Zambia

Social Protection Expenditure and Performance Review and Social Budget

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Social Security Department
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This report is the Social Protection Expenditure and Performance Review (SPER) and Social Budget (SB) for Zambia. It focuses on five key issues with respect to the objective of extending social protection coverage in the country:

- Living conditions of households with a focus on the overall situation of poverty and key vulnerable groups;
- Working conditions and prevailing patterns of informality in the labour market;
- Coverage and performance of existing public social protection interventions;
- Current resource allocations to social protection within the current fiscal environment;
- Future trends in the Zambian social budget

The analysis presented is a result of a joint effort between staff at the ILO Social Security Department in Geneva (Pauline Barrett-Reid, Florence Bonnet, Krzysztof Hagemejer, Mirtha Muñiz, † Raphael Muturi, Amjad Rabi) and the field office in Lusaka (Adrian Shikwe, Urszula Lonc, John Angelini). Florence Bonnet not only prepared LCMS 2004 and LFS 2005 datasets for the analysis but also developed the methodology and calculated the indicators of the degree of informality in the labour market. Nknadu Chilombo, Mubita Lubawelba and Felix Masiye prepared background analytical reports and/or direct inputs to the main report. Christine Smith was responsible for editing the text and Irene Brown for typing and formatting. Special thanks go also to those at the Zambian Central Statistical Office who originally worked on all the surveys used, and shared and discussed the methodological questions with us.

Contents

Abbreviations

BHCP	Basic Health Care Package
BoZ	Bank of Zambia
CBoH	Central Board of Health
CSO	Central Statistical Office
DFID	Department for International Development
FNDP	Fifth National Development Plan
GRZ	Government of the Republic of Zambia
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German technical cooperation agency)
HICP	Highly Indebted Poor Countries
IHE	Integrating the Healthcare Enterprise
ILO	International Labour Office
IMF	International Monetary Fund
LASF	Local Authorities Superannuation Fund
LCMS	Living Conditions Monitoring Survey
LuSE	Lusaka Stock Exchange
MCDSS	Ministry of Community Development and Social Services
MDRI	Multilateral Debt Relief Initiative
MTEF	Medium-Term Expenditure Framework
MoH	Ministry of Health
MoFNP	Ministry of Finances and National Planning
NAE	National Average Earnings
NAPSA	National Pensions Scheme Authority
NPS	National Pension Scheme
PETS	Public Expenditure Tracking Survey
PIA	Pensions and Insurance Authority
PSPF	Public Service Pension Fund
PWAS	Public Welfare Assistance Scheme
RHVP	Regional Hunger and Vulnerability Programme
SAGs	Sectoral Advisory Groups
SCTS	Social Cash Transfer Scheme
SIDA	Swedish International Development Agency
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNZA	University of Zambia
WCFCB	Workers' Compensation Fund Control Board
WFP	World Food Programme
WHO	World Health Organisation
ZNPF	Zambian National Provident Fund

Introduction

In recent years, Zambia has witnessed steady economic expansion (with growth rates over 5 per cent in the last four years) and a fall in inflation rates towards acceptable levels (below 10 per cent in 2006). This situation has been accompanied by lower external vulnerability: Zambia benefited from significant external debt reduction in 2005 and 2006. Given this relatively favourable context,[1] it is an appropriate time to examine the performance of the Government and other public social actors (e.g., donors, NGOs and businesses) in improving the options for the population to make a decent living, notably by gradually extending the scope and coverage of the national social security (social protection) system.[2]

This report is an output of the first year of work of the ILO/DFID-funded project in Zambia: "ILO Global Campaign for Social Protection and Coverage for All as a Means to Reducing Poverty in Africa and Asia". The ILO supports implementation of the Zambian Fifth National Development Plan with its Decent Work Country Programme (DWCP) which seeks to promote opportunities for women and men to obtain decent and productive work in conditions of freedom, equity, security and human dignity. The activities of the project are deeply integrated in the overall Zambian DWCP objectives and strategies.

The report also contributes to the ILO's Global Campaign on Social Security and Coverage for All; and builds on earlier global analytical and policy development work undertaken jointly by the ILO, DFID and other cooperating partners. That work indicates that social security/protection is an indispensable factor in economic and social development and decent state-building, and that even a minimum social protection package (comprising basic benefits for children and basic pensions for the

[1] It is not the purpose of this report to analyse in depth the sustainability of the economic expansion or the existing legal framework to attract foreign investment.

[2] ILO does not make any distinction between the terms "social security" and "social protection". Both reflect the same array of policy instruments and interventions undertaken usually by public (also sometimes by private) bodies, which seek to provide affordable access to health care and certain minimum income security and other support in case of old age, sickness and disability, death of the breadwinner (particularly when the breadwinner suffers these contingencies as a result of employment-related accident or disease), unemployment, maternity and other family obligations. Social security/protection aims at preventing poverty but also at alleviating existing poverty and exclusion resulting from these or other contingencies.

elderly and persons with disabilities) would substantially reduce poverty in low-income countries and be affordable in the longer run.[3]

Social security/protection systems are usually described as consisting of contributory and non-contributory schemes. It is common practice to judge such social protection systems by three criteria: numbers of the population covered, scope of coverage and adequacy of benefits. These are the main outputs of social security/protection systems and individual programmes. To assess the performance of individual programmes and the overall social protection system, this report looks closely at these outputs for both types of scheme. A comprehensive picture of the formal schemes (including coverage, scope and adequacy of benefits) is available in subsequent chapters. Coverage by such schemes is generally limited to workers in formal employment, which is a small fraction of all the employed population. Scope is limited to old age, death, survivors, invalidity, maternity and workmen's compensation and the levels of benefits are low. Most workers who work in the informal economy and their families are excluded from contributory schemes.

Non-contributory schemes are provided by the Government, international and national NGOs, donors, the church, as well as by traditional practices. The main non-contributory social protection programme in Zambia is, of course, public health-care services, for which user fees are gradually being eliminated starting in the poorest districts. Others are social-assistance type schemes providing mainly in-kind and some cash benefits to the most vulnerable. However, it has proved difficult to obtain a comprehensive picture of numbers of the population covered, and the scope and depth of provision of these schemes. The situation is expected to improve as the Ministry of Community Development and Social Services (MCDSS) designed a monitoring and evaluation system, including questionnaires and a database, intended to look in detail at the outputs and costs of all social assistance-type programmes – both public and those run by international donors and NGOs.[4] We looked mainly at public schemes on which a number of analytical studies have been undertaken, commissioned mainly by the MCDSS and funded by its cooperating partners. It is generally agreed that the coverage of benefits and services provided is very limited and that although there is evidence of positive impacts at the local level where they operate, significant up-scaling would be needed to bring a measurable effect at national level.[5]

Although different social programmes can be more or less effective in meeting policy objectives depending on their design and on governance quality, there is no doubt that if inputs in the form of available financial resources to cover the costs and delivery of transfers are very low, then it is also difficult to expect high levels of output. It is also difficult to obtain far-reaching outcomes and strong impacts from such social transfers. In order to assess the performance of a social protection system, therefore, in addition to looking at the joint outputs of social security programmes in the country, one should examine the financial inputs provided: government and donor allocations to social security/social protection, other sources of financing (contributions paid by employees and employers, and income from investments of reserves accumulated by social insurance programmes).

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[3] See for example: Townsend, 2008.

[4] Proposed Monitoring & Evaluation System for Social Protection, MCDSS/GTZ, Lusaka, June 2007 (see also at: http://www.socialcashtransfers-zambia.org/pageID_2466950.html).

[5] We have not yet been able to include findings of a very recent study looking at the experience of five pilot cash-transfer social assistance schemes in Zambia (which also compares costs and benefits of different targeting approaches): Ben Watkins: *Alternative Methods for Targeting Social Assistance to Highly Vulnerable Groups*, Kimetrica for the Technical Working Group on Social Assistance, Feb. 2008.

Whereas Zambia allocates significant resources to education and health, in relative terms, the other forms of social protection are apparently under-funded. The contributory schemes collect contributions and some of them are building reserves to help finance the future pensions of current contributors. However, the pension schemes of Government employees are subsidized by the general taxpayer from the state budget. On the other hand, allocations to social assistance are very low compared with these subsidies.

Social security coverage will have to be extended because of the scale of informal-sector employment, mainly by scaling up the non-contributory programmes. This will require significant increases in allocation of resources.

From that point of view, the report looks at Zambia's economic and fiscal performance in order to make an assessment of the fiscal space available now and in the future. In this context it also looks at the Zambian Social Budget – how much is spent in total on the various social programmes in the country, what and whose needs this spending is supposed to meet, and how and by whom it is financed. The Social Budget is also projected into the future, under status quo assumptions. These baseline projections can be the foundation of any future policy option analysis supporting the process of a national policy debate, particularly a social dialogue on the future of social protection in Zambia. It is hoped that it will be a useful input into ongoing work in Zambia on the future design of social security and social protection within the Fifth National Development Plan (FNDP) implemented by different sectoral ministries, and by Sectoral Advisory Groups (SAGs), cooperating partners and other actors involved.

Chapters 1 and 2 describe the overall social and economic situation and focus on living conditions of the population and identifying particularly vulnerable groups, based on the 2004 Living Conditions Measurement Survey (LCMS) by the CSO.

Zambia has a population of about 11.5 million people, 49 per cent of them aged below 15 years and less than 4 per cent aged over 60 years. This relatively young country is facing a severe threat in HIV/AIDS, which is affecting the lives and causing the death of working-age persons who leave behind children, widows and elderly relatives. Around 1.1 million people are infected (UNAIDS, 2006), with HIV/AIDS more prevalent among working-age people (17 per cent). Hence, life expectancy has fallen dramatically.[6] Besides the disastrous consequences in human terms (deaths, broken families, orphan-headed households), this national epidemic highlights the responsibility of the Government (and donors) to avoid further losses and later to improve livelihood opportunities. There is a great need for social protection.

Zambia is also suffering as a result of climate change.[7] About 65 per cent of households depend on agricultural activities (CSO, 2005) but only 7 per cent of available land is arable (BoZ, n.d.). Events such as floods, droughts or epidemics are becoming more frequent.[8] In this context it is difficult even for able-bodied individuals and large households (with presumably more labour) to be self-reliant; hence the establishment of permanent food programmes financed by the Government and donors to help people living in food-insecure areas.

Chapter 3 focuses on what people do for a living: how they work, where they work, and how integrated they are into the formal economy. In this chapter, we analyse

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[6] According to the UNDP, life expectancy in Zambia has fallen by 14 years since the mid-1980s (UNDP, 2006, p.26).

[7] Global warming declines average annual rainfall, which causes more chronic food emergencies (UNDP, 2006, p. 164).

[8] There were at least six disasters of this type in the country between 2000 and 2007. See: *EM-DAT: The OFDA/CRED International Disaster Database*, www.em-dat.net - Université catholique de Louvain – Brussels - Belgium.

the range of economic activities (not necessarily income-generating activities) performed by individuals by age group, sex and location in rural or urban areas. With respect to income-related activities, we focus on paid employees and develop working definitions related to *formality in employment*. Our analysis is based on the datasets of the 2005 Labour Force Survey (LFS) prepared by the CSO.

This is the first study of this kind carried out with existing national survey data and it is justified, given that official figures do not fully capture in a single indicator the complexity of the labour market and the working conditions of paid employees. For instance, an unemployment rate of around 16 per cent is not a useful indicator for policy-making because there are no unemployment benefits that justify people doing nothing to survive. Despite data constraints in the labour force survey, we carried out an exercise to explore the conditions of employment. Typically, informality in employment exists at different levels, depending on the existence and enforcement of a legally binding contract with an employer, entitlement to paid leave, and employer participation in social security contributions. Consequently, opportunities to rely on existing social security provisions also differ according to the degree of informality of employment.

Chapter 4 describes and analyses the scope of different social protection schemes, including employment-related schemes and social assistance schemes. Considering that only 3 per cent of employed persons and 22 per cent of paid employees are 'totally formal' (see chapter 3) and that around half of the population lives in extreme poverty, it is necessary to analyse which population groups are being supported by social assistance schemes. There is a donor-supported initiative to extend the current pilot cash-transfer schemes to reach the poorest and most vulnerable segments of the population, but there still remains the challenge of integrating the informal sector into well-established social protection schemes.

Chapter 5 outlines the current situation of government accounts and existing fiscal space. Donors are identified as important partners of the Government in expanding social expenditure, mainly in health and education sectors. Chapter 5 also presents our estimates of the Zambian Social Budget, the levels of social expenditure and sources of its financing.

Chapter 6 presents results of status-quo simulations of the Social Budget revealing possible expenditure trends in the area of social policy resulting from the current legislative situation. It includes a set of initial and approximate estimates of a possible minimum package of social protection benefits: an old age benefit, targeted social assistance and child benefit.

Chapter 7 presents overall conclusions.

1

This chapter is in three parts. The first part examines demographic trends in Zambia and their main determinants. The second part describes recent economic developments and their effect on the labour market. The third part presents broad aspects of the social environment in Zambia, including poverty incidence, income inequality and selected indicators of human development, preparing the way for an analysis in greater depth of the living conditions of the poorest and most vulnerable population groups, in Chapter 2.

1.1 Demographic trends

Currently, Zambia has a predominantly young and steadily growing population which, on the surface at least, has not changed since independence. Beneath the surface, however, there have been significant changes in the demographic situation associated with recent developments in urban population growth and the unabated spread of HIV/AIDS.

Zambia's population was about 9.8 million inhabitants in 2000 and was projected at 12.1 million for 2007 (CSO, 2006d). According to the census report, 2000 was the first year in which the male population slightly outnumbered the female population in Zambia (CSO, 2003a). Figure 1-1 shows the evolution of the population since 1980.

Zambia's population is young and growing fast. During the 1990s, it grew on average by 2.4 per cent per year, whereas the world population increased by 1.5 per cent and other developing countries by 1.7 per cent.[1] However, as Table 1-1 shows, there has been a slowdown over the last decades: the population annual growth rate of Zambia decreased from 3.1 per cent in the 1970s to 2.4 per cent in the 1990s.

[1] Growth rates were obtained from UN Population Division estimates (UN, 2006). The total population in sub-Saharan Africa grew at a higher rate than Zambia's: 2.7 per cent during the 1990s.

Overview of the demographic, economic and social environment

Figure 1-1. Population by sex, 1980-2007 (millions)

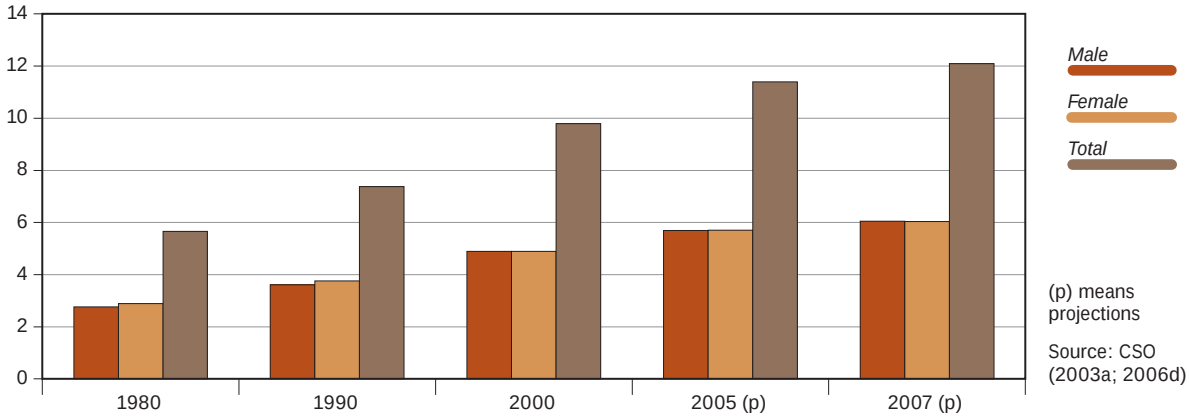


Table 1-1. Population annual growth rate, 1970-2000

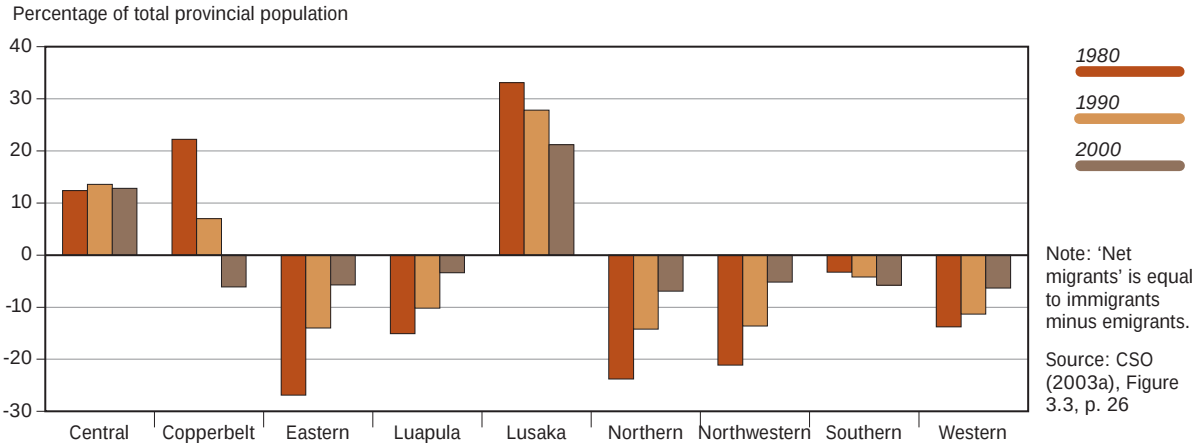
Population growth	1969-1980	1980-1990	1990-2000
Rural	1.6	2.8	3.0
Urban	6.0	2.6	1.5
Total	3.1	2.7	2.4

Source: CSO (2003a)

The main reason for this was the sharp decline in the growth rate of the urban population (from 6.0 per cent during the 1970s to 1.5 per cent during the 1990s) that offset the modest increase in the population growth rate of the rural areas. These different growth rates are mirrored in a change in the population structure: the ratio of urban to total population fell from 39.9 per cent in 1990 to 34.7 per cent in 2000 (CSO, 2003).

Two factors explain this change: internal migration behaviour and the different fertility rates in rural and urban areas. The first factor, internal migration, is driven by

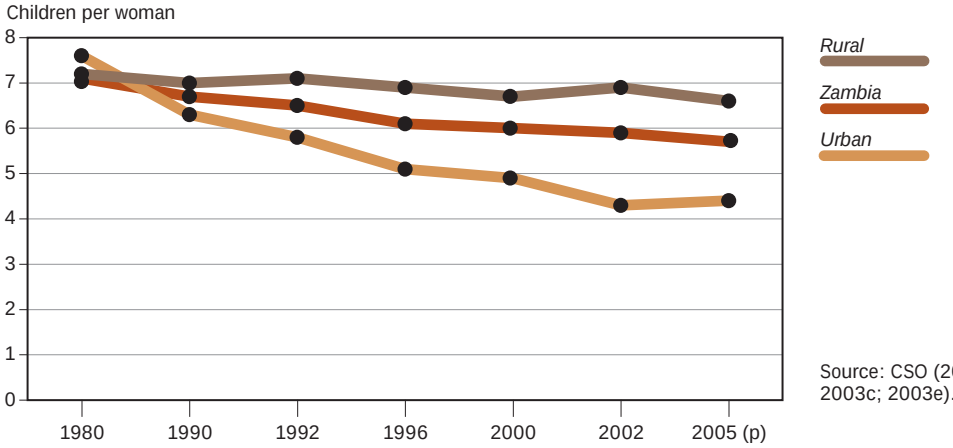
Figure 1-2. Contribution of net migrants to population by census year, 1980, 1990 and 2000



Note: 'Net migrants' is equal to immigrants minus emigrants.

Source: CSO (2003a), Figure 3.3, p. 26

Figure 1-3. Total fertility rates, 1980-2005



Source: CSO (2003a; 2003c; 2003e).

economic conditions. During the period 1969-90, there was marked rural-to-urban migration, in line with the pro-urban economic policies applied during those years (see Chapter 2). The opposite phenomenon occurred during the 1990s: migration was from urban to rural areas, led by the crisis in the mining and manufacturing sectors.

It is worth mentioning here that while migration is more likely to occur between districts within provinces (from rural to urban areas or vice versa in the same province), there are some provinces that are predominantly areas of immigration (such as Lusaka and Central) and others that are a net source of migrants (CSO, 2003d).[2] In addition, as Figure 1-2 shows, migration behaviour in the Copperbelt was notoriously different during the 1990s from previous decades as a consequence of the copper-mining crisis. While in 1980 net migration represented 22.2 per cent of the population, in 2000 the province was actually a source of migrants. In that year, the number of emigrants minus immigrants represented 6.1 per cent of the population. Non-economic reasons fuelling migration are environmental, e.g. droughts that affect the livelihoods of rural households (as in Southern Province).

The second factor, fertility rates, has a more stable pattern than migration. The total fertility rate (TFR) in rural areas is historically higher than that in urban areas

[2] CSO (2003d, p. 28) shows that inter-district migration is an important phenomenon with positive net-migration rates in all districts of the country.

(see Figure 1-3). The influence of different fertility rates on the population structure is that the rural population grows much faster (with a TFR of 6.7 in 2000 versus 4.9 in urban areas) and that even without migration to rural areas, its share in the total population will increase.

Figure 1-3 shows that there is a decreasing trend in fertility rates: overall TFR for Zambia fell from 7.2 children per woman in 1980 to 5.7 children per woman in 2005. Much of the decline in TFR between 1980 and 2000 occurred in urban areas. TFR in rural areas remained almost constant over the same period and consequently moderated the rate of decrease of the overall TFR.

Nevertheless, better economic conditions during the 2000s than during the previous decade – with annual economic growth around 5 per cent between 2000 and 2006 – could explain a new phase of migration into urban areas, which could change the distribution of the population and also the path of the overall TFR, as most migrants are of reproductive age and urban areas are more likely to attract migrants with the lowest fertility rates (for instance, TFR in Lusaka was 4.3 in 2002).

The rise in the mortality rates is another increasingly important factor. While inhabitants of urban areas have easier access to health care services than those in rural areas, they are also more at risk of being infected with HIV than those in rural areas.

It is extremely difficult to foresee how this pandemic will evolve, because several factors must be taken into account. First, it is linked to risky sexual behaviour, and behavioural changes take time. Second, in addition to the prevalence rates, there are variations in the progression from HIV infection to AIDS and from AIDS to death, access to treatment being a key determinant (UN, 2006). Third, levels of mother-to-child transmission also vary. However, the impact of HIV/AIDS on future population growth and composition is important because its prevalence is higher among people in their 20s and 30s (the prevalence rate is over 20 per cent in these age groups).

Without this terrible health hazard and the high incidence of other diseases that are still pandemic in the country (such as malaria), life expectancy would improve over time. Official estimates of life expectancy based on the 2000 census report are shown in Table 1-2. Life expectancy at birth was estimated at 50 years (48 years in rural areas and 54 in urban areas), showing an improvement in relation to the 1990 indicator that was 47 years (CSO, 2003a). However, there is no consensus about this estimate and it seems that life expectancy could be much lower (see Appendix B).

Nevertheless, Zambia's population is still young. Its average age is 20.9 years and the median age is around 17 years. Figure 1-4 depicts the age distribution of the population foreseen for 2007 (CSO, 2006a).

Table 1-2. Life expectancy at birth, 1980, 1990 and 2000

Life expectancy	1980	1990	2000
Female	53	48	52
Male	52	46	48
Zambia	52	47	50

Source: CSO (2003a)

Figure 1-4. Population pyramid, 2007

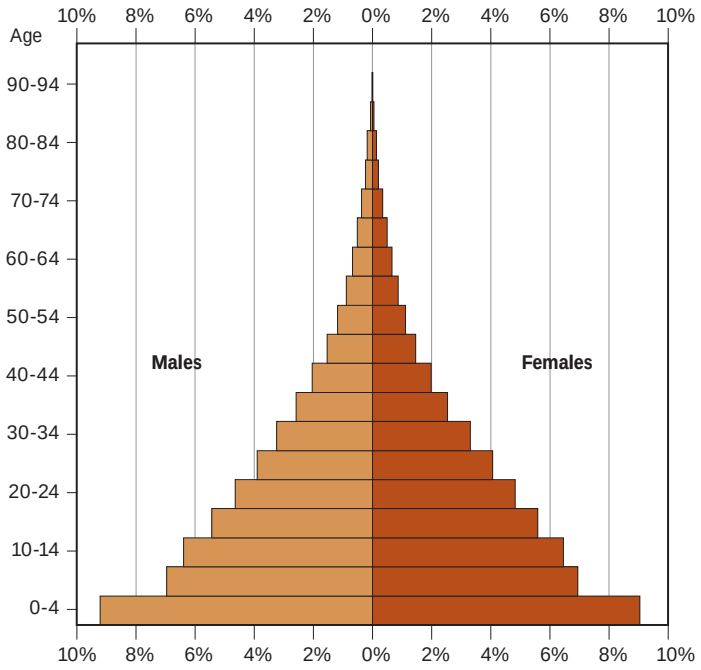
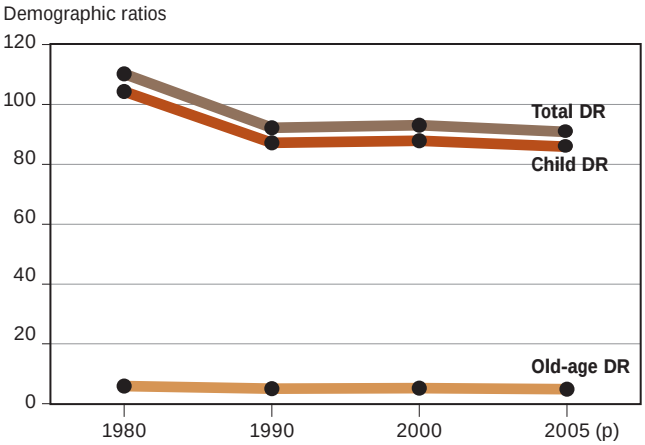


Figure 1-5. Dependency ratios, 1980, 1990, 2000 and 2005



DR = dependency ratio

Child DR is the ratio of the population aged 0-14 to the population aged 15-64. Old-age DR is the ratio of the population aged 65 years or over to the population aged 15-64.
Total DR is the sum of the two previous ratios.

Source: CSO (2003a) for years 1980 and 1990 and CSO (2006d) for years 2000 and 2005

The population pyramid reveals that the female population of reproductive age (between 15 and 49 years old) is nearly half of the total female population. This broad-based shape of the pyramid has changed little over the past 20 years: the proportion of the age group 0-14 years in the population was around 45 per cent in 1990 and in 2000. Similarly, child dependency ratios are high, although a decreasing trend has been observed, as Figure 1-5 shows.

In line with different fertility patterns, rural areas show higher child dependency ratios than urban areas. Furthermore, the urban population is facing an ageing process shown by the decrease in the child dependency ratio from 104.3 in 1980 to 74.0 in 2005 (see Table 1-3) and slight increase in old-age dependency ratios. However, the evolution of the prevalence of HIV in the working-age population could affect these demographic ratios, thus increasing the burden on healthy people aged 15-64 supporting dependants and the actual labour force participation rates of older persons and young people just out of school.

Table 1-3. Dependency ratios in rural and urban areas, 1980, 1990, 2000 and 2005

		1980	1990	2000	2005 (p)
Rural areas	Child dependency ratio	104.3	90.1	94.0	93.1
	Old-age dependency ratio	8.6	7.1	6.8	6.2
	Total dependency ratio	**112.9**	**97.3**	**100.8**	**99.3**
Urban areas	Child dependency ratio	104.3	82.9	77.7	74.0
	Old-age dependency ratio	0.2	1.9	2.5	2.6
	Total dependency ratio	**106.3**	**84.7**	**80.3**	**76.6**

Note: Child dependency ratio is the ratio of the population aged 0-14 to the population aged 15-64. Old-age dependency ratio is the ratio of the population aged 65 years or over to the population aged 15-64. Total dependency ratio is the sum of the two previous ratios.

Source: CSO (2003a; 2006d)

Economic situation and labour market trends 1.2

Over the past few years, Zambia's economy has improved its performance with respect to the major macroeconomic indicators. Gross Domestic Product (GDP) grew by around 5 per cent per year from 2000 to 2006. It is important to analyse the main drivers of this growth and the implications of this on the living standards of the population.

Recent economic performance *1.2.1*

Traditionally, the Zambian economy has depended on copper exports. As Box 1 explains, the fall in the international price of copper caused a deep economic crisis that later fuelled liberal economic reforms and public expenditure cuts. However, the economy is becoming more diversified. Whereas in 1994 mining production represented around 17 per cent of real GDP, it accounted for a little more than 9 per cent of GDP in 2006.

Trade and financial services increased their participation in real GDP during 1994-2006 from almost 30 to 37 per cent. The agriculture sector remains important, representing around 14 per cent of real GDP. However, its performance is linked to climate conditions that in recent years have been adverse, with recurrent droughts or

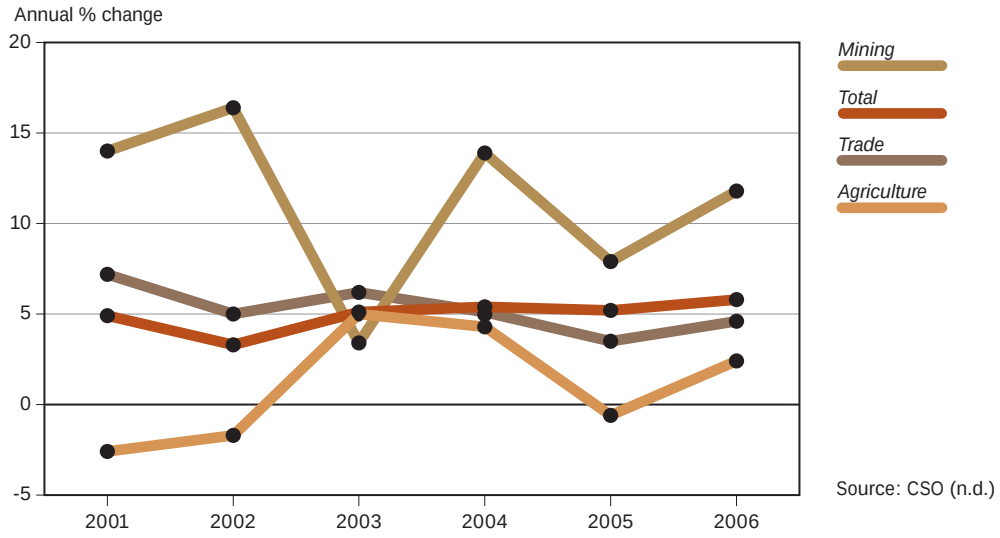
Box 1. From independence to the new millennium

Following the country's independence in 1960 Zambia was one of the better-off countries in sub-Saharan Africa, with a strong extractive industries sector and viable social protection arrangements in place including key public service provisions. This situation was not to last, however, as international prices of copper declined in the 1970s and worldwide inflation fuelled by petroleum price hikes undermined the economy. The Government nevertheless maintained tight control over economic and social arrangements in the country during this period and it was not until the mid-1980s that key reforms to liberalize the economy were initiated. Alongside political liberalization that gained momentum in the early 1990s, economic reforms led to severe cutbacks in public provision and employment, which had previously accounted for more than half of national GDP. The 1990s were a particularly lean decade in which the various reforms commonly referred to as Structural Adjustment Policies (SAPs) had an adverse impact on all population groups, but especially on the poorest segments. As a result, poverty incidence increased substantially while the social protection programmes that had previously been in place lost their ability to safeguard those most likely to suffer from the adverse effects of rapid change.

The unexpected effects of SAPs were not lost on the population and there were demands to rectify the situation. The 1990s saw, therefore for the first time, government efforts to examine more closely the impact of (the liberal) economic and social policies, including the initiation of national surveys to measure poverty and vulnerability. At the same time the international community, notably bilateral donors, placed pressure on the Government to act on the downward-spiralling living standards. Thus the late 1990s saw nationwide social protection initiatives launched by the Government covering both the formal and the informal sectors of the economy. These efforts extended into the early years of the new millennium with greater international support following recognition that something urgent had to be done about global poverty and failure to develop in countries like Zambia. Although such efforts have had some impact on the downward spiral of living conditions that began in the 1990s, the situation in Zambia today is still dire.

Source: World Bank 2005

Figure 1-6. Recent trends in GDP, selected sectors for 2001-2006

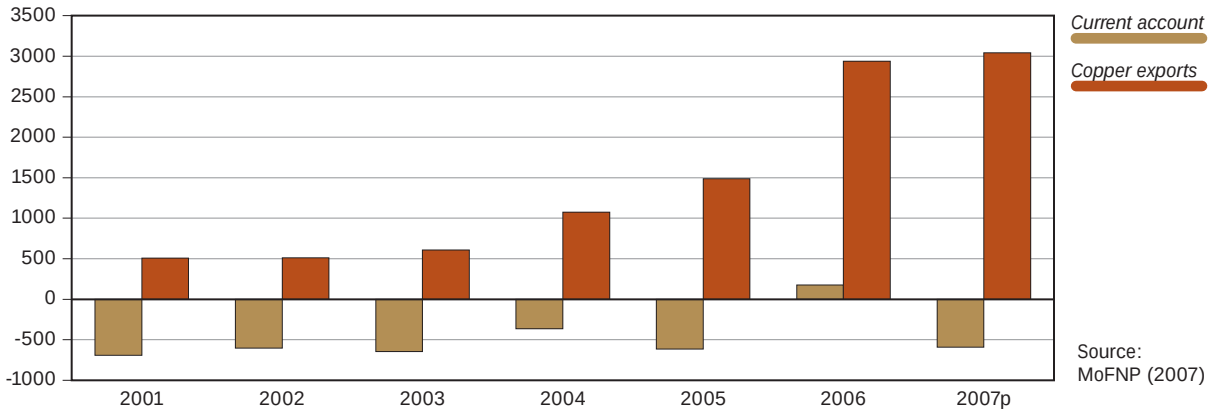


floods (see Chapter 2) as well as to Government policies, e.g., Fertilizer Support Programme and Food Reserve Agency encouraging maize production and a lack of investment in irrigation.

During this decade, high GDP growth rates have been driven by the mining and construction sectors (the latter with growth rates over 10 per cent in recent years). As Figure 1-6 shows, agriculture has given a fluctuating performance, with short-term contractions.

In contrast, mining production has grown strongly fuelled by a favourable international context. Copper prices reached maximum values in May 2006. Furthermore, 2006 prices were on average over 80 per cent higher than those of 2005, so that copper exports were almost USD 3,000 million in 2006. In that year the current account of the balance of payments had a surplus that represented 1.6 per cent of nominal GDP (see Figure 1-7). Copper exports are even higher in 2007. However, the impact of rising international oil prices – Zambia is a net oil importer – would affect the balance of payments harder during this year than the previous one.

Figure 1-7. Current account of the balance of payments and copper exports, 2001-2006 (USD millions)



Copper exports for 2007 are estimated on the basis of exports in the first three quarters of the year. P = provisional

Table 1-4. Main economic indicators, 2001-2006

	2001	2002	2003	2004	2005	2006
Nominal GDP (USD billion)	3.7	3.8	4.3	5.5	7.4	10.5
Nominal GDP per capita (USD)	367.2	368.4	412.7	508.6	668.7	929.7
Real GDP (per cent growth)	4.9	3.3	5.1	5.4	5.2	6.2
Inflation rate (end period), per cent	21.4	22.2	32.0	17.5	15.9	8.2
Bank of Zambia interest rate (December)	52.5	34.0	21.3	18.3	17.1	10.7
Central Government overall balance (per cent of GDP) [a]	n.a.	n.a.	-6.6	-3.3	-3.4	-1.1
Current account deficit (per cent of GDP) [b]	-19.1	-16.3	-15.0	-6.7	-8.4	1.6
External debt stock (USD billion) [a]	n.a.	n.a.	6.5	7.1	4.5	0.7

[a] MoFNP (2007a). [b] It includes grants, ILO calculations based on BoZ (2007b) and nominal GDP figures in USD from UN (2007b)

Source: BoZ (2007a), CSO (2007f), MoFNP (2007a)

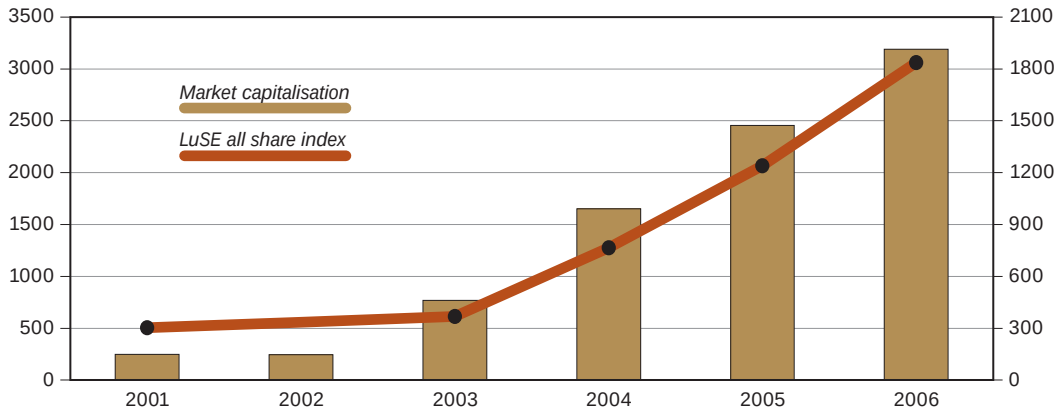
On the demand side, both public and private consumption have increased in recent years, in a context in which almost all economic activities have expanded. Table 1-4 presents aggregate indicators that signal an improvement in the Zambian economy, both in external and internal balances. Chapter 5 presents an assessment of general government accounts.

This improved performance has occurred in parallel with increased investors' confidence as shown by growing levels of investment. Investment has grown steadily since 1996 and represented almost 28 per cent of GDP in 2006 (almost 13 percentage points higher than a decade ago). In addition, there has been an unprecedented growth of short-term inflows in the stock exchange during this decade, as shown in Figure 1-8.

The purchasing power of the kwacha has improved as inflation levels have reduced over time from a maximum of around 184 per cent in 1993 to 8.2 per cent in 2006. However, the value of the Zambian kwacha with respect to the US dollar is still not stable, as Figure 1-9 shows.

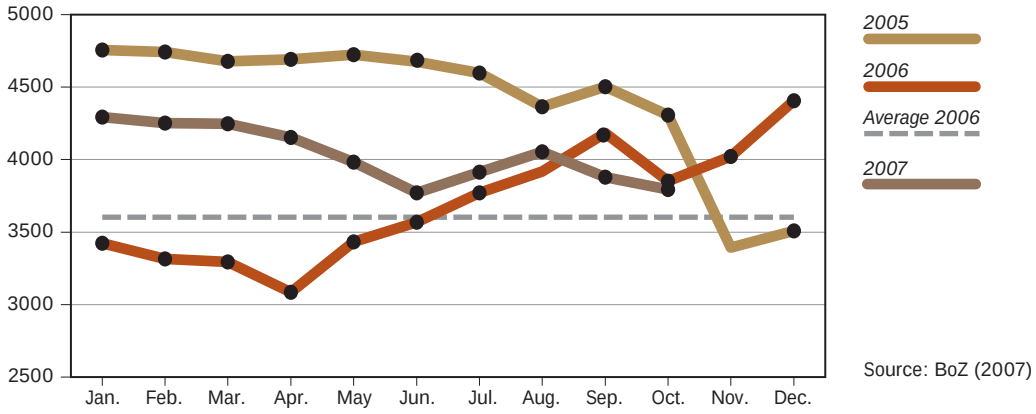
This erratic behaviour of the exchange rate in the short run has implications for the national budget that depends to a large extent on the availability of donor funds, which is reducing overtime from 43 per cent in 2003 to 16.6 per cent in 2008, denominated in foreign currency. See Chapter 5.

Figure 1-8. Recent trends in the stock exchange market, 2001-2006 (USD millions)



Source: LuSE (2007)

Figure 1-9. Evolution of nominal exchange rate (kwachas per US dollar), 2005-2007



Source: BoZ (2007)

1.2.2 *Labour market trends*

To understand the current reality of the labour market it is necessary to recall what happened during the 1990s with the structural adjustment packages and liberalization policies. Without the protection of import tariffs, the national industry collapsed and publicly managed companies were privatized. Public expenditure decreased from 25.7 to 7.3 per cent of real GDP during that decade.[3] Consequently, formal employment fell and the labour force had to migrate to informal activities.

In absolute numbers, formal-sector employment, defined here as employment in formal businesses (a discussion about this and other related concepts is found in Chapter 3) reached its maximum level in 1991: around 545,000. Since then, formal-sector employment fell from about 12 to 7 per cent of the working-age population between 1991 and 2005.[4] This trend is depicted in Figure 1-10. The working-age population is presented as an index, so that the slope of the curve shows the rate of growth.

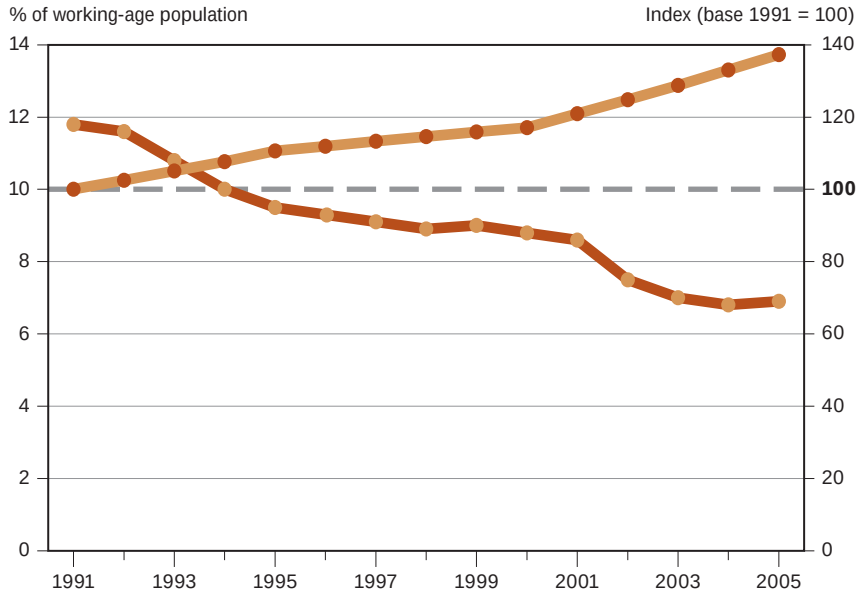
Looking at the sectoral composition of the formal employment, it seems that:

1. There are high fluctuations in formal-sector employment for reasons other than economic performance. For instance, formal jobs in construction fell strongly in 2002 (by over 80 per cent) despite the fact that its production increased by 17 per cent, so that formal jobs in this sector in 2005 were about 58 per cent of the number existing in 2001 (calculations based on CSO, 2007e; n.d.).
2. There is no direct link between economic performance and formal employment in the long run, especially in those sectors that are more labour-intensive, such as trade and general services. Figure 1-11 shows the evolution of total GDP (in real terms) and formal employment in these two sectors over the past decade.
3. In the short run, it seems that tertiary sectors are absorbing more employment than in previous years. In 2005, formal employment in these sectors accounted for over 65 per cent of total employment, while it was 58 per cent in 2004. Therefore, in 2005, total employment in the formal sector grew the first time in more than a decade.

[3] These figures were calculated based on UN (2007b). The CSO (2006e) states that public expenditure was 13.1 per cent of real GDP in 1994 and 8 per cent in 2000.

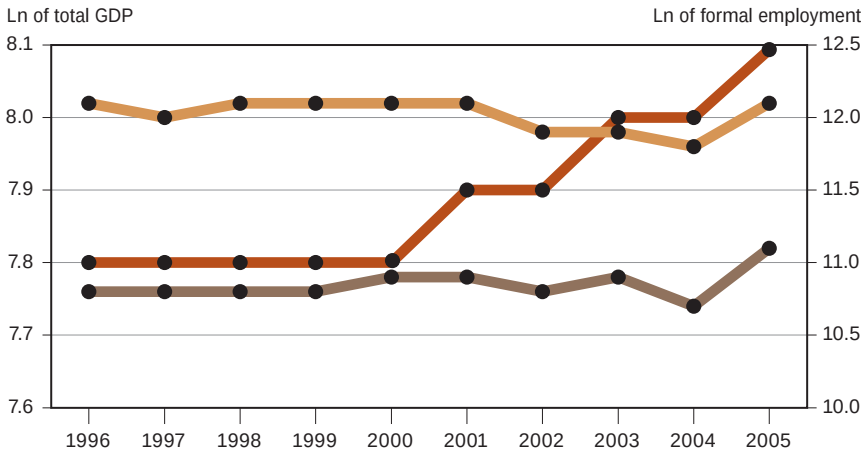
[4] Formal employment is expressed as a percentage of the working age population because there are no available labour force figures for that period. Still, the trend is clearly negative and the absolute numbers reported by the CSO (2007e) declined lower and lower after 1991 (except in 2005).

Figure 1-10. Formal employment and working age population, 1991-2005



Source: CSO (2007e) and ILO calculations based on UN population projections.

Figure 1-11. Economic activity and formal employment, 1996-2005



'Services' include community, social and personal services.

Source: CSO (2007e; n.d.)

It was not possible to obtain long-term figures for total employment; however, the 2005 labour force survey (CSO, 2007a) provides information about total employment by type of economic activity. The definition of formal sector used in the labour force survey is a little different from the one used for the long-term series (CSO, 2007e; see Appendix C) so that we do not compare the figures of formal-sector employment from these two different data sources.

Table 1-5 compares employment in the formal sector and total employment. In 2005, over 72 per cent of total workers were employed in agriculture, while only 15 per cent of formal-sector workers were registered in this sector. By contrast, workers in services represented only 7 per cent of total employment.

A special feature of the Zambian labour market from CSO (2007a) is the high unemployment rate: around 16 per cent of the labour force (the working-age population actively looking for a job).

One reason could be the increase in the labour force participation rate. Indeed, in the 2005 labour force survey this rate is the highest by comparison with the ones

Table 1-5. Distribution of employment by economic activity, formal and total employment

Economic activity	Formal sector employment		Total employment
	1995	2005	2005
Primary sectors	25.0	22.4	73.6
of which: Agriculture	14.2	15.0	72.3
Secondary sectors	14.7	12.5	5.8
of which: Manufacturing	11.5	9.2	4.0
Tertiary sectors	60.3	65.2	20.6
of which: Trade	8.5	15.4	10.5
of which: Services	35.6	39.9	7.0

Figures are expressed as percentage of employment in all economic activities (primary, secondary and tertiary sectors). Primary sectors include agriculture and mining. Secondary sectors include manufacturing, electricity and construction. Tertiary sectors include trade, transport, finances and services.

Source: CSO (2007a; 2007e; n.d.)

recorded in the 2000 census report and in living conditions measurement surveys carried out over the past ten years. For instance, for those aged 20-24 the participation rate was 82, 73, 76, 67, and 86 per cent in years 1996, 1998, 2002-3, 2004, and 2005, respectively. Given the different methodologies used over time in such household surveys, we did not consider it useful to analyse trends in total employment. Moreover, according to the 2000 census the participation rate was 61 per cent for the same cohort (aged 20-24).

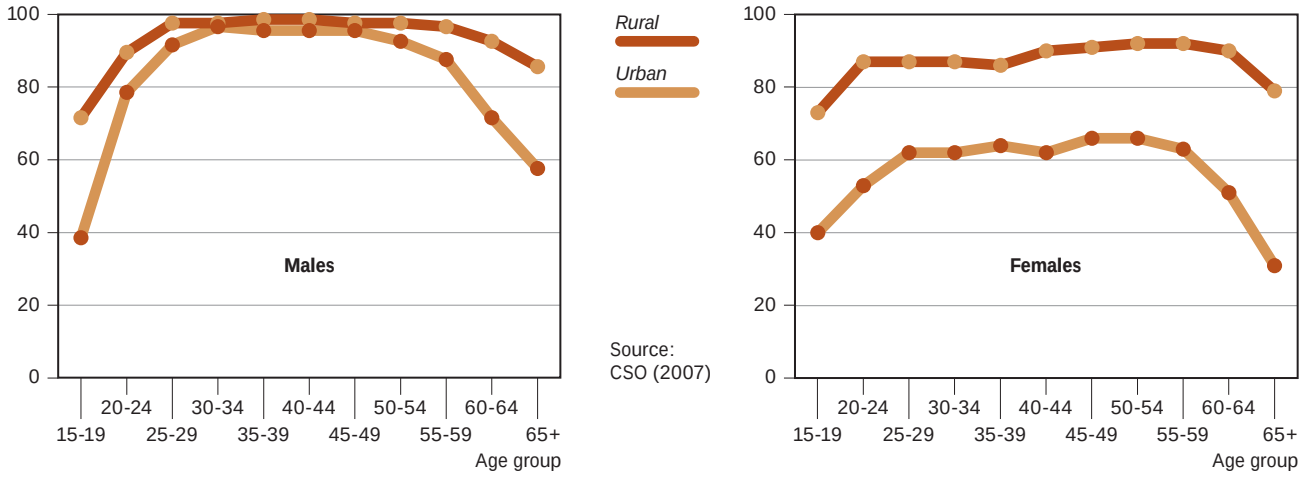
However, it is relevant to identify the different patterns in the distribution of labour force and employment based on 2005 figures. A detailed analysis about conditions of employment is carried out in Chapter 3.

First, urban and rural populations exhibit different features in terms of their labour force participation (see Figure 1-12):

(a) Urban dwellers delay their entry into the labour market compared with those in rural areas.

(b) The gap between male and female rates during the productive years is significantly narrower in urban areas, compared with that of the rural population.

Figure 1-12. Labour force participation rates, 2005 (percentage)



While feature (a) can be attributed to the fact that school attendance in urban areas is higher than in rural areas, feature (b) is mainly the result of the different fertility rates of the two population groups.

Second, younger people have the highest unemployment rates. About 25 and 22 per cent of people in the labour force aged 15-19 and 20-24, respectively, were unemployed in 2005. However, they represent a higher percentage of total employment than other cohorts, given the young profile of the Zambian population.

Third, younger people are more likely to be employed in rural than in urban areas. This is linked to the higher employability of young people in the informal agricultural sector, as Figure 1-13 shows.

The light grey shadowed area depicts the age structure of total employment. The lines show that, in effect, younger people are employed in agriculture and older people are employed in mining.

Fourth, men are more likely to be employed than women in both rural and urban areas. Total employment rates were 91 per cent for men and 90 per cent for women in rural areas, while these were around 78 per cent for men and 64 per cent for women in urban areas.

Figure 1-13. Distribution of employment by age group in selected economic activities, 2005

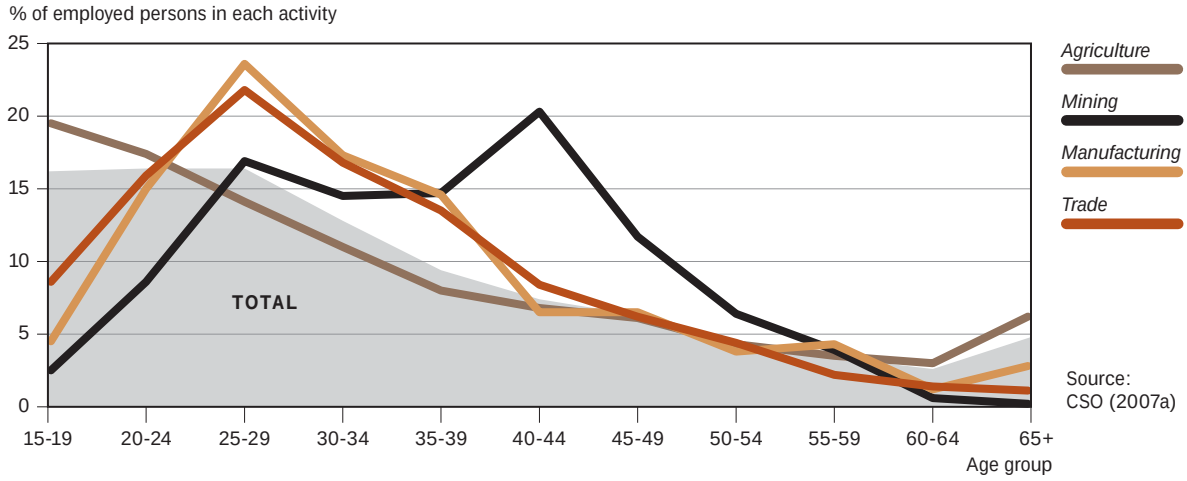


Table 1-6. Percentage distribution of employment by four main groups, 2005

	Female		Male	
	Urban	Rural	Urban	Rural
Agriculture, forestry and fisheries	26.7	95.2	14.8	89.8
Mining and quarrying	0.6	0.1	7.2	0.2
Manufacturing	7.0	1.3	13.0	1.7
Electricity, gas and water	0.4	0.0	1.5	0.3
Construction	0.6	0.1	6.0	0.7
Trade, wholesale and retail distribution	31.9	2.2	23.9	3.9
Hotels and restaurants	3.1	0.1	2.2	0.2
Transport and communication	1.6	0.1	10.5	0.5
Finance, insurance and real estate	1.4	0.0	4.4	0.3
Community, social and personal services	26.7	1.0	16.6	2.5

Source: CSO (2007a)

Fifth, employment in rural areas is concentrated in agricultural activities (95 per cent of female workers and 90 per cent of male workers) while employment in urban areas is more evenly distributed among three economic activities: trade, services and agriculture. Table 1-6 shows the distribution of employment by economic activity for females and males in urban and rural areas.

At this point, it is clear that recurrent shocks in agriculture indeed affect a large part of the population engaged in farming, especially in the informal sector.

In terms of employment by type of business, most employed persons were in the private sector, which is also a signal of the less important role that the public sector has in the overall economy by comparison with the situation in the 1980s. Table 1-7 shows some aggregate figures by sex that are the basis for the Social Budget to be presented in later chapters.

Table 1-7. Indicators of employment by sex, 2005 (in percentages)

	Female	Male	Total
Basic classification			
Paid workers (as per cent of employed persons)[a]	46.2	71.8	59.4
Paid employees (as per cent of paid workers)	20.1	30.6	26.6
Employed in the formal sector (as per cent of paid workers)	12.8	23.3	19.3
Paid workers in the formal sector by type of business			
Central Government	33.3	18.4	22.1
Local Government	6.3	6.9	6.8
Parastatal	4.7	9.1	8.0
Private[b]	55.7	65.6	63.1
Total	100.00	100.00	100.00

[a] Paid workers' include self-employed, employers and paid employees. [b] 'Private' includes private sector, NGOs, churches, international organizations and households.

Source: Cross-tabulations based on labour force survey 2005

Paid workers are defined here as all employed persons excepting unpaid family workers. Table 1-7 shows the limited coverage of the formal sector in terms of this group: less than 20 per cent of paid workers are employed in formal-sector employment and the situation is more difficult for female workers. In absolute terms, around 25 per cent of these formal-sector paid workers were female and 75 per cent were male.

Looking at different businesses, the private sector employs around 63 per cent of paid workers in the formal sector. In the public sector, central Government employs 22 per cent; local Government, 7 per cent; and the parastatal sector, 8 per cent.

Household incomes and inequality 1.3

Detailed analysis of households' living conditions is based throughout the report mostly on the results of 2004 LCMS as LCMS 2006 was not yet available when the analysis was conducted. The 2004 dataset which was made available by CSO required cleaning procedures which – in some cases – may lead to slightly different results than those presented in the report on 2004 LCMS published by CSO.

One can also find in the report references to preliminary results of 2006 LCMS, which have as source aggregate results published by the CSO by the end of 2007 and beginning of 2008. The LCMS 2006 dataset was made available to the project team only in the first quarter of 2008 and thus we were not able to make use of it for the purpose of this report.

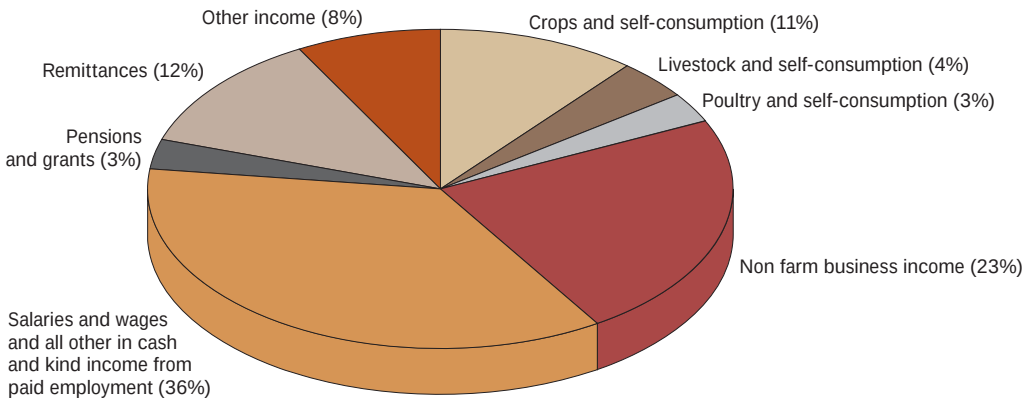
Composition of incomes *1.3.1*

An analysis of the composition of total mean monthly incomes in 2004 revealed that the greatest portion of household incomes in Zambia came from salaried and wage employment, followed in second place by non-farm business activities and in third place by agriculture and livestock-rearing activities. Figure 1-14 presents the average share in household incomes for eight main income sources.

Examining the composition of incomes in rural areas, where 60 per cent of the Zambian population was to be found in 2004, reveals that the largest share (44 per cent) of household incomes came from agriculture and livestock rearing. Other important sources of income for rural households were non-farm business activities, which accounted for 26 per cent of total mean monthly incomes, and to a lesser extent salaried and wage employment, which accounted for 17 per cent of total mean monthly incomes.

On the other hand, salaried and wage employment was the most important income source for urban households, accounting for 46 per cent of total mean monthly incomes. Non-farm business activities and remittances were also important income sources for urban households, accounting for 22 per cent and 17 per cent of total mean monthly incomes, respectively.

Figure 1-14. Composition of average total monthly household incomes per adult equivalent: all Zambia (2004)



Source: LCMS 2004

Figure 1-15. Main sources of household income (2004)

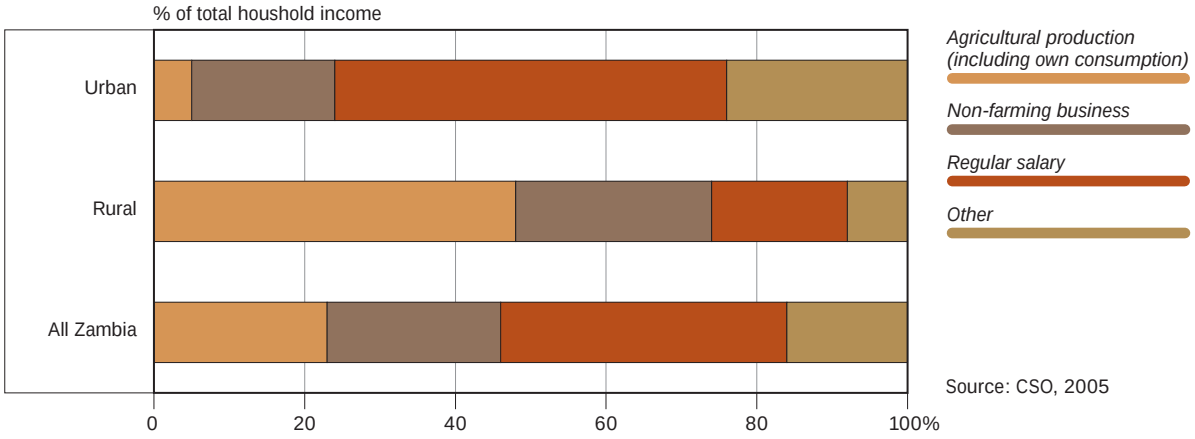
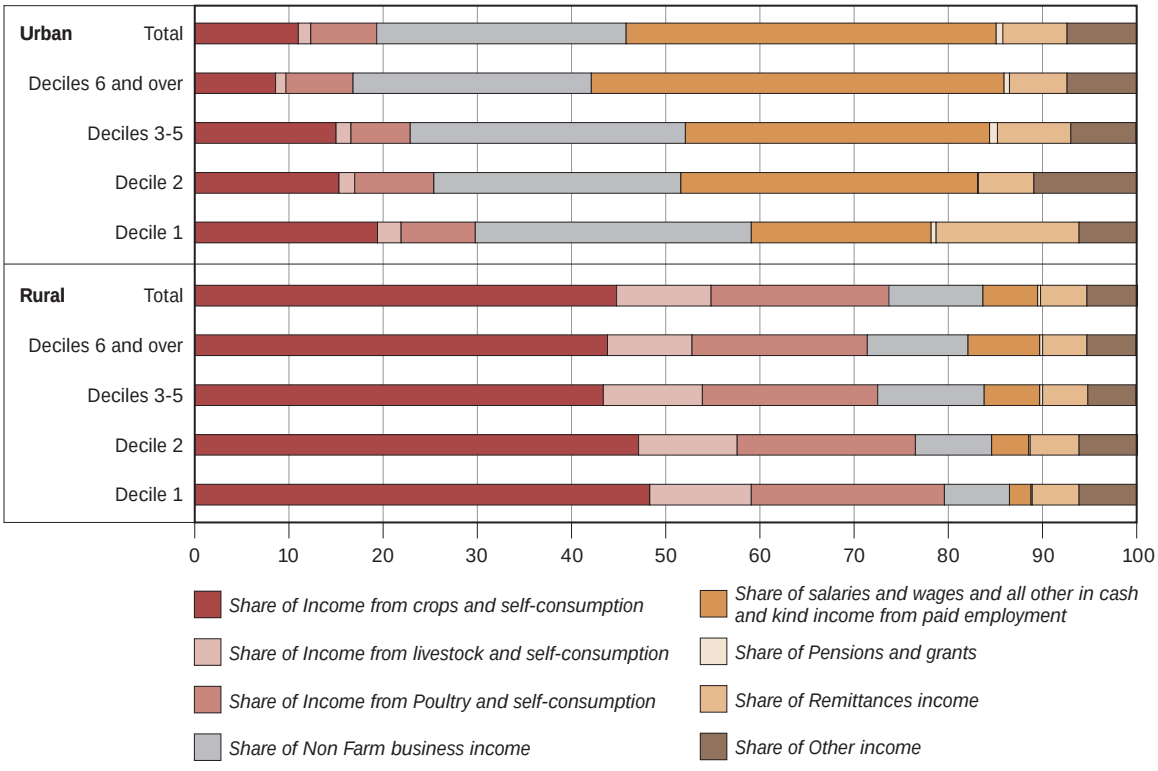


Figure 1-15 presents the average composition of monthly household incomes per adult equivalent for the whole of Zambia and separately for urban and rural populations.

Figure 1-16 presents the average composition of monthly household incomes for different population groups ranked by average monthly consumption in 2004.

Figure 1-16. Average share per month of different sources in total household income per equivalent adult by expenditure groups



Distribution of incomes and inequality 1.3.2

The mean monthly income for a Zambian household in 2004 was K502,030 whereas the modal income ranged from K150,001-K300,000, representing 24 per cent of the population (CSO 2005, p. 85).

The majority of Zambian households (65 per cent) received mean monthly incomes at or below K450,000, which was below the threshold estimated as necessary to meet the cost of basic needs.

Findings from the LCMS 2004 point to high income inequality in the general population, with a bias towards urban areas. Urban households reported average per capita incomes over twice as large as those of rural households. Of 39 per cent of the population in 2004, urban households accounted for 60 per cent of total national incomes.

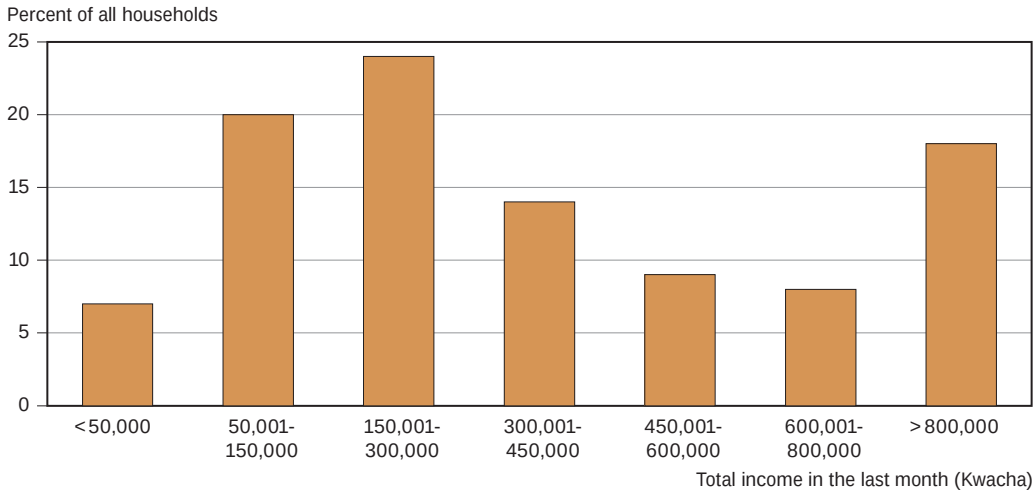
The Gini coefficient for the entire population in 2004 was 0.57. Individuals in the bottom two national income deciles accounted for only 4 per cent of national per capita incomes, while individuals in the top two income deciles accounted for 45 per cent of national per capita incomes.

The Gini coefficients for the urban population were 0.50 and for the rural population 0.55, indicating greater inequality within the rural population than within the urban population.

However, comparing the income shares of the 20 per cent poorest individuals within urban and rural areas shows the relative income situation of the poorest individuals to have been less favourable within urban areas, where the bottom two income deciles accounted for only 1 per cent of average per capita incomes, compared with 8 per cent for the bottom two rural income deciles (CSO 2005, p. 89).

Figure 1-17 shows the number of households in various income groups in 2004.

Figure 1-17. Distribution of households by income group (2004)

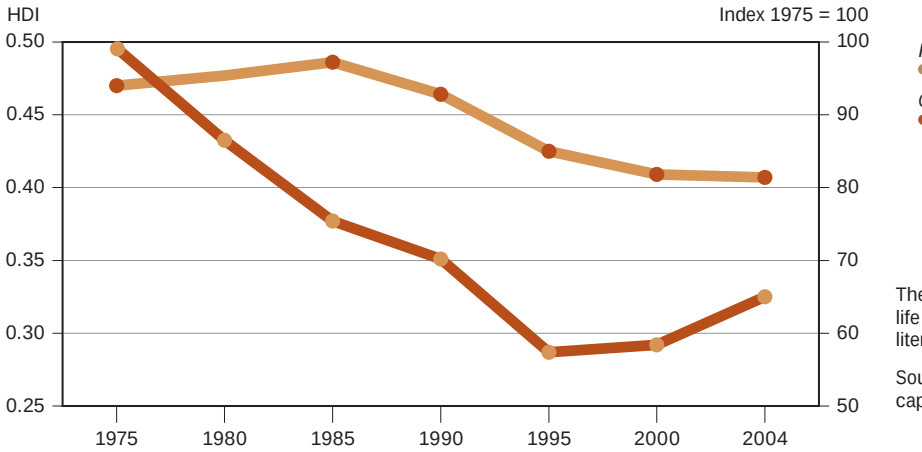


Source: CSO, 2005

1.4 Selected human development indicators

Despite the improved macro-economic performance of the country, the well-being of many Zambians has not improved. Figure 1-18 shows the evolution of real GDP per capita and the human development index (HDI). This index aggregates the achievements of individuals in three aspects: life and health, education, and income (which is taken as a proxy of living standards).

Figure 1-18. Real GDP per capita and Human Development Index (HDI)



The HDI includes three indicators: life expectancy at birth, adult literacy rate, and GDP per capita.

Sources: UN (2007b) for GDP per capita, and UNDP (2006) for HDI

Figure 1-19. Top ten diseases 2005 and 2006 (based on second quarter data)

	Diagnosis	Year	Incidence per 1000 population	Total diagnosis	Inpatient deaths
1	Malaria	2006	76.1	1347504	1706
		2005	200.1	2398539	4139
2	Respiratory infection: non pneumonia	2006	34.5	125686	868
		2005	78.7	943042	432
3	Diarrhoea – non bloody	2006	13.0	230673	580
		2005	34.2	410, 255	1331
4	Trauma: accidents, injuries, wounds, burns	2006	8.1	143217	158
		2005	21.8	260860	418
5	Respiratory infection: pneumonia	2006	7.1	125686	868
		2005	21.9	263085	2061
6	Skin infections	2006	6.5	115286	48
		2005	21.6	258739	52
7	Musculoskeletal and connective tissue	2006	4.2	74586	18
		2005	8.9	106977	35
8	Digestive system (not infectious)	2006	4.0	70564	115
		2005	9.2	109926	295
9	Anaemia	2006	2.3	41860	615
		2005	3.2	37895	555
10	Aids (suspected and confirmed cases)	2006	1.7	29515	1707
		2005	3.5	21674	1384

Source: Zambia Economic Report 2006 (MoFNP 2006, p.98)

While GPD per capita has increased since the second half of the 1990s, the HDI has decreased or has not improved. This highlights the need to take additional action because economic growth by itself does not promote the well-being of all Zambians. In addition, as seen in section 1.3, income inequality is high (0.57) and therefore, the Government's role in redistributing wealth and opportunities is paramount.

The Government's task to improve the well-being of its citizens is difficult, given the catastrophic effect of HIV/AIDS on life expectancy. In addition to having intrinsic importance for people to promote their goals in life (e.g., supporting practical reasoning and thinking skills), education has an instrumental value because it creates possibilities for people to integrate into the labour market with more chances of finding decent work and of taking better care of their health by participating in prevention campaigns, keeping good hygiene habits, and so on.

As discussed in section 1.1, the low life expectancy in Zambia is largely attributable to a high disease burden. Among the leading causes of death in 2006 were malaria, non-pneumonia respiratory infections (including tuberculosis), diarrhoea, traumas, pneumonia and other HIV/AIDS-related complications (Figure 1-19).

Although malaria is still the leading cause of death in Zambia, there has been a substantial decline in its prevalence in recent years, with incidence rates per 1000 people falling from 400 in 2000, to just above 200 in 2004 (UNDP 2007, p. 72), and most recently estimated at 76 (MoFNP 2006, p.98).

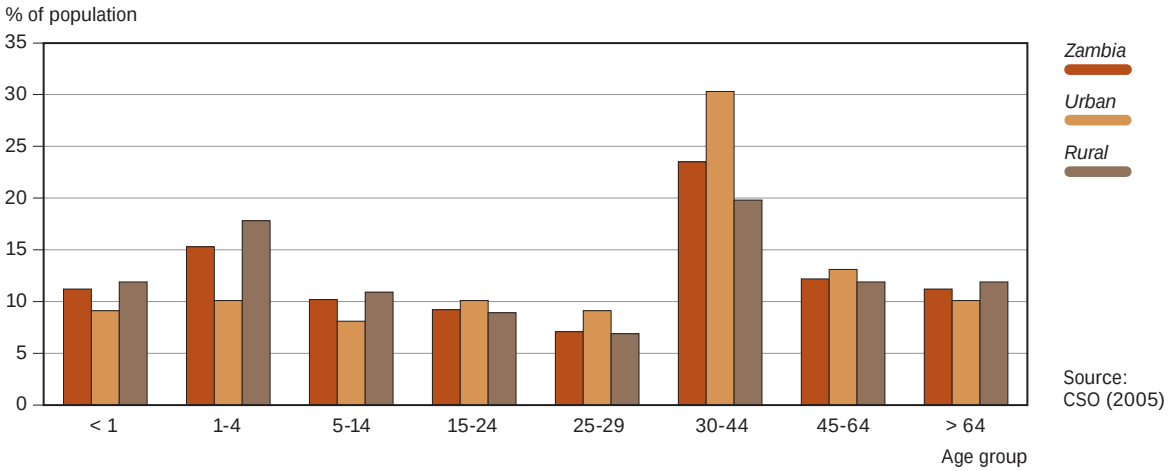
However, the same cannot be said for HIV/AIDS, of which the prevalence is still very high and showing little recent improvement. HIV prevalence was last estimated in 2002 at 15.6 per cent of the population in the age group 15-49 (ZDHS 2002). The concentration of death among those aged 30-44 is due particularly to the high HIV prevalence rate affecting this age group (see Figure 1-20).

Figure 1-21 clearly shows the disproportionate impact of HIV/AIDS on the female population. The female prevalence rate was estimated at 17.8 per cent, compared with 12.9 per cent in the male population. The urban population was found to be at higher risk, with a prevalence rate of 23 per cent, compared with about 11 per cent in rural areas.

HIV/AIDS is eroding human capacity on a broad front. Zambia now loses two-thirds of its trained teachers to HIV/AIDS, and in 2000 two in three agricultural extension workers in the country reported having lost a co-worker in the past year. The spread of AIDS is a consequence as well as a cause of vulnerability. (UNDP, 2005, p. 22)

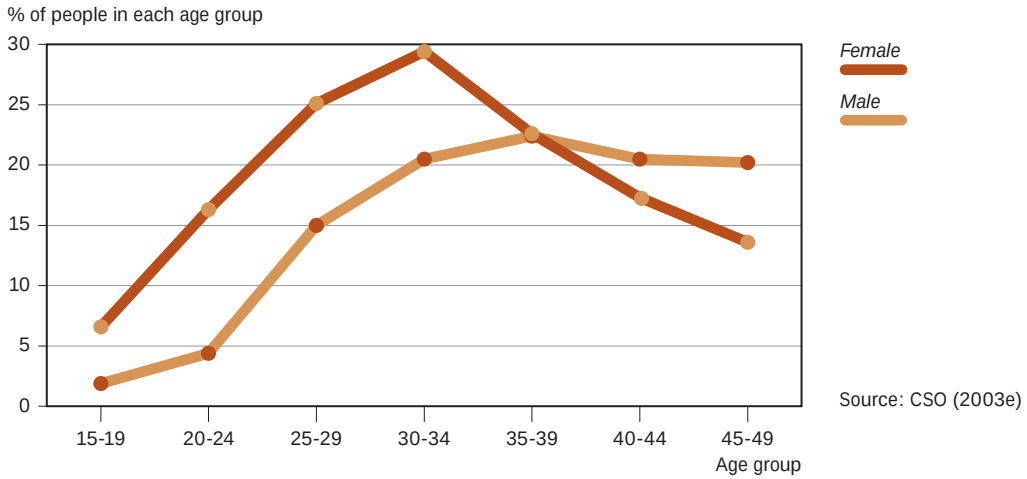
Positive trends include declining, but still high, under-5 mortality and infant mortality rates estimated in 2002 at 168 per 1000 live births and 95 per 1000 live

Figure 1-20. Percentage distribution of deaths by age, 2004



Source: CSO (2005)

Figure 1-21. HIV prevalence rates by sex and age group, 2002



Source: CSO (2003e)

births, respectively. That is a decline by 15 and 13 per cent, respectively, from those of 1996. The high rates are mainly caused by the high HIV/AIDS prevalence rates among women in their reproductive years and the consequent impact on high rates of HIV/AIDS mother-to-child transmission. On the other hand, national immunization coverage rebounded in 2004 and was estimated at 80 per cent of children under one year old, a slight improvement from the rate of 73.5 per cent in 2003. However, coverage is still considerably lower than a peak record of 86 per cent, achieved in 2001.

Table 1-8. Trends in health indicators

	2001	2002	2003	2004	2005	2006
Supervised deliveries (per cent)	44	49	55	61	62	48
Fully immunized children under 1 year (per cent)	86	76	74	80	90	96
Underweight prevalence (per cent weight)	23	22	21	17	16	16
Malaria (incidence per 1000 cases)	n.a.	n.a.	337.5	214.4	200.1	76.1

Source: MoFNP (Annual economic reports)

2

Following the overview of the demographic, social and economic environments presented earlier, we examine poverty and vulnerability as two related and widely prevalent phenomena that characterize living conditions in Zambia, pointing out the need for greater social protection coverage to address the needs not only of the majority of the population that is officially classified as poor, but also of the poorest and most vulnerable population groups.

Poverty in Zambia is longstanding and its eradication has been a major focus of national development efforts in the post-independence era. As a low-income country, Zambia faces numerous development challenges, e.g., historically low levels of human and material capital, inconsistent periods of economic growth and severe poverty implying an inability of the majority of the population to sustain basic needs. While poverty was known to be extensive, it is only since the early 1990s that systematic efforts have been made to measure it. As a result of a series of national household surveys carried out since 1991, it is now possible to report on the extent of poverty in the population across the years. Such an examination reveals that poverty has remained extensive, with most of the population subsisting below what is considered to be the minimum standard of living.

An important aspect of contemporary poverty measurements in Zambia is that the actual living conditions of the population can be compared against objectively defined minimum living standards in the form of official poverty lines. Two poverty lines are currently in use: the food poverty line, which marks a minimum level of food consumption and below which level households are characterized as extremely poor; and the basic needs poverty line, which marks the minimum level of consumption necessary to meet all basic needs and which demarcates the overall poor. Taking into account these distinctions, the Government estimated in 2006 that 51 per cent of Zambians were extremely poor and 64 per cent were overall poor.

By contrast, assessing vulnerability implies taking a more dynamic view of well-being, i.e., one which takes into account not only current livelihood outcomes but also the key risks faced by individuals and households in their daily lives, and their ability to deal with them when they occur. Like poverty, vulnerability is no stranger to Zambia. A large body of evidence points to the fact that most of the population is vulnerable to one or another poverty-threatening event. Such events are likely to

The poor and the poorest: Living conditions and vulnerability

affect any household, for example, the death of a productive member of the household because of HIV/AIDS; or may affect only certain population groups, for example the loss of livestock to disease which is a risk faced particularly by rural livestock-rearing households. Poverty and vulnerability in Zambia are closely related. On the one hand, poverty itself reflects a form of vulnerability, with the poor presumed to be especially likely to suffer in the event of 'shocks' due to their presumed limited ability to protect themselves. On the other hand, vulnerable groups such as orphans, elderly widows and persons living with HIV/AIDS are more likely than others to become poor, as their status almost always has some negative impact on their livelihoods and their ability to meet basic needs.

Because of their real and potential impact on welfare, poverty and vulnerability both imply states against which some form of social protection is required. This could be in terms of prevention, if negative outcomes are avoidable; reducing risks; or mitigation, if negative outcomes are entrenched. As most of the population is poor, ensuring a minimum of social protection for all could play a major role in poverty reduction. At the same time, there is no doubt that even in the poor majority some are poorer and more vulnerable and especially in need of some form of public social assistance. The onus in this case is to identify such needy groups and determine how they can most effectively be targeted.

Although this is certainly not the first attempt to examine poverty and vulnerability in Zambia, the following analysis is distinguished in two ways. First, it makes use of the most up-to-date empirical data on living conditions in the country, notably data arising from the Living Conditions Monitoring Surveys series, complemented by evidence from a number of secondary sources.[1] Second, the analysis responds to the challenge of how to extend coverage of social protection in a context of widespread poverty and vulnerability by identifying some of the characteristics which distinguish the neediest members of society from the erstwhile majority poor, and which could facilitate targeting of the former.

[1] Although systematic investigations into conditions of poverty and vulnerability have not been the norm in Zambia, a recent and growing preoccupation with such analyses is evident, especially with the advent of the national Poverty Reduction Strategy Papers (PRSPs). The World Bank's Poverty and Vulnerability Assessment (2005) marks one particularly recent and comprehensive attempt.

The rest of the chapter is organized as follows:

- Part 1 discusses current estimates of the extent of poverty in Zambia and looks at past trends.
- Part 2 examines the living conditions experienced by the poor, referring to various indicators of well-being such as the ability to meet basic food needs, education and health status, and access to housing and safe drinking water.
- Part 3 examines vulnerability in Zambia from the perspective of major livelihood threats and the individual and household characteristics identified with a greater susceptibility to poverty.
- Part 4 identifies areas where public social protection interventions could be most effective in protecting the livelihoods of the poorest and most vulnerable.

2.1 Contemporary poverty

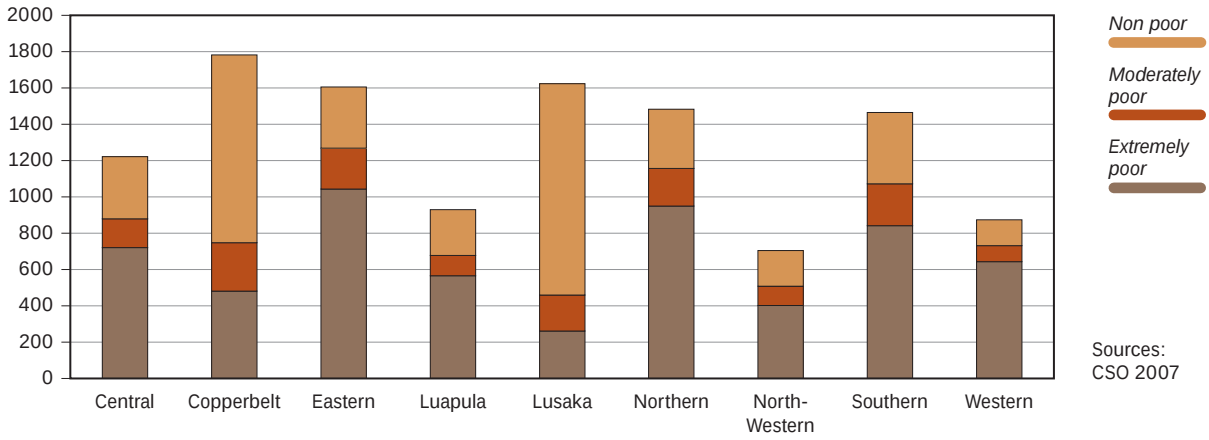
The Government of Zambia estimated that 64 per cent of the population were poor in 2006, including 51 per cent of the population classified as extremely poor (living below the food poverty line), and a further 13 per cent of the population classified as moderately poor living between the core (food) and overall (basic needs) poverty line (CSO 2007)). Although poverty headcount ratios such as those indicated above illustrate overall poverty incidence, they only scratch the surface when it comes to showing the extent and nature of poverty in a country. This holds true in Zambia, where the incidence of poverty depends to a large extent on which particular area or population group is taken into account for the measurement, and where the poor themselves reflect a wide range of welfare outcomes. In this section, we examine further aspects of poverty in Zambia, in particular the depth and severity of poverty[2] alongside its incidence in the population, and compare poverty measurements for different population groups. We also examine poverty estimates dating from the early 1990s until the present, highlighting patterns that have emerged over this period.

Poverty headcounts for the provinces in 2006 were calculated with reference to the same poverty lines and data sources used to calculate the national headcounts. Examining the headcounts in each province, it can be seen that in all but two provinces poverty rates exceeded 50 per cent, implying that in the majority of the provinces the populations were predominantly poor. However, even among such provinces there were some who were poorer than others: while the poor constituted over three-quarters of the population in Western, Northern and Eastern Provinces, they made up just above two-thirds of the population in Central, North-Western, Luapula and Southern Provinces.

The remaining two provinces, on the other hand, reported far lower poverty headcounts. In Lusaka Province just below a third of the population were found to be poor and around one-sixth of the population extremely poor. Likewise poverty rates

[2] Regarding the decomposable poverty measures pioneered by Foster, Greer and Thorbecke (1984): depth of poverty refers to the 'poverty gap': the average distance, measured in monetary terms, between the mean consumption of the poor from the poverty line. Severity of poverty refers to the *square* of the poverty gap; which, in contrast to the other two measures, is sensitive to changes in income distribution (or inequality) among the poor and gives greater weight to an increase (or decrease) in welfare among those at the lowest end of the income distribution scale in reflecting a reduction (or augmentation) of poverty. For more on the use and interpretation of these measures see chapter 3 of the UN *Handbook on Poverty Statistics (2006)*.

Figure 2-1. Distribution of the poor within Zambia's provinces (2006) (thousands)



Sources: CSO 2007

were comparatively low in Copperbelt Province, where less than half of the population were found to be poor and just above a quarter extremely poor. Figure 2-1 presents the size and distribution of the poor population in each of the country's nine provinces. As can be seen in the figure, in the provinces where the poor were in the majority, extremely poor persons accounted for the majority of those who were poor, representing close to 80 per cent of the overall poverty headcount in the seven poorest provinces.

The rural/urban character of an area was found to have a significant bearing on poverty. Of those identified as poor in 2006, the vast majority (82 per cent) were estimated to be living in rural areas, where poverty was both more prevalent and intense by comparison with urban areas. Eighty per cent of the rural population were poor in 2006 compared with just around a third of the urban population. In addition the character of poverty in urban areas was such that it was much less intense than in the rural areas; in 2006 the urban poor experienced an average shortfall or poverty 'gap' of 13 per cent of the overall poverty line, compared with an average poverty gap of 45 per cent in the case of the rural poor. As reflected in the ratio of their squared poverty gaps, which take into account not only the average of consumption across the respective poor groups but also the distribution of incomes within them, poverty was also found to have been more than four times as 'severe' in the rural areas than in the urban areas.[3] Comparing the extent of extreme poverty across rural and urban areas based on the lower or food poverty line similarly reveals that the rural population were particularly disadvantaged compared with their urban counterparts: those who were extremely poor made up around two-thirds of the rural-based population compared with just one-fifth of the urban population.

The large differences in poverty rates between rural and urban areas are also observable in the provincial poverty headcounts presented earlier. All seven of the predominantly poor provinces reviewed are at the same time predominantly rural, with the share of their rural populations ranging from 78 per cent in Central and Southern Provinces to 92 per cent in Eastern Province in 2006 (CSO 2007). The two least-poor provinces, Lusaka and Copperbelt, on the other hand were the most urbanized, with

[3] The squared poverty gap is defined as:

$$P_{\alpha=2} \text{ where } P\alpha = {}^{1}\!/_{N} \sum_{i=1}^{n} \left({}^{Z-Yi}\!/_{Z} \right)^{\alpha}$$

Where N = the total population in a group of interest; Z = the poverty line (Moderate); n = the number of individuals below the poverty line; Yi = the adult equivalent expenditure; a = the poverty aversion parameter which takes on values of 0,1,2; and Z – Yi = the poverty gap. $P_{\alpha=2}$ was found to have been 0.30 for the rural population and 0.07 for the urban population. See also footnote 2.

the share of their urban populations at 85 per cent and 79 per cent, respectively. Figure 2-2 shows the distribution of major urban centres (towns) in Zambia.

Rural and urban areas are distinguished not only by their different poverty rates but also by their different population densities, which has potential implications for the relative prevalence of poverty in one or other area. As might be expected, urban areas reflect far higher population densities compared with rural areas. Provincial population densities calculated on the basis of 2006 LCMS data indicate that the more urbanized provinces in Zambia have much higher population densities than less urbanized provinces. Whereas the average number of persons per square kilometre was 75 in Lusaka and 57 in Copperbelt, the averages were much lower in the remaining seven provinces, ranging from 23 persons per square kilometre in Eastern Province to 6 persons per square kilometre in North-Western Province.

It might thus be questioned whether the higher population densities experienced in the relatively urbanized provinces compensated for their lower rates of poverty such that, other things being constant, one's likelihood of being poor would be the same in any one of Zambia's nine provinces. We set out to answer this question by comparing the distribution of the total poor across the provinces against the corresponding distribution of the total population.

Table 2-1 shows both the distribution of the poor in Zambia by province and the distribution of the population by province. Comparing the third and fifth columns in the table, which show the percentage shares of the whole population and of all the poor respectively in each province, it can be seen that in all but two provinces the percentage shares of the poor exceeded the percentage shares of the population. Not surprisingly, the two provinces that were the exception, and where the population percentage shares of the poor proved to be less than the corresponding percentage shares of the population by rather large margins, were the same ones that were predominantly urban: Lusaka and Copperbelt.

The above findings imply that even though the high population densities seen in Lusaka and Copperbelt Provinces may have resulted in higher concentrations of the poor within them, their poor populations were still proportionately smaller than was to be expected given the distribution of the overall population. Consequently, most Zambians based in the other seven, predominantly rural provinces had a significantly higher chance of being poor.

Table 2-1. Distribution of the population and of the poor by province (2006)

Province	Number of persons	Percentage share	Number of poor	Percentage share
Central	1 221 667	10	879 255	12
Copperbelt	1 782 799	15	748 481	10
Eastern	1 604 257	14	1 267 363	17
Luapula	929 310	8	678 396	9
Lusaka	1 640 853	14	475 476	6
Northern	1 482 946	13	1 156 674	15
North-Western	709 095	6	507 595	7
Southern	1 453 112	12	1 058 262	14
Western	887 183	8	740 858	10
Total	**11 711 223**	**100**	**7 512 362**	**100**

Sources: CSO 2001; CSO 2007

Trends in poverty: 1991-2006 2.2

We now turn to examine how poverty in Zambia has developed over the last fifteen years based on a set of nationally representative household sample surveys conducted between 1991 and 2006. In principle, such trend analysis of poverty requires that only findings from surveys similar in design be compared, so that any differences in the observed incidence of poverty between particular points in time follow as a result of actual changes in the welfare of the population rather than from changes in the survey methodology. Taking the series of surveys carried out in Zambia since 1991, six of the seven meet this criterion and are consequently used to examine trends in poverty in Zambia.[4] In particular, two of the surveys the LCMS II conducted in 1998, and the LCMS V conducted in 2006, have been identified as providing the best current basis for assessing poverty trends over a short-term period of eight years.[5] Box 2 presents an overview of all the surveys.

Box 2. Introduction of national surveys to measure poverty in Zambia

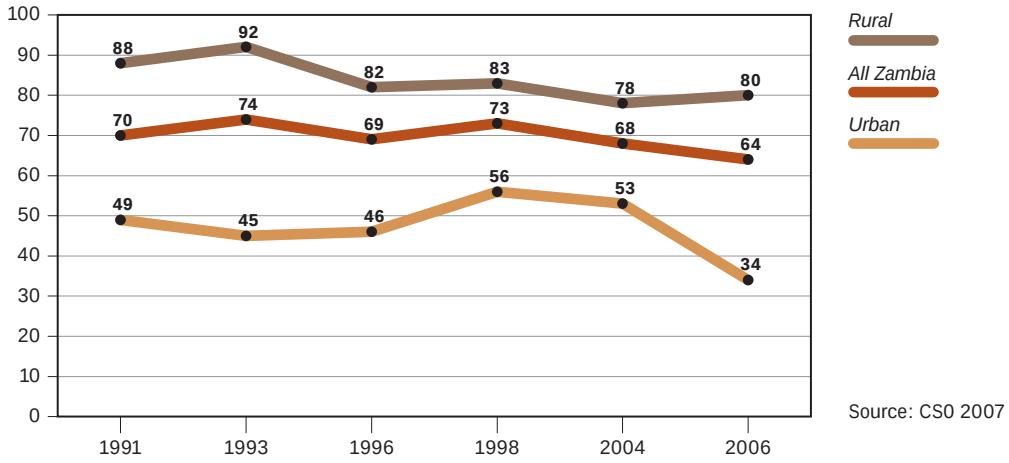
The implementation of surveys specially designed to monitor different aspects of living conditions among the population is quite a recent phenomenon in Zambia. In the period since independence, no such surveys had been carried out, and it was only once the harsh effects of the Structural Adjustment Programmes (SAPS) become apparent in the early 1990s that monitoring was introduced. The first surveys carried out were the Social Dimensions of Adjustment Priority Surveys, carried out in 1991 and again in 1993 in order to track the effects of the SAPs on population welfare, and especially on the least well-off population groups. Although limited in scope compared with later surveys, PSI and PSII allowed relatively precise measurements of poverty to be conducted for the first time at national and sub-national levels. These initial surveys were followed by a series of Living Conditions Monitoring Surveys (LCMS) which began in 1996 and were subsequently carried out in 1998, 2002-2003, 2004 and 2006. Measuring various aspects of living conditions such as income, expenditures, wealth, engagement in economic activities, access to basic infrastructure and public services, educational attainment and health status. The LCMS have further developed the use of household indicators, notably aggregate consumption, in measuring poverty. With the exception only of the 2002-2003 survey, which was based on a non-comparable design, it is now possible to examine poverty estimates from the 1991, 1993, 1996, 1998, 2004 and 2006 surveys and analyse with relative confidence the development of poverty between these years. National surveys measuring the living conditions of the population and poverty in particular are expected to continue in future, especially now that the National Development Plans have poverty reduction as their primary goal.

Figure 2-2 shows the respective shares of the national, rural and urban populations living below the overall poverty line between 1991 and 2006. Examining the middle graph, which traces changes in the national poverty headcount ratio, it appears that

[4] Poverty estimates based on the Integrated Household Budget Survey 2002/2003 (or LCMS III) are not examined here because of the different way in which that survey was conducted compared with the other surveys. In particular, the 2002-2003 survey was based on a panel design, involving continuous data collection over a twelve-month period with households recording their expenditures and other consumption data in monthly diaries, in contrast to the other surveys which employed a cross-sectional design where enumerators collected household data at only one point in time. Nonetheless, the same unique features of the survey of 2002-2003 prove particularly useful in analysing seasonal dynamics of poverty in Zambia.

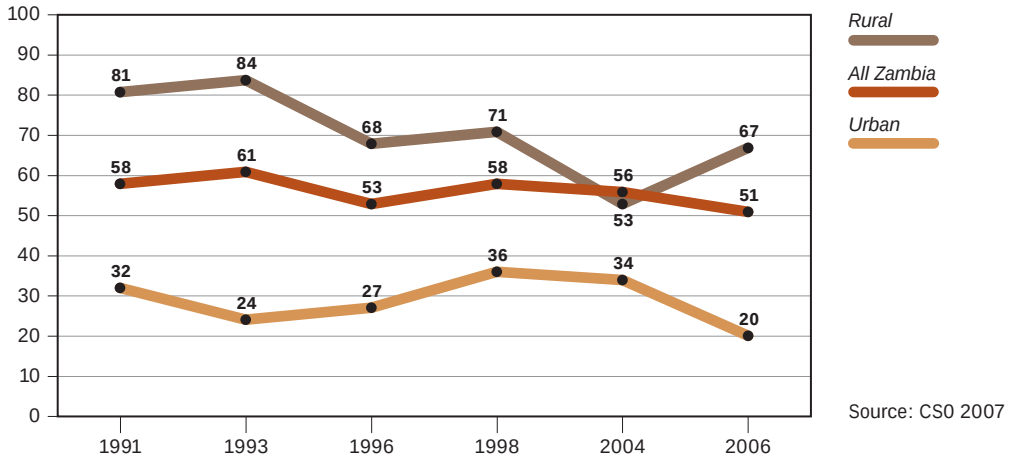
[5] Another reason for taking the 1998 survey as a baseline for assessing short-term developments in poverty in the present analysis is that, at the time of its introduction, this survey was specifically intended to be a baseline instrument for the evaluation the first Poverty Reduction Strategy of Zambia and, subsequently, also as a baseline instrument for monitoring national progress on the Millennium Development Goals.

Figure 2-2. Trends in overall poverty (1991-2006) (percentage)



Source: CS0 2007

Figure 2-3. Trends in extreme poverty (1991-2006) (percentage)



Source: CS0 2007

poverty in Zambia today is less prevalent than it was 15 years ago although there have been significant fluctuations in-between. Compared with 1993 when poverty was at its most widespread in Zambia with almost three-quarters of the population found to be poor, poverty incidence was much lower in 2006, when the poor made up just under two-thirds of the population.

As in 2006, poverty incidence in rural and urban areas differed substantially in the other survey years, with a far higher proportion of the rural population found to have been poor at any one time. However, mirroring the national trend, both rural and urban poverty appear to be lower today than they were in the 1990s. As the top graph in Figure 2-2 shows, rural poverty was most prevalent in 1993, when almost all the rural population were found to have been poor, and had decreased to its second-lowest level in 2006. As indicated by the bottom graph in Figure 2-2, urban poverty also decreased from a peak in 1998 to its lowest point in 2006, although this reduction was much greater compared with that seen in rural areas.

Figure 2-3 further shows that a decreasing share of the overall poor in the population has been accompanied by a decreasing share of the extremely poor, indicating that in addition to actual poverty reduction, which could imply either a reduction in the prevalence of poverty or an absolute decrease in the number of the poor population, during this period there has also been a reduction in the intensity of poverty, with a

greater number of poor households approaching the poverty line than was previously the case. This is especially apparent in rural areas, where the share of extremely poor persons dropped from above 80 per cent in the early 1990s to just below 60 per cent in 2004. Urban extreme poverty also reduced significantly during the same period from a high of 36 per cent in 1998 to a low of 20 per cent in 2006.

Although a smaller share of the population was found to have been living in poverty in recent years compared with the 1990s, a closer examination of the changes in rural and urban poverty between 1991 and 2006 reveals distinct developments in the sequencing and character of poverty reduction in either area during the period in question.[6] On the one hand, poverty in urban areas seems to have reduced in both extent (how widespread it was among the population) and magnitude (how many people were actually poor) between 1991 and 2006. As Figure 2-2 shows, the percentage of the urban population living in poverty decreased slightly between 1991 and 1996, then increased substantially between 1996 and 1998. After decreasing slightly between 1998 and 2004, urban poverty rates then experienced a sudden and spectacular drop between 2004 and 2006.[7]

Examining the period between 1998 and 2006 when urban poverty thus seems to have been on the decline, and when the urban poverty rate experienced a net percentage decrease of 40 per cent, it was found that the number of urban poor at the same time decreased: there were almost three-quarters of a million fewer people living in poverty in urban areas in 2006 compared with the situation in 1998. This suggests that of those who were able to escape poverty over the past fifteen years, many may have come from urban areas.

On the other hand, the reduction in poverty which occurred in rural areas over the past fifteen years has been much more modest than that seen in urban areas, with only the extent of poverty in the rural population decreasing but not the absolute numbers of the poor, while even the timing of the former development has been different. Figure 2-2 shows that the rural poverty rate increased somewhat between 1991 and 1993, but then reduced substantially between 1993 and 2004. From 1996 to 1998 there was not much change in poverty levels, while from 1998 onwards rural poverty rates experienced a slight drop. The overall pattern for rural areas is therefore of a sudden increase in the poverty rate followed by an also sudden and even larger decrease, both taking place in the first half of the1990s after which there was not much change in the extent of rural poverty. However, a stabilization of the rural poverty rate over the last few years has not translated into a similar stabilization of the number of the rural poor: in the period between 1998 and 2006 more than 800,000 individuals were added to the ranks of the rural poor, offsetting any progress that had been made over the same period in rolling back urban poverty.[8]

Thus, in contrast to the trend seen in urban areas where poverty reduction has been primarily a phenomenon of the last few years, the bulk of rural poverty reduction seems to have taken place further back in time, notably in the period between

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[6] Various explanations can be found in the policy literature for the trends examined here. For one account relating the policy reforms on poverty and inequality, pursued in Zambia during the 1990s, see McCulloch et al. (2000).

[7] Although poverty estimates from the 2002/3 LCMS are not taken into account for reasons mentioned earlier, they seem to support the overall trends in rural and urban poverty the ILO indicates. As officially reported, the poverty rates over 2002/2003 were 67 per cent for the entire population, 74 per cent for the rural population and 52 per cent for the urban population (CSO 2004).

[8] Differential rates of population growth in rural and urban areas over this period certainly contributed to the large increase seen in the number of rural poor, independently of any other poverty-inducing factors. However, it is expected that one goal of national poverty reduction would be to slow down the growth in absolute numbers of the poor population, bearing in mind population growth patterns.

1993 and 1996. At the same time, whereas the number of the urban poor was found to have actually decreased between 1998 and 2006, the reverse was true in rural areas where there were more poor people in 2006 than at any point in the preceding fifteen years. The outcome of the short-term movements in rural and urban poverty recorded between 1998-2006 is therefore that there was only a small net increase in the total number of poor persons in Zambia during this period. Between 1998 and 2006 the poor in Zambia increased by under 100,000 individuals, a number which falls far short of the increase that could have been projected to occur between these years taking into account actual population growth over this period, and which also falls far short of the actual increase in the number of poor persons between 1991 and 1998.[9] The unique character of the urban poverty reduction that has taken place over the last eight or so years, in terms of both a reduced prevalence of poverty and a decrease in the poor population, thus accounts for much of the reduction in the incidence of poverty in Zambia during this period, and notably the dramatic halt in the growth of the national poor population.

As might be expected, differential rates of population growth in rural and urban areas have certainly contributed to the opposite shifts in the numbers of the rural and the urban poor, regardless of any other poverty-inducing factors. According to official estimates and as also seen in the previous chapter, during the 1990s the rural population grew at twice the rate of the urban population. In the face of shifting patterns of migration, fertility and the impact of HIV/AIDS as well as other known causes of mortality, it is still not known to what extent either population has grown in the years since 2000, and thus how the respective population growth rates could have impacted on the growth of the poor population. However, the current preponderance of rural dwellers in the population and the much higher prevalence of poverty among them implies that reducing rural poverty, both in terms of extent and the absolute number of the rural poor, is a key prerequisite if any of the national poverty reduction goals such as those articulated in the FNDP and Vision 2030 are to be met.

In the next section, we turn back to the present, to examine how poverty impacts on living conditions, looking particularly at health, education and access to safe drinking water. Later on we see how events such as droughts and deaths in the household represent a major risk of falling into poverty, even for those who are not poor.

2.3 Living conditions of the poor

Now we consider various aspects of living conditions of the poorest population groups. As might be expected, poverty in Zambia translates into not only the inability to afford basic needs such as food and housing but also other adverse outcomes in health, education, access to safe water and sanitation.

[9] Our calculations show that taking 1998 as the baseline and assuming an average annual population growth rate of 1.9 per cent (the average between 1998 and 2006) the size of the poor population in Zambia could be expected to have grown by more than one million individuals by 2006. On the other hand, our calculations show that in the period 1991-1998 the number of poor persons in Zambia actually increased by almost 1.5 million persons.

Meeting basic food needs

As indicated in the reference to poverty lines, measuring poverty in Zambia follows a 'cost of basic needs' approach. On the one hand, a food basket has been defined based on the average monthly consumption of a household of six members in the middle-income quintile. Taking as a basis this value, the cost of other basic needs such as housing and clothing are estimated for the same 'average' household and their value added to the food basket in order to arrive at an estimated cost of all basic needs, referred to as the 'basic needs basket'. The food basket subsequently determines the food poverty line while the basic needs basket determines the overall poverty line. Table 2-2 shows the composition of the food basket in December 2006.[10]

As noted before, the LCMS 2006 found 51 per cent of Zambian households to be 'extremely poor' or reporting average monthly consumption lower than the value of the food basket. That the majority of households in Zambia find it difficult to meet even basic food needs is further indicated in households' own assessments of their poverty status: only 42 per cent of households in the LCMS 2006 indicated that they could afford to have three meals a day.

Households' ability to meet basic food needs is critically affected by the size of their incomes. Comparing incomes of extremely poor and moderately poor households as reported in the LCMS 2004, the modal monthly income of extremely poor households was found to have been between two and three times smaller than that of moderately poor households. Further analysis of the LCMS 2004 data shows that households in the lowest consumption decile consumed on average only half of what households in the next lowest decile consumed, and four times less than what was consumed on

Table 2-2. Food basket to meet monthly nutritional requirement of a household of six members (December 2006)

Item	Product	Quantity	Calories per 100 grams	Protein	Unit cost 12/2006	Average price 12/2006
1	White Roller 25 kg	3.6	10 712	221	26 288	94 636.80
2	Dried Kapenta Siavonga 1 kg	2	203	41	28 692	57 384.00
3	Dried bream 1 kg	1	100	21	22 317	22 317.00
4	Fresh milk (pasteurized) local 500 ml	4	43	2	2186	8744.00
5	Groundnuts 1 kg	3	570	27	5743	17 229.00
6	Eggs 1 unit	2	125		5660	11 320.00
7	Cooking oil imported 750 ml	6	619	-	5394	32 364.00
8	Onions 1 kg	4	14	-	3864	15 456.00
9	Tomatoes 1kg	4	7	1	2253	9012.00
10	Vegetables	7.5	74	6	1697	12 727.50
11	Dried beans	2	222	16	6041	12 082.00
12	Table salt 1 kg any brand	1	–	–	2424	2424.00
	TOTAL		**12 689**	**335**		**295 696.30**

Source: CSO (2007)

[10] At that time the Food Basket was valued at K78,223 (approximately USD 20) per adult person per month and the Basic Needs Basket at K98,872 (approximately USD 25) per adult person per month.

average by those households just below the poverty line. These differences in reported household incomes suggest that even among the officially classified 'poor', there are some who are more able to meet basic food needs than others.

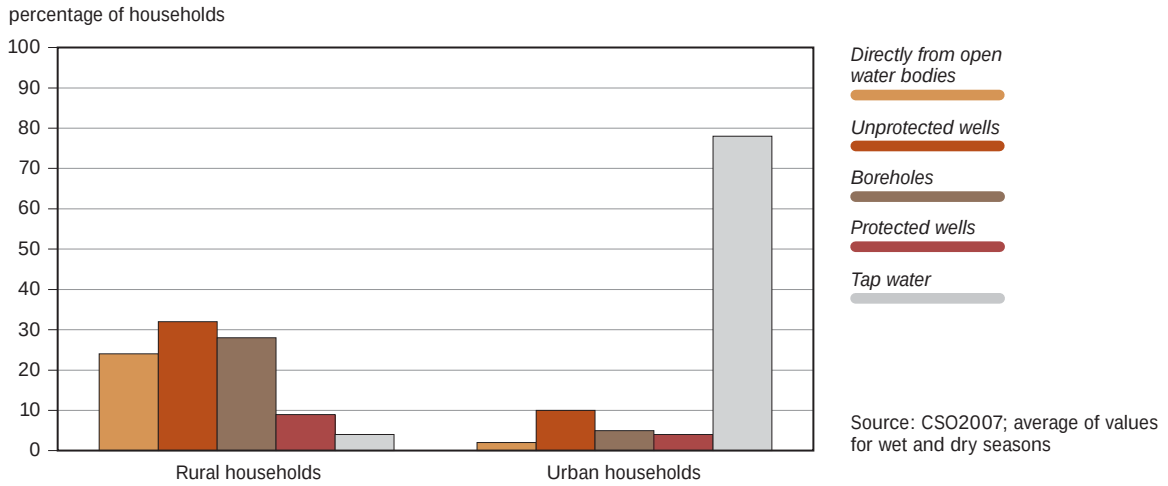
Findings from the ZDHS 2001/2 and LCMS 2003 further illustrate the influence of low household incomes on nutritional status, with one analysis having found that children belonging to households in the bottom welfare quintiles are progressively more likely to be severely stunted, reflecting long-term malnutrition, compared with children in wealthier households (World Bank 2005: 216-220).[11]

Access to housing and safe drinking water

Aside from the challenges in meeting basic food needs, the poor in Zambia also face difficulties in gaining access to decent housing and services. Analysis based on findings from the LCMS 2004 reveals that the poor had far fewer opportunities for access to safe sources of drinking water. Compared with 69 per cent of non-poor households, only 48 per cent of extremely poor households surveyed reported having access to a safe source of drinking water in the dry season, while the share of households in the lowest consumption decile was even lower: 36 per cent. These findings also suggest that the poor are especially at risk of suffering from water-borne infections like typhoid and dysentery.

However lack of access to clean water and decent housing in some parts of the country affects not only the poor. Ninety per cent of rural respondents surveyed in the LCMS 2006 reported occupying dwellings lacking basic amenities such as piped water and sanitation facilities, compared with only 22 per cent of urban households. Figure 2-4 shows main sources of drinking water for rural and urban households in 2006.

Figure 2-4. Households by main sources of drinking water (2006)



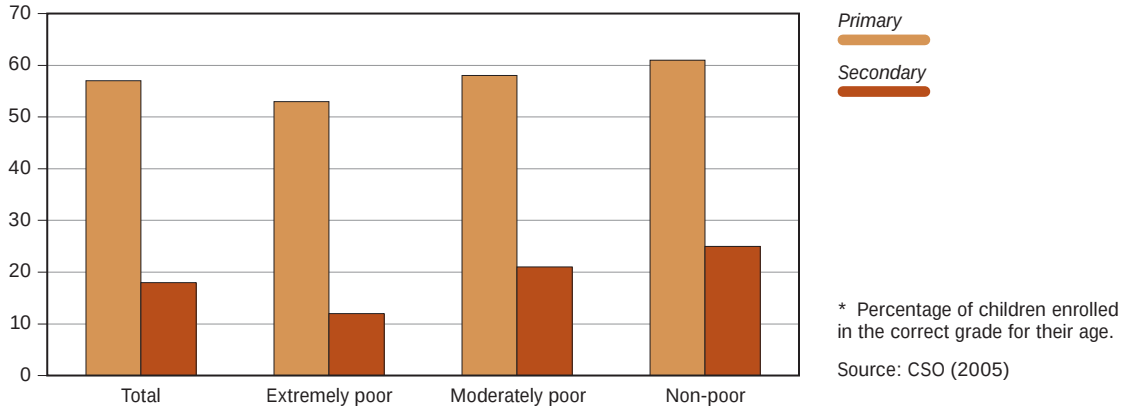
Source: CSO2007; average of values for wet and dry seasons

[11] Only children in the two richest quintiles experienced significantly less stunting, however, indicating the widespread risk of malnutrition facing the child population in Zambia.

Access to education

Data from the LCMS 2004 were used to examine education outcomes alongside poverty status. On the one hand, poverty was strongly associated with low educational attainment among adults. Compared with 51 per cent of non-poor households, only 33 per cent of extremely poor households and 36 per cent of all poor households were headed by a family member who had achieved some level of secondary school education.[12] Although school attendance among children has improved substantially in recent years, poverty remains a major barrier to education, especially among the poorest households and beyond the early years of schooling. As Figure 2-5 shows, secondary school attendance is significantly affected by poverty status, with extremely poor households being the least likely to have children in school at the right age.

Figure 2-5. Net attendance rates by poverty status (2004)*



* Percentage of children enrolled in the correct grade for their age.

Source: CSO (2005)

Health status

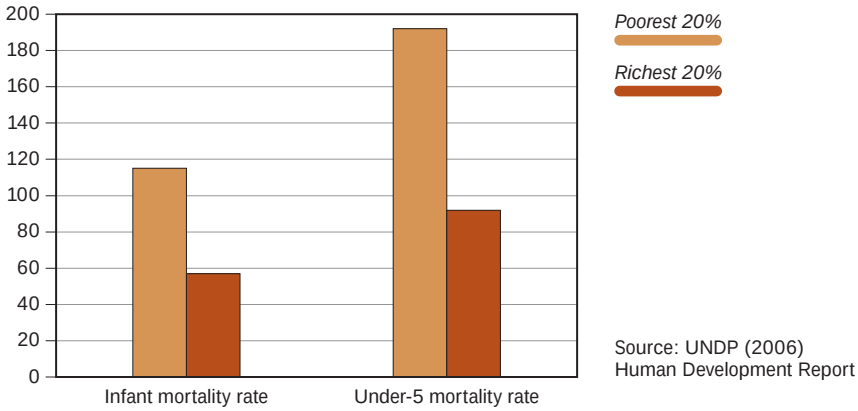
As could be expected given their inability to secure proper shelter, sanitation and access to safe drinking water, poor people are more likely to suffer from poor health. Figure 2-6 provides one indication of the health outcomes the poor in Zambia are likely to face early in their lives.

Apart from their higher exposure to health risks, another factor that (indirectly) affects the health of the poor in Zambia is the cost of health care services. In the absence of a universal health care system, although user fees have been abolished in the rural areas, they represent a major barrier to poor households gaining access to health services. Based on analysis of LCMS 2004 data, poor individuals were found to have been much less likely to have consulted a health professional or even a traditional healer or take medication when sick or injured, compared with wealthier individuals: of those individuals who reported having been sick or injured in the two weeks preceding the survey but not having consulted or taken any medication, 28 per cent were in the lowest consumption decile.

One reason why the poorest households will delay or fail to seek health services when they require them is that they have much less to devote to health spending,

[12] Reported educational attainment among the poorest households was even worse: only 21 per cent and 31 per cent of persons heading households in lowest and second-lowest consumption deciles respectively had obtained a secondary school education.

Figure 2-6. Child mortality rates (2001)



Source: UNDP (2006) Human Development Report

compared with other population groups. This can again be seen in the LCMS 2004, where average spending on health reported by extremely poor individuals was less than a third of that reported by non-poor individuals, although the probability of illness was certainly higher among the former. Given the smaller incomes of the poorest households, critical and unplanned health spending may also impose a significant burden on household resources and therefore indirectly lead to a worsening of their ability to sustain a livelihood and meet other basic needs. Cheelo et al. (2006) estimate that costs of health care may on average account for 10 per cent of the expenditures of the poorest quartile of households, but less than 3 per cent for households in the second poorest quartile. Analysis of LCMS 2004 data reveals a similar trend, with health spending taking up almost a fifth of total consumption of households in the poorest decile, a level of health spending that could be termed catastrophic.

2.4 Vulnerability

In what follows we examine vulnerability from the perspective of events or conditions that subject households in Zambia to the risk of poverty. Of course, poverty defined in terms of the inability to meet basic needs is only one among many sub-optimal welfare outcomes that households in Zambia are likely to encounter. Others may include chronic or permanent loss of health and the loss of family members. Nevertheless, the focus on vulnerability to poverty is not misplaced: as demonstrated in the previous section, poverty in Zambia is associated with a range of adverse living conditions that in turn point to a greater susceptibility to other undesirable outcomes such as illness and long-term destitution.

Implied in the present approach are two questions that are vital from a social protection perspective. On the one hand, what are the (exogenous) risks that may hasten or entrench deterioration in households' well-being to the point of lowering consumption below the poverty line? On the other hand, which (endogenous) characteristics are likely to predispose individuals, households or communities in Zambia to poverty? Although we cannot answer either question in its entirety, we do present evidence indicating some of the key risks engendering poverty in Zambia as well as identifying those which are particularly susceptible to poverty and should be targeted in anti-poverty measures.

Previous studies on vulnerability in Zambia have referred to any number of events whose occurrence may threaten households' livelihoods or even their very survival (del Ninno & Marini 2005). These include natural disasters such as droughts and floods, serious illnesses, in particular HIV/AIDS, the death of productive household members, and macroeconomic instability, to name but a few. In addition to such 'shocks', long-term structural conditions also engender vulnerability. The Fifth National Development Plan of Zambia in its chapter on social protection identifies various such risk factors, including:

- lack of sustainable livelihoods in rural areas
- inadequate access to social security, education and training
- inadequate health services
- HIV/AIDS
- violence against women and children
- and lack of legal entitlements for refugees.

In what follows, we examine two phenomena widely cited as engendering a risk of poverty in Zambia: natural disasters and HIV/AIDS. We examine different aspects of the vulnerability arising from these phenomena, including how often or how widely they occur; particular groups they are likely to affect; and the causal processes by which they might lead households into poverty. Later on, we identify measures that, from a social protection perspective, could be considered to reduce the associated vulnerability.

Natural disasters

Table 2-3 shows the frequency of some natural disasters in Zambia in recent years. As can be seen, in only two of the eight years reviewed did no disaster occur, while in other years events such as epidemics, floods and droughts occurred simultaneously.

Various studies (e.g. Parker and Mwape, 2004; del Ninno & Marini, 2005) cite natural disasters as a key cause of downward mobility in Zambia. One reason is that their economic impact is often widely felt. For example, the disruption of agricultural production associated with droughts and other weather-related shocks acts simultaneously to lower rural incomes and to raise food and commodity prices in urban areas, lowering consumption and exacerbating food insecurity in both areas. Another reason is that such events typically expose a population to several risks at once. For instance, apart from disrupting production and damaging assets, disasters like floods also act to spread diseases, especially where the drinking water and sanitation infrastructure is

Table 2-3. Incidence of natural disasters (2001-2007)*

	2000	2001	2002	2003	2004	2005	2006	2007
Epidemic	✘	✘		✘		✘		✘
Flood/drought	✘	✘			✘			✘

* The following events qualify as disasters: 10 or more people reported killed, 100 people reported affected, a call for international assistance, or declaration of a state of emergency (EM-DAT, 2007).

poor or non-existent. Recurrent shocks result in increasing vulnerability as people sell assets, etc., to survive each shock.

Natural disasters are expected to remain a major obstacle to development and poverty reduction in Zambia over the coming years. Global warming represents one particular threat. According to the environment chapter of the FNDP, temperature warming is expected to lead to substantial reductions in rainfall and increase the frequency of droughts in some of the most fertile regions of the country (GRZ 2006: 304-305).

HIV/AIDS

HIV/AIDS, now a full-blown pandemic in Zambia, represents another grave risk facing the population. Apart from the direct suffering of those infected and of their families, who spend vital resources caring for them through their illness and are eventually left behind, the impact of HIV/AIDS is felt in other areas of society as the extended family and neighbours contribute to funeral costs and in many cases support households which have lost a breadwinner or caretaker. As was noted elsewhere.

For households whose economic standing is already insecure, the increased dependency ratio and added financial burdens caused by illness and death in related households can push them below the poverty line. If they fully meet their traditional social obligations, then the requirements of HIV/AIDS-affected relatives may drain their saving and render them more vulnerable to impoverishment as a result of any shocks that they themselves might experience. (WB 2005: 193).

Further threats posed by the pandemic include the loss of skilled professionals such as teachers and health care workers, the disruption of the organized economic sectors, and a deterioration in food security as small-scale rural households, which are responsible for growing the bulk of food crops in the country, find themselves labour-constrained as a consequence of HIV-related deaths.

Table 2-4 shows the number of people currently living with the disease and prevalence rates among various age groups. As discussed in Chapter 1, the risk posed by HIV/AIDS is not uniform for all individuals but varies according to age and sex. In the past, cases of infection were mostly restricted to older men, although now it is young women who are reporting the highest rates of infection. At the same time, the majority of HIV/AIDS cases continue to be reported in urban areas, implying that urban women constitute a key risk group (World Bank 2005).

In addition to the threats posed by natural disasters and HIV/AIDS, vulnerability in Zambia also follows as a result of structural conditions such as long-running under-investment in public education and the inability of the most vulnerable

Table 2-4. HIV/AIDS estimates (2007)

Number of people living with HIV	**1,100,000**
Prevalence among adults aged 15-49 years	17 per cent
Women aged 15 and over living with HIV	570,000
Children aged 0-14 living with HIV	130,000
Orphans aged 0 to 17 living with HIV	710,000

Source: UNAIDS: http://www.unaids.org/en/Regions_Countries/Countries/zambia.asp

members of society to influence policy outcomes vital to any improvement in their living conditions. In such conditions, a large part of the population finds itself in a 'trap' from which there few opportunities for escape because of constant low returns on livelihood strategies.

In the next section we use data from the LCMS 2004 to assess endogenous vulnerability, in which certain individual and household attributes are indicative of the risk of being poor.

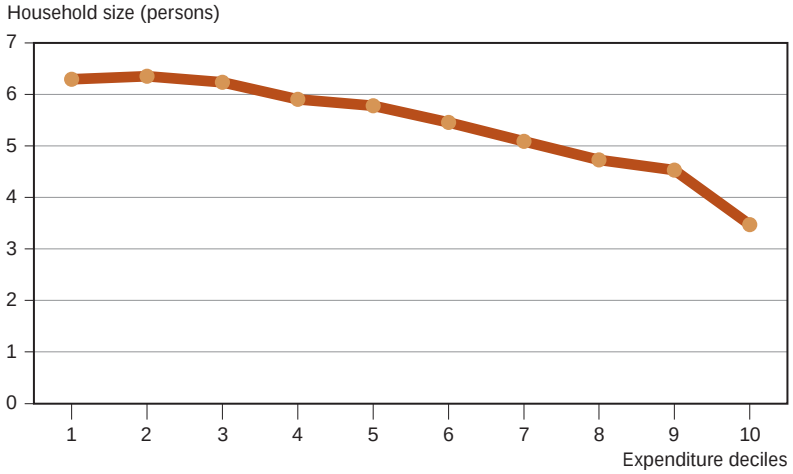
Household size and composition

LCMS 2004 data reveal increasing household size to be associated with a greater likelihood of poverty. The average poor household in 2004 had six members compared with four members in the average non-poor household. Large households, consisting of six or more members, made up 54 per cent of extremely poor households, 42 per cent of moderately poor households and 27 per cent of non-poor households. The tendency to increasing household size was evident also among the poorest households, with the bottom two income deciles featuring the largest number of large households as shown in Figure 2-7. However, households in rural and urban areas were not markedly different in size on average, suggesting this was not a factor contributing to differences in income between them.

Increasing household size has a most direct impact on household income levels via over-dependency. This comes about when a few productive members of the household are responsible for a large number of non-productive members, as might occur for example in a household consisting of parents supporting many young children. Over-dependency may also reflect the obligations imposed by traditional safety nets, where households welcome into their midst needy members of the extended family.

Another characteristic that has a bearing on poverty status is the generational composition of the household. An examination of the structure of Zambian households based on the LCMS 2004 reveals the existence of several types of households made up of different combinations of generations. Analysis of consumption data corresponding to these household categories reveals significant disparities in welfare, depending on the presence of certain generations in the household which are deemed critical to poverty status.

Figure 2-7. Households' income distribution by average size



Source: LCMS 2004

The vast majority of Zambians were found in households consisting of adults and children living together, which accounted for 70 per cent of all households.[13] This type of household approximated a 'standard household' in terms of size, with on average close to six members per household. However, there was no typical level of consumption for households of this type, with the majority qualifying as 'moderately poor'[14] and a minority reporting consumption that clearly placed them in the top income brackets. This implies that additional household characteristics need to be known in order to identify who is likely to be poor among such households.

Much less common, accounting for only a tenth of all households, were extended households consisting of adults, children and elderly persons living together. Such households are by definition large, with on average seven members per household. Representing only a minority of households, their vulnerability in terms of their likelihood of being poor is at the same time more straightforward to determine: analysis reveals that households of this type were in most cases poor, if not extremely poor, with the lowest reported median consumption per adult equivalent and a mean just above the extreme poverty benchmark. The susceptibility of multi-generational households to poverty is also demonstrated by the fact that more than a third of such households counted among the bottom national welfare quintile.

Other household types were those of active-age adults living on their own, representing 14 per cent of all households, elderly persons living on their own, representing 2 per cent of all households, adults living with elderly persons, representing 3 per cent of all households, and elderly persons living with children, representing 1 per cent of households.[15] Households in the first two categories were found to have been substantially better off than most other households, with median and mean consumption exceeding the poverty lines. Households consisting of active age-adults living with elderly persons mirrored the 'standard' household in terms of median and mean consumption, although with much less variation in welfare levels (reflected in a lower standard deviation compared with the latter category). Households in the final category however counted among the poorest sections of the population, with the second-lowest median consumption levels after the multi-generational household type and mean consumption levels below the poverty line.

The above findings point to a telling pattern: households composed of adults living with children or elderly persons, or of all three generations living together, were significantly more likely to be poor compared with households consisting either of adults or elderly persons living on their own. Below we examine some reasons why the presence of children and elderly persons in a household in addition to active-age adults might imply a greater likelihood of poverty.

One reason why households consisting exclusively of elderly persons might reflect overall lower levels of welfare compared with households consisting exclusively of active-age adults could be the different rates of economic activity exhibited by the two generations.

However, on its own, the presence of elderly persons in a household is not sufficient to imply any significant likelihood of poverty, as indicated in the fact that elderly-only households recorded the second highest mean and median consumption

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[13] For the purposes of the present analysis children are defined as between 0-14 years of age, adults 15-59 years, and elderly persons 60 years and above.

[14] Reflected in a median aggregate expenditure value of K82,879 per adult equivalent, which was between the upper and lower poverty lines in 2004.

[15] The LCMS 2004 dataset also included a number of children-only households. Due to the very small numbers reported such households are omitted from this analysis but are examined in the later discussion on orphans.

levels after adult-only households, with both measures keeping well clear of the overall poverty line.[16] The presence of elderly persons in households where there were also active-age adults on the other hand could be taken to imply a somewhat greater likelihood of poverty.

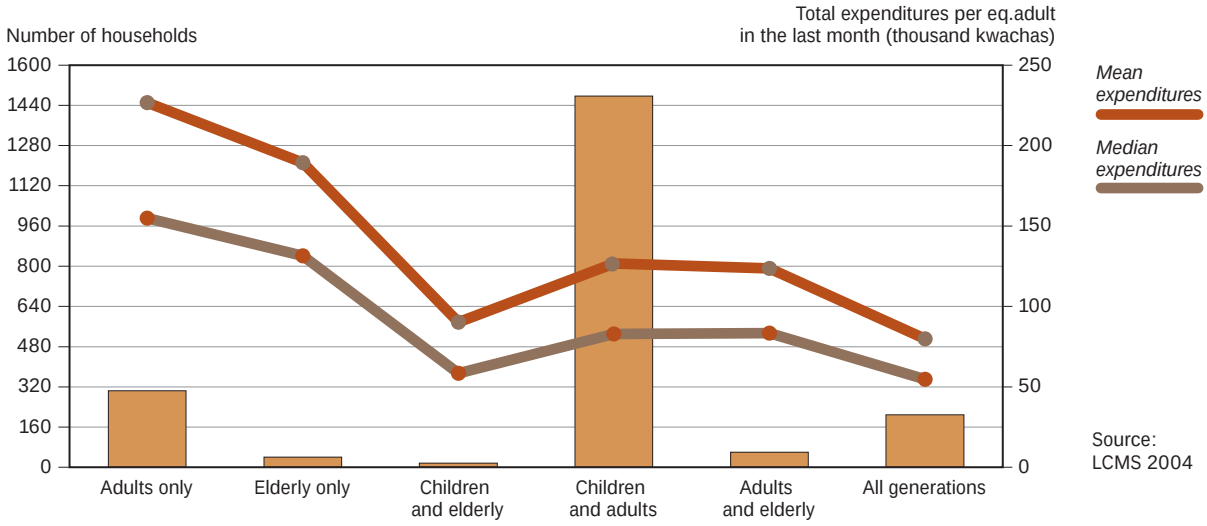
Given the higher probability of persons aged 15-59 years being economically active, it is not surprising that households composed only of persons in this age bracket were the best-off. The lower consumption levels of households in which children and elderly persons were present in addition to active-age adults on the other hand might be indicative of a dependency relationship between the generations that is welfare-diminishing.

The existence of households composed of elderly persons and children without any active-age adults present may be explained by the observation that there is currently a generation of the elderly in Zambia caring for orphans left behind as a result of HIV/AIDS-related deaths among young and middle-aged adults (World Bank 2005: 181-182). Although such households are relatively rare, representing only 1 per cent of the national total in 2004, their impact on overall rates of poverty should not be underestimated. Analysis of LCMS 2004 data reveals that elderly-households were disproportionately represented among the poorest population groups, accounting for 17 per cent of extremely poor households and 25 per cent of the poorest decile of households.

Figure 2-8 illustrates the prevalence of the different household generational types and their respective welfare levels as described above. Note that for each category represented in the figure the bars indicate the corresponding number of households, measured on the left axis, while the lines indicate corresponding consumption levels, measured in adult equivalent terms on the right axis.

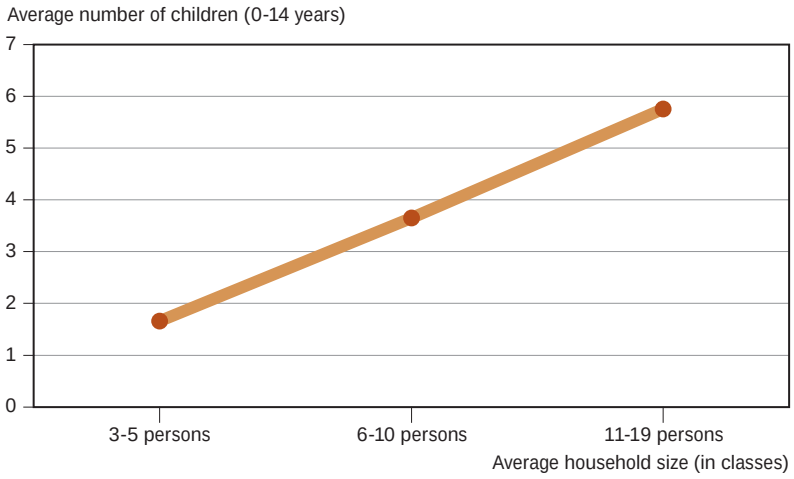
This indicates that the presence of children and elderly persons in a household is likely to be a key factor determining poverty status. This comes about as children are more likely to be found in large households which, as discussed earlier, are more likely than not to be extremely poor. Figure 2-9 shows that the number of child members per household increases proportionately with the size of the household. As

Figure 2-8. Different household generational types



[16] However, very large standard deviations of the mean, exceeding the latter in magnitude, were discerned, corresponding to consumption levels recorded for both adult-only and elderly-only types of households.

Figure 2-9. Number of children by average household size



Source: LCMS 2004

discussed earlier, large households are more likely than not to be poor, implying a large number of children.

Further investigation indeed reveals this to be the case. Analysis of the LCMS 2004 indicates that, together with the elderly, children accounted for half of the extremely poor population and more than half of the bottom income decile.

Sex of household head

Although women headed only a minority of households countrywide, they were disproportionately more likely to head poorer households. Compared with the overall 22 per cent of households which they headed, women headed 24 per cent of extremely poor households and 27 per cent of households in the bottom income decile.

Households headed by a widowed female were also found to be over-represented among the poor, with 13 per cent of widow-headed households having been counted in the bottom income decile.

Evidence separately provided by the World Bank (2005: 178-179) indicates that female-headed households are likely to be worse-off than male-headed households in other dimensions of welfare, such as education and nutrition. Based on an analysis of the LCMS 2003, children living in female-headed households were found less likely than their counterparts in male-headed households to be enrolled in school, and more likely to be vulnerable to chronic or acute malnutrition as manifested in stunting and wasting, respectively.

Disability

According to the LCMS 2004 less than 2 per cent of the population was disabled[17]. Elderly age groups experienced the highest rates of disability with 10 per cent of those aged 70 years and above, 5 per cent of those aged 65-69 years and 3 per cent of those aged 60-64 years having reported themselves as disabled.

Overall there were more disabled males than disabled females, except in the case of the bottom income decile, in which disabled females outnumbered disabled males. Disabled persons were found to be disproportionately likely to be extremely poor, with almost a quarter (24 per cent) of the disabled population having counted in the bottom two income deciles.

While the incidence of disability among persons aged 15-59 years was low compared with other age groups, disability rates were significantly higher among extremely poor persons in this age group. Disabled persons reported being much less economically active in comparison with the able-bodied population, with labour force participation rates of around only 50 per cent in 2004.

Orphanhood

The LCMS 2004 revealed that 18 per cent of persons aged 0-20 years were orphans.[18] Seventy-three per cent of orphans were partial orphans having lost only one parent, in most cases (78 per cent of the time), the father. This indicates that in 2004 approximately 60 per cent of orphans were living with their mothers.

The incidence of orphanhood varied across the country, with Western Province recording the highest incidence, with 24 per cent of children aged 0-20 years orphaned, and North-Western Province recording the lowest incidence, with 12 per cent of children aged 0-20 years orphaned. Orphanhood was altogether more prevalent in urban areas than in rural areas.

The LCMS 2004 revealed that orphans experience some of the highest poverty rates in the country, notwithstanding already high rates of poverty among children. Of those orphans aged under 15 years, i.e. younger than the legal working age, 54 per cent were extremely poor compared with 52 per cent of non-orphans of a similar age. Orphans alone accounted for 9 per cent of the bottom income decile.

Evidence provided in the World Bank's Poverty and Vulnerability Assessment Study of 2005 further illustrates the vulnerability experienced by today's orphans. In conditions of widespread mortality occasioned by a maturing HIV/AIDS epidemic and where the loss of one's parents represents just one facet of the catastrophe, alongside the death of spouses, breadwinners and adult caretaker children, the safety-net function once served by kinship ties is eroding. Thus, even when orphans come to be taken in by the extended family, they are less likely to receive an appropriate level of care compared with other children in the household. The World Bank data reveal that while the presence of orphans is not likely to significantly affect households' welfare status, orphans themselves (and particularly those who have lost their mother or who are female) are considerably likely to face discrimination compared with other children in the same household, for instance, by not being sent to school.

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[17] The specific question in the household survey was: 'Is [the household member] blind, partially sighted, deaf, dumb, physically disabled, mentally retarded, mentally ill, or ex-mental?' (Questionnaire, p.2).

[18] Orphans were defined as persons having lost either or both their parents and aged under 21 years.

2.5 Conclusions

From the starting-point that half of the Zambian population is extremely poor, being unable to afford even basic food items on a sustainable basis, it was found that:

- Households headed by the elderly and women are the most likely to experience extreme poverty. In the poorest decile 25 per cent of households were headed by elderly persons and 27 per cent by women. Households headed by persons with less than a secondary school education were also more likely to be extremely poor, with only 33 per cent of extremely poor households headed by a person with a secondary school education.
- The majority of extremely poor households in Zambia have six or more members most of whom are children. Children alone account for nearly half of the extremely poor population.
- Nearly one-fifth of all children are orphans, most having lost their parents to HIV/AIDS. The majority of orphans are partial orphans living with their mothers. Orphan children experience higher poverty rates than non-orphan children, with full orphans (having lost both parents) experiencing the highest poverty rates. Orphans alone account for 10 per cent of the poorest population decile.
- There are disproportionately more women and disabled persons in the poorest income decile. Individuals in this group are also vulnerable because of their higher exposure to unsafe sources of drinking water, lower likelihood of consulting a health professional in case of sickness or injury, and higher susceptibility to chronic illness.
- Children in the poorest income decile are much less likely to attend school and when they do, they begin at an older age.
- Although the poorest individuals seem to be the most economically active, almost all work in the informal economy, with four-fifths of workers in the poorest income decile based in traditional agriculture, forestry and fishing sectors.

3

The previous chapter points to some sources of poverty and vulnerability. Such analysis may help in designing policies to build up the national social protection system gradually. It may help in taking decisions about social risks and contingencies as to which should be addressed first and what target groups should be of particular concern. This chapter looks at levels of economic activity and the types of employment people are involved in: how many of those economically active are employees with a more or less formalized contractual relationship? For an employer, how many are self-employed, etc.? Experience in other countries shows that groups with different employment status (such as having an employer or not, having an employment contract or not, etc.) require different institutional solutions to provide affordable access to health care and basic income security benefits in case of sickness, disability, old-age or other contingencies. Such analysis may thus help to decide what institutional forms of social protection would be the most desirable and feasible.

Everyone's income security is endangered in cases of sickness, disability, old age, unemployment, death in the family, maternity or other family obligations such as the need to provide care to children or the sick. But the need for specific forms of social protection differs depending on employment status. For example, for those who are contract workers for an employer, with earnings from that employment as their only source of income and wealth, and with no degree of flexibility with respect to when and how long they have to be available to work; and for the self-employed whose incomes are usually less regular and predictable but sometimes have greater flexibility in planning their working hours and may own certain productive assets.

Furthermore, with respect to the design of entitlements to social protection and to deciding on its financing sources, what is desirable and feasible and for what groups depends on prevailing employment patterns in the labour market.

Mandatory contributory social insurance schemes providing income replacement (or supplements) in case of sickness, employment injury, disability, old-age, unemployment or maternity and other family obligations are administratively feasible to implement and enforce when employees have legally binding contracts with their employers. However, they are a challenge in every sense when it comes to covering the self-employed or employees whose employment is not formalized in any legal sense. In Zambia, employees and their employers in the public and the private sectors are obliged to

Degrees of informality: Prevailing patterns in the Zambian labour market and social security coverage

contribute to social security pension funds (administered by NAPSA, PSPF and LASF) but – as we will see – this obligation is not effectively enforced to cover all employees.

Similarly, in many countries labour codes or employment acts oblige employers to provide and finance certain types of social security benefits directly to their employees. In Zambia employers are obliged by the Employment Act to provide paid maternity leave and paid salary in case of sickness up to a certain maximum number of days during the year (see Chapter 4.2 for more details). There are no data that would show the extent to which this regulation is enforced and how many workers actually enjoy these benefits. However, judging from the small percentage of employees who are entitled or are aware of their entitlements to paid annual leave, as reported in the CSO Labour Force Survey 2005, the actual coverage is not high.

Employees in the unionized sectors are often additionally covered – as some in Zambia – for additional social benefits specified in collective agreements. Some employers also offer supplementary benefits such as health insurance or direct provision of health-care services, occupational pensions, housing allowances, family allowances or funeral benefits. No data exists but judging from the large degree of informality of employment even in the case of paid employees (as shown by the LFS 2005 results) and the low degree of unionization, coverage by such benefits must be low.

In Zambia, as in many other low-income countries, especially in sub-Saharan Africa, the majority of those employed are either self-employed or helping (unpaid) family members. Additionally, most of them work in traditional subsistence agriculture. Their economic activities are not formally registered, the nature of their activity makes it difficult to collect contributions, their incomes are irregular and, significantly, are not regular monetary incomes.

Experience in some countries shows that even in such situations it is possible to build an effective universal health protection system through a combination of free basic public health care with contributory social health insurance linked with community-based micro-insurance schemes, where the participation of the poorest is subsidized by the State from general revenue. However, to provide at least minimum income security one would also need to rely on a combination of universal minimum basic income guarantees (such as social pensions for the elderly) and social assistance benefits targeting the most vulnerable.

3.1 How people work: The employment status of the population

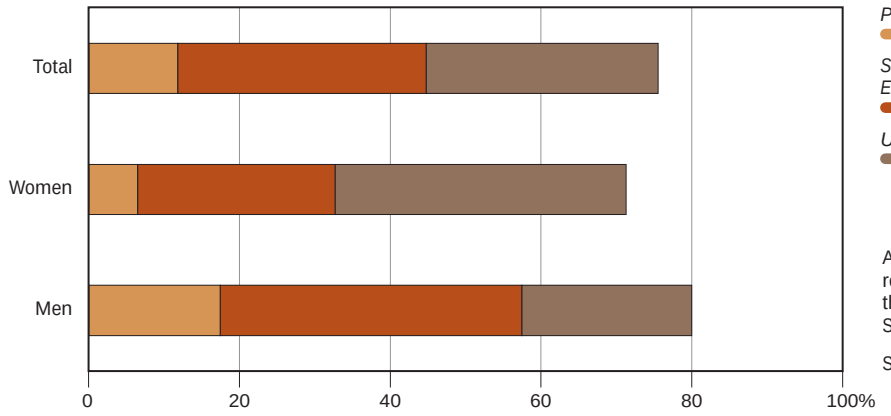
The employment to population ratio measures the percentage of the population in a given age group who were involved in gainful economic activity during the seven days preceding the survey. In Zambia, according to LFS 2005, overall employment rates are high: more than 75 per cent of all those aged 15 and over were employed (71 per cent of all women at this age and 79 per cent of all men). See Figure 3-1. Employment rates were 89 per cent in rural areas and 52 per cent in urban areas.

However, over 40 per cent of all those 6.2 million people employed worked as unpaid helping family members or workers (nearly 55 per cent of employed women and 27 per cent of employed men) – most of them in traditional agriculture. About 43 per cent were self-employed or employers (50 per cent of all employed men and 35 per cent of all employed women), while only 16 per cent were employed as paid employees (less then 10 per cent of employed women and 23 per cent of employed men)

Twenty-five per cent of children aged under 15 were recorded in the survey as employed, but the large majority of them are unpaid family workers.

The lack of provision for income security in old age (except for a small minority) results in the employment rates of older people (at age 55 and over) being even higher than for those of working age (15-54 years). See Figure 3-2. Eighty-one per cent of older people were employed: 78 per cent of all older women and 84 per cent of all older men. It is interesting that the large majority of the employed elderly are reported as self-

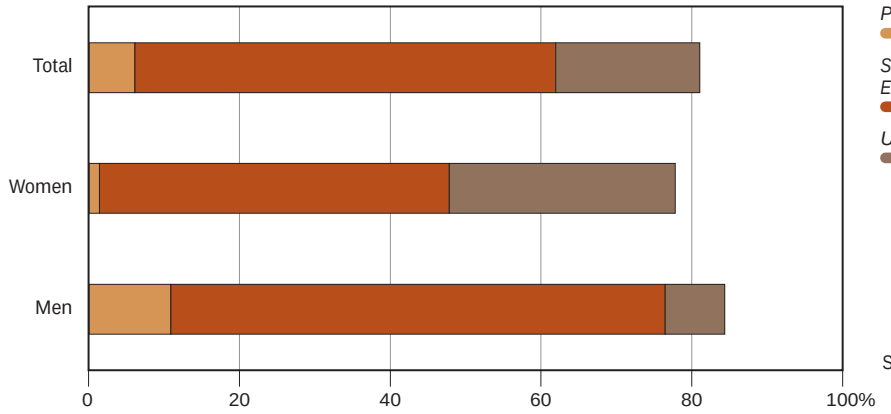
Figure 3-1. Employment to population ratio, by sex and employment status (population 15 and over)



As original LFS data set was slightly recoded, some results may be different than those in CSO, 2007 (Labour Force Survey Report).

Source: CSO LFS 2005

Figure 3-2. Employment rate by sex and employment status (population 55 and older)



Source: CSO LFS 2005

employed or employers (68 per cent of all, 77 per cent of all men, nearly 60 per cent of all women), and that a much smaller percentage than that of the working-age-population are employed as unpaid family members: 23 per cent of both sexes, 9 per cent of all older men but a high proportion (38 per cent) of older women. Very few older people are employed as paid employees: 8 per cent of both sexes, 13 per cent of older men but only 2 per cent of older women.

Where people work: Employment by legal form of establishment 3.2

From the point of view of potential social security coverage, two important factors are employment status (e.g., employee versus self-employed), and also where a person is employed. In Zambia as elsewhere, social security coverage and entitlements differ depending on whether someone works for central government, local government, a parastatal company, private business, NGO or international organization, or simply in the household.

In Zambia in 2005, 5 per cent of all employed persons (more than 6 per cent of working men and more than 3 per cent of working women) were employed by central or local government bodies or a parastatal company. Slightly over 30 per cent worked in private businesses (25 per cent of all working women and 35 per cent of all working men). The majority simply used their own household as a business environment: 65 per cent of all employed persons, 71 per cent of working women, and 58 per cent of working men.

Figures 3-3 to 3-5 show the patterns of employment when employment status (employee, self-employed or unpaid family worker) is combined with type of business establishment or work: public, private or just household. One can see that these patterns are very different for men and women and also for urban and rural populations.

The majority of those employed work in their own homes – either as unpaid family workers (1.5 million people) or self-employed (nearly 1.4 million people). Within this whole group working in households, women dominate the sub-group of unpaid family workers whereas most men are reported as self-employed.

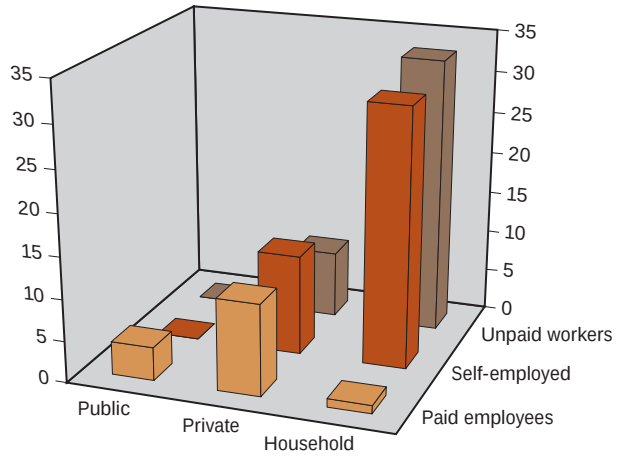
Paid employees are the smallest employed group in the country (over 700,000) but they represent the largest (nearly 600,000) group in the urban employed population: 28 per cent of all the urban employed are employees, while 19 per cent are self-employed, and only 10 per cent unpaid family workers. More than twice as many people are employed as paid employees in the private sector than in public institutions: (central, local government or parastatals).[1]

Older workers, as stated earlier, are predominantly self-employed and most of them work at home; the second largest group works in more formal, private business environments.

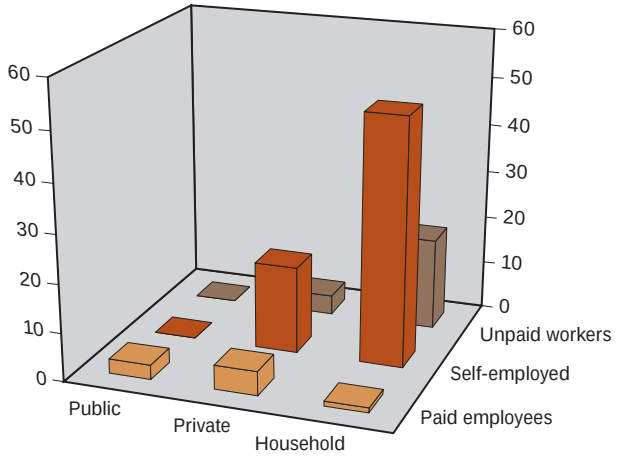
Figures 3-3 to 3-5 show the percentage of employed people that falls under each category (e.g., paid employees in public establishments, self-employed in private establishments, unpaid workers in households, etc.).

[1] Employment in the private sector does not include household work.

Figure 3-3. Employment distribution by employment status and type of establishment (percentage)



a) All population 15 years and over

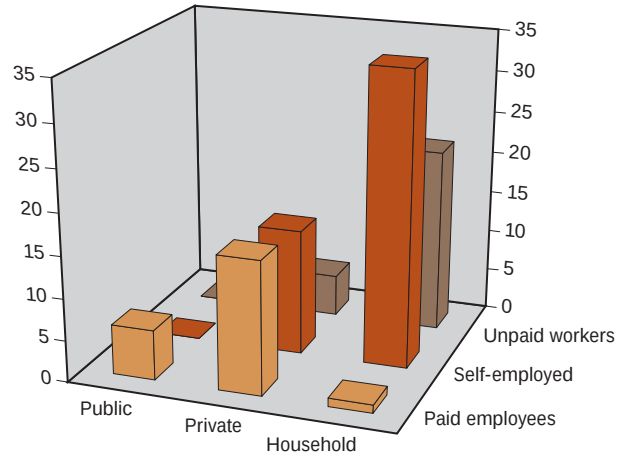


b) All population 55 years and over

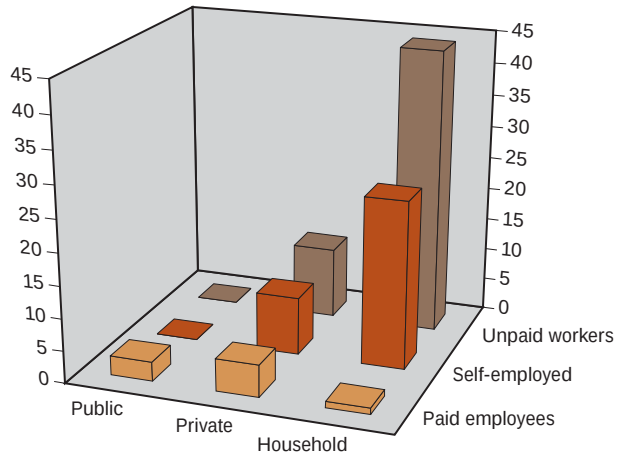
Source: CSO LFS 2005

Figure 3-4. Employment distribution by employment status and type of establishment (percentage)

a) Population 15 years and over by sex



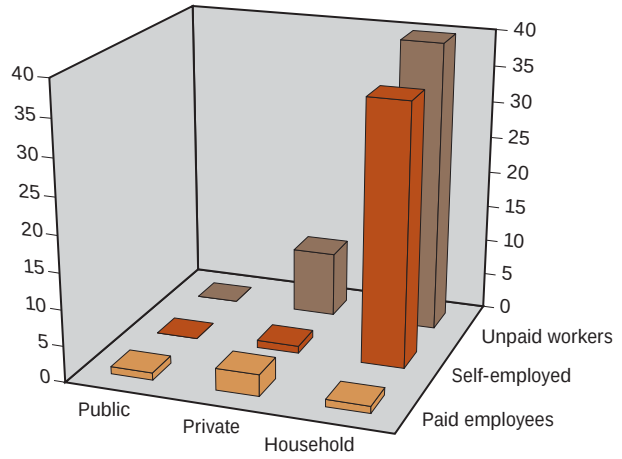
Men



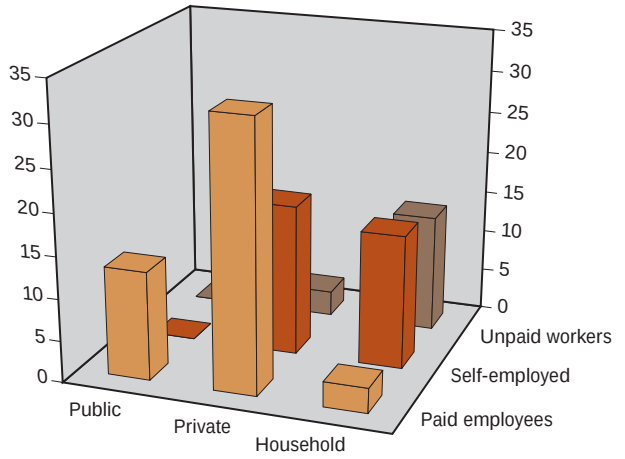
Women

Source: CSO LFS 2005

b) Population 15 years and over by rural or urban area



Rural

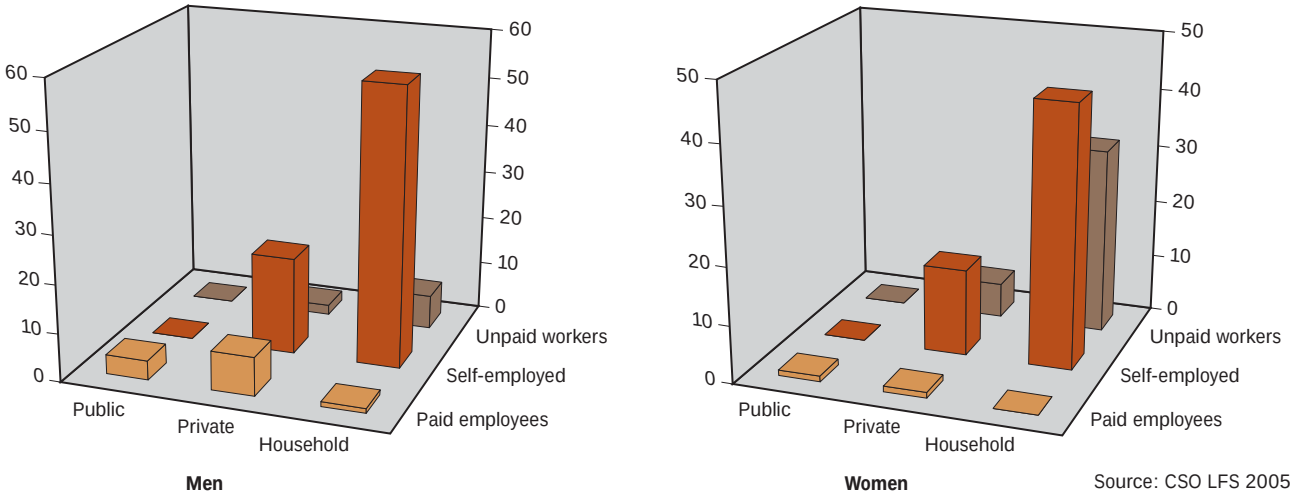


Urban

Source: CSO LFS 2005

Figure 3-5. Employment distribution by employment status and type of establishment (percentage)

Population 55 years and over by sex



Source: CSO LFS 2005

Paid employees 3.3

As most existing social security provision in Zambia specifically targets employees, it is important to look in greater detail at the characteristics of their employment relationship and why apparently not all of them are reached by existing social security provisions.[2]

- 95 per cent of employees are aged 15-55 and only 5 per cent are aged over 55 (the legal retirement age within the formal social security schemes). Less then 30 per cent of all employees are women; less then 20 per cent of employees work in the rural areas.
- 80 per cent of employees work in relatively large establishments, employing four or more persons; 30 per cent of women employees are employed in smaller establishments.
- 30 per cent of employees (27 per cent of men and 37 per cent of women) work in 'informal' locations: at home or in other informal locations outside home (e.g., in the street).
- 20 per cent of employees report their employment as being temporary (practically no gender difference here).

One of the obstacles to achieving greater social security coverage may be the fact, revealed by the survey, that nearly half (49 per cent of total, 54 per cent of women and 47 per cent of men) say either that they do not have a contract with their employer or that they do not know whether they have one. Of those who have a contract, 88 per cent say it is a written contract (92 per cent of public employees) and 12 per cent only an oral contract. The Employment Act requires written contracts of employment lasting six months or longer, and employers are obliged to keep records of all oral contracts.

[2] While over 700,000 persons are reported in the survey as employees, overall coverage by all existing social security pension schemes seems to be well below 500,000. The latter figure is still uncertain owing to poor record-keeping standards in the social security institutions and difficulties in establishing how many members and regular contributors they actually have.

So it is thus not surprising that over half of all employees (but only 19 per cent of public-sector employees) say their employers do not contribute to social security or that they do not know whether their employer contributes. It seems there is widespread lack of awareness of social security membership and employers' contributions, as the number of members and contributors reported by social security institutions are well over half the number of all employees. However, taking into account the poor status of membership and contributors' records in social security institutions, there is a need to look closer at the issue of enforcement of social security laws, particularly in the private sector.

Similarly, more than half of all employees (19 per cent of public-sector employees) say they have no entitlement to paid leave or at least are not aware of this entitlement. The same situation could apply to other legal entitlements of employees regulated by the Employment Act, such as sick pay and paid maternity leave.

One of the explanations of the low level of enforcement of legal entitlements of employees and the low level of awareness of these entitlements may be the low level of unionization: only 30 per cent of employees belong to a trade union (while in the public sector the unionization rate is 60 per cent). Additionally, the social security funds have a responsibility to inform the public about what the schemes provide.

The Labour Force Survey 2005 reports that female employees' earnings are on average 89 per cent of those of male employees. This gap is much larger for employees in the private sector: earnings of female employees are only two-thirds the earnings of male ones. Female employees in the public sector report earnings 18 per cent higher than men's. However, the effect of low wages in the public sector should be taken into consideration here.

3.4 Informality of employment

Informality of employment[3] is a multidimensional concept.[4] It enlarges the previous concept of the informal sector and seeks to take into account precarious or unprotected forms of employment, including that of employees in formal-sector enterprises.

The definition of employment in the informal sector includes all jobs in informal-sector enterprises or all persons who, during a given reference period, were employed in at least one informal-sector enterprise, irrespective of their employment status and whether it was the main or secondary job (ILO, 1993). The informal sector – and the related concept of employment in the informal sector – is an enterprise-based concept. Working in the informal sector may mean working in an enterprise where its size, in terms of numbers employed, is below a certain threshold; or one which is not registered. It can also mean working in a household, home or in the street.

Informal employment is a job-based concept, directly linked to the workers' employment conditions. It covers situations in which employees are in theory protected by labour legislation – and are covered by social security, entitled to employment benefits and so on – but are in practice unable to claim their rights, because mechanisms to enforce the existing regulations are lacking or deficient. Informal employment may be determined by the existence of a formal contract, the type of contract involvement, the character of the job (temporary or not), and the actual entitlements to various benefits

[3] This section contains the ILO original analysis about informality based on the Zambian Labour Force Survey.

[4] See Hussmans (2004) and ILO (2003; section 3.1 on Statistics of informal employment, p. 47).

envisaged by the law (e.g., paid leave). Even within the formal sector one finds workers who are informally employed (just as one can imagine that even in the informal sector some persons may be formally employed).

The scale presented in Tables 3-1 and 3-2 proposes different degrees of employment formality, in the formal sector and outside it. For the purpose of this analysis based on the LFS 2005 dataset, we adopted the following criteria of formality/informality of employment.[5]

Employed in the formal sector

"Employed in the formal sector" applies to all those in the public employment service and all those employed elsewhere if establishments employ more than four persons and employment takes place on formal business premises. These two proxy indicators (establishment size and formal business location) are used in the absence of any information about registration of the enterprise or its compliance with fiscal legislation. All the others are treated as employed in the informal sector.

Formal employment

In this case, we measure the degree of formality of employment using three criteria: (i) the existence (or awareness) of a formal contract (permanent or fixed term) with an employer; (ii) the existence (or awareness) of entitlement to paid leave; and (iii) that the employer contributes to social security. We use a four-degree scale: if all criteria are met, we classify employment as totally formal (value 3); if none of the three criteria is met, employment is totally informal (value 0).

Formal economy

We introduced also a five-degree scale for the informal economy, which is a combination of the 0-1 scale for the informal sector and the four-degree scale for informal employment. Totally informally employed in the informal sector are in totally informal economy; those fully formally employed in the formal sector are in totally formal economy. In between however we have degrees of informality of the economy depending on the number of the four criteria met.

Tables 3-1 and 3-2 present the results for all employed persons and for paid employees.

Eighty-eight per cent of all those employed (but 93 per cent of all employed women) in Zambia work in the totally informal economy which means they are deprived of most of the rights and entitlements – including social security – associated

[5] Formal/informal economy criteria overlap but are not identical to criteria applied by the CSO (2007) Labour Force Survey Report to identify informal sector employment. The results presented here are thus different and not easily comparable. Criteria of formality/informality and the approach are also different from the ones applied in CSO (2006a) and CSO (2006c). Nearly 500,000 employees reported in CSO (2006c) as working in the formal sector are actually working in businesses which are formally registered, but they include employees with varying degrees of employment formality, according to the criteria applied here.

Table 3-1. Degrees of informality for all employed persons

Degree of informality		Male	Female	Total
Totally informal	Gender composition	49 per cent	51 per cent	100 per cent
	Share of group in total	*83 per cent*	*93 per cent*	*88 per cent*
High informality	Gender composition	67 per cent	33 per cent	100 per cent
	Share of group in total	*6 per cent*	*3 per cent*	*4 per cent*
Medium informality	Gender composition	73 per cent	27 per cent	100 per cent
	Share of group in total	*3 per cent*	*1 per cent*	*2 per cent*
Low informality	Gender composition	76 per cent	24 per cent	100 per cent
	Share of group in total	*4 per cent*	*2 per cent*	*3 per cent*
Totally formal	Gender composition	73 per cent	27 per cent	100 per cent
	Share of group in total	*4 per cent*	*2 per cent*	*3 per cent*
All	Gender composition	52 per cent	48 per cent	100 per cent
	Share of group in total	*100 per cent*	*100 per cent*	*100 per cent*

Source: LFS 2005

Table 3-2. Degree of informality for paid employees

Degree of informality		Male	Female	Total
Totally informal	Gender composition	65 per cent	35 per cent	100 per cent
	Share of group in total	*18 per cent*	*25 per cent*	*20 per cent*
High informality	Gender composition	74 per cent	26 per cent	100 per cent
	Share of group in total	*20 per cent*	*18 per cent*	*19 per cent*
Medium informality	Gender composition	72 per cent	28 per cent	100 per cent
	Share of group in total	*14 per cent*	*14 per cent*	*14 per cent*
Low informality	Gender composition	76 per cent	24 per cent	100 per cent
	Share of group in total	*26 per cent*	*21 per cent*	*25 per cent*
Totally formal	Gender composition	73 per cent	27 per cent	100 per cent
	Share of group in total	*22 per cent*	*22 per cent*	*22 per cent*
All	Gender composition	72 per cent	28 per cent	100 per cent
	Share of group in total	*100 per cent*	*100 per cent*	*100 per cent*

Source: LFS 2005

with formal employment. Only 3 per cent of all those employed work in an environment that may be called fully formal – at least according to the criteria adopted.

The degree of employment formality among paid employees is obviously much higher but still only a little more than one-fifth of them works in the totally formal economy, while another one fifth (and even one-quarter when women employees are taken into account) works in a fully informal economy and thus is totally deprived of all those rights and entitlements which Zambian law gives to employees.

A quarter of employees belong to the low informality group (90 per cent of them say their employers contribute to social security), and 14 per cent belong to the medium informality group (where 30 per cent of employees say that employers contribute to social security). In the high informality group (19 per cent of all employees), only a small percentage of employers are reported as making social security contributions.

As Table 3-3 shows, most of the informal economy employees are in the private sector (24 per cent totally informal and another 23 per cent with a high degree of

Table 3-3. Degree of informality for paid employees by type of employer

	Totally informal	High informality	Medium informality	Low informality	Totally formal	Total
Central Government	0 per cent	4 per cent	9 per cent	40 per cent	47 per cent	100 per cent
Local Government	0 per cent	16 per cent	17 per cent	38 per cent	28 per cent	100 per cent
Parastatals	0 per cent	12 per cent	18 per cent	38 per cent	32 per cent	100 per cent
Private sector	24 per cent	23 per cent	15 per cent	21 per cent	16 per cent	100 per cent

Source: LFS 2005

informality), while only 16 per cent of employees in the private sector work in a totally formal environment. However, even in public-sector employment one can find a relatively high degree of informality (by our definition, employment in the public sector cannot be fully informal): 16 per cent of employees in local governments, 12 per cent in parastatals and 4 per cent in central government were employed in conditions of high informality and – respectively – 17 per cent, 18 per cent and 9 per cent in conditions of medium informality.

There is a high correlation between degree of formality and level of education, including the ability to read and write. Among employees employed in the totally informal economy, 12 per cent of urban and 28 per cent of rural dwellers cannot read and write, compared with only 1 per cent of employees in the totally formal economy. Moreover, the higher degree of formality, the higher the earnings of those employed. And, of course, the more formal the employment, the more rights and entitlements, income and social security employed persons have.

3.5 Conclusions

A large majority of the employed in Zambia are employed in the totally informal economy. The process of increasing the prevailing degree of formality takes a long time. Meanwhile, social security measures that are adequate and feasible for those in the informal employment must be developed.

The situation is different for those who have employee status: only 20 per cent of them are totally in the informal economy. But, on the other hand, *only 22 per cent of them are in totally formal environment*. Most work with a higher or lower degree of informality, enjoying some of the entitlements resulting from labour legislation but never all of them, including coverage by contributory social security schemes. With respect to this group, formalization of their status is possible and does not have to take very long. It requires institutional efforts focussing on enforcing existing legislation, raising awareness of this legislation among employees and employers – as well as introducing new legislation where necessary. Some of these efforts are the responsibility of existing social security institutions: more effective enforcement of obligations to register and contribute to social security, but also awareness-raising among the employees and employers of their social security rights and obligations. It is also important to create stronger incentives to contribute by developing well-designed social security policies and good governance of social security schemes.

4

This section describes and analyses the main social protection schemes in the country, according to the conditions required and contingencies covered. The aim is to provide an overall assessment of the social protection system, not an exhaustive exploration of all the schemes.

As explained, a small share of the labour force is employed and an even smaller share in the relatively formal economy. This group benefits to some extent from the employment-related contributory schemes described in the first part of this chapter.

For most of the labour force burdened with heavy family responsibilities, very limited opportunities exist for protection against contingencies such as old age, sickness or death of the main breadwinner. There are non-contributory programmes financed by the Government, private households, communities, church organizations, and donors who target specific, rather small, groups in the population. The most important of these programmes are presented in the second part of this chapter. The main funding source of these non-contributory schemes is the Government, which channels resources from domestic taxation and from donors.

The last part briefly presents the health care system in Zambia.

4.1 Contributory and other employment-related schemes

Zambia has a long history of social security provision dating back to the pre-independence period, and this has shaped the current institutional and benefit structure. It is based largely on the social insurance model and limited to the provision of protection against the loss or reduction of income resulting from retirement, disability and death.

The contingencies covered fall short of the ILO's prescribed minimum standards[1] of social security which should include the following contingencies: sickness; unemployment; old age; work injury; maternity; invalidity; survivors, family/

[1] Social Security (Minimum Standards) Convention, 1952 (No. 102).

Social protection schemes

child benefits and health care. Zambia has not ratified any of the ILO's main social security Conventions.

The national social security institutions operating in Zambia are the National Pensions Scheme Authority (NAPSA), the Public Service Pension Fund (PSPF), and the Local Authorities Superannuation Fund (LASF). In addition to several private occupational pension schemes, there is an occupational disease and work injury scheme: the Workers' Compensation Fund Control Board (WCFCB). These schemes, which mainly provide social security to persons in formal employment, are described in greater detail in the next section (Cheta, 2005).[2]

Although three statutory social security schemes currently operate in the country, a three-pillar social protection system was envisaged by the reform of the social security system which emerged after a protracted period of consultative processes and analytical studies and was implemented in 2000.

NAPSA was designed to be a mandatory first-pillar pension scheme providing a *basic* pension income to all formal-economy workers, with an option to include workers not in formal employment (GRZ, 2007).

The second pillar was to be composed of all private occupational schemes and the statutory ones (Hantuba, 2005). The original proposal considered a floor and a ceiling to insurable earnings, so that the contribution would not affect the poorest and at the same time would provide incentives for the well-off to contribute to occupational schemes as a second pension pillar. The idea was that the private schemes would be contracted by the employers to provide supplementary social security.

The third pillar would be composed of all forms of private and informal protection that people take, such as life insurance, though this is not widely undertaken in Zambia.

Hence, by design, NAPSA would offer lower replacement rates (and charge lower contribution rates) than those of the public schemes. However, the other statutory schemes are still not operating as second-pillar occupational or complementary schemes. Instead, they are working to restore the previous status quo, which is a very

[2] The relevant legislation is: the Draft National Social Security Bill, 2007; the National Pensions Authority Act, 1996; the Public Service Pension Fund Act, 1996.

detrimental move, as the workers contributing to NAPSA have accumulated rights which cannot easily be moved. This will not solve the solvency problems these schemes have been facing as the root causes are the non-payment of contributions and costly investment decisions, coupled with other governance issues.

Social security schemes are regulated and supervised by the Pensions and Insurance Authority (PIA), which falls under the Ministry of Finance and National Planning. However, it has more regulatory authority over the private occupational schemes than over the public ones, as these have reporting obligations to their respective government authorities. On the other hand, Section 2 of the Pension Scheme Regulation Act exempts NAPSA from being regulated by the PIA. The Ministry of Labour and Social Security regulates NAPSA and WCFCB.

The Ministry of Labour and Social Security (through the Department of Social Security) is the lead government institution implementing and coordinating social security policies and programmes in Zambia. There has not been a policy or legal framework for the effective functioning of the Department of Social Security since it was established in 1998. The Ministry is only now working out these frameworks in consultation with various stakeholders.

Apart from the benefits provided by the schemes, employees are entitled to other benefits depending on collective bargaining agreements and the provisions of employment legislation. These benefits are also discussed in this chapter.

4.1.1 *The National Pensions Scheme Authority (NAPSA)*

The National Pension Scheme Authority (NAPSA) was established after Parliament passed Act No. 40 in 1996. It was established to replace the Zambia National Provident Fund (ZNPF), which had existed since 1966 but had a number of weaknesses, such as low contributions, inadequate benefits and an ineffective structural design (Musonda, 2006). The Authority became operational on 1 February 2000 and is administered by an independent tripartite Board appointed by the Minister of Labour and Social Security.

NAPSA administers the assets of the National Pension Scheme (NPS) and the old Zambian National Provident Fund (ZNPF). The ZNPF was a compulsory savings scheme for private-sector employees that provided lump sums to its members based on the cumulated balances of their individual member accounts. Contribution rates to the ZNPF were very low which, coupled with unfavourable economic conditions, lack of indexation and governance issues, translated into low benefit packages. In contrast, the NPS is a defined-benefit, partially funded scheme that offers pensions based on career-average adjusted earnings.

At the time of the reform (February 2000), members of the ZNPF could choose to commute their balances to be integrated into the NPS, but these would have a value of 30 per cent for the calculation of future pensions. In the case of lump sums, they could receive the full value. Alternatively, they could leave their balances in the ZNPF and start in the NPS as completely new contributors. In the latter case, they would receive a lump sum from the ZNPF and either a lump sum or a pension from the NPS at the time of their retirement, depending on the number of contribution.

Coverage

At the end of 2005, NAPSA was the largest pension scheme in Zambia with about 355,200 members drawn from about 15,000 registered employers. NAPSA is a compulsory scheme that covers "regularly employed persons in the private, parastatal sectors and all employees who joined the Public Service and Local Authorities on or after February 1, 2000" (Musonda, 2006). All members of the discontinued ZNPF became members of NAPSA when it started operating. Additionally, in an effort to streamline statutory pension schemes in Zambia, public-service and local authority employees engaged after 1 February 2000 now make contributions to NAPSA. Civil service and local authority employees engaged before the establishment of NAPSA have continued to be members of the other two statutory schemes that were initially to be converted into fully fledged occupational schemes for workers from the sectors covered.

Nonetheless, employees of Konkola Copper Mines Plc, ZCCM (Smelterco) Limited and ZCCM (Mineco) Limited (now Mopani Copper Mines), were exempted from NAPSA through Statutory Instrument No. 14 of 2000. A possible reason for the exemption may be that contributions to NAPSA could have increased labour costs for the mining companies at a time when copper prices were very low and when the mining companies already had a contributory defined-benefit pension scheme. The implication of the exemption is that employees of the two mining companies have no form of retirement security, as the two employers have now converted to defined-contribution schemes which in practice do not provide periodic pension payments at retirement and have no form of redistribution. The minimum entry age into the scheme is 16 years and the worker needs to be employed by a registered contributing employer.[3]

According to the NAPSA Act, workers aged under 15 and those aged over 55, as well as those earning less than K15,000[4] per month, and the defence and armed forces are exempt from membership of the Scheme.

However, the Minister of Labour and Social Security may provide by statutory instrument for the conditions and procedures under which any person not eligible for membership may become a member.[5] By means of this provision, the scheme can draw its members from the self-employed and workers in the informal sector. The scheme has yet to draw members from the informal sector, as the Minister has not provided the framework or modalities whereby membership can be extended to this group.

The contributions rate to NAPSA is 10 per cent of total gross earnings for each year up to a ceiling of four times the National Average Earnings (NAE). This is shared equally between the employee (the insured) and the employer, i.e., 5 per cent each. Pensions accrue at the ultimate rate of 40 per cent of career earnings over a maximum of 30 years.

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[3] See section 11(2) of the National Pension Scheme Act, 1996.

[4] Equivalent to USD 12.46, at the 1996 nominal exchange rate of USD 1 to ZMK 1203.17, when the NAPSA Act was enacted.

[5] See section 11 (3) of the National Pension Scheme Act, 1996.

Table 4-1. NAPSA benefit provisions

Benefits	Description	Qualifying conditions
Retirement/old-age benefits		
Retirement pension	Monthly pension based on the insured's average adjusted monthly earnings multiplied by the number of monthly contributions	Attainment of the age of 55 years with at least 180 contributions and retired from regular employment If 40 years old or over on 1 Feb. 2000, members are required to have made a minimum of 60 contributions (5 years) to qualify for a pension Those who were 39 years or under on 1 Feb. 2000 are required to have made contributions for a minimum period of 15 years to qualify for a pension.
Retirement lump sum	An indexed refund of all the contributions made with interest	Attainment of retirement age but do not qualify for a pension, i.e., members who have made between 12 and 60 monthly contributions These are said to have partly qualified for a pension and are eligible only for a lump-sum payment
Permanent disability benefits		
Disability pension	Paid to person who is permanently incapacitated for any work owing to a physical or mental disability. This pension is adjusted to incorporate compensation for lost work-years.	Accumulation of at least 60 monthly contributions. To qualify, a member should have been in employment for at least 12 months during the 36 months immediately preceding the occurrence of disability.
Disability settlement		A lump-sum payment paid when a member does not qualify for a disability pension. Payment is the total adjusted contributions of employee and employer, plus accrued interest
Survivors' benefits		
Survivors' benefits	Paid to the surviving spouse and child/children following the death of a member who was still in employment and had made at least 60 contributions or was receiving the retirement pension or the invalidity pension.	Child/children must be aged under 18 years, or up to 25 years if in full-time education. No age restriction if the child has a disability. Surviving spouse caring for one or more of the deceased's children is eligible for a pension until death or remarriage. If the surviving spouse is younger than 45 years and without children by the deceased, a limited pension is payable for two years. A lump sum is paid when the survivors do not qualify for a pension.
Funeral grant *	Payable to the next of kin on the death of the insured	Deceased had at least 12 months of contributions in the 36 months before death. The amount paid is ten times the minimum pension payable.

* Currently it is calculated at ten times the minimum pension, which translates to ZMK 2,944,382.00.

Benefits

To qualify for retirement benefits the member must have reached the retirement age (55 years) or five years prior to retirement age but must have contributed to the scheme for a minimum period specified by the Authority (currently 180 contribution months).

However, the qualifying criteria for older members were more flexible, in order to get a retirement or invalidity pension, or a survivor's pension, for their next of kin:

- ☐ members aged 48 and over on 1 February 2000 are required only to have made 60 monthly contributions
- ☐ members aged over 39 but below 48 on 1 February 2000 qualify according to a sliding scale of between 60 and 180 monthly contributions.

The minimum pension is set at 20 per cent of national average earnings which is determined by the Authority annually after applying data from Central Statistical Office. There is no provision for transfer of pension rights between countries for expatriate staff. However, Zambians living abroad can contribute to NAPSA on a voluntary basis, for which they are required to contribute the total of 10 percent. Pensions accrue at the ultimate rate of 40 per cent of average career earnings over a maximum of 30 years (Cheta, 2005). See Table 4-1.

Indexation of benefits

Section 35 of the National Pension Scheme Act, 1996 requires benefits to be adjusted annually in line with increases in National Average Earnings. NAPSA is the only scheme to index its benefits. In other schemes, benefits are adjusted on the basis of the respective Minister's decision following management advice.

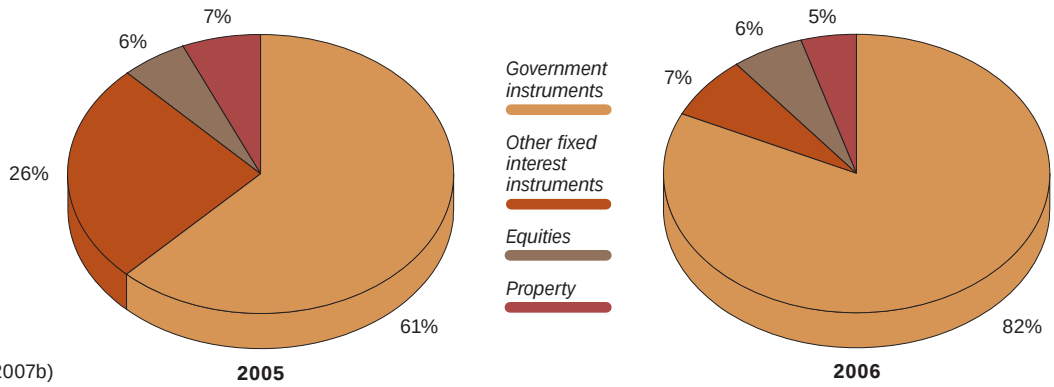
Investment of reserve funds

In exercise of the powers contained in section 41 of the National Pension Scheme Act and in accordance with section 40 of the Act, the National Pension Scheme Authority is obliged to manage the National Pension Scheme in accordance with the *prudential management principles* specified in the Pension Scheme Regulation Act No. 28 of 1996 (GRZ. 2001). The principles clearly set out guidelines for investments and specify fiduciary duties for those charged with managing investments. Investment decisions are made by the Investment Committee of the Board.

The investment portfolios of the NPS and the ZNPF both have a huge proportion invested in Government instruments, which reached 82 per cent in 2006 for the combined funds. Hence, the rate of return of both funds was 12.5 per cent in 2005 and 11.2 per cent in 2006. The latter is similar to the average interest rate of the Central Bank of Zambia: 11.5 per cent. Though Government securities are stable, this is not a very prudent way of investing. Figure 4-1 shows the composition of the portfolio in both years.

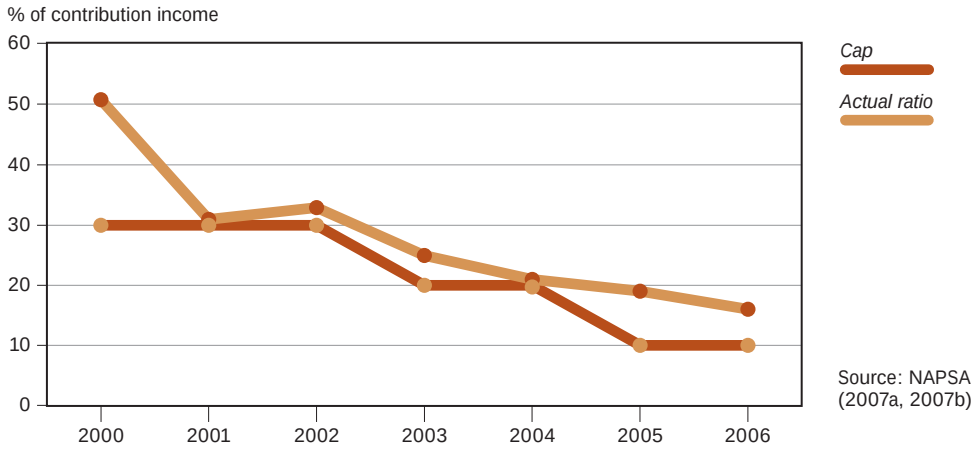
The return of the ZNPF was lower than that of NPS: 9.1 per cent versus 11.6 per cent respectively, in 2006. Note that all property investments are held by the ZNPF (NAPSA, 2007b).

Figure 4-1. Composition of investment portfolio managed by NAPSA, 2005 and 2006



Source:
NAPSA (2007b)

Figure 4-2. Evolution of administrative costs of NAPSA, 2000-2006



Source: NAPSA (2007a, 2007b)

Administrative cost

The NPS has defined a target for administrative costs as a percentage of contribution income, currently 10 per cent. However, the actual cost was higher: 19 per cent in 2005 and 16 per cent in 2006. Figure 4-2 shows the evolution of administrative costs. These have decreased steadily, fuelled by the increase in contribution income, which in 2006 represented six times income in 2000.

In contrast, the ZNPF has very high costs and, now that it is no longer collecting contributions, these costs represent 81 per cent of benefit expenditure (NAPSA, 2007b). Nevertheless, these costs dropped by almost 23 per cent in 2006 compared with 2005.

Public Service Pension Fund (PSPF) *4.1.2*

The Public Service Pension Fund was established in 1997 by Act of Parliament, as a defined-benefit scheme. The intention was to consolidate the law relating to pensions and other benefits for persons employed in the public service. Prior to 1997, pension benefits for public service employees were handled by the Civil Service (Local Conditions) Pensions Board that came into operation in 1961 following the enactment of the Civil Service (Local Conditions) Pensions Ordinance Cap 48 on 1 November 1961.

Coverage

The PSPF draws its membership from its forerunner, the Civil Servants Pension Fund and any other employees of the public service as the Board may prescribe.[6] Though the NAPSA Act made it mandatory for newly recruited civil servants to be members, new members still join the PSPF from the Zambian Army, Zambian Air Force, Zambian National Security, and the Teaching Service (QED, n.d., p. 3). Employees joining the public service after the age of 45 years cannot join the scheme, but are put on contract and paid a gratuity at the end of the contract.

As at 31 December 2006, PSPF had 112,479 active members with an average age of 36 years. There were about 58,233 pensioners, attracting an annual pension bill of approximately K70 billion. The average pension was K97,000 per person per month.

Contribution rate and ceiling

Contributions are made by the employer and the employee, each at the rate of 7.25 per cent, of insurable earnings. Pension claims by members who leave the scheme prior to attaining 55 years but qualify for benefits are settled using the government grant. In such instances, the PSPF acts as a paying agent for the State.

The greatest challenge that the PSPF faces, in terms of contributions, is that the Government as an employer has not kept its contribution payments up to date (QED, n.d., p. 15). This situation was exacerbated by stringent fiscal reforms that the Government was pursing from the early 1990s in order to stabilize the economy. By the end of 2005, 46 per cent of net assets were contributions in arrears.

Retirement age is 55 years, but members of the defence and security forces are allowed to retire at 45 years, as long as they have been members for more than 20 years. No service beyond retirement age is taken into account when calculating pension benefits, and any contribution paid beyond retirement age is refunded.

Retirement benefits for public officers or civil servants are protected by the Republic's Constitution, in article 124. This constitutional provision preserves the accrued rights by ensuring that members are not made worse off by any amendment to the Act.

Benefits

The Fund is designed to provide income security in the event of retirement, permanent invalidity and survivorship. The five different types of benefits provided are listed in Table 4-2.

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[6] See Section 10 of the Public Service Pensions Act, 1996.

Table 4-2. Benefits provided by PSPF

Benefits	Description	Qualifying conditions
Retirement/ old-age Benefits	Payments to members upon attaining retirement age.	Retirement benefits are payable to members who not only attain the retirement age but have also contributed for a period of not less than 10 years. For defence and armed forces, it is the attainment of the age of 45 years, after contributing for a minimum period of 20 years
Early retirement benefit	Benefit payment to members who leave the scheme by opting for early retirement.	
National interest	Payment to members who leave the scheme, through what is referred to as "retirement in the national interest".	Decision by authorities to retire official in the national interest
Medical	Payment of benefits to members who leave the scheme on medical grounds	Member must have accumulated ten years contributions
Survivors *	Payment to a member's survivors in the event of his/her death.	

* In the event of the death of a member who has contributed for under 20 years, the benefits are paid as if he/she had resigned, and are distributed to surviving beneficiaries according to the deceased's will or the interstate Succession Act, 1989. In addition a special death gratuity is paid which is equivalent to the member's annual pensionable emoluments. If the deceased served for more than ten years the spouse is entitled to a pension. If the deceased leaves children as well as a spouse and the deceased served for more than ten years, the children are paid a proportion of the spouse's pension as follows: for one child 20 per cent; for two children 40 per cent; for three children 50 per cent; for four children 60 per cent; for five children and more 66.67 per cent.

Level of benefits

Calculation of the benefits is based on the last annual salary multiplied by the years of service divided by 660 (previously 720). Two-thirds of the pensions are commuted into a lump sum on the date of retirement and the remainder is paid as a pension for life on a monthly basis. The pension ceases at death.

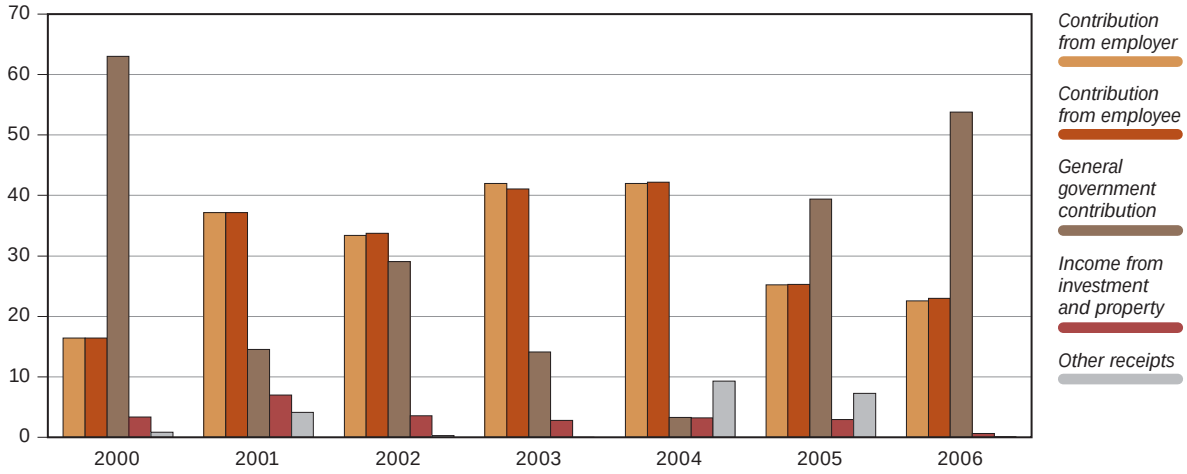
Investment

Investment income accounted for an average of 3.34 per cent of PSPF's total receipts for the period 2000 to 2005, as seen in Figure 4-3. Contributions from both employers and employees accounted for highest average of 63 per cent of the total receipts over the same period. No detailed data were received on the structure of PSPF investments and returns on each of the categories of investments.

Administration costs

Over the years, the Public Service Pension Fund has incurred high administrative costs because of decreasing contribution income, averaging about 17.46 per cent of the contribution income between 2000 and 2006. There is no cap on administrative expenditure in the PSPF legislation, but management has set its own limit at 17 per cent of contribution income.

Figure 4-3. PSPF Receipts as percentage of total (2000-2006)



Local Authorities Superannuation Fund (LASF) *4.1.3*

The Local Authorities Superannuation Fund was created under Government Notice No. 314 of 1954. It is administered by a tripartite Board of Directors, appointed by the Minister of Local Government and Housing pursuant to Cap 284 of the Laws of Zambia. Like the PSPF, the LASF is a defined-benefit scheme, based on a definite formula prescribed by the LASF Act.

Coverage

The Fund covers employees of the local authorities and water utility companies who joined the local authorities prior to 1 February 2000, including those employed by ZESCO Limited and the National Housing Authority.[7] As at December 2006, the total membership of the Fund stood at 21,642.

Contribution rate ceiling

The Act specifies the contribution rate at 10 per cent for members and 23 per cent for the employers.[8] This means that even after an actuarial recommendation any change in contribution has to await a change in the law. Generally, actuarial recommendations are supposed to be implemented on a timely basis, as any delay in case of an actuarial deficit will worsen the situation. The process of passing amendments to Acts of Parliament such as the LASF Act, is time-consuming, as recent experience in Zambia has shown.

Benefits

The Fund is designed to provide income security in the event of retirement, permanent invalidity and survivorship. Within this context, the benefits offered by LASF are derived from the categories of employment terminations set out in Table 4-3.

[7] www.lasf.org.zm {visited 22 July 2007}.

[8] See section 19 and 21 of the Local Authorities Superannuation Fund Act (Amendment) Act, 1996.

Table 4-3. Benefits provided by LASF

Benefits	Description	Qualifying conditions
Retirement due to age	Employment terminates on attainment of retirement age (55 years).	Attainment of retirement age (55 years) and minimum contribution period of 10 years.
Retirement due to retrenchment	Granted if a member's employment terminates as a result of staff reductions by his/her employer or of reorganization or abolition of the member's job in order to improve efficiency or for organization.	Should not be as a result of the member's fault. If such a member has less than seven years'continuous service, a payment equal to the amount of the contributions paid by him/her together with 2 per cent of such amount in respect of each completed year by which his/her continuous service exceeds three years. If such a member has seven years or more continuous service, a payment is made equal to twice the amount of the contributions paid by him/her plus interest at the rate of 4 per cent per annum, compounded annually.
Dismissal, discharge or resignation	If the member is dismissed from the service of an employer as a result of grave misconduct, dishonesty or fraud, that member is paid a lump sum of the contributions the member had paid into the Fund up to the point of employment termination.	Leaving employment with member's own accord or member's own actions.
Retirement due to ill health	A member who has been proved permanently incapable of efficiently discharging duties by reason of illness of mind or body is retired on health grounds under section 27 of the LASF Act and qualifies for retirement benefits.	Recommendation by qualified people (after assessment) that member should be retired on health grounds.
Death benefits	Survivors of a member who dies whilst in employment are entitled to benefits under Section 35 of the LASF Act.	If a male or female member in receipt of an annuity dies within six years of the date of his/her retirement, the dependants of the deceased are granted a lump sum equal to the sum of the annuity payable in respect of the unexpired portion of the said period of six years.

Level of benefits

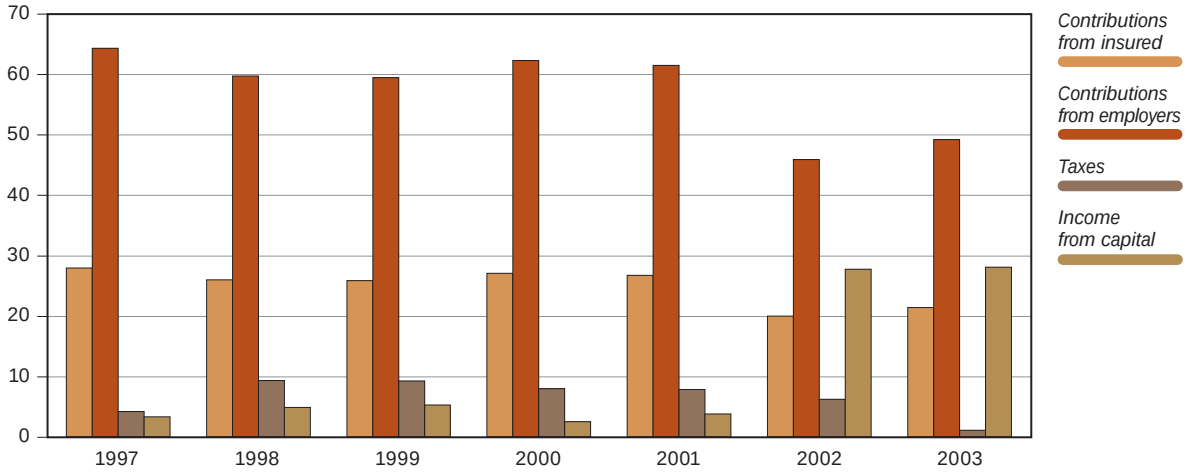
Benefit computation is based on final salary and commutation factors increased to match those applicable under the public service pensions fund.

In 2004, all pensions were adjusted upwards so that the minimum pension was K 100,000 for all pensioners. For those who received more than K 50,000, the increase was K100,000. There would be increases in pensions every three years depending on the financial situation of the scheme.

In 2003, there was an equity swap in which local Governments covered their debts and the ZPTF transferred K 7 billion of shares to the LASF valued at their market prices at the time of the transaction.

However, the financial situation of the scheme and the living conditions of the pensioners are still worrying. The scheme does not pay benefits promptly because there are contribution arrears. In June 2006, these were about K 88 billion and the backlog of unpaid benefits to pensioners was of two years (LASF, 2006a). Furthermore, in September 2006, out of K 22.5 billion collected, K 21.8 billion concerned previous years (LASF, 2006b).

Figure 4-4. LASF Receipts as percentage of total (1997-2003)



Investment

LASF's investment income grew from an average of 4 per cent of total receipts before 2000 to about 28 per cent after 2001 as seen in Figure 4-4 above. Contribution income accounted for an average of 83 per cent of total receipts over the period 1997 to 2003.

Administration costs

LASF's administrative expenditure is capped at 14 per cent of contribution income but over the years, its administration expenses have exceeded the cap because of non-remittance of increased contributions by employers.

Workers' Compensation Fund Control Board 4.1.4

The Workers' Compensation Fund Control Board was established by Act of Parliament for the purposes of compensating workers disabled[9] or killed by occupational accidents and diseases. It dates back to 1930 when the Workmen's (Non-native) Compensation Ordinance was passed. Several Amendments have been made since then.

In 1999 when Parliament passed the current Act, it repealed the Workmen's Compensation Act Cap 271 and the Pneumoconiosis Compensation Act Cap 217, in order to merge the two schemes.

Coverage

As stipulated in Section 110 of the Workers' Compensation Act, all employers are required to insure their workers with the Fund, other than the State and any other employer exempted by the Minister of Labour.

[9] According to Section 2 (1) of the Workers' Compensation Act, "Disablement, means disablement which results in the loss or diminution of wage-earning capacity or in the reduction of the chances of obtaining employment".

Contribution rates

Contribution to the Workers' Compensation Fund is entirely the employer's liability based on the declared earnings of their employees, assessed risks of the work place, cost of compensation payable and requirements of the Fund. Contribution rates, known as assessments, are derived from workers' earnings from enterprises.

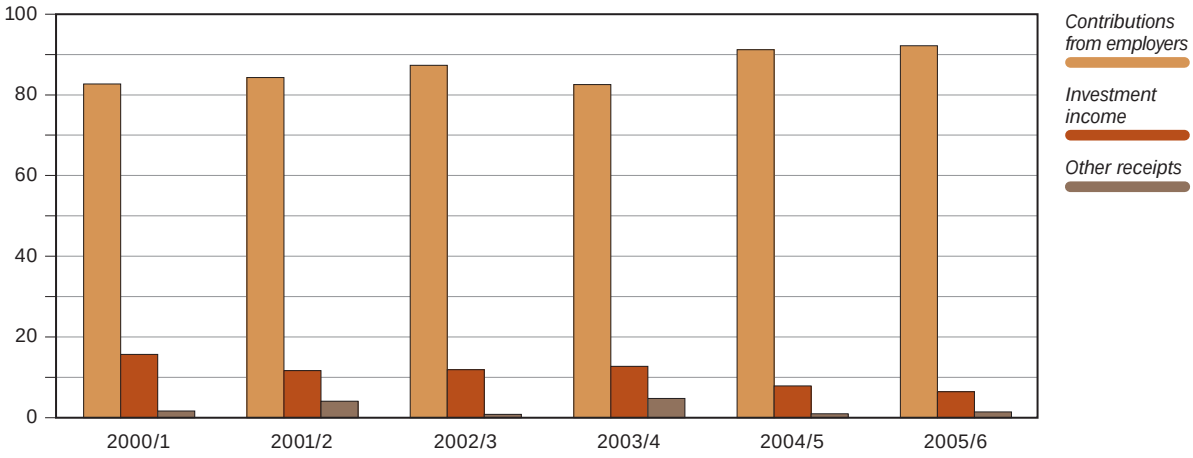
Benefits

The Workers' Compensation Fund provides four benefits which are described in detail in Table 4-4.

Table 4-4. Benefits provided by the Workers Compensation Fund

Benefits	Description
Total disablement	Compensation for total disablement is a monthly pension amounting to 50 per cent of the worker's assessed earnings.
Partial disablement	Compensation for partial disablement is paid in relation to the level of disablement multiplied by 50 per cent of the worker's assessed earnings. For both partial and total disablement, the period of receipt of the pension is limited to 18 months.
Permanent disablement	The compensation for permanent disablement is as for total disablement, i.e. 50 per cent of the worker's assessed earnings. Where the degree of disablement is under 100 per cent the compensation is calculated according to the degree of disablement multiplied by 50 per cent of the worker's assessed earnings. Where the level of disablement is below 10 per cent, a lump sum is paid, as prescribed by the Minister of Labour and Social Security. Where a worker has sustained an injury or contracted a disease, he/she is regarded as permanently disabled at least to the degree set out for such injury or disease. Where the disease or injury is not specified in the schedule of the Act the degree of disablement is regarded as the minimum disablement for the degree
Death	Where a worker dies as the result of an accident or disease compensation is paid as follows; a) if the worker leaves a dependent spouse and no dependent children, a monthly pension worth 40 per cent of the worker's assessed earnings; b) child pension; c) if the worker leaves no dependent children or a person wholly dependent upon him/her, but leaves partial dependants, an amount of three times the value of the benefits received by the dependant from the worker during the twelve months immediately preceding the accident or the onset of the disease; d) where a worker receiving a monthly pension for permanent disablement or who was entitled to a pension dies of causes other than the accident or disease for which he/she was being paid compensation, the spouse is paid 40 per cent of the monthly pension which the deceased worker had been receiving or would have received if he/she had been entitled to a monthly pension; e) funeral expenses are refunded in full to the person who paid them or such an amount as prescribed by the Minister.

Figure 4-5. WCFCB Receipts as percentage of total



Investment

Investment income accounted for an average of 11 per cent of WCFCB's receipts between 2000 and 2005, see Figure 4-5. Contribution income accounted for an average of 87 per cent of the total receipts over the same period. No detailed data were received on the structure of WCFCB investments and returns on each of the categories of investments.

Administration costs

Between 2000 and 2006 the administration costs of the Workers' Compensation Fund averaged about 82.16 per cent of contribution income.

Comparison of selected characteristics of contributory social security schemes 4.1.5

Coverage

As Table 4-5 shows, the data on membership provided by the existing pension schemes suggest that they cover around 79 per cent of their target group (550,000 out of about 700,000) – that is, all those aged 15-55 years who are in employment. However, results of the Labour Force Survey suggest that effective coverage by these schemes may actually be lower than that. This finding not only confirms that most working people in Zambia lack adequate social security coverage but also that even those who could be relatively easily covered by existing social insurance schemes are far from fully covered.

Given this situation, some measures should be taken to give most Zambians some basic old-age income security and to extend basic social insurance coverage for some other contingencies. GRZ (2007, p. 11) argues that the rate of compliance should be increased (many registered members are not active) and that the schemes should extend coverage to workers in the informal economy.

Table 4-5. Social Security Coverage in 2005

	Active members	per cent labour force	per cent paid workers	Pensioners
NAPSA[1]	355200	8.0	16.1	0
PSPF	106062	2.4	4.8	46122
LASF	13000	0.3	0.6	8250
Occupational schemes	40904	0.9	1.8	7173
WCFCB				17721
Labour force (15-54)		4,416,822		
Paid workers (15-54)		2,212,336		
Formal-sector paid workers (15-54)		435,588		

[1] estimate

Contribution rates

Regarding *contribution rates*, the public schemes have higher contribution rates than NAPSA (see Table 4-6). From both employers and employees, PSPF collects 14.5 per cent of wages and LASF collects 33 per cent of wages, by contrast with NAPSA which collects only 10 per cent. However, the NAPSA law allows for scaled premium funding, which means that the contribution rate will increase over time to assure full-funding of future benefit payments. Currently, this is not a problem because the scheme is still young. The case of WCFCB is different: instead of contributions, the Fund collects an annual, risk-related premium, so-called assessments, which range from 1.88 to 3.75 per cent of insurable earnings (Cheta, 2005).

High contribution rates cannot be relied upon to meet expected benefit expenditures if the Government, as the employer, fails to transfer these payments to the fund. The public pension schemes rely on such government transfers to be able to fulfill their obligations; which the Government, as an employer, has been failing to remit in a timely fashion, and has thus accumulated a huge debt with these schemes, that it is slowly liquidating. In 2006, pension arrears amounted to 4.4 per cent of total domestic debt or 1.0 per cent of GDP (MOFNP, 2007). This unfortunate situation has contributed significantly to the delayed payment of pensions to pensioners.

Financing

In practice, the schemes have slightly different financing mechanisms, as shown in Table 4-6. Currently, the LASF and the PSPF are PAYG while the new NAPSA is partially funded PAYG, with a scaled premium financing system.

The funds mobilized by the pension schemes, and mostly invested in the country, are large by comparison with the total market capitalization (fixed-income securities and stocks) and the gross domestic product, as shown in Figure 4-6.

Given the importance of such funds it is necessary to ensure sound investment policies that protect the entitlements of future pensioners and guarantee adequacy of benefits.

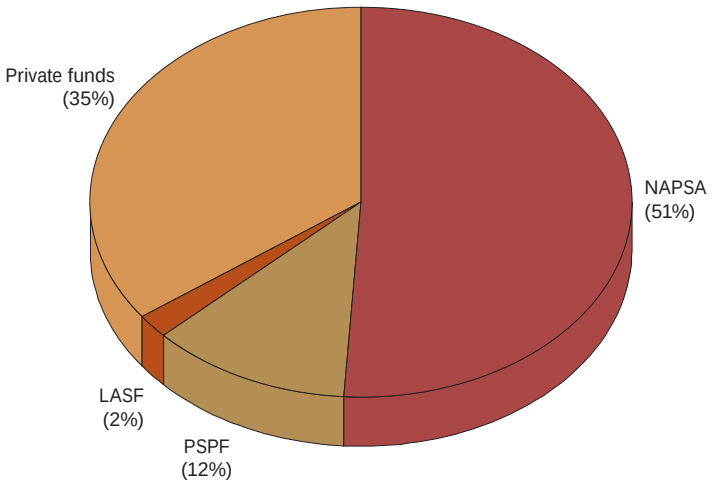
Table 4-6. Comparison of statutory pension schemes

Pension scheme	Financing system[1]	Retirement age	Early retirement	Contribution rate (per cent)		
				Self-employed	Employee	Employer
NAPSA	Partially funded, scaled premium	At age 55 *and* with 15 years of service[2]	– At age 50[3]	10.0	5.0	5.0
PSPF	Pay-as-you-go, unfunded	At age 55 *and* with 10 years of service	– Illness – From age 50[4] – At any age with 20 years of service	n. ap.	7.25	7.25
LASF	Pay-as-you-go, unfunded	At age 55 *or* with 22 years of service	– At age 50 with 10 years of service – At any age with 22 years of service[5]	n. ap.	10.0	23.0

Note: 'n. ap.' = not applicable. [1] Refers to the current situation because the LASF and the Civil Service Pensions Board (CSPB) – predecessor of the PSPF – were fully funded. Deficiencies in the design and management and the economic crises affected the schemes (GRZ, 2007).
[2] Those who aged 40 or over on 01/02/2000 require a minimum of 5 years. [3] If the person has at least 180 months of contributions and the resulting reduced pension is at least equal to the minimum pension. [4] 'Early retirement on grounds of marriage for a female officer at any time within 5 years of pension age' (Cheta, 2005). [5] Mandatory

Figure 4-6. Indicators of fund reserves of pension schemes, 2006

	K billion	per cent GDP	per cent market size
NAPSA	1 430	3.6	10.9
PSPF	333	0.9	2.6
LASF	72	0.2	0.5
Private funds	983	2.5	7.5
Total	**2 817**	**7.2**	**21.6**



Contingencies covered / benefit formulas

NAPSA, LASF and PSPF offer retirement, invalidity and survivors' pensions. NAPSA also provides a funeral grant. All the schemes grant defined-benefit pensions but the pension formulas are different. Table 4-7 shows the pension formulae for retirement pension benefits.

In the case of retirement pensions, NAPSA has a fixed minimum pension of 20 per cent of the national average earnings (NAE) and the maximum replacement rate is 40 per cent of the career average of the adjusted monthly earnings. In contrast, the public schemes do not have a maximum limit for the replacement rate and the total

Table 4-7. Comparison of retirement pension benefits

Pension scheme	Item	Description
NAPSA	Pension formula	Gross annuity = 0.001111 (1/900) × Career average of adjusted monthly earnings x Number of monthly contributions. (This gives 1.333 per cent of earnings annually.)
	Benefits paid	Earnings and resulting pensions are indexed to the national average earnings
LASF/PSPF	Pension formula	Gross annuity = (Last annual salary × Number of months of service) 1/660. (This gives 1.818 per cent of earnings annually.)
	Benefits paid	– Two-thirds are withdrawn as a lump sum – One-third is paid monthly as a perpetual annuity (using age-specific commutation factors) Monthly pension is indexed to the IPC.

Based on LASF (n.d.), PSPF (n.d.), and NAPSA (1999).

balance depends on the final salary. This means that the contributors to the pension schemes could reach a higher final balance than contributors to NAPSA. For instance, if someone contributed 25 years to the PSPF, the replacement rate would be 45.5 per cent [25x12/660] of the last wage while if the same person contributed to NAPSA, he/she would get 33.3 per cent of his/her career average wage (which in most cases is lower than the final wage).

In the case of survivors' pensions, the formulas differ between schemes. All schemes offer benefits for surviving spouses and surviving children but the benefits for the latter might be lower. In the case of LASF, each child would receive 25 per cent of the benefit provided to the spouse, up to a limit of 75 per cent for three surviving children or more. Survivors would receive a lump sum if the contributor had less than ten years of service in the case of PSPF, and less than five years of service in the case of NAPSA. We do not have enough information to compare replacement rates for specific cases such as a widow with two children, or only surviving children receiving benefits under different schemes.

On the other hand, the fact that contributors to LASF and PSPF can withdraw as a lump sum up to two-thirds of their final balance at retirement raises doubts about the role of these pension schemes to ensure adequate income replacement to their pensioners in the last years of their lives. The minimum pension in the case of LASF was increased in 2004 so that it was equalized in nominal terms to the minimum pension in NAPSA. At that time, 60 per cent of pensioners were receiving the minimum pension or around USD 20 (LASF, 2006).

Table 4.8 shows the retirement benefit level if an employee in that scheme or covered by the respective law retired assuming a pensionable service of 20 years. Further assumptions had to be made for NAPSA for it to be comparable with other schemes; for monthly pensions, the average index of monthly earnings has been assumed to be equal to the 2007 NAE applicable in 2008. Equally, there are differences in the rates of contribution for employees with one employer but contributing to two different schemes, for instance, a water utility company will pay a total of 33 per cent into LASF for an employee employed before 31 January 2000 and contribute a total of 10 per cent capped at four times the national average wage; the same is true for civil servants who were employed before and after 31 January 2000.

Table 4-8. Comparative analysis of some retirement benefits

	PSPF	LASF	NAPSA
Replacement rate[1]	36.36	36.36	26.66
Monthly pension	201 432[2]	217 659[3]	406 528[4]
Lowest pension	50 000	41 667	304 896
Highest pension	1 300 000	1 166 667	1 472 191
Lump sum	62 460 305	60 413 568	36 587 760

[1] After 20 years of contribution. [2] Calculation based on an average salary of ZMK 923,234 as stated in the 2006 Formal Sector Employment and Earning Inquiry Report by the Central Statistical Office. [3] Calculation based on an average salary of ZMK 997,606 as stated in the 2006 Formal Sector Employment and Earning Inquiry Report by the Central Statistical Office. [4] Calculation based on the National Average Monthly Earning of ZMK 1,524,480.

Occupational pension schemes 4.1.6

In addition to contributing to the mandatory schemes, employers can establish occupational pension schemes for their employees under a trust fund. Over 250 such schemes have been established (GRZ, 2007).

Private forms of social protection in Zambia usually take the form of private occupational pension schemes with insurance and non-insurance companies. Employers are free, and encouraged by the government, to establish occupational pension schemes for their employees. These schemes are established under trust in accordance with the Land (Perpetual) Succession Act, Cap 186 of the Laws of Zambia. However, under Section 8 of the Pensions Regulation Act No. 28 of 1996, all pension schemes are obliged to register with the Registrar of Pensions and Insurance for them to operate.

The Pensions and Insurance Authority (PIA) in 2005 estimated the number of occupational pension schemes to be about 207 with a membership of 223,813. Of the total membership 73.3 per cent belonged to the Public Service Pensions Fund and Local Authorities Superannuation Fund. Membership of private schemes under the management of insurance and non-insurance companies accounted for only 26.7 per cent (PIA, 2005). Of note, however, is the fact that occupational pension schemes are mainly supplementary as The National Pension Scheme Act No. 40 of 1996 mandates all private-sector employers to register all their workers with NAPSA.

The total membership of occupational pension schemes in 2005 fell to 223,813 from 261,615 in 2004. This represents a percentage decrease of 14.45 per cent. According to the PIA (2005:7), this decrease is a result of ever-shrinking formal employment, despite the fact that more pension schemes are being set up. Furthermore, a number of pension schemes have discontinued, owing to the fact that individuals feel overburdened by deductions from their salaries that go to the state scheme (NAPSA), thereby reducing the number of members in schemes.

Pension system regulation 4.1.7

The Pension Scheme Regulation Act, 1996 (as amended in 2005) provides for the regulation and supervision of all pension schemes except the National Pension Scheme Authority (NAPSA). As at 31 December 2007, 237 pension schemes were registered. The major requirements of the Pension Scheme Regulation Act are outlined in Box 4.1.

Box 4-1. Key requirements of the Pension Scheme Regulation Act

- All pensions schemes, other than that established by written law need to be established under an irrevocable trust.
- The governing board of a pension scheme (Board of Trustees) must have equal representation of members and employers. The members elect their representatives and the employer nominates his/hers.
- Pension fund managers, administrators and custodians need to ensure that at least 51 per cent of their scheme's share capital is owned by Zambians (effective May 2008).
- Defined-benefit schemes need to have an actuarial valuation every two years in the first four years of registration, thereafter every three years, so as to review the sound funding of the scheme.
- All pension schemes need to submit audited financial statements three months after the end of the financial year and submit quarterly returns 14 days after the end of each quarter.
- The Act requires the preservation of pension rights. Therefore, once attained, rights cannot be changed, meaning that as regards benefit levels amendments can only affect future rights.
- The Act also grants full portability of members' benefits. Members can transfer their accrued benefits when they change employment.
- All pension schemes need to have an investment policy approved by the Regulator.
- Pension schemes need to give a member a benefit statement every year, clearly stating the accrued portable benefits.
- Only a maximum of 30 per cent of the net assets of the pension scheme can be invested abroad.

In practice, it is difficult to regulate public pension schemes as there are conflicts in the laws. Key conflicts are the composition of the governing boards, submission of returns, period of actuarial valuation, portability of benefits, investment of funds, penalties for delayed remittance of contributions etc.

The Pension Scheme Regulation (Amendment) Act, 2005 requires that the governing board of a pension scheme have equal representation of employers and employees, The PSPF, LASF and NAPSA have the composition of their governing bodies dominated mostly by employers and only one seat for workers' representatives. The Pension Scheme Regulation Act, 1996 expressly states that it does not apply to the NAPSA yet, strangely, the National Pension Scheme Act, 1996 states in section 32 that the Authority shall ensure that the Scheme is managed in accordance with the prudential management principles specified in the Pension Scheme Regulation Act.

The Pension Scheme Regulation Act, 1996 empowers the Registrar of Pensions and Insurance to ensure that the actuarial recommendations are implemented by the Trustees of a scheme, yet the PSPF Act requires the intervention of the President if the directors fail to implement any of the recommendations from the actuary, while the LASF Act requires the Minister of Local Government to intervene and, in the case of NAPSA the Minister of Labour and Social Security, if the board fails to implement any of the recommendations of the actuary.

The Pension Scheme Regulation Act (PRSA) also requires that audited financial statements be prepared within three months after the end of the financial year, while both the PSPF and LASF Act have no provision about the deadline for the preparation of audited accounts. NAPSA on the other hand is required to prepare audited accounts before the end of six months. It is imperative to note that delayed preparation of audited accounts has serious consequences on the operations of any pension scheme, as tasks such as the preparation of actuarial reports will not be completed on time. For instance, the PSPF has a draft actuarial report based on 2005 accounts. By the time the final report is prepared, over two years will have passed since the period concerned and, in decision-making terms, it may no longer be valid.

In terms of reporting, the Pensions and Insurance Authority has a dual reporting role to the Minister of Finance and National Planning and also to the Minister of Labour and Social Security. The PSPF reports to the President, LASF reports to the Minister of Local Government and NAPSA reports to the Minister responsible for Labour and Social Security. The Minister of Labour and Social Security is absent from the LASF and PSPF Acts, yet he/she is the custodian and driver of social security policy.

The PSPF and LASF Acts do not contain explicit provisions regarding regulation. It is important also to note that the PSRA seems to focus only on the regulation of private occupational schemes. Therefore for the Pensions and Insurance Authority (PIA) to regulate public schemes, specific regulations for the public schemes will be needed, as operational risks are so different from those managed privately. Further, the PSRA grants full portability of benefits to persons who change employment, yet none of the other three Acts (the NAPSA, LASF, and PSPF) allows members transfer of accrued benefits. The NAPSA Act make no provision to cater for members who change employment from a contributing employer to an exempted employer (i.e. Konkola Copper Mines Plc.), and PSPF and LASF provide only for the refund of employees' contributions, without any option of transfer to another scheme or deferring benefits to retirement. It is also worth noting that the fourth schedule of the Income Tax, Cap 323 allows the refund of both employer's and employee's contributions to an employee who leaves employment. The Income Tax Act, Cap 323 of the Laws of Zambia, allows only a maximum commutable amount of a pension yet a member of LASF or PSPF can commute up to two-thirds of their pension.

The Workers' Compensation Fund Control Board has a Board of Directors who report to the Minister of Labour and Social Security. The Board is tripartite, representing Government, employers, and employees. The Board is required to appoint an actuary who should ascertain the financial soundness of the Fund at intervals not exceeding three years. Further, the Board is required to have the financial statements for the Fund and a report submitted to the Fund not later than six months after the end of the year. The Workers' Compensation Fund Control Board Act has no section for prudential management and regulation of the Fund. There is no restriction on the level of administration costs or required solvency levels at the end of each period.

Other employment-related benefits *4.1.8*

Workers are entitled to other benefit packages, as provided for in various pieces of legislation. Others benefits are agreed upon jointly by workers and employers. Examples of the benefits provided for in some selected collective bargaining agreements are presented in Chart A.

Severance payment

An employee who has served with an employer for not less than ten years and has attained the age of 55 years, under the provisions of the supplementary law to the Minimum Wages and Conditions of Service Act (Cap 276) of the Laws of Zambia, is entitled to three months' basic pay for each completed year of service. However, where the employer has established a pension scheme approved by the Minister of Labour and Social Security, such retirement benefits are paid in accordance with that pension scheme.

Where the employer and employee have agreed that the latter retires before attaining the age of 55, the severance payment is in accordance with the formula of three months for each year of service with ten years service as the minimum period. Most voluntary separation schemes have similar or better provisions. In addition, the employer is under an obligation to provide transport to the employee and family to the employee's place of initial recruitment. Alternatively, the employer must pay a repatriation allowance as part of the severance payment, which should be equal to the current cost of travelling by public transport using the most direct route to the employee's place of recruitment.

Paid maternity leave

Section 15 (A) of the Employment Act provides for a minimum period of maternity leave with full pay of 12 weeks for female employees who have completed two years of continuous service with their employer or since their last maternity leave. The condition is the production of a medical certificate of her pregnancy signed by a medical practitioner. None of the social security schemes provides maternity benefits to its members, hence the incidence of cost in terms of maternity falls squarely on the employer. Some have argued that this makes the recruitment of women less attractive and have thus called for this risk to be transferred to social insurance.

Paid sick leave

Health insurance is not part of the social security package offered through the schemes in Zambia, as is the case in some countries. Employees are usually covered through negotiated arrangements that require their employers to enter into an agreement with health care providers, so that the employees can go there when they are unwell or they are simply reimbursed their health expenses up to a certain limit. Some of the arrangements take the form of pre-paid schemes where both the employees and employers have to contribute, as is the case with most companies whose social security provision in collective agreements are summarized in Chart B.

Furthermore, the underlying protection for all workers in formal employment is provided in Section 54 (1) of the Employment Act. This states that: *"Except as may be provided in any contract of service, collective agreement or other written law more favourable to the employee, if any employee becomes temporarily incapacitated in consequence of sickness or accident not occasioned by his own default, such employee shall, provided he has produced a valid medical certificate, receive pay for the days absent up to a maximum of twenty-six working days in any period of twelve months* (...)".

In addition to the leave prescribed in subsection (1), subsection (2) states that every female employee shall be entitled to one day's absence from work each month without having to produce a valid medical certificate.

Funeral grants

Some collective bargaining agreements provide for funeral grants should an employee lose a registered dependant; otherwise, they receive salary advances. For contributors to NAPSA, this is covered by NAPSA but, usually because of lack of knowledge and perhaps also of the length of time before a claim is processed, bereaved contributors would rather get that entitlement from their employer first, then claim the NAPSA one later.

Some employers provide education and housing allowances to their employees. These benefits, which apply to many long-term employees, are a major cause of the employers' marked preference for short-term and casual employment contracts and for the relatively low penetration of occupational pension schemes (Petrauskis, 2005; Hantuba, 2005).

Provisions for vulnerable workers

The Minimum Wages and Conditions of Employment (General) Order sets out remuneration and benefit packages applicable to workers who are neither unionized nor in managerial positions. Statutory instruments which provide for these minimum wages and conditions of employment are normally reviewed every two years by the Minister of Labour and Social Security. Unionized workers have their packages negotiated annually and stipulated in collective bargaining agreements, while those in management positions have them specified in their respective contracts of employment (GRZ, 2002). There has however been some deliberate misapplication of the provisions on the minimum wages and conditions of employment statutory instruments by some people in managerial positions when awarding themselves a gratuity, which they usually base on three months' pay for each year served. The Ministry of Labour has endeavoured to clarify the correct interpretation but the trend seems not to have diminished.

According to the 2006 Statutory Instrument on the Minimum Wages and Conditions of Employment (General) Order, employees without collective bargaining agreement protection have the right to sickness leave with three months of full pay and three additional months of half pay, if necessary. In case of pregnancy, women are entitled to 120 days of paid maternity leave –only for those with a minimum of two years at work. On the other hand, employers can provide health care and medical coverage through private providers and usually both employers and employees contribute equally (ZIC, 2006, p. 35). However, there are no data on actual coverage by these arrangements. The norm also regulates paid holidays (not less than 24 days per year) and special paid leave (e.g., due to death of a family member). Results of the LFS 2005 discussed in the previous chapter show that many employees are not actually able to enjoy these entitlements.

If the employee is declared redundant before the end of his/her contract (with at least one month's notice), the employer has to pay the equivalent of two months of basic salary for each completed year of service (i.e., redundancy benefit).

Extending coverage by contributory schemes to uncovered informal-economy workers 4.1.9

A major problem in the social insurance system in Zambia is that all pension contribution schemes have been designed for people in the formal sector, which has tended to disadvantage non-formal workers. This targeting method implies that those working in the informal economy are excluded from contributing to the scheme. Although there is provision in the statutes relating to statutory pension schemes for voluntary affiliation of the self-employed and other categories of workers in the informal economy, no measures have been put in place to capture those working in this sector owing to the administrative and logistical challenges involved. However, in a country with an existing employed labour force of about 4.1 million people (CSO, 2007)[10] of whom

[10] Central Statistics Office (2007): *Labour Force Survey 2005*. Lusaka: CSO.

only 495,784 are in the formal sector, there is a case for extending existing social insurance schemes to include non-formal workers.

With the contraction of the formal sector, the informal economy is increasingly the main sure source of employment in Zambia. In terms of disadvantaged groups, most working women in Zambia are excluded from access to social insurance, as a good number of them are engaged in non-formal jobs. A related and equally disadvantaged group is young people whose unemployment rate is quite high (over 16 per cent) and most of whom have never worked before, so have no basis for claiming the social insurance that in Zambia is targeted at those who have work or have worked before. Thus, the case for extending existing social insurance schemes to include non-formal workers would seem justified (CSO, 2007).

This can be done by embarking on broad-based sensitization campaigns aimed at informal-economy workers who in most cases are not aware of the benefits of affiliating to a social insurance scheme or the dangers of not doing so. The main advantage of this approach is that it would make use of already existing institutional framework, expertise, and experience. Nevertheless, there might be a need to reform the existing schemes as they are designed to cater for workers in formal employment. The ILO (2002) gives examples of South Korea, Japan, and Portugal as places where social insurance schemes have been successfully extended to non-formal workers.

However (Van Ginneken, 2003) argues this approach has been difficult to apply in most low-income countries: because, "the benefits offered do not correspond to the priority needs of most informal sector workers and that the contributions required are much higher than what informal sector workers are prepared to pay".

The success of such an approach would therefore require the introduction of deliberate packages targeted at a clientele with the characteristics of informal-economy workers, for which most formal social protection institutions do not have the time and resources. The biggest drawback of this option is the extra administration costs that would be needed to come up with packages for non-formal workers at the same time as the scheme's officials manage the main scheme for members in formal employment. Therefore, the approach is a combined one: sensitization campaigns plus the offer of a new package. This requires further consideration.

4.1.10 *Micro-insurance in Zambia*

There is no explicit government policy on micro-insurance, though the State has been lending support to micro-finance concepts. The Bank of Zambia has draft regulations for micro-finance institutions. However, micro-insurance aptly falls under the Pensions and Insurance Authority, which has not taken steps to regulate it. Nonetheless, the size and number of formal micro-insurance transactions have grown dramatically since 2001. However, the range of micro-insurance products has remained narrow, with most of the products being closely linked to micro-credit.

Formal micro-insurance in Zambia largely consists of credit life and funeral coverage for micro-finance borrowers and their family members. Micro-insurance in the form of contributory medical schemes is also slowly taking root in Zambia. For instance, an optional contributory medical scheme is available to civil servants that is managed by a private institution called Premier Medical Services Limited. Much of the recent interest in providing insurance to low-income households, however, comes from micro-finance institutions (MFIs) that want to protect their loan portfolios from default caused by death and illness.

Formal micro-insurance can be traced to CETZAM, one of the country's leading MFIs, which introduced a funeral benefits insurance scheme in partnership with NICO insurance company in 2000. This product was in response to CETZAM's market research, which indicated that death was the number one risk for its clients. Most MFIs facing similar challenges have also began to provide some informal, internally managed insurance funds. For example PULSE, then still a micro-finance project under CARE International, introduced its Borrowers Protection Fund (BPF) in 2000. Since then it has been providing micro-insurance in the form of credit life, using a partnership agent model (partnering with Madison Insurance Company Limited.).

In addition, a few examples of informal or unregistered micro-insurance activities, such as funeral funds, can be found in market places and sometimes in church organizations, in which weekly premiums ranging from USD 0.13 to 0.33 are made. The premiums are not based on actuarial analysis but on what the members can afford. In general, however, risk management and insurance *per se* are not widely understood concepts in Zambia. Insurance penetration, which is between 1.0 and 1.5 per cent, ranks quite low (Churchill, 2006). However, based on the traditional concept and practices of *Chilimba*, which is widespread, it is reasonably possible that with a good regulatory framework, micro-insurance services could easily be accepted and established as a means to social protection in Zambia.

Conclusion 4.1.11

There are a few key issues for the contributory schemes. NAPSA has recently received an actuarial report, which shows the scheme is in a healthy position for the medium term, but has funding problems for the longer term. It is actively considering the way forward. The Government pension schemes have liquidity problems due to non-payment by the Government of monies due. There is pressure to reverse the reforms, which were aimed at providing a multi-pillar system.

Issues of equality should be addressed in the respective Acts. For social security to be all-inclusive, gender needs should be incorporated in the legislation. The LASF Act, for instance, still assumes a male contributing member; there is urgent need for the Act to be amended so as to share sufficient legal protection equally among the members.

Good governance principles need to be incorporated into the management of social security institutions. Board members should have sufficient knowledge and skills to supervise management so as to provide adequate and reliable benefits. Government policy on who should be regulated also needs to be clear; currently it is not clear whether the PSPF and LASF should be regulated.

Chart A. Formulae and other features of benefits paid by pension schemes in Zambia

	Pensions Retirement	Invalidity	Survival Pensions/ Death Benefits
National Pension Scheme Act	(AIME × 0.001111 × M)	C + Max (G,Pm)	C + Max (G,Pm)
Public Service Pension Fund Act	$\frac{KA*B}{C}$	(SC + (SC*I*Y)) or (KA*B/C) + (KA*D*7/7,200)	(KA*B/1,800) + (KA*C*7/18,000) Note if deceased member has served for more than 20 years he is deemed retired
Local Authorities Superannuation Fund Act	$\frac{KA*B}{C}$	If member has served for more than ten years he is deemed retired and can commute 1/3 of benefit for cash or in case of less than ten years refund of contributions plus interest	If member has completed twenty years of service is deemed to have completed twenty two years and retired. Spouse pension = (1/2000) * KA*B. Children are paid up to two thirds of spouse. If no spouse children get twice annuity that could have been granted to them
Employment Act	Not stated	Not stated	Not stated
Minimum Wage Acts	3 months' basic pay for each completed year of service (service with employer needs to be more than ten years)	2 months' basic pay for each completed year of service	Not stated
Workers Compensation Fund Control Board Act	N/A	N/A	40 per cent of assessed earnings

	Redundancy	Employment injury	Paid Maternity	Funeral	Indexation of benefits
	N/A	N/A	N/A	10 Times minimum pension (ZMK2,944,382.00	yes
	(KA*B/C) + (KA*D/60)	(A/100) * 2/3B+ 1/3C	N/A	NONE	Board can adjust monthly pensions at such intervals as they may determine
	If member has served for more than ten years he is deemed retired and can commute 1/3 of benefit for cash	N/A	N/A	NONE	The Minister can increase upon Board and actuarial recommendation.
	2 months' basic pay for each year served		Twelve weeks	Not stated	N/A
	2 months' basic pay for each completed year of service		120 calendar days	Funeral expenses plus ZMK 200,000 funeral grant	N/A
	N/A	50 per cent of assessed earnings	N/A	Refund of funeral expenses	No indexation stated

Chart B. Social protection provisions in selected collective bargaining agreements

Institution/ Company name	Health	Sick pay	Paid maternity	Redundancy	Employment injury
INDO Zambia	Reimbursement @12 per cent annual basic pay	First 12 months full pay, then next 3 months at half pay	90 calendar days	As per Employment Act	Not stated
PSPF- STAFF	Contributory medical insurance	90 calendar days full pay+ next 90 days at half pay	90 calendar days	As per Employment Act	Not stated
Occupational Health & Safety	Medical scheme	6 months	3 months	As per Employment Act	As per Workers Compensation Act
LBTCMB	None	6 months	3 months		
ZRA	Medical scheme	90 calendar days full pay+ next 90 days at half pay	90 calendar days	Terminal gratuity	GL
NAPSA-STAFF	Medical Allowance	6 months	3 months	4.5 basic salary * each year served	GL
ZSIC	Medical insurance (K 4 million per out of patient treatment or hospitalization)	12 months	3 Months	3 months per each year served	GPA (5* Annual basic salary)
CHILANGA CEMENT PLC	Medical Insurance plus two months basic pay for discharge on medical grounds	90 calendar days full pay+ next 90 days at half pay	120 calendar days	2 months for each year served or as varied by GRZ	Workers Compensation Fund Control Board
MOPANI PLC	Company has hospitals	90 calendar days full pay+ next 90 days at half pay	90 calendar days	3 months for each year served	Workers Compensation Fund Control Board
KCM PLC	Company has hospitals	90 calendar days full pay+ next 90 days at half pay	90 calendar days	3 months basic salary for each year served	Workers Compensation Fund Control Board
TAZARA	Company has clinics and pays medical expenses at hospitals for staff (ZMK70,000 per month)	180 days full pay for normal sickness and 360 days as a result of sickness related to employment	90 calendar days	4.8 basic salary for each year served	Workers Compensation Fund Control Board
Development Bank of Zambia	Medical scheme	Six months	120 days	4 basic salary for each year served	Workers Compensation Fund Control Board

Pensions retirement	Disability pensions/ Invalidity	Survival pensions/ death benefits	Funeral	Employer sector	Size of employer
4 months basic salary for each completed year of service	4 months basic salary for each completed year of service	NAPSA	Funeral expenses plus grant of ZMK 550,000	Banking	Large
15 months basic salary plus three months salary for each year served	Not stated	Accrued benefits	4-6 per cent of annual salary	Pension scheme	Medium
3 months basic pay plus NAPSA	3 months basic pay	Pension Scheme	Grant of ZMK 600,000 plus transport	Public	Medium
NAPSA	NAPSA	NAPSA	Grant of ZMK 600,000, coffin plus transport	Education	Small
Contract gratuity	Not stated	NAPSA and accrued benefits under contract	Some expenses plus grant	Public tax collector	Large
Staff scheme	Not stated	Staff scheme	Grant of ZMK 800,000 + Full expenses	Pension scheme	Large
Staff scheme	Not stated	GLA and staff scheme	Grant of ZMK 1,500,000 + funeral expenses	Insurance	Large
Defined contribution Staff Scheme plus NAPSA	Workers Compensation Fund Control Board	Refund of employers and own contributions under DC only.	Grant of ZMK 3,500,000 + plus expenses	Manufacturing	Large
Defined contribution Staff Scheme. Exempted from NAPSA	Workers Compensation Fund Control Board	Refund of employers and own contributions under DC only.	Grant of K 750,000	Mining	Large
Defined contribution Staff Scheme. Exempted from NAPSA	Workers Compensation Fund Control Board	Refund of employers and own contributions under DC only.	Grant of K 750,000	Mining	Large
Occupation scheme(1/45) plus NAPSA	Workers Compensation Fund Control Board	Staff scheme and NAPSA	Funeral expenses plus grant of ZMK 300,000	Railway	Large
4 basic salary for each year served plus NAPSA	Workers Compensation Fund Control Board	Group life and NAPSA	Funeral expenses plus grant of ZMK 500,000	Banking	Medium

Institution/ Company name	Health	Sick pay	Paid maternity	Redundancy	Employment injury
Copperbelt Bottling	Medical scheme	three months on full pay then half pay till medical discharge	90 days	3 months basic salary for each year served	Workers Compensation Fund Control Board
Barclays Bank Zambia	Medical Insurance non contributory by staff	Paid till medically discharged	4 months at full pay	As agreed by the union subject to the law	Workers Compensation Fund Control Board
CRESTA GOLF VIEW HOTEL	NONE	90 days on full pay and half pay the next 90 days	120 days	Contract Staff	Workers Compensation Fund Control Board
ARMCOR Security	NONE	As permitted by doctor through sick note. But usually after prolonged illness staff lose employment	120 days	As per Employment Act	Workers Compensation Fund Control Board
PJP Associate Firm of Architects	Medical scheme (monthly cost not to exceed $100)	Sixty days at full pay and next 30 days at half pay	90 days	Contract staff	Not stated
INDENI OIL REFINARY	Medical Scheme	6 months	90 days	As per Employment Act	Workers Compensation Fund Control Board
Securicor	None	One month	As per minimum wage currently 120 days	As per Employment Act	Not stated
Continental Investment Ltd	Medical scheme	As per Employment Act. Currently three months with full pay	90 days	Contract staff	Workers Compensation Fund Control Board
Shoprite Stores	Only allowance in salary is provided	As per Employment Act. Currently three months with full pay	120 days	2.5 basic pay for each year served	Workers Compensation Fund Control Board rules

Pensions retirement	Disability pensions/ Invalidity	Survival pensions/ death benefits	Funeral	Employer sector	Size of employer
Defined Contribution scheme plus NAPSA	Defined benefit scheme	Group Life Plus refund of contributions plus interest in addition to NAPSA	Funeral expenses plus ZMK 1.5 million	Manufacturing	Medium
Defined Contribution scheme plus NAPSA	Workers Compensation Fund Control Board	Group Life plus refund of contributions plus interest in addition to NAPSA	Funeral expenses plus grant (max ZMK 4 Million)	Banking	Large
NAPSA Plus employment contract gratuity	Workers Compensation Fund Control Board	NAPSA Plus accrued gratuity	ZMK 300,000 plus coffin	Hospitality	Medium
NAPSA	Workers Compensation Fund Control Board	NAPSA	Help with funeral expenses and transport	Security firm	Medium
NAPSA	Not stated	NAPSA	Help with funeral expenses depending on availability of funds	Constructuring consultancy (mostly self employed)	Small
Defined Benefit Scheme(1/55)	Workers Compensation Fund Control Board	NAPSA plus staff occupational scheme	Funeral expenses plus grant	Manufacturing – oil refinery	Large
NAPSA	Not stated	NAPSA	Help with funeral expenses (Grant for expenses) aximum ZMK 200,000 and transport	Security firm	Medium
NAPSA and gratuity may be provided at Mgt discretion at 10 per cent of accumulated basic salary	Workers Compensation Fund Control Board	NAPSA	Funeral expenses plus grant of ZMK 400,000	Information technology	Small
NAPSA plus retirement Fund set by employer at 3 months basic pay for each year served	Workers Compensation Fund Control Board rules	NAPSA plus retirement Fund set by employer at 3 months basic pay for each year served	Funeral expenses plus grant	Shop chain (super-market)	Large

4.2 Non-contributory programmes

4.2.1 Introduction

This part reviews the main non-contributory social protection programmes found in Zambia at present. While *social protection* can be said to entail making transfers in form of cash, goods or services to persons at risk of or already experiencing adverse conditions such as poverty, unemployment and sickness, or otherwise vulnerable owing to their age, physical condition or household status, *non-contributory programmes* make such transfers unilaterally, i.e., without linking benefits to any contribution requirement. Included within the scope of this review, therefore, are all public or private measures providing some form of social security or assistance, with the specific exception of insurance-type schemes.

In reviewing existing non-contributory social protection programmes in Zambia, one focus will be to determine the extent of their coverage by identifying the social risks they address, the extent to which the benefits they provide prevent or reduce such risks, and the number of households or individuals they reach out of the total number in need of support. In this way it will be possible to assess the extent to which existing non-contributory programmes address needs for social protection among the large majority of individuals and households in Zambia excluded from existing social insurance schemes which are limited to formal-sector workers. An additional focus will be to assess the *performance* of existing non-contributory programmes in terms of their ability to meet stated objectives (their effectiveness), the ratio of programme costs to net benefits (their efficiency), as well as their financial and institutional sustainability. Based on these findings, it will also be possible to identify opportunities and challenges to extend coverage to those population groups currently lacking any form of social protection.

Five non-contributory programmes in Zambia have been identified as the most important in terms of their coverage and impact on social protection. Together these programmes address major social risks and situations of vulnerability, target relatively large numbers of beneficiaries, and have achieved significant results in terms of securing the well-being of the target populations.

- The Public Welfare Assistance Scheme (PWAS) has had its budget dramatically reduced in 2008 to K4.3 billion. PWAS reaches out to over 100,000 beneficiaries countrywide, providing a range of benefits linked to better nutrition and health, income support, child protection, education and occupational training. PWAS will soon include elements of cash transfers (see below).

- A group of Social Cash Transfer schemes are financed by international donors and implemented under PWAS structures in a few districts of the country. These schemes pay out modest monthly cash benefits reaching close to 7,000 households (30,000 persons). There now exists a joint donor-Government strategy for scaling up cash transfer schemes.

- The Food Security Pack (FSP) is a Government-funded scheme providing basic agricultural inputs, technology transfers and training to vulnerable small-scale farming households across the country. Over the past five years, between 30,000 and 160,000 farmers have benefited each year from the programme.

- The School-Feeding Programme in Zambia is funded by the World Food Programme and provides school meals and take-home rations to school-age children from poor families in drought-stricken areas. More than 170,000 children benefited from school-feeding in 2006.

- The Project Urban Self-Help is a government-funded public works programme that originated in the early 1990s and provides short-term employment for up to 50,000 persons in a given year.

Other non-contributory programmes in Zambia address one or another aspect of social protection, but these are not discussed in this review. This group includes programmes considered too small in scale, sporadically implemented programmes such as those in response to emergencies, and programmes exclusively addressed at long-term social and economic empowerment.

The five programmes identified above are then presented according to key aspects of their design, implementation and performance. Particular attention is paid to the institutional framework, referring to such elements as the actors involved with the programmes as well as financing and administrative arrangements; coverage (not only the geographical areas of operation and beneficiary groups but also the social risks secured against and type of benefits provided); and performance indicators such as cost-efficiency, effectiveness and impact on poverty and vulnerability among the targeted groups. In Part 4.2.3, an overall assessment is made about the extent of social protection coverage by the existing non-contributory programmes in Zambia and the prospects to extend coverage to reach individuals currently lacking in any form of social protection.

Different sources have been consulted for the purpose of this comparison. These include a number of overview and thematic studies on social assistance programmes conducted over the past few years, official government strategy documents and expenditure reports. However, information on some of the programmes was hard to come by, especially those without a stable institutional basis or not subject to systematic monitoring and evaluation.

Table 4-9 shows the main programmes according to the kind of benefit provided.

Table 4-9. Main social assistance programmes

Population groups	Programme	Main benefit
'Incapacitated' households*	Social Cash Transfer Scheme (SCTS) / Public Welfare Assistance Scheme (PWAS)	Cash/in-kind transfers to cover basic material needs
	National Trust for the Disabled (NTD)	Credit facilities encouraging the setting-up of business enterprises
'Vulnerable but viable' farm households**	Food Security Pack (FSP) programme Micro-Bankers Trust (MBT)	Farm inputs
People living in food-insecure areas	World Food Program	Food
	School Feeding Programme	Food (also hygiene education, school gardens, etc.)
	Food-for-assets and food-for-training projects	Food and skills training
Orphans and vulnerable children	Strengthening Community Participation for the Empowerment of Orphans and Vulnerable Children (SCOPE OVC)	Psychological and educational support, food
Farmers	Fertilizer Support Programme	Farm Inputs

* Incapacitated households' is the term used by the GRZ to refer to the 10 per cent poorest and most vulnerable households.
** Vulnerable but viable' households are those which lack the financial resources but have the physical capacity to sow.

Source: WFP (n.d.), RHVP (2007a), MCDSS (2007)

The Public Welfare Assistance Scheme (PWAS) reaches out to over 150,000 beneficiaries countrywide, providing a range of benefits linked to better nutrition and health, income support, child protection, education and occupational training. PWAS is implemented by the Ministry of Community Development and Social Services (MCDSS), in collaboration with the Ministry of Health, Education, World Vision, GTZ and other institutions.

PWAS is currently integrating the Social Cash Transfer Schemes (SCTS). These schemes are financed by international donors and implemented under PWAS structures in a few districts of the country. These schemes pay out modest monthly cash benefits reaching close to seven thousand households (30,000 persons). There is a joint donor-Government strategy for scaling up cash transfer schemes (MCDSS, 2007).

The Food Security Pack (FSP) is a government-funded scheme providing basic agricultural inputs, technology transfers and training to vulnerable small-scale farming households across the country. Between 30,000 and 160,000 farmers have benefited each year from the programme over the last five years. The Fertilizer Support Programme will receive K185 billion in 2008.

The School Feeding Programme in Zambia is funded by the World Food Programme (WFP) and provides school meals and take-home rations to school-age children from poor families in drought-stricken areas. More than 170,000 children benefited from school feeding in 2006. The WFP has several line actions to provide food to people living in food-insecure areas, including groups with different needs (e.g., people affected by HIV/AIDS and tuberculosis, orphans and other vulnerable children, refugees, etc.).

Table 4-10 shows the number of beneficiaries and resources allocated to these main programmes.

In addition, programmes targeting specific groups, such as unemployed young people living in the cities, street children, families with housing needs, disabled people and so on, offer work opportunities or micro-credits. The street children programe is being expanded in 2008.

Altogether the Government, supported by donors, allocates to these programmes resources amounting to under 0.2 per cent of GDP and 1 per cent of total Government spending. Though these non-contributory programmes are supposed to provide assistance to a wide range of poor and vulnerable groups, effective coverage is low because resources are so limited that they result in low benefit levels and inconsistent and ineffective targeting.

More effective social assistance would require much larger resources to cover many more beneficiaries. PWAS has objectives to cover the poorest 2 per cent of the population, but still lacks the necessary resources (not to mention the actual feasibility

Table 4-10. Detail of beneficiaries and expenditures, 2005-2006

Scheme	2005		2006	
	Beneficiaries	Expenditure	Beneficiaries	Expenditure
Public Welfare Assistance Scheme	107 415	10 351	166 559	10 181
Social Cash Transfer Scheme	39 500	3 225	64 700	5 971
Food Security Pack	40 000	9 000	34 942	21 000
School Feeding Programme	19 520	3 116	173 980	22 408

Sources: MCDSS (2006), MCDSS/GTZ (2005), RHVP (2007), MoFNP (2007), Lee & Siamwiza (2006)

of identifying the most vulnerable 2 per cent). To cover the poorest 10 per cent of the population who most need social assistance would require identifying and covering a further 900,000 highly vulnerable but not yet covered individuals each year. Similar numbers of vulnerable farmers miss out on the Food Security Pack (MCDSS, 2007; MCDSS/GTZ, 2005). Also not covered are the 400,000 persons who would qualify for cash transfers, and between 500,000 and 750,000 informal-sector unemployed workers not covered by existing work-for-aid schemes (MoFNP, 2007; MCDSS/GTZ, 2007; MCDSS, 2007).

From the current national Social Protection Strategy it is clear that non-contributory social assistance programmes will play a greater part in the extension of social protection coverage in Zambia, especially if the planned national rolling-out of cash transfers is implemented.

Main characteristics of individual non-contributory programmes 4.2.2

Public Welfare Assistance Scheme

The Public Welfare Assistance Scheme (PWAS) is the flagship public social assistance programme. Established in the 1950s to provide support to Zambian war veterans, it is also the oldest welfare programme in the country. In the second half of the 1990s PWAS was redesigned to decentralize its operations and include elements of community decision-making in welfare assistance, with the new scheme launched in 2000.

Under the redesigned PWAS, the Department of Social Welfare (DSW) within the Ministry of Community Development and Social Services coordinates operations and provides training and other technical assistance to community partners. Most PWAS activities are decentralized, with volunteer-staffed Community Welfare Assistance Committees (CWACs) responsible for identifying beneficiaries and administering benefits. A smaller number of Area Coordinating Committees (ACCs) supervise the CWACs, while at district level a District Welfare Assistance Committee (DWAC), forming part of the District Social Welfare Office, oversees operations.

PWAS aims to help the poorest and most vulnerable households throughout the country to meet their basic needs. Assistance is provided in health, education and social support. The scheme targets 200,000 individuals or around 2 per cent of the population comprising low-capacity or incapacitated households, out of an estimated one million (10 per cent of the population) estimated to be in dire need of social assistance. Targeted groups include: households where the head is elderly, chronically ill, a disabled women or child; households with no productive assets, relatives to provide assistance or adults capable of working; victims of natural disasters, people with poor-quality housing, orphans and children not at school, including street children. Beneficiaries typically receive assistance in the form of food, shelter, education, health, warm clothing and travel allowances to the value of USD 2-20 annually. Assistance in health and education was provided in the past through pilot programmes operating as part of PWAS, such as the Community Health Welfare Scheme (CHEWS) and the Community Bursary Scheme.

PWAS has achieved a nationwide presence, covering all 72 districts in the country. Most districts were operating under the redesigned scheme at the beginning of 2007, with the change-over expected to be complete by the end of the year (MCDSS 2006). The scheme is currently estimated to cover 6500 communities, with 166,559 individuals having received benefits in 2006. Although this is higher than coverage in

Table 4-11. Breakdown of assistance by category in 2006

Type of assistance	Number of beneficiaries		Total
	male	female	
Primary education	2308	1829	4137
Secondary education	6129	4819	10948
Food	32177	53967	86144
Health	1913	2027	3940
Shelter	783	790	1573
Clothing & bedding	29074	22684	51758
Repatriation	3471	4588	8059
Total	**75855**	**90704**	**166559**

Source: MCDSS, Department of Social Welfare Annual Report 2006

Table 4-12. PWAS expenditures and beneficiaries 2001-2006

Year	Total funds received (K)	Male beneficiaries	Female beneficiaries	Total beneficiaries
2006	10181230646	75855	90704	166559
2005	10350901822	53621	53794	107415
2004	7180782292	47685	68262	115947
2003	5329477288	43361	61682	105043
2002	1705841132	44915	64068	108983
2001	718152714	40260	54783	95043

Source: MCDSS, Department of Social Welfare Annual Report 2006

2005, the programme is still operating below the target figure of 200,000 beneficiaries per year (MCDSS 2006). Tables 4-11 and 4-12 present a functional breakdown of PWAS assistance in 2006, followed by a summary of the number of beneficiaries and total programme expenditures between 2001 and 2006.

PWAS has received mixed reviews since the latest restructuring. On the one hand, the identification of needy individuals and disbursement of benefits at community level are considered an innovative, cost-efficient and empowering way of delivering social assistance to the needy. On the other hand, the scheme has been criticized because its funding base is too small and is greatly reduced in the 2008 budget making it difficult to respond adequately to the needs of even the 2 per cent of the population targeted. Available funds have been spread too thinly and support to individuals has been sporadic, because disbursements are distributed according to the availability of funds. The scheme is reported to suffer from weak administrative capacity, with supervising officers from the DSW having excessive workloads and being unable to respond in a timely manner to requests for assistance. The community-based targeting mechanism is also reported to be susceptible to manipulation and not sustainable in the long run, given the voluntary status of CWAC members. Finally, broader issues of programme design can be questioned, such as the decision to target only a fraction of those identified as belonging to the most vulnerable population groups and the very low level of benefits provided.

The Public Welfare Assistance Scheme constitutes the single most important public framework for social assistance in Zambia. However, the decision to target only one-fifth of the potential target group and the low levels of and inconsistency in benefits provided seriously compromise the impact of the programme concerning existing levels of poverty and vulnerability in the country.

Sources: JCTR 2007, MCDSS 2004, 2005, 2007, Petrauskis 2007, RHVP 2007

Social Cash Transfers

Cash transfers can be defined as one kind of social transfer involving regular and predictable payments to vulnerable households or individuals in order to ensure a minimum level of well-being and which can take the form of income support, child grants, disability benefits, foster care grants, scholarships and stipends, or non-contributory social pensions. Cash transfers can also be designed to be conditional, linking the granting of cash benefits to certain objectives usually linked to human development, for example child allowances tied to regular school attendance (Chapman, 2006, DFID, 2005). In Zambia, cash transfers are a relatively new yet increasingly accepted means of affording social protection to the most vulnerable, and so far have been implemented in five districts of two provinces. The majority of cash transfer programmes in Zambia are unconditional.

The first programme to implement cash transfers in Zambia began in 2003 as a pilot scheme in *Kalomo* District of Southern Province. The *Kalomo* scheme initially began as a pilot to investigate the feasibility, costs, benefits and impact of social cash transfers to very poor families. Ten per cent of the most destitute or incapacitated households were targeted, with priority given to single-parent households, those headed by the elderly and orphans afflicted by extreme poverty, hunger and work incapacitation. Selection of beneficiaries was done through a participatory process at local level by Community Welfare Assistance Committees (CWACs). At the start of the pilot each beneficiary household received a monthly basic grant equivalent to ZMK 30,000 (USD 7.5), while households with children, estimated at three-quarters of all beneficiary households, received a child bonus of ZMK 10,000 (USD 2.5). Since 2007 the basic grant has been increased to ZMK 40,000 (USD 10). In addition, beneficiaries living close to *Kalomo* town were initially provided with bank accounts from which to collect the monthly payments. These were later abolished in favour of a network of designated pay-points established around the district. Following a test phase lasting from November 2003 to April 2004, the cash transfer programme has been steadily expanded to cover the rest of *Kalomo* District. Starting with an initial group of 1000 households receiving benefits, the scheme coverage had increased to 2400 households by mid-2007, and reached full coverage of 3,500 households by the beginning of 2008.

Besides the *Kalomo* pilot, cash-transfer programmes have also been introduced in the following areas in Zambia.

- *Kazungula* District in Southern Province, run since January 2005 by MCDSS with technical support from CARE International with funding from the UK Department for International Development (DFID). The programme is a pilot to investigate how to administer cash transfers in a low-density district with a small population, and the impact of increased transfer levels on livelihood outcomes. Over 600 households had directly benefited by May 2007.

- *Mongu and Kaoma* Districts in Western Province, where, with funding from DFID, Oxfam Zambia ran a time-bound emergency response cash transfer scheme between November 2005 and March 2006, in response to a seasonal drought. Between 10,500 and 13,500 households received benefits during the period of operation.
- *Chipata* District in Eastern Province, run since February 2006 by MCDSS with support from CARE International with funding from DFID. The *Chipata* pilot is intended to study the effectiveness of cash transfers in an urban scenario with slightly higher benefit levels and a focus on child education. Over 1200 households had directly benefited from the programme by May 2007, with 1400 households targeted at full capacity.
- *Monze* District in Southern Province, run by MCDSS since January 2007 with additional funding from DFID. Designed to replicate the *Kalomo* pilot, the Monze programme is being closely monitored by the MCDSS to learn lessons from the roll-out of cash transfers in a new district without direct technical assistance. In addition, *Monze* is used to study the impact as well as administrative feasibility of soft conditionality. At full capacity, the programme intends to cover 3,300 households.
- *Katete* District in Eastern Province, run by MCDSS with support by CARE International as a universal pension scheme pilot targeting 1000 households.

These schemes generally follow the *Kalomo* design, though some have innovated in areas such as target groups, level of benefits and conditions for receiving benefits. The DFID-CARE programme in *Chipata* District, for example, also targets the poorest 10 per cent of households in the district, relies on community volunteers to identify beneficiaries, and provides approximately the same size of basic monthly benefit.

Notwithstanding small differences between individual programmes, the overall experience with cash transfers in Zambia has been positive. Crucially, evaluations of the first pilot scheme in *Kalomo* awarded it high scores for design, implementation and impact. Among the findings were the following:

- Cash benefits allowed beneficiary households significant flexibility in their consumption and investment decisions, so that they were able to buy household necessities, send their children to school and invest in a few farm animals.
- Community-based targeting allowed for a fairly accurate and context-sensitive means of identifying the neediest households, comparing favourably with proxy statistical methods employed in other international projects involving cash transfers.
- The transfers were cost-efficient. Administrative costs for the Kalomo pilot took up only about 13 per cent of the total programme budget and are expected to stay at similar low levels in the other programmes.[11]
- Cash transfers were linked to significant improvements in nutrition, health, educational attainment, and employment and psychological well-being among the individual beneficiaries. They also stimulated local economies in the pilot area and decreased adverse social dependencies in communities.

On the other hand, not all cash-transfer programmes introduced to date have performed as well as the Kalomo pilot, with problems such as recurrent delays in the

[11] The Oxfam Zambia emergency cash transfer programme operated for five months in *Mongu* and *Kaoma* districts is the exception, with non-cash costs of the project estimated at over 25% of total programme expenditures (over 30% of the benefits paid out), possibly due hurried implementation and rising inflation at the time. See the discussion in Harvey and Marongwe 2006.

payment of benefits, errors in the selection of beneficiaries and capacity constraints with regard to overseeing cash transfers at the provincial and district levels reported in some programmes, e.g., the *Chipata* District. All pilot projects are undergoing an impact evaluation. It will be important to evaluate and compare performance of the pilot projects. In general, it is still unclear whether the community-based targeting system used by all the programmes represents the best way of targeting social assistance in conditions of widespread poverty. Although definite advantages follow from a decentralized and largely voluntary system of beneficiary targeting in a large and poorly connected country, to date, there is some information from the Kimetrica study but overall there is insufficient information about the accuracy of this method of targeting, particularly if compared with a more direct method based on age.

In the future, cash transfers are expected to be the main component of social assistance under PWAS and, ultimately, of a "government-resourced and government-delivered national social safety net" (MCDSS 2006). The social protection strategy contained in the Fifth National Development Plan called for a national scaling-up of cash transfers targeting extremely poor and incapacitated households, starting in 2009. Following this, the MCDSS recently tabled a framework document for the scaling-up to a national system of cash transfers, which suggests that by 2008 the current pilot schemes will cover close to 10,000 households (approximately 58,000 people) in the five districts, and from then on will gradually be expanded to cover the rest of the country by 2012 (MCDSS, 2006).

Among other factors, the decision to expand cash transfers beyond the current five districts will depend on the lessons learnt from the existing pilot schemes as well as the availability of donor funding. The framework document mentioned above indicates that cash transfers in the present five districts will cost ZMK 7.5 billion (USD 1.9 million) in 2008, up from ZMK 5.5 billion (USD 1.4 million) in 2007. This figure will rise to ZMK 31 billion (USD 7.8 million) if the scheme is expanded to cover an additional 10 districts in 2009. The Government is reported for the first time to have allocated funds for cash transfers, committing ZMK 1.5 billion (USD 350,000), roughly a quarter of all costs for the schemes in 2007. The rest of the funding until 2008 is to come from an established basket fund with DFID as the lead donor. The framework document further suggests that the Government will take up all costs of cash transfers by the completion of the national scaling-up.

The figures in Table 4-12a extracted from the framework document mentioned above, include cost of transfers, administration at district, provincial as well as national level and takes into account the expected inflation. The budget for 2007 and 2008 is based on the different pilot schemes with different amounts and structures. For the budget calculation of a SCT programme scaling up nationwide from 2009, the Kalomo model is taken as a basis for calculation. Once a decision has been taken on the design of the national cash-transfer scheme, the figures need to be revised accordingly. It will be important to undertake detailed costing of scaling up cash transfers in the next stage of this project. Preliminary costings are to be found in Chapter 6.

Social cash transfers are an especially cost-efficient way of providing social assistance to vulnerable population groups in Zambia. Nonetheless, experience with the ongoing pilot schemes suggests that more will need to be done to investigate the advantages and disadvantages of specific design elements of the schemes. Although currently operating in only a few parts of the country, cash transfers are expected to be an increasingly important component of public social assistance, eventually becoming the main pillar of a government-delivered and -financed national social safety net.

Source: GTZ, 2005; Goodman and Harland, 2007; Harvey and Marongwe, 2006; MCDSS, 2006 and 2007; MCDSS/GTZ, 2007; Petrauskis, 2007; Schubert and Goldberg, 2004; http://www.socialcashtransfers-zambia.org

Table 4-12a. Budget calculations for 2007-2012

	2007	2008	2009	2010	2011	2012
Districts starting	1	2	10	15	20	22
Districts established	3	3	5	15	30	50
Transfers *(in thousand K)*	3198000	3758000	22415250	49141125	94833750	143009295
Admin districts *(in thousand K)*	667000	768000	3349405	7342927	14170560	21369205
Admin province *(in thousand K)*	32000	69000	161100	305700	500100	698100
Admin headquarters *(in thousand K)*	205000	505800	505800	505800	505800	505800
Total *(in thousand K)*	410200	5100800	26431555	57295552	110010210	165582400
TOTAL US$	**1025500**	**1275200**	**6607889**	**14323888**	**27502553**	**41395600**

Source: DFID Zambia and partners

Food Security Pack

The Food Security Pack is a country-wide public programme offering material and technical assistance to small-scale farmers in the form of a low-interest loan. Established in 2000, it is operated by Project Against Malnutrition (PAM), a local NGO contracted by the Government. The FSP is targeted at small agricultural households that face food insecurity as a result of endemic poverty and/or insufficient seasonal rainfall. Every year, 200,000 households (20 per cent of a total of 800,000 households belonging to this group) are targeted. Targeting is done at community level by committees consisting of central and local Government officials, NGOs and local leaders who focus on particularly vulnerable households such as the victims of natural disasters, and households that are female-headed, or have orphan, elderly or disabled members. Each beneficiary household is entitled to a food security pack consisting of basic agricultural inputs (seeds), training in conservation farming and food-processing, technology transfers and marketing assistance provided seasonally over a two-year period, with the average annual benefit package valued at around ZMK 150,000 (USD 38) per household. Following the harvests, beneficiaries are required to pay back a portion of their produce, (between 10 and 20 per cent of the value of inputs provided) which is then allocated to communal seed reserves.

At the most recent count, the FSP was present in all 72 districts of the country. Until 2006, less than half of the target group, only 300,000 households, had benefited under the programme. Of this number, about 10 per cent (slightly more than 30,000 households) "graduated", becoming self-sufficient in food production and able to gain access independently to commercial agricultural services. At the same time, 70 per cent of the loans were reported as having been recovered from households having graduated, with repayments used to support additional beneficiaries.

The FSP has led to some significant gains in food production at both household and national level. At the household level, those receiving the pack have witnessed increased crop yields, leading to improved nutrition and additional income from the sale of excess produce. Such households have therefore been able to escape the worst forms of poverty and in some instances even invest in human development, for instance by sending their children to school. The programme has also contributed to greater

The Food Security Pack has achieved substantial coverage as a national scheme. However, the target of population groups will need to be revised to take into account available funding in order to improve the quality of the support provided. The programme is a crucial instrument for food security and poverty alleviation in this largely agricultural and poor country and will require particular attention in order to ensure that the need for social protection among small-scale poor farmers is met.

Sources: Sources: MCDSS, 2007 ; MCDSS/GTZ, 2005 ; Petrauskis, 2007; RHVP, 2007; http://www.pam.org.zm/fsp.htm

food security at the national level, stabilizing crop yields in poor-performing agricultural areas and reducing the need for emergency assistance following adverse seasonal rains. Rural areas have benefited from the growth of local markets, while urban areas face a potential fall in food prices. Overall, the investment in national food production represented by the programme has achieved notable value for money, averaging annual returns of between 200 per cent and 300 per cent. As such, the food security pack has become an important source of livelihood and economic security for the large number of agricultural households in this primarily agricultural country.

On the other hand, a number of barriers have arisen that limit the potential coverage and impact of this programme. Of these, and just as in the case of the PWAS, poor and erratic funding is perhaps the greatest limitation. For instance, the ZMK 15 billion budgeted for the programme in 2006-2007 represents less than 10 per cent of the funding required to meet the target of 150,000 households for the same period. This shortage of funding has led not only to inadequate amounts and late supply of inputs to farmers, but also to the underperformance of integral components of the programme intended to promote market entrepreneurship, seed and cereal bank development and alternative livelihoods. In addition, external factors such as unpredictable rains, a lack of interest in farming among some beneficiaries, and confusion about the aims of government assistance among some communities have also contributed to the relatively low graduation rates achieved by the programme.

School-Feeding Programme (SFP)

There have been a number of government-sponsored school-feeding programmes in Zambia since the 1970s, intended to improve the health and nutritional well-being of school-age children. The largest SFP currently operating began in mid-2003 following a food crisis over the preceding two years in Southern and Western Provinces and parts of Eastern Province, and is sponsored by the World Food Programme. Funded under the *Assistance for Basic Education* component of the WFP Country Programme, the SFP seeks to address the nutritional needs of children from poor households in food-insecure areas while improving enrolment and attendance rates as well as children's performance at school. Targeted at orphans and other vulnerable children, the programme combines the provision of on-site meals in primary schools with take-home rations provided to children, particularly girls, from vulnerable households who are otherwise unlikely to attend school. An additional component of the SFP consists in monthly HIV/AIDS sensitization sessions conducted in the schools.

School feeding funded by the WFP typically consists of a wet meal, usually porridge, given to children once per school day. In many cases, this provides the child's first and major meal of the day. While ingredients (principally flour) are provided by the sponsoring agency, meals are prepared on-site by community volunteers, usually

teachers or members of the children's households. The take-home ration on the other hand consists of a month's supply of cereal for an entire family, provided monthly to certain low-capacity, incapacitated and non-viable households, especially those headed by children or elderly persons (MCDSS, 2007). In addition to nutritional support, the programme facilitates basic health services for schoolchildren such as de-worming operations, and promotes the cultivation of school orchards as a means of generating additional income for schools.

The school-feeding programme had been extended to cover a total of 526 community schools in 11 districts in four provinces at the end of 2006. Around 140,000 children benefited from on-site school feeding and close to 35,000 households from take-home rations in 2006. Planning documents from the WFP indicate that the programme will be extended to cover over 210,000 orphans and vulnerable children in 400 schools spread over ten districts in Southern, Western and Eastern Provinces in 2007. Unconfirmed estimates also report over 220,000 child beneficiaries in 786 schools in Lusaka, Southern, Western and Eastern Provinces (JCTR, 2007)

Implemented alongside a (recently introduced) government policy on free primary education, school feeding is said to have a generally positive impact on child education through stabilized attendance rates at primary schools and improved academic performance among child beneficiaries. At the same time, the take-home rations provide a significant form of food and income support for the most vulnerable households who otherwise choose to send their children to school. However, many aspects of the programme have been criticized. One recent assessment revealed serious weaknesses in the system of identifying households eligible for the take-home ration, which in addition to compromising the targeting of vulnerable households was also reported to have led to a straining of community relations. The programme's reliance on community volunteers to prepare and distribute the school meals as well as take-home rations has also been evaluated as not sustainable in the long run, especially where teachers are involved. School feeding has been criticized as too expensive, inefficient and donor-dependent. There are also serious challenges about its effectiveness, with increased primary-school enrolment rates attributed to an increase in the number of community schools, rather than to programme incentives, and the increase in the number of schools (and thus vulnerable children) benefiting contrasted with the quality of the food. More generally, it is noted that more systematic evaluations are needed before any conclusions about the effectiveness of school feeding can be drawn.

School-feeding programmes have been shown to have positive impacts on the nutrition and health status of orphans and other vulnerable children, while increasing school attendance. On the other hand there is a debate about the sustainability of such programmes given the present heavy reliance upon funding from international donors.

Sources: JCTR, 2007; Lee and Siamwiza, 2006; MCDSS/GTZ, 2005; WFP 2006, 2007

Work-for-aid project: PUSH/PROSPECT

Various work-for-aid projects have been implemented in Zambia since the early 1990s. Although work-for-aid implies that participants are required to make certain contributions (in terms of labour) in return for social benefits, the present study examines programmes in which benefits have exceeded or are non-comparable with contribution requirements, implying some measure of social protection beyond a purely reciprocal or

market-based exchange. CARE has been involved in two projects: the Project Urban Self Help (PUSH), and the Programme of Support for Poverty Elimination and Community Transformation (PROSPECT). PUSH is a notable example of a work-for-aid programme providing social protection through a mixture of contributory and non-contributory elements. Established in the early 1990s when Zambia experienced a severe food crisis, PUSH began as a work-for-food programme operating in peri-urban areas, where it aimed to promote the development of the urban poor through participatory and community-based public works projects. Beneficiaries were typically the extreme poor yet able-bodied, whose family members had lost jobs as a result of economic reforms or else were victims of natural disasters, such as drought and floods, or were women and orphans.

Beneficiaries of PUSH took part in public-works projects aiming at the upgrading of infrastructure and public services, in exchange for which they received food and other in-kind benefits such as clothing and shelter. Although the in-kind benefits were assessed as below the minimum formal sector wage (the average monthly benefit in 2006 was estimated at ZMK 90,000 or USD 22), demand for participation in the programme has been consistently high and has frequently outstripped the number of available places. This reflects not only the absence of opportunities for employment in Zambia for the poorest in the population, but also the degree of welfare function assumed by the programme, providing work and thereby an income where these are absent from the labour market. In addition, the public-works and training components of the programme have been seen to directly benefit participants by improving the supply of clean water, providing usable roads, market centres and health facilities, and promoting better farming methods and entrepreneurial activities among beneficiary communities. Major reported outputs in 2006 included the construction of 540 water wells in Western Province, twocommunity markets in North-Western Province and three community schools in Eastern Province.

Nevertheless, monitoring of the programme has also revealed that in several cases infrastructure improvements were of poor quality, while the new skills obtained by participants were put to little use owing to poor macroeconomic conditions and a lack of access to capital. Although the original PUSH and PROSPECT programmes have since been wound up, the World Food Programme is currently operating food-for-assets and food-for-training programmes in the country, reaching around 45,000 poor households in 2006.

The degree to which work-for-aid programmes contribute to social protection can only be determined by distinguishing elements of welfare transfer within them from other objectives of the programmes. Based on reported past practice, such programmes provided assistance in the form of cash and in-kind transfers earned in exchange for participation in public-works projects. In addition to providing below-market rate benefits, this form of assistance was only available to able-bodied persons. As such, the ability of this kind of programme to cover work-incapacitated persons is necessarily limited, as is its ability to become more than a temporary source of relief to a small proportion of those lacking employment or income-generating opportunities. Public works are generally said to be less efficient, compared with other forms of social assistance.

Sources: Garrett, 2004; MCDSS, 2007; MoFNP, 2006; http://www.wfp.org/country_brief/indexcountry.asp?country=894

4.2.3 *Conclusions: Opportunities and challenges to extend social protection coverage*

This section summarizes the extent of social protection coverage achieved by the existing non-contributory programmes in Zambia, and goes on to identify the major challenges to the extension of this coverage, and the opportunities created.

Extent of social protection coverage

Although the existing non-contributory programmes provide assistance to a wide range of poor and vulnerable groups, including those affected by hunger, extreme poverty, sickness, old age, orphanhood, disability and death of family members, the same programmes fail to cover most people within such groups, because of excessively narrow targets, inaccurate targeting and low and inconsistent levels of benefits. For example, taking the estimate of the poorest 10 per cent of the population who are most in need of social assistance, around 900,000 highly vulnerable individuals miss out on PWAS assistance each year, while a similar number of vulnerable farmers miss out on the Food Security Pack. Also excluded are the 400,000 persons estimated to qualify for cash transfers, and 500,000-750,000 informal-sector unemployed workers not covered by existing work-for-aid schemes.

Moreover, several other groups requiring specialized interventions also missed out on any form of social assistance because of the absence of dedicated programmes. This has in the past included over 10,000 street-children estimated to have missed out on government and NGO support services in 2006 (MoFNP, 2006), and most of the 250,000 disabled persons who missed out on specialized government programmes supporting education, micro-credit and job-training objectives in recent years (MCDSS, 2007). Also largely excluded from the coverage of current programmes are persons living with HIV/AIDS, among whom only 10 to 20 per cent had received anti-retroviral therapy by mid-2005.[12] This reflects the overall low coverage of social health protection in the country where, despite the intention to introduce a community-based health waiver scheme, out-of-pocket payments by households make up nearly a third of all health spending[13] while pre-payment schemes operated by employers and private health insurance reach fewer than 30,000 people[14] (CHEWS,2006;MoH,2005). Finally, the nature of social protection afforded by some of the programmes in some instances excludes those who are otherwise in need of assistance, for instance in the case of work-for-aid schemes being limited to the able-bodied unemployed.

Major challenges to extending the coverage of existing non-contributory programmes are outlined below:

- ☐ The fact that national programmes are under-funded and deliver low and inconsistent benefits. On the other hand, better-funded programmes delivering more substantial benefits cover only pilot areas or small sections of the population, or are run for limited periods of time.
- ☐ The fact that in most cases targeting is decided on the basis of available funds with little reference to situations of poverty and vulnerability. Present community-based targeting methods may also lead to inclusion and exclusion errors.

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[12] UNAIDS: http://www.unaids.org/en/Regions_Countries/Regions/SubSaharanAfrica.asp.

[13] Household spending in health care accounted for 28.4 per cent of total health expenditure in 2004. Source: NHA2002-2004, MOH.

[14] Source: NHA2002-2004, MOH.

- Insufficient and erratic funding for established government programmes compromises their ability to meet targets and extend coverage. On the other hand, donor-funded programmes are also uncertain and in many cases do not leave behind lasting arrangements for social protection.
- Most programmes have failed to make adequate arrangements for monitoring and evaluation, limiting the extent to which design and implementation can be improved.

Implications for the development of comprehensive national social protection

A certain degree of consolidation of the existing non-contributory programmes on social protection is already taking place, for instance, Social Cash Transfers are being brought under the framework of the PWAS. Together with the adoption by the Government of a Social Protection Strategy (SPS) included in the Fifth National Development Plan 2006-2010, there are strong indications of a move towards a national system of social protection. This is made particularly clear in the SPS, which outlines an ambitious plan to initiate and extend pilot programmes on food security, public works and social security in the private sector; extend the social cash transfers under PWAS; abolish all health user fees for children and expand the Community Health Waiver Scheme; establish a pilot programme providing anti-retroviral therapy to AIDS victims; expand basic and rehabilitation services for street children; and extend support-services for victims of gender-violence to all provincial centres (MCDSS, 2005).

The commitment made in the SPS to allocate USD 25 million of government funding towards the running and expansion of the PWAS over the five years further reinforces the Government's intention to expand non-contributory public social protection, including elements of cash transfers. However, under the current arrangement cash transfers will continue to be funded by donors over the next five years, after which the Government has indicated it will take over. This however means that other social welfare programmes, in particular those linked to the provision of cash, food, health and education benefits, will continue to depend upon the funding capacity of donors.

Zambia's health system 4.3

Introduction *4.3.1*

Improving the health of all Zambians is intrinsic to the country's social development goals. Improved health enhances social development in a variety of ways, such as: relieving individuals and households from the impoverishing effects of ill-health; averting poverty by keeping income-earners healthy; and giving households a greater ability to enjoy life.

Health policy in Zambia is anchored on the rights-based approach that treats health care as a basic human right guaranteed and accessible to every citizen. Over the past two decades, Zambia has undergone major demographic, epidemiological, economic and social changes, which have culminated in new health challenges, such as increased destitution, a high burden of disease, poor access to health care and poor population health outcomes. This makes increased health care expenditure to provide equal access to health care a policy imperative.

In 1991/92, the Government initiated a process to restructure the health sector. A major facet of these reforms was re-organizing the health sector into a decentralized, district-oriented health system. By increasing local authority over resources, decentralization was intended to ensure health services reached the needy effectively. The guiding aim of these reforms was to bring "access to cost-effective, quality health services as close to the family as possible" (MOH,1993).

To operationalize its vision, the Ministry created the Basic Health Care Package (BHCP) as the framework for prioritizing health services. The BHCP defines the health care services that should be delivered at all levels of health care, and aims to ensure effectiveness of resource allocation while achieving the greatest impact on the health status of the population. However, the health care system in Zambia has remained at a level that does not ensure sufficient service provision to combat effectively leading causes of death and disease. Since the beginning of health reforms the burden of disease and general health conditions have not improved (see Table 4-13). Zambia has experienced a major health and demographic upheaval under the influence of the HIV epidemic. The main agenda of the National Health Strategic Plan 2006-2010 contained in the Fifth National Development Plan, 2006-2011 established as a priority the extension of coverage of priority interventions to all populations and geographical regions. The health system seeks to expand health care coverage, in order to deal with the major health challenges that Zambia faces.

Profile of the health burden in Zambia

Health systems are assessed by their impact on key aspects of a population's health. Key indicators define the state of population health are presented here (see Table 4-13). About 20 per cent of children born in Zambia do not live past their fifth birthday, while 10 per cent of children die before they reach their first birthday. Adult mortality is also high. These mortality statistics are unacceptably high.

The leading causes of death in Zambia are (in declining order): malaria, HIV/AIDS (1,236/100,000), respiratory infections in children, diarrhoeal diseases and TB. It is clear that the greatest challenges facing Zambia's health problems are rooted in the epidemiological transition defined largely by the advent of HIV/AIDS and other communicable diseases. Although progress has been made on childhood illnesses such as measles and polio, too many children still die of other preventable and treatable illnesses.

Table 4-13. Zambia health indicators 2000-2004

Indicator	2000	2001	2002	2003-5
IMR (probability of a child dying before 1st birthday, per 1,000)	101	102	102	102
Under-5 mortality rate (probability of a child dying before 5th birthday, per 1,000)	181	182	182	182
MMR (# of maternal deaths per 100,000 births)	750	750	750	830
Life expectancy	37	36.8	39.7	40
HIV prevalence	19	15.6	15.6	13.9

Source: ZDHS, 1996, 2002; WHO data base; UNICEF database; MOH HIV-prevalence projections, 2005

Overview of the health delivery system in Zambia

Decentralized health care is delivered at three levels: central, provincial and district. The Ministry of Health is in charge of policy, strategic planning, coordination, monitoring and evaluation, and overall health system oversight, at central level. The central level is also responsible for procurement and distribution of medical supplies, capital investment and staff allocations for all levels of the system. Below the MOH headquarters are the provincial health offices, which have a less operational role but serve as liaison between districts and the national MOH headquarters. The third tier is the district health management team (DHMT). The DHMT is responsible for service delivery at district level and also runs the district hospitals and a satellite of health centres and health posts within the district. Health Posts were intended to be the first point of contact with the health system for populations of 3,500 in the rural areas or 7,000 in urban areas. A community volunteer usually runs the health post, and dispenses simple interventions such as oral dehydration salts, anti-malarials, first aid for injuries, and so on. Health centres offer basic curative and preventive care to communities. In urban areas, health centres are equipped with diagnostic capabilities to investigate most major ailments. The clinical officer, a laboratory assistant (if there is a laboratory), a midwife, an environment health technician and a nurse are the key personnel operating health centres.

Parallel to DHMTs are higher-level referral hospitals (secondary and tertiary level). These hospitals are run by Hospital Management Boards. The second-level hospitals receive referrals from district or level-1 hospitals. They provide care in internal medicine, general surgery, pediatrics, obstetrics and gynecology, dental, psychiatry and intensive-care services. These hospitals are also intended to act as referral facilities for the first-level institutions. The tertiary hospitals serve as last referral centres. They offer specialized care and offer medical training.

Current distribution of health care resources 4.3.2

This section provides an overview of the resources (facilities, personnel and financial) available for provision of health care in Zambia. The focus is on distribution of these resources across geographical regions and across levels of care.

Health infrastructure

The Government still has a major role in the health care delivery system. The latest Living Conditions Monitoring Survey of 2004 showed that health care facilities run by the Government were found to offer most of the health care services in Zambia. About 82 per cent of those who consulted over their illness reported that they visited one of the government health facilities. Other providers of health care are mostly missions and private for-profit health care providers.

Since the Health Services Act of 1995, Zambia has seen substantial growth in the number of private for-profit clinics and hospitals, and in medical practitioners ranging from specialists, general practitioners, dentists and others who are in solo- or group-practice. These are funded from employer or private insurance schemes, and out-of-pocket payments. In addition, there has been a rapidly expanding community of retail pharmacists.

Table 4-14. Distribution of health institutions by type of ownership, 2002

Ownership	Level 1				Level 2		Level 3	
	Health centre		Hospitals		Hospitals		Hospitals	
	2002	2008	2002	2008	2002	2008	2002	2008
Government	1071	1136	36	39	12	13	5	5
Private	98	75	17	4	0	5	0	0
Missions	61	83	21	29	6	3	0	0
Total	**1230**	**1294**	**74**	**72**	**18**	**21**	**5**	**5**

Source: Health Institutions in Zambia, Ministry of health 2002 and 2008

Table 4-14a. Health facilities per 100,000 population, 2008

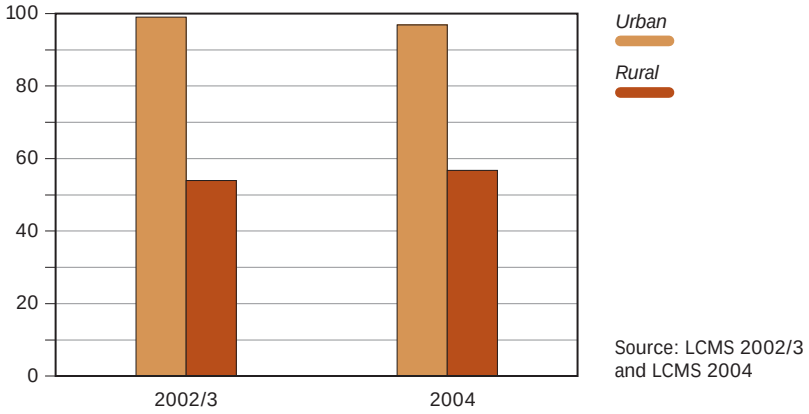
S/No.	Province	Population	No. of Health Facilities	Facilities per 100,000 population	No. of	
					Beds	Cots
1.0	Central	1237251	154	12.4	1898	195
2.0	Copperbelt	1911572	229	12.0	4945	880
3.0	Eastern	1632583	195	11.9	2857	351
4.0	Luapula	945868	136	14.4	1814	174
5.0	Lusaka	1654579	105	6.3	2387	477
6.0	Northern	1586753	193	12.2	2934	198
7.0	North-Western	711127	154	21.7	2402	234
8.0	Southern	1483654	236	15.9	2730	224
9.0	Western	901299	161	17.9	2022	240
Total		**12064686**	**1554**	**12.9**	**23989**	**2973**

Source: Health Institutions in Zambia, Ministry of Health, 2008

Since the late 1990s, the Ministry of Health has built additional health facilities across the country in an effort to extend health care access. Table 4-14 summarizes the available health facilities in Zambia and 4-14a by Province. However, hospital capacity is still poorly distributed across the country. For example, there are only five tertiary hospitals which have the capacity to offer any level of sophisticated health interventions. All of these hospitals are located in urban areas. This does not serve the needs of populations living far out in rural areas.

Distribution of infrastructure is reflected in the distance to the nearest facility. Proximity to health care is a particularly significant impediment to health-care access in rural communities. Despite the increase in the proportion of households living within five km of a health centre from 69 per cent in 2002 to 75.5 per cent in 2004, the gap between rural and urban populations is still significant and therefore contributed to the low access rate to health facilities in rural communities (see Figure 4-7). Urban areas are also served by a wide network of retail pharmacists.

Figure 4-7. Percentage distribution of households living within 5 Km of a health facility, 2002-2004



Source: LCMS 2002/3 and LCMS 2004

Quality of services and service capacity of health infrastructure

Crude measures of access such as beds per population or percentage within five km of a health facility are often not enough to provide information about the relationship between health care expenditure and health outcomes. This is because crude indicators of access and coverage can be undermined by diminished quality. In other words, for the same health need, a visit to an urban health facility may result in a better health outcome than a rural visit. Therefore, it is important to examine the quality of health infrastructure.

There is evidence to suggest that health facilities in rural and remote areas may be providing health care inferior to that of urban centres. They include: lack of facilities, shortages of qualified health personnel to delivery services, lack of modern tools of medical practice, poor communication and physical infrastructure leading to bottlenecks in the supply chain, and so on. Table 4-15 shows the level of medical and non-medical equipment and tools available in service delivery at a sample of health centres and hospitals in rural and urban Zambia.

Table 4-15. Proportion of health facilities reporting inadequate medical equipment and lab test supplies, 2006

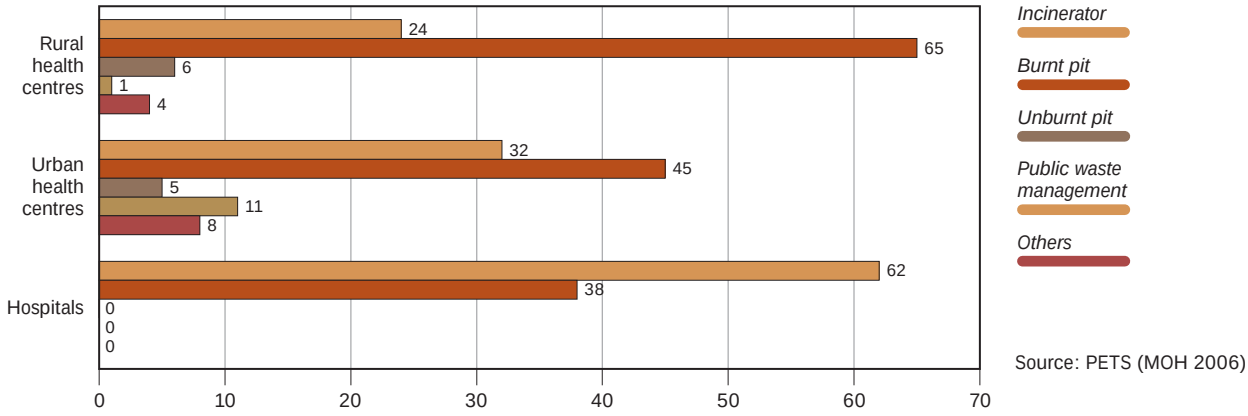
Items	Rural health centres	Urban health centres	Hospital
X-ray	33	75	33
Sonogram	50	50	23
Lab equipment	54	56	50
Anaesthetic equipment	–	–	53
Blood bank	–	–	43
Oxygen supply	–	–	64
Height measuring device	54	45	19
Microscope	74	55	10
Audioscope	87	68	33
Surgical instruments for obst-gynae	57	66	19
Gowns and protective clothing	54	50	14
Malaria smear	76	58	14
Urine test strip	81	74	19

Source: PETS (MOH 2006)

Waste disposal

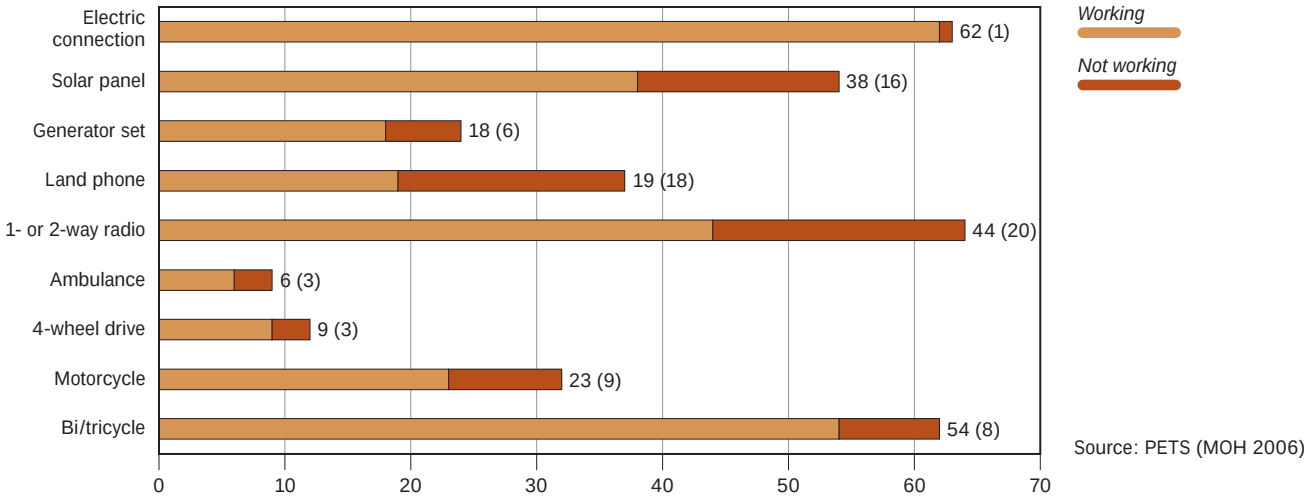
Facilities for disposal of medical waste are still lacking in many facilities. More than a third of public hospitals and more than two-thirds of health centres in both rural and urban areas have incinerators. More than half of health facilities use a pit where waste is burnt, while the rest of the health centres dump their waste in a pit without burning. See Figures 4-8 and 4-9.

Figure 4-8. Health facilities with medical waste disposal (per cent), 2006



Source: PETS (MOH 2006)

Figure 4-9. Proportion of health facilities with functional and non-functional utilities and transportation tools (per cent), 2006



Source: PETS (MOH 2006)

Distribution of health personnel

The public health care system has constantly faced a severe shortage of health staff, which undermines its capacity to cope with the worsening disease burden in Zambia. The Health Sector Joint Annual Review Report of 2005 indicated that the human resources situation in the health sector is close to disastrous. It further estimated the number of available staff in 2005 at less than 50 per cent of the recommended establishment.

Table 4-16. Population/staff ratios, 2005

Staff category	Population / Staff Ratio	
	Existing ratio	Recommended ratio
Doctors	17 767	4940
Nurses	1883	679
Mid-wives	5050	2029
Clinical Officers	9886	2841
Pharmacists	478 234	270 543
Pharmacy Technician	136 638	94 690
Lab. scientists	459 104	227 256
Lab. Technologists	114 776	54 109
Lab. Technician	39 307	8741
EHO	216 559	94 690
EH Technologist	358 675	51 649
EH Technicians	15 986	8741
Dental Surgeon	819 829	344 327
Dental Technologist	286 940	37 876
Dental Therapist	5 738 806	37 876
Physiotherapist (degree)	0	227 256
Physiotherapist (diploma)	133 461	45 451
Radiologist	3 825 870	344 327
Radiographers	82 573	56 814
Paramedics	35 868	1894
Nutritionist	176 579	56 814
Support Staff	1043	1136
Total	**495**	**230**

Source: Health Sector Joint Annual Review Report 2005

Overall, population-to-staff ratios for all cadres of health personnel are far worse than recommended international norms. For almost all cadres of staff, existing levels are out of line with recommended ratios (see Table 4-16). This simply means that it is harder for an average Zambian to reach a health practitioner when need arises. The morale of staff and quality of care are also potentially affected in areas which are densely populated and have too few personnel.

Furthermore, Table 4-17 shows that the distribution of human resource capacity is highly inequitable, with rural areas being disproportionately affected. Lusaka and Copperbelt Provinces, with 30 per cent of the country's population, have 71 per cent of the medical doctors practising in the public sector in Zambia. The labour-intensive nature of health service delivery makes this the most critical supply-side constraint limiting the effectiveness of the overall health system in Zambia. Interventions to address the human resource crisis in health care are being made, including training and retention schemes, especially for rural areas. However, the situation is likely to remain critical for some time. Until 2006, the Ministry of Finance was operating under a cap on growth on the public service wage bill as part of the conditionalities of the IMF. This cap on the wage bill exacerbated the HR crisis. In addition, the brain-drain of health personnel to neighbouring countries and overseas continues to bleed the health system of much-needed human resources.

Table 4-17. Population to staff ratios, by Province

Province	Medical doctors	Clinical officers	Registered midwives	Registered nurse	Enrolled midwives	Enrolled Nurse	Pharmacists	Laboratory technicians and technologists	Medical licentiate	Paramedical staff	Environmental health technicians
Central	33243	8815	19392	13851	4808	2999	129280	31446	0	25294	12511
Copperbelt	8998	9719	14425	5091	3599	1567	55076	16523	0	12982	23006
Eastern	51771	10879	100090	14576	9442	2967	187670	53620	0	39509	15804
Luapula	59414	13711	89122	24756	22852	3253	178243	35649	891215	42439	16204
Lusaka	6247	7544	12397	3799	5243	1577	319847	15527	0	9872	27573
North Western	31930	12191	134104	17645	16354	2386	95789	37251	0	33526	9185
Northern	65763	13521	80377	15391	9710	4521	289357	48226	0	41337	16075
Southern	36665	8007	44944	11908	3881	2101	87078	29026	1393253	26288	11058
Western	31408	9664	54964	23143	13741	2513	219854	48856	0	29314	10857
National	17589	9787	27714	8822	6099	2293	123509	27249	5681402	20849	15150

4.3.3 Structure of public-sector health care financing and expenditure

This section focuses on assessing health-sector financing in Zambia. In order to address the policy need for social protection and for reducing inequities inherent in current health care expenditure and service delivery, it is important to understand how many resources are available and how they are mobilized. We identify the sources of health care resources, the growth of the public health sector resource envelope, and how the resources are allocated to regions and various functions of the health system.

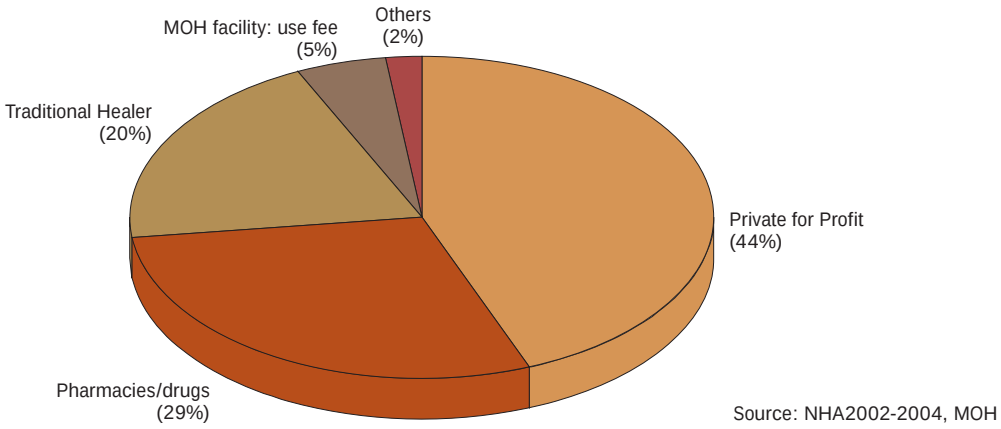
Sources of health care finances and flow of funds in the public health system

Three sources of financing (the Government, donors and households) account for 94 per cent of total health expenditure in Zambia. Employer-based and private medical insurance schemes remain a relatively small contributor to total health-sector resources. Since the late-1990s, the health sector has seen double-digit growth in the share of total expenditure attributable to donors, from around 15 per cent in 2000 to over 40 per cent in 2004. Although the Government has slightly increased its spending, its contribution to higher levels of spending has been overwhelmed by a dramatic increase in donor expenditure.

Household spending on health care accounted for 28.4 per cent of total health expenditure in 2004. Household expenditure also remained static in dollar terms, but fell slightly as a share of the total. Health care financing in Zambia has relied heavily on out-of-pocket expenditure by households (see Figure 4-10). Household spending is mostly out-of-pocket in the form of user fees to consult at health facilities (private or public) and also to procure drugs from pharmacies.

Challenges to access and population health are associated with this method of raising revenue. Out-of-pocket tends to be inequitable and generally bad for population

Figure 4-10. Households expenditure by provider, 2004



health as needy people in the lowest income segments often go without life-saving health care. Reliance on out-of-pocket expenditure also has an impoverishing effect on the poorest households. A multi-country study by the WHO showed that there is a strong correlation between the share of out-of-pocket payments in total health expenditures and the proportion of households with catastrophic expenditures (Xu et al, 2003). In 2000 the World Health Organisation ranked Zambia 155 out of 191 countries in terms of fairness of financial contribution to the health sector total resource base. This reflects the fact that a large proportion of Zambian households lack health insurance and therefore financial protection from the cost of disease. This situation has contributed to the prevailing health inequalities and unfair health financing.

The increased role of donor expenditure also raises various policy debates. For Zambia, a significant portion of donor funding is linked to scaling up programmes aimed against major health problems. Donor funding helps to add to the fragility of domestic-revenue-based financing. However, a strong national policy framework and stewardship are necessary to ensure that donor funding is targeted at worthwhile programmes and does not duplicate government efforts. Further, in order to be meaningful, the growth in revenue needs to have an impact on the budgets of regular organs of the health delivery system, such as DHMTs, Hospital Boards and other units. Finally, the sustainability of increased dependency on donor funding is also an issue of public debate (see Figure 4-11).

Figure 4-11. Health care expenditure by financing source as percentage of total health expenditure, 2000-2004

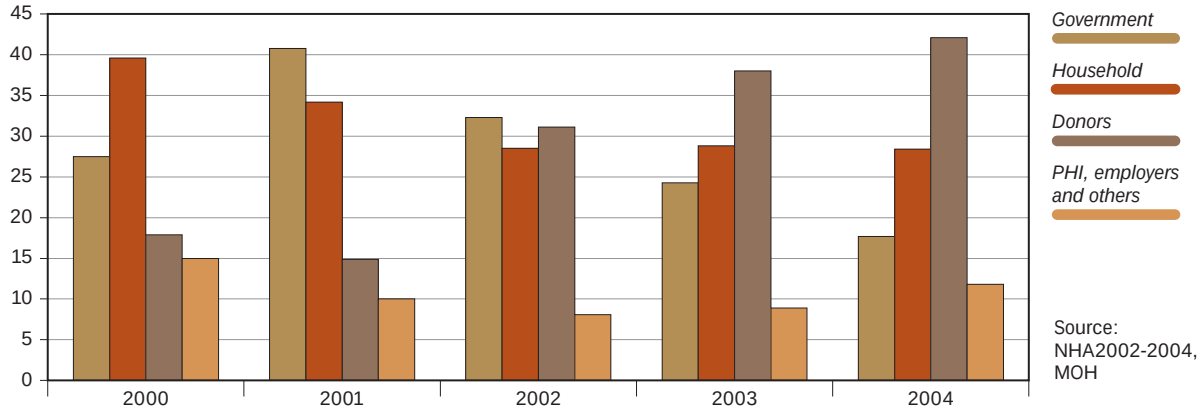
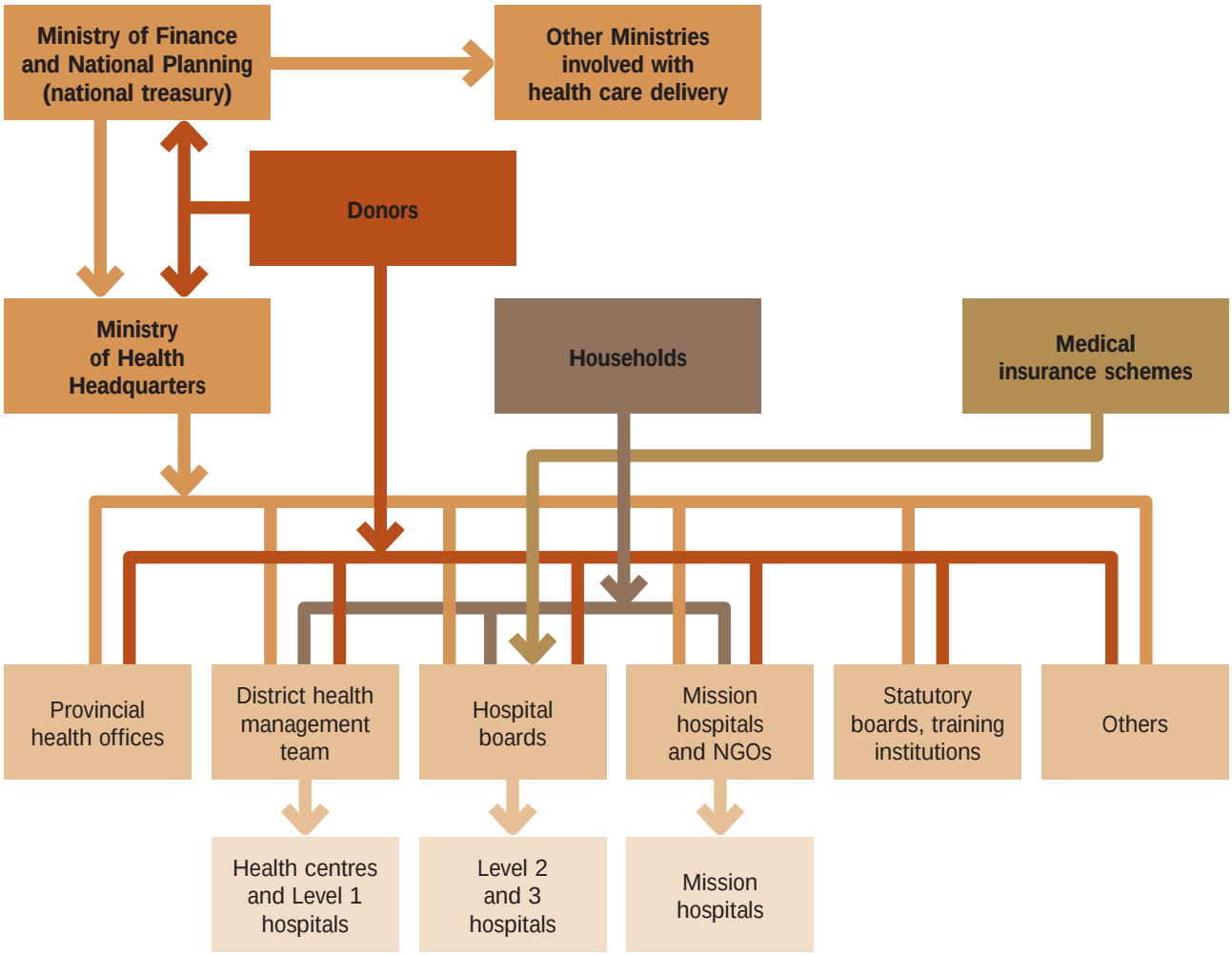


Figure 4-12. Flow of funds in the public health sector



Other players in the health care system are employers and private health insurance. Employers' share of overall health expenditure increased slightly between 2002 and 2004 but remained low at less than 7 per cent and is largely through pre-payment schemes. Private health insurance is still minimal, with only 0.2 per cent of overall health spending channelled through private health insurance. The coverage was estimated at 30 000 members in 2004, which is less than 7 per cent of the total formal employment.

Flow of funds in the public health sector

As shown in Figure 4-12, the flow of funds through the health care delivery system from source of finance to providers follows a fairly straightforward pattern. There are few financial intermediaries because the insurance industry is still under-developed. As stated earlier, DFID and the EU are giving their support through the national treasury at the Ministry of Finance and Planning and other donors, such as SIDA, are considering moving to this position. However, some donors, such as the Global Fund, PEPFAR and others, still channel their support through the Ministry of Health and NGOs. Where households pay directly in the form of user fees to facilities, these fees are collected and returned to DHMTs or Hospital Management.

The Ministry of Health channels funding directly to DHMTs and Hospital Management Boards as well as to other statutory institutions (e.g. academic and training institutions, research, nutrition commission, etc.). In addition to financing its own health facilities, the Government provides mission health facilities. The Ministry enters into annual service agreements with mission institutions which deliver services to areas where the Government does not have its own health facility.

National health policy framework

It is useful to discuss recent key developments in the national economic environment that have direct implications for health sector financing. In 2003, the Government launched the Medium-Term Expenditure Framework (MTEF) as an instrument for harmonizing all public budgeting and expenditure in all ministries. In addition, the European Union and DFID who were giving support directly to the Ministry of Health under the Sector-wide Approach shifted to direct budget support through the national treasury at the Ministry of Finance and National Planning. Under MTEF the Government is now able to commit resources to priority programmes and areas. Expenditure ceilings make it hard for misallocations away from priority areas. Further, unlike in the past, MTEF also provides greater stability of government expenditure. Three-year budget cycles are developed based on carefully projected revenue. Indeed, the discrepancy between planned spending and actual disbursements has narrowed in recent years.

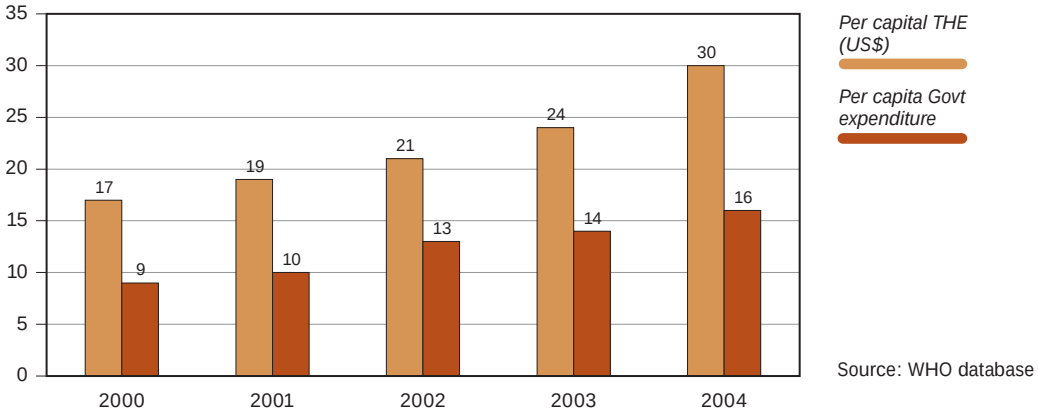
Health care as a proportion of GDP is planned to increase in the future. This development should enhance the capacity for greater public financing of health care for all Zambians. A needs-based resource allocation was developed and became operational in 1004. This formula is used to allocate financial resources from the center to the districts. The MoH needs to work on intra-resource allocation formulas for the districts, and formulas for the second- and third-level hospitals, training institutions and statutory boards.

Levels of public sector health expenditure

The level of financial resources available to the public health sector in Zambia is displayed in Figure 4-13. The graph shows per capita total health care expenditure (all sources), per capita government expenditure and the proportion of total health expenditure that is attributable to direct charges to households for health care or insurance payments. This provides a picture of resource availability in Zambia's health sector. These are the resources that are available for spending in the entire health sector

There has been considerable growth in per capita health care expenditure since 2000. Since that date, Zambia has seen substantial investment in the health sector from both Government and external sources. If the goals of scaling up coverage and extending social protection are to be achieved, more resources are required. For example, there is evidence that coverage in specific programmes such as ART, PMTC in HIV/AIDS, bed-net usage in malaria, DOTS for TB, and so on, has made good progress, as a result of increased funding in the health sector. On the other hand, these initiatives are creating a huge negative impact on the overall health system. Emerging evidence is that most of the money from these initiatives (PEPFAR, Global funds, etc.) is defragmenting the health systems as it is 'off-budget', there is a lot of duplication, and the transaction costs are high, owing to use of separate systems of procurement, accounting, awaiting implementation and monitoring and evaluation.

Figure 4-13. Total and government health expenditure per capita



While the increase in total health expenditure is a positive sign, Zambia needs to spend much more than $30 per capita if the goals of improved health are to be achieved. Conservative estimates suggest that the cost of delivering a package of essential health services is about USD 30-40 (Mphuka 2006). The WHO estimated that the per capita cost of an essential intervention package for health for a low-income country like Zambia was USD 34, in 2002. Given that a significant portion of the USD 30 spent in 2004 was through household out-of-pocket expenditure, this means that regions where most population live in abject poverty spend far less than the national level of USD 30 per capita. Further, government spending alone is still very low at USD 16 per capita. This figure falls far short of the estimated cost of the BHCP of USD 37.70.

In Table 4-18, the WHO estimates that government per capita expenditure on health includes all funds distributed through the Government. The ILO included another estimate that defines the Government as the source of funds only and based on the previous analysis. The significant difference is due mainly to the external donors' funds channelled through the Government, which amounted to 55.6 per cent of all disbursements by the Government and accounted for over half of total donor funds.

Health care expenditure as a proportion of Gross Domestic Product

It is useful to compare the proportion of total economic resources that go on health (see Figure 4-14). For 2004, the NHA estimated that overall expenditure on health accounted for 7.2 per cent of GDP. This represents a remarkable increase since 2001, and is largely attributable to a sharp increase in external donor participation in the health sector. By African standards, Zambia spends a relatively high proportion of its income on health. The issue is whether this is a share of a small pie in the first place.

Table 4-18. Per capita expenditure on health care, US D average exchange rate, 2004

Country	Zambia		Kenya	Malawi	Mozambique	Namibia	Uganda	Tanzania	Zimbabwe
Total	30 (WHO)	35.6 (NHA)	20	19	12	190	19	12	27
Government	16 (as FA)	6.3 (as FS)	9	14	8	131	6	5	13

Legend: NHA = National health accounts; FA = Financing agent, and FS = Financing source

Source: WHO and NHA (2004)

Figure 4-14. Health care expenditure by financing source as percentage of GDP, 1996-2004

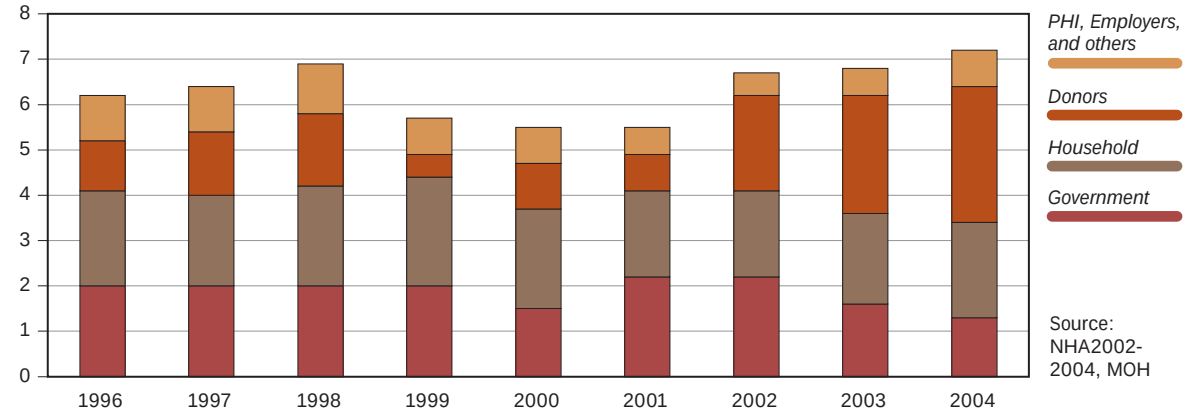
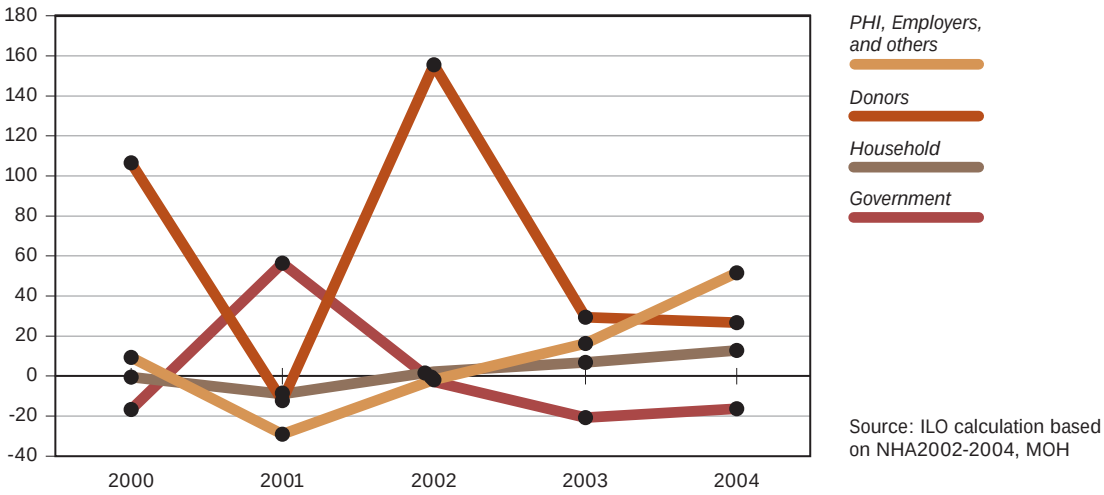


Figure 4-15. Real growth in health expenditure by source of financing, 2000-2004



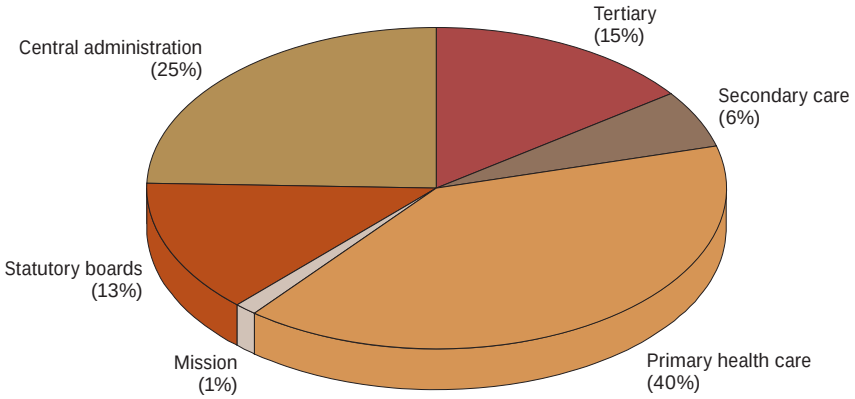
Trends in financing sources suggest that the Government's share of overall health expenditure declined (see Figure 4-15). This is partly explained by the significant increase in donors' contribution. However, the real growth of government expenditure on health started slowing down in 2001 and even became negative in 2002-2004, indicating that the increase in government allocation of funds to health care was not even sufficient to offset inflation.

Allocation of resources across levels of care and regions

One of the biggest challenges to the extension of social protection in Zambia is the efficient allocation of available resources. The Ministry of Health acknowledges that resources will always be inadequate to deal with all health problems at hand; however, it has started down the path of allocating resources using a needs-based resource allocation formula, which was developed and operationalized in 2004. It would be useful to broaden the basis for allocation by considering whether the allocation between rural and urban areas is equitable in relation to capital projects and human capital.

There are operational consequences to rationalizing health expenditure. These have to do with how resources are to be allocated by levels of care and by geographical

Figure 4-16. Government health expenditure by level of care, 2004



Source: NHA2002-2004, MOH

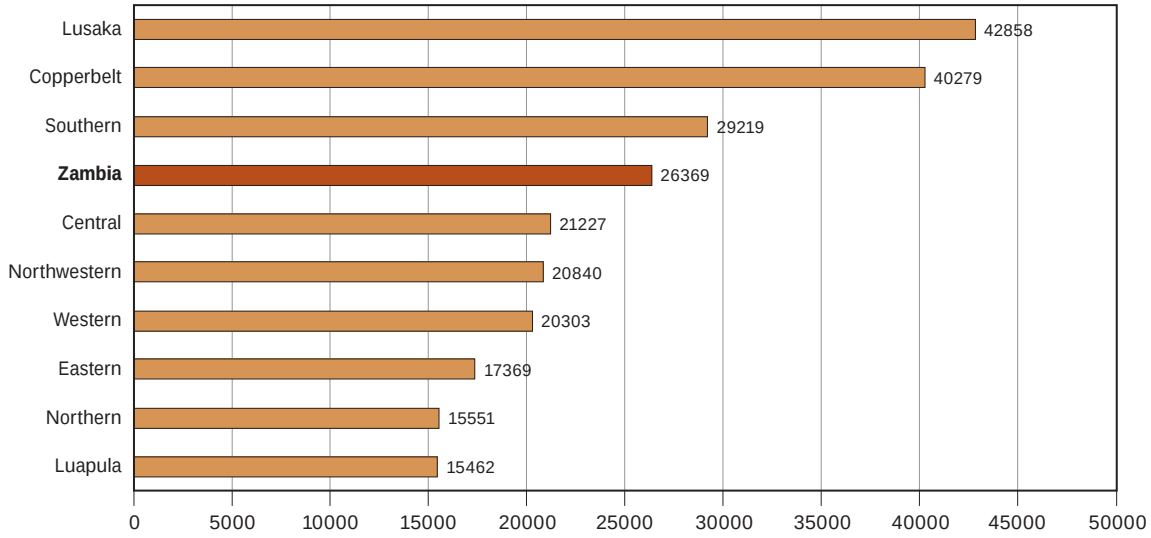
regions (see Figure 4-16). The Ministry of Health has been engaged in increasing the share of resources that go to lower levels of care, in keeping with the principle of cost-effective and equitable health care delivery. This has meant a departure from a situation where urban-based tertiary- and secondary-level hospitals claimed the largest share of resources.

Personnel emoluments accounted for most of the Government's spending on health care, in terms of expenditure by line items. In 2004, personnel emoluments' share of overall government own funds allocated to health care stood at 67 percent. It is worth mentioning that the cap on the wages bill implemented by the MOF in 2004 has resulted in a constant decline in this ratio, from 67 per cent in 2004 to a low level projected at under 50 per cent by 2009. However, this cap has been removed and this may influence longer-term projections. This ratio is lower than those of other developing countries and essentially constitutes an impediment to reaching acceptable levels of population/staff ratios with which to tackle effectively the deteriorating health conditions in Zambia.

Geographical allocation of resources presents the challenge of improving the underlying effect of material and social deprivation on the health of populations. Districts with greater levels of poverty and deprivation also suffer greater levels of health need. Equitable geographical allocation of public expenditure then provides an opportunity to address this issue. In 2004, the Ministry developed deprivation-based resource allocation criteria for allocating resources across districts (i.e. DHMTs). Using a household poverty headcount, assets, services and amenities available in each district, an index of deprivation was constructed for each. Allocations are now weighted by this district index to compensate the poorer districts comparatively more (CBOH, 2004).

The 2006 Public Expenditure Tracking Survey conducted by the Ministry of Health provided data on per capita allocations to provinces in 2005. As shown in Figure 4-17, the three most urbanized provinces (Lusaka, Copperbelt and Southern) received significantly more resources than the others. Lusaka and Copperbelt spend more than twice as much as Luapula, Northern, and Eastern Provinces. These figures suggest that the road to equitable allocation and social protection is going to be long and winding. A recent review of equitable resource allocation in the health sector highlighted some major impediments (Chitah and Masiye, 2007). Rural districts do not attract health staff, tend to be less capitalized and historically have been under-funded. As long as these underlying structural imbalances persist, the allocation of resources will continue to fund labour and capital, both of which are relatively abundant in urban areas. Further, without substantial growth, it will be politically difficult to re-allocate resources from urban to rural provinces.

Figure 4-17. Inter-provincial distribution of Government expenditure, per capita (Zambian Kwacha), 2005



Coverage of health services 4.3.4

Health care coverage provides an indication of how the benefits of health care expenditure are distributed across the population. Currently, poor access to health care remains one of the major impediments to achieving health targets in Zambia. Data from alternative sources corroboratively show that vulnerable groups and citizens residing in hard-to-reach and under-served areas do have difficulties getting access to services. The benefits of national health expenditure are disproportionately captured by relatively wealthy urban citizens. Further, although health is determined by a complex interplay between many factors (poverty, education, sanitation, water, etc.) of which health care is only one, there is evidence that inadequate coverage of health interventions has played a central role in defining Zambia's health profile. For example extended coverage of simple-technology interventions such as measles immunization have already been shown to lead to improvements in child mortality. On the other hand, low coverage of the target populations is strongly associated with high mortality in children and women.

Coverage of interventions

Immunization coverage

Immunization coverage is critical to the health of populations. Since the late 1990s, Zambia has stepped up its campaign to get children and women immunized against major infectious diseases. Table 4-19 shows trends in levels of coverage of selected interventions. Overall, it is shown that immunization coverage has been high in Zambia. International support through the Global Alliance for Vaccines and Immunization has been crucial to this success.

Table 4-19. Child Immunization coverage levels

	2006	2005	2004	2003	2002	2001	2000	1990
BCG	94	94	94	94	94	94	92	97
DTP1	94	94	94	94	94	94	93	97
DTP3	80	80	80	80	80	80	78	91
Hepatitis B3	80	80	–	–	–	–	–	–
Haemophilus influenzae type b3	80	80	80	–	–	–	–	–
Measles	84	84	84	84	84	84	85	90
Tetanus (PAB)	90	91	90	89	88	85	78	62
Polio3	80	80	80	80	80	80	79	90

Coverage of selected preventive and curative care

Table 4-20 presents a summary of the level of access to preventive and curative care at public facilities for various health needs. While a majority of children in Zambia do get immunized against major diseases, these children still face other risks to survival. Access to effective treatments for leading causes of disease among young children such as respiratory infections, diarrhoea and malaria is still low. These are acute illnesses which generally have high fatality rates because most children cannot easily reach centres where they can get treatment before it is too late. This partly explains why childhood mortality remains high in Zambia despite major strides in immunization coverage.

Over a third of TB cases remain undetected and therefore untreated. For highly infectious diseases such as TB, this poses a great risk for family and communities. Further, more than half of deliveries are done without the supervision of a qualified health worker. This is another area that calls for improvement if the level of maternal mortality is to be reduced. As shown earlier, for every 100,000 births 800 mothers die largely because of the lack of medical care. This is a challenge for increasing expenditure on maternal interventions throughout the country.

Coverage of ART for HIV/AIDS

HIV/AIDS represents the greatest share of Zambia's current health burden. In addition, the strong link with poverty also makes HIV/AIDS a major threat to the country's general development. To address this challenge, Zambia has been extending

Table 4-20. Coverage of selected preventive and curative care

Indicator	Coverage (year)
Percentage of children who slept under an ITN the night before survey	22.8 (2006)
Percentage of of children with fever who received an antimalarial	57.9 (2006)
Percentage of women who received an antimalarial during pregnancy	76.9 (2006)
Percentage of children with diarrhoea who receive treatment	66.9 (2002)
Ante-natal care (at least 4 visits)	71.4 (2002)
Percentage of deliveries attended by skilled birth attendant	43.4 (2002)
TB case detection rate (per cent)	68.0 (2005)

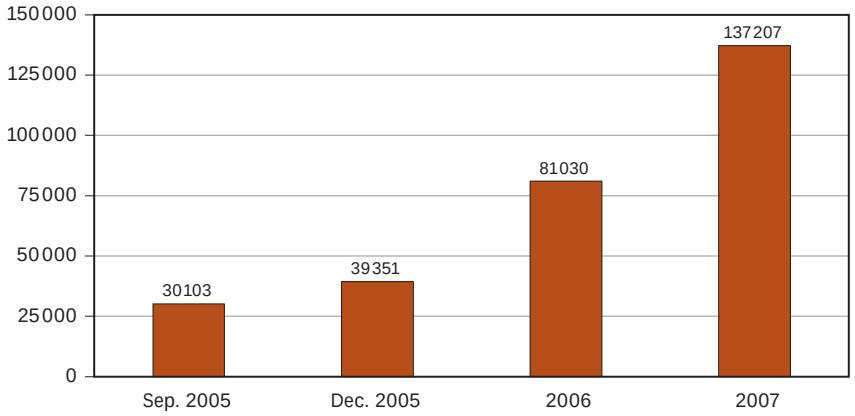
Source: Malaria Indicator Survey 2006, DHS 2002, WHO database

coverage of antiretroviral therapy (ART) to most HIV/AIDS patients. Until recently, ART had been beyond the reach of most patients because of its high cost. Now, the Government is scaling up provision of ART in all public institutions at a highly subsidized cost to the patient; whereas ARVs have been provided free in all public health facilities since mid-2005. In some cases, patients are required to pay for associated medical examinations.

Trends in the total number of individuals on ART are presented in Figure 4-18 as estimated by UNAIDS. Clearly, there has been a dramatic increase since 2006. However, it is estimated that these figures represent less than half of the target group. The distribution of coverage by province also shows that coverage is unequally distributed.

Further, a simple epidemiological model is used to project the proportion of HIV-positive patients actually receiving ART by province. Data on prevalence, incidence, population and an estimated fraction of 10 per cent of HIV population being eligible for ART are combined to estimate the number of ART candidates per province (see Table 4-21). These are crude estimates. However, they are within the WHO/UNAIDS estimate of 140,000 adults in need of ART (www.who.int/GlobalAtlas) and a WHO estimate that the national coverage of ART in Zambia is 36 per cent (WHO database). Coverage is modest across the country, but very low in places like Luapula Province.

Figure 4-18. Number of individuals on ART in Zambia



Source: UNAIDS: *Zambia country report 2008*.

Table 4-21. Projected ART coverage by province, 2005

Province (1)	Prevalence (%)	Reported number of people on ART	Projected population in need of ART	Estimated coverage of ART (%)
Central	15	2539	12657	20.1
Copperbelt	20	9233	28035	32.9
Eastern	14	4057	14878	27.3
Luapula	11	1102	6671	16.5
Lusaka	22	24227	41818	57.9
Northern	8	1526	7379	20.7
North-Western	9	895	3992	22.4
Southern	18	5612	18950	29.6
Western	13	2573	7777	33.1
Zambia	**15.6**	**51764**	**142156**	**36.4**

Note: Estimates based on MOH assumptions on fraction needing ART among HIV-positive population

Socio-economic inequities in access to health care

Besides geographical location, socio-economic status remains a key barrier to access in health care. Utilization of health services is dependent upon ability to pay transportation costs to the facility. Cost barriers have made it harder for poor households to afford health care.

Constraints on health care utilization

The burden of health care costs falls disproportionately on the poor, leading many of them not to seek care when they need it. The LCMS of 2004 indicated that, overall, 56 per cent of those who reported illness consulted over their illness during the two-week study period. About a quarter of persons reporting illness used self-administered medicine and 18 per cent did nothing about it (see Figure 4-19). This demonstrates that the Government's policy of delivering equitable access to health care has yet to be realized.

Differences were found between rural and urban populations in terms of consulting over illness see Figure 4-20). The LCMS 2004 indicated that 61 per cent of urban residents consulted over their illness compared with 54 per cent of residents in rural areas. Furthermore, the percentage of those who did nothing about their illness in rural areas was almost double that in urban areas.

Finally, while the LCMS of 2004 did not follow up surveyed persons on their reasons for not consulting health facilities when needed, the LCMS of 2002/2003 reported that 18 per cent of households that did not use a health facility stated that the

Figure 4-19. Health care consultation by age group as percentage of reported illness, 2004

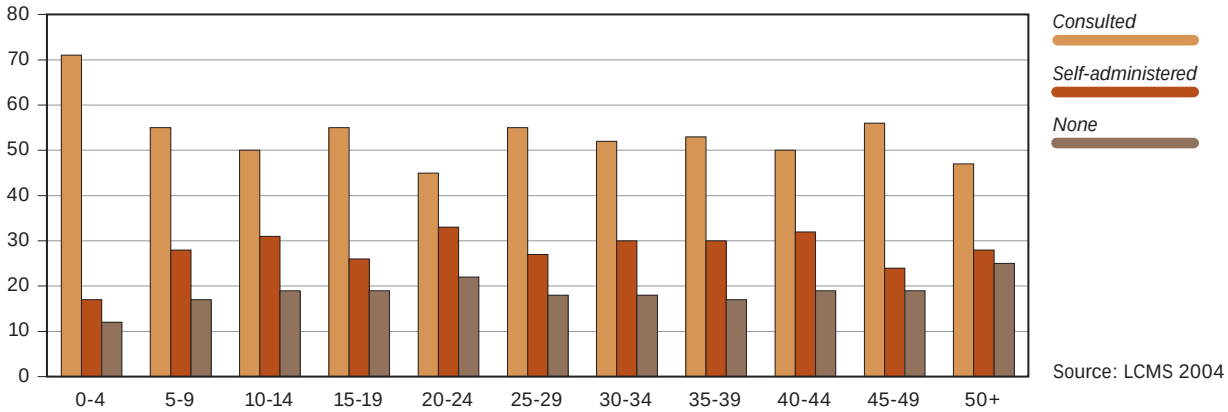
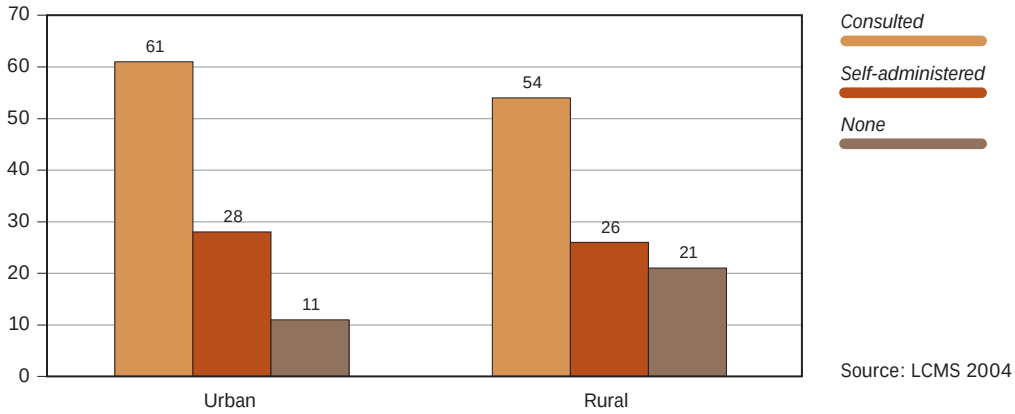


Figure 4-20. Health care consultation by urban/rural in per cent to reported illness, 2004



reason was that the health facilities were too far, 15 per cent stated that they were too expensive and 10 per cent indicated that they were of poor quality.

Data gathered in the 2001-2002 Zambia DHS included questions about the problems women perceive as barriers to gaining access to health care for themselves. Financial barriers to seeking treatment were cited as the biggest problem (66 per cent). Long distances to the nearest facility and/or non-availability of public transport also appear to be significant barriers to utilization and access. Further, Table 4-22 indicates that distance and availability of transport seem to be less of a problem in the urbanized provinces of Lusaka and Copperbelt.

Disproportionate cost of seeking health care

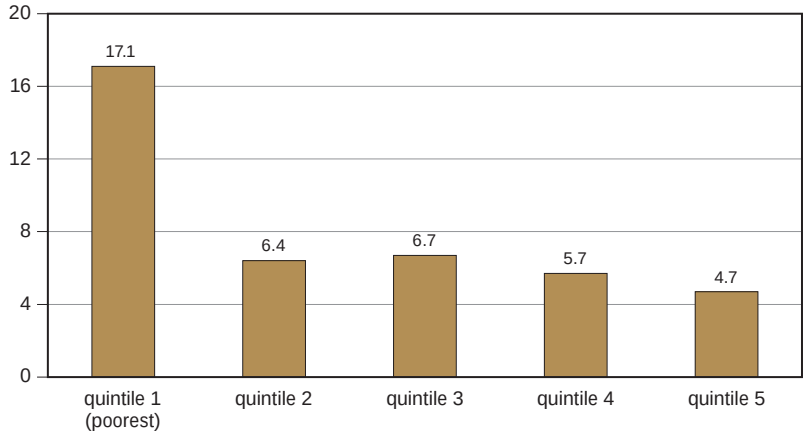
The financial consequences of illness fall heavily on poor households, with the result that either these households are likely to forgo appropriate treatment or to suffer catastrophic financial losses as a result of paying for health care. The World Health Survey (WHS) asked households how much they spent on various items in a four-week recall window. Health care costs were listed as one expenditure item. For the households which incurred health care costs in that window, the proportion of total expenditure related to health care costs is presented in Figure 4-21, by income quintile.

Table 4-22. Percentage of women who report that they have "big problems" in accessing health care when they are sick, by type of problem and province

	Knowing where to go for treatment	Getting permission to go	Getting money for treatment or transport	Distance to facility	Availability of transportation	Any of the above reasons
Central	12.2	4.8	66.0	58.0	50.2	82.4
Copperbelt	5.5	3.3	57.1	27.6	28.0	66.0
Eastern	3.4	2.6	78.4	52.1	57.7	83.2
Luapula	0.6	3.8	60.9	57.8	56.2	77.2
Lusaka	6.5	4.1	66.9	32.1	36.9	75.6
Northern	4.8	1.2	68.0	55.7	59.4	82.5
Northwestern	7.0	5.8	73.1	56.6	57.9	82.1
Southern	8.9	4.7	69.6	50.8	56.2	80.6
Western	18.8	9.2	65.5	50.1	49.5	79.6
Zambia	**7.0**	**4.0**	**66.4**	**45.5**	**47.3**	**77.3**

Source: Zambia DHS 2001/2 table 9.11

Figure 4-21. Health care cost as a proportion of total household expenditure (percentage)



Note: calculations based on WHS (WHO 2003)

Based on actual household expenditure in the WHS conducted in 2003, the proportion of total household expenditure devoted to health care was estimated. As expected, the poorest households spend nearly a fifth of their total expenditure (which is taken to represent income) on health care. This is four times the burden shared by wealthiest households. In many of the cases, one illness episode can take up nearly a fifth of a household's income in terms of health facility visits, transport costs or retail drugs.

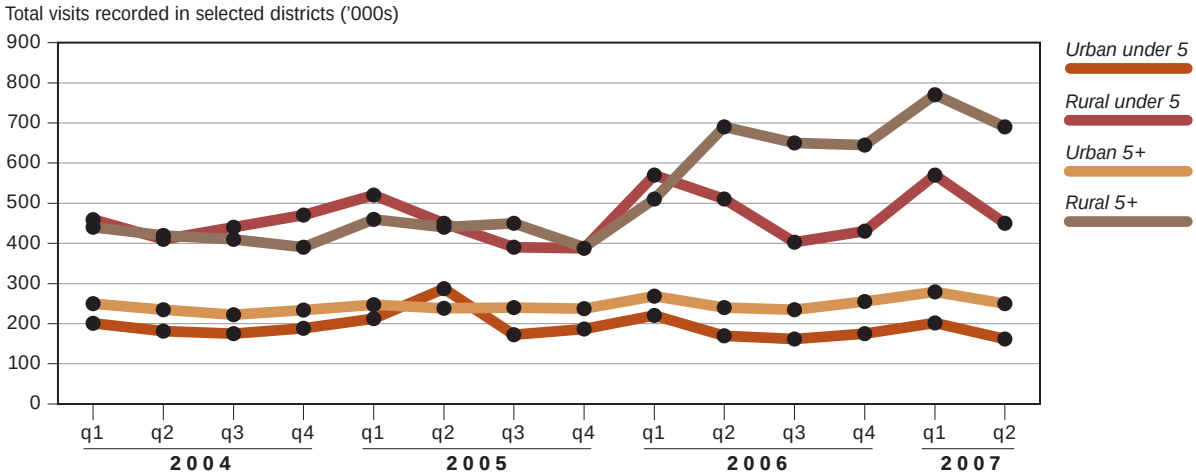
Extending health service coverage through abolition of user fees

Since 1993, the Ministry of Health has been operating a mechanism to exempt identified groups of the population from paying user fees. The exemption criteria included; persons identified as indigent by local social welfare officers, persons aged above 65 years, children under the age of five years, pregnant women seeking pregnancy-related care, and victims of public accidents such as road traffic accidents. The exemption based on destitution was implemented in conjunction with the Ministry of Social Community Development and Social Services. However, this exemption scheme did not yield the desired results, particularly with regard to destitution-based exemptions. Only an insignificant proportion of the needy were getting the exemptions.

The Government decided that one of the effective measures for achieving broad-based social protection was to protect the poor from paying user fees. On 1 April 2006, user fees were abolished in the rural and peri-urban areas. All the 54 districts and 18 municipalities and cities have implemented the user fees removal policy. All the 54 rural districts are covered, whereas in the 18 municipalities and cities user fees are charged only within a radius of 15 km and 20 km, respectively.

The United Kingdom Department for International Development (DFID) provided USD 5 million which was to be used as replacement revenue to DHMTs, which had lost user fee revenue. Each district was allocated an amount based on DHMTs' own projected user-fee revenue for 2006, with an adjustment for the anticipated increase in utilization. This was done to ensure that district service delivery and activity programmes (so-called action plans) did not suffer disruption because of the lost user-fee revenue. The purpose of this experiment was to demonstrate whether increased public funding would increase utilization and improve social protection by eliminating

Figure 4-22. Trends in public health centre utilization before and after user fee removal



the financial burden on households seeking health care. The intention was eventually to apply this user fee abolition policy to the rest of the country.

Following the removal of user fees, public facilities recorded a 50 per cent increase in utilization in rural areas. The trends presented in Figure 4-22 are based on data collected by the Health Management Information Systems Unit, at the Ministry of Health. The trend in utilization by patients aged at least five years in rural areas contrasts significantly with trends in utilization in the urban districts where virtually no change was observed during the same period. This dramatic change occurred among patients aged at least five in rural areas (children under the age of five were already not required to pay user fees). This demonstrates that removing barriers to access can increase uptake of public services and extend social protection in a significant way.

Conclusions *4.3.5*

Achieving social protection in health-related matters is central to advancing progress in reducing poverty and sustainable development. Good health offers protection from incapacitation and increases the capacity to enjoy life. Currently, Zambia's health profile is characterized by a very high mortality among children and women of reproductive age. Life expectancy at birth is only 40 years. Leading causes of death are infectious diseases, many of which could be prevented or treated with available medical technologies. Unfortunately, access to either effective technologies or preventive care is a major problem for most Zambians. Constraints on both supply and demand prevent many interventions reaching the people who need them. This chapter has discussed some of the key issues that underlie the state of social health protection in Zambia today.

Zambia still has a limited health care infrastructure which is inequitably distributed across the country. Further, the distribution of the most important resource, namely, health staff is perhaps the most important constraint on achieving greater health care coverage. Many preventable deaths occur because patients are too isolated from the trained medical personnel who could save their lives.

The positive news is that the level of investments in the health sector has increased considerably since 2000, largely because of donor inflows. Many of the donor-funded programmes are targeted at priority diseases such as HIV/AIDS, TB and malaria and are making considerable progress in expanding health care coverage. However, health care expenditure is still skewed towards urban areas where the majority of the cost input (labour) is concentrated. The quality of most health infrastructure in rural areas falls below what is recommended and, in some cases, necessary to deliver life-saving interventions.

Importantly, the share of total health care resources mobilized through out-of-pocket payments in Zambia is one of the highest. One way of raising health care revenue, private payment, offers the least protection to the population, and hurts the poorest the most. There is strong evidence that private payments have constrained access to care and offered no protection from the impoverishing health care expenditure. The Ministry of Health is exploring the option of social health insurance, which is viewed by the WHO, the World Bank and other international institutions as a more financially and equitable method for raising revenue.

5

Previous chapters showed that there is very little paid formal employment in the country and just as little access by the population to social protection schemes. Chapter 2 identified the main determinants of poverty and vulnerability, Chapter 3 the labour status of the population, and Chapter 4 presented the main benefits provided by the Government and other actors to protect people from various contingencies. There is an apparent mismatch between the scale of poverty and vulnerability and the fact that existing social protection programmes cover mostly workers in formal employment. This chapter focuses on the resources actually allocated to different types of social protection against different contingencies and to different population groups. The overview of the national Social Budget attempts to show the scale of social protection financing from different sources and to set it against the overall fiscal envelope available.

With around 70 per cent of its population living in poverty, Zambia has benefited from international development cooperation, which has supported expenditure of over 8 per cent of GDP in recent years. Furthermore, public external debt fell by 90 per cent in 2006 with respect to 2004 as a consequence of the Highly Indebted Poor Countries (HICP) initiative and the Multilateral Debt Relief Initiative (MDRI). In this context, it is relevant to discuss the role of international partners and the effect that relieved foreign debt service has had on government social expenditure.

The chapter consists of four parts. The first presents the main components of the Government's budget and its social expenditure allocations. The second discusses the role of international cooperation, focusing on aid flows and debt relief. The third presents the aggregate Social Budget and then explains some details by sector. The fourth discusses the main challenges to the provision of social protection in Zambia.

Government expenditure and Zambia's Social Budget

Government expenditure 5.1

Government resources come mainly from tax revenues that represent about 18 per cent of GDP. In recent years, grants have had an important role in financing both current and capital expenditure. Nevertheless, the Government has difficulties in financing all its expenditure, even with the support of donors. Hence, expenditure and ways open to the Government of attending to the needs of its population have reduced over time.

Recent performance of government expenditure and social sectors

Table 5-1 presents the main accounts of the central Government for 2000-2006, and preliminary figures for 2007 (MoFNP, 2008), as percentage of GDP.

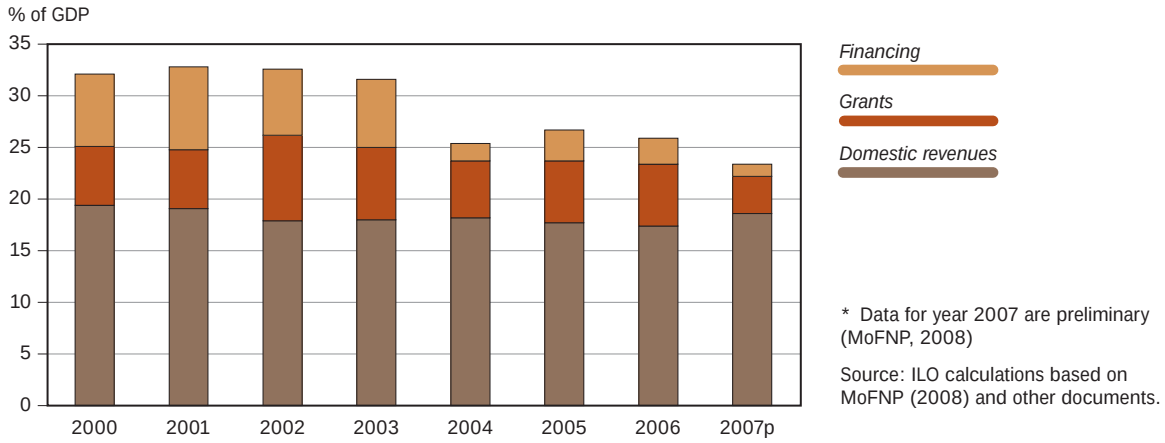
Table 5-1. Summary of operations of the central Government (percentage of GDP)

	2000	2001	2002	2003	2004	2005	2006	2007p
Revenues	25.1	24.8	26.2	24.9	23.7	23.6	23.4	22.3
Domestic revenues	19.4	19.1	17.9	18.0	18.2	17.7	17.4	18.6
Grants	5.7	5.7	8.3	7.0	5.5	6.0	6.0	3.6
Expenditure	26.9	31.5	31.3	30.9	26.6	26.3	26.0	23.4
Current expenditure	16.9	19.6	19.4	19.5	17.9	19.0	17.9	19.2
Capital expenditure	10.0	11.9	11.8	11.4	8.7	7.3	8.0	4.2
Overall fiscal balance								
Including grants	-7.0	-8.0	-6.4	-6.6	-1.7	-3.0	-2.5	-1.2
Excluding grants	-12.7	-13.8	-14.7	-13.5	-7.2	-9.0	-8.5	-4.8

Figures for 2007 are preliminary. The gap between revenues and expenditures and the overall fiscal balance may differ because of balancing items (not projected).

Source: ILO calculations based on MoFNP (2007c; 2008) and other documents.

Figure 5-1. Sources of funds managed by the central Government (as percentage of GDP)*



* Data for year 2007 are preliminary (MoFNP, 2008)

Source: ILO calculations based on MoFNP (2008) and other documents.

In nominal terms, the resources mobilized by the Government in 2006 (K10,183 billion) were more than three times those mobilized in 2000. However, they did not follow the positive performance of the economy, as they decreased from 31.2 to 26.0 per cent of GDP during those years (see Figure 5-1). This reduction was led by a continuous fall in the fiscal deficit that was caused not by a sustained increase in tax revenues but by cuts in expenditure.

During the period 2000-2006, tax revenues declined from 19.2 to 17.0 per cent of GDP. Only in 2007, was there an improvement in tax revenues fuelled by company income tax and import VAT (MoFNP, 2008). Foreign grants represented over 6 per cent of GDP during the same period but they are expected to fall, as the Government has benefited from significant debt relief that in theory would release resources to social sectors. For instance, preliminary data for 2007 indicate that grants represented only 3.7 per cent of GDP in that year, but the 'released' funds corresponding to debt relief represented 18.6 per cent of GDP (IMF, 2008b). This is discussed in more detail in paragraph 5.2

In this context, the Government has implemented the Public Expenditure Management and Financial Accountability (PEMFA) programme, which should enhance the efficient use of resources. This is in line with the agreement reached with cooperating partners based on the principles of the Paris Declaration (2005) on aid-effectiveness: ownership, alignment, management for results, and mutual accountability.

In terms of use of government resources, capital expenditures have decreased significantly: from their peak of 11.9 per cent of GDP in 2001 to 8.0 per cent of GDP in 2006. The fall was even deeper in 2007: capital expenditure was around 4.3 per cent of GDP (MoFNP, 2008). The main reason behind this is the low capacity of certain ministries and government units at provincial and district levels to execute capital expenditure. The GRZ is committed to overcoming this situation because the poverty reduction strategy requires social and economic infrastructure to be accessible to the poorest.

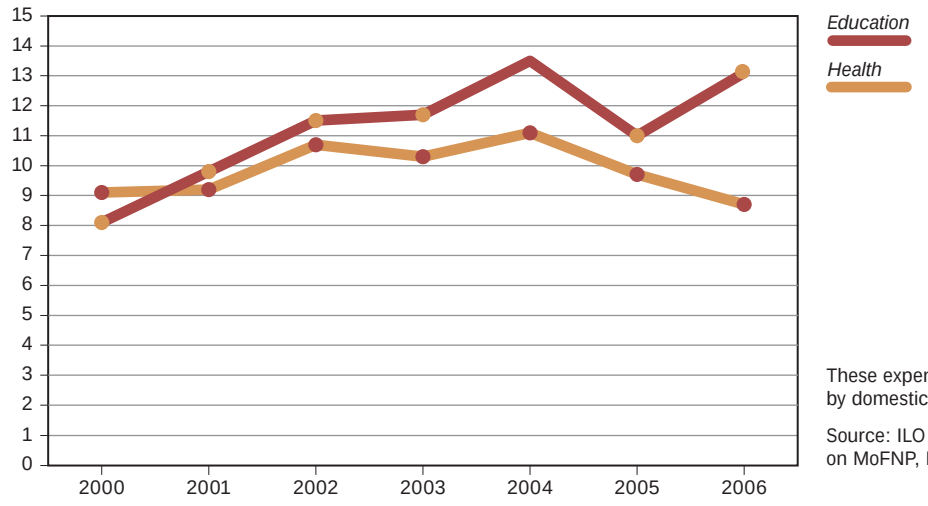
Another important trend is that foreign financing (grants and loans) finance most government investments: around 76 per cent. This means that with lower non-reimbursable aid funds, public investment could retract even more. Moreover, the revenue from foreign grants had become unpredictable as a result of the volatility of the Kwacha exchange rate (see Weeks, 2008, for an analysis of the effects of currency appreciation on fiscal position).

It is difficult to construct a long-term series of major social expenditures (see Appendix C, section 1). However, looking at the expenditures of a recent period (2004-2006) and at the medium-term expenditure framework (MTEF) of the last two years, it is possible to see whether the social sectors are a priority for the Government.

Figure 5-2 shows that education expenditure increased its share of national expenditure so that it accounted for over 13 per cent of total expenditure. By contrast, health expenditure reached its lowest point in 2006 when it represented only 8.7 per cent of total government expenditure, financed with own resources or donor funds. Preliminary figures for 2007 suggest that education and health expenditure will represent 10.8 and 15.0 per cent of total expenditures, respectively.

Figure 5-3 plots the different composition of expenditures by function in the 2007 budget releases, the actual 2007 expenditures (preliminary figures) and the 2008 Budget. The message here is that low spending capacity caused social sectors – especially health – to have a lower than planned actual expenditure. As the figure shows, budget releases to social sectors represented 37.4 per cent of total releases in 2007, but actual social expenditure only reached 30 per cent of realized total expenditures. The extreme case was health, that had an allocation of 10.7 per cent of total expenditures but only 7.5 was realized. Furthermore, in absolute terms, actual 2007 expenditures were 10.9 per cent lower than budget releases. Despite this, the 2008 Budget assumes that expenditures can increase by 28.4 per cent with respect to real 2007 expenditures.

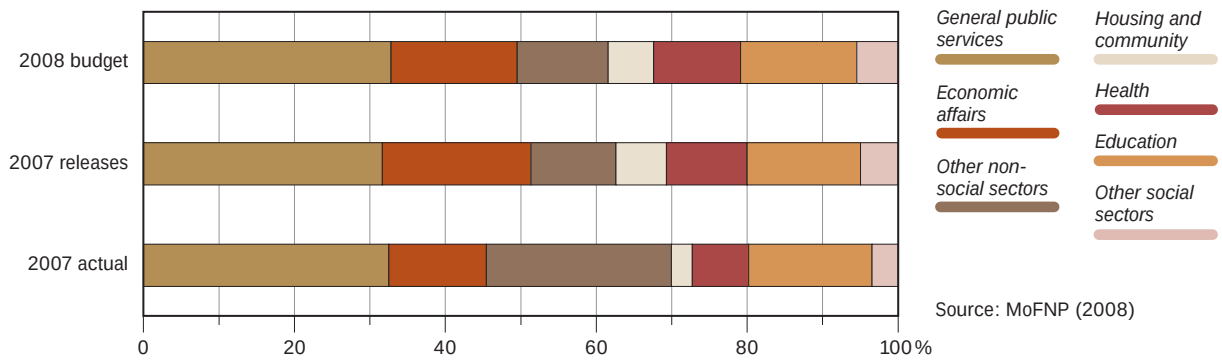
Figure 5-2. Evolution of expenditures of major social sectors (per cent of total expenditure)



These expenditures are financed by domestic and foreign resources.

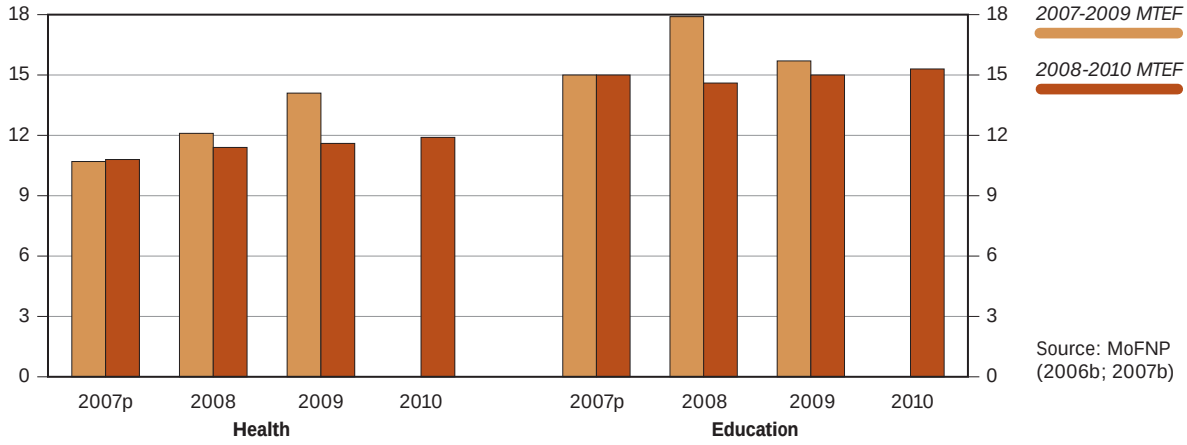
Source: ILO calculations based on MoFNP, MoE, and MoH

Figure 5-3. Execution versus budget releases in 2007 and 2008 budget, by sector



Source: MoFNP (2008)

Figure 5-4. Priority social sectors in medium-term planning, 2007-2010 (percentage)



In terms of budget allocations, from 2006 to 2007 there has been an increase in health and education in total government expenditure, so that in 2010 these are expected to be 11.9 and 15.3 per cent of GDP, respectively. However, there has been a decrease in the 2008-2010 METF with respect to the allocations proposed in the 2007-2009 METF. Figure 5-4 depicts the selected social expenditures expressed as a percentage of total government expenditure. For instance, for 2009, the target for health expenditure is 14.1 per cent of total expenditures in the 2007-2009 METF, but it is 11.6 per cent in the 2008-2010 METF.

Creating fiscal space [1]

A better picture of the fiscal situation of Zambia is obtained when foreign inflows are not taken into consideration. Excluding grants, the fiscal deficit reached its highest point in 2002 when it represented 14.7 per cent of GDP. From that level, it steadily decreased to reach almost 5 per cent of GDP in 2007.

Fiscal space can be created by increasing tax revenues, reallocating current expenditure or administering financial policy more efficiently. The Government plans to collect more tax revenues from mining companies with the reform introduced this year (see below). Regarding expenditure, the Fifth National Development Plan (FNDP) indicates that the priorities are social sectors and infrastructure, so that the execution of investment is crucial. In terms of financial policy, the debt relief reduced the payment of interest to external lenders; however, domestic borrowing increased.

As explained earlier, it seems that tax revenues reflect their previous years' declining trend. For future years, the Government has introduced a new fiscal and regulatory framework for the mining sector. This would allow the Government to raise important resources in a context of high copper prices from which it was not able to benefit, because mining companies had generous tax exemptions – it must be recalled that copper exports represent over 75 per cent of exports of goods. The GRZ would also restructure the tax revenues by establishing new thresholds for personal

[1] Fiscal space is 'room in the Government's budget that allows it to provide resources for a desired purpose without jeopardizing the sustainability of its financial position or the stability of the economy' (IMF, 2008a, p. 3).

income tax and revising VAT, in order to broaden the tax base and build sustained growth in domestic revenues. Among several measures, the export levy of 15 per cent on the export of copper concentrates and cotton seed would raise extra revenues of K148.7 billion (MoFNP, 2008).

Regarding current expenditure, the strategy basically consists of monitoring the adequate use of released funds and identifying bottlenecks especially those relating to under-spending institutions. Special efforts are being made to expand the infrastructure investment in road, irrigation, water and sanitation, health, education and housing. Social sectors are increasing their share of total government expenditures. Here, it should be pointed out that wages and salaries represent a high percentage of these expenditures so that any plan to expand social expenditure must also ensure adequate staff salaries. In 2006, education personnel received around 67 per cent of total expenditures and medical staff, around 33 per cent. These shares are higher than the 29.6 per cent that wages and salaries represent in total expenditures of the central Government (around 7.8 per cent of GDP) and will probably increase, as the Government is to recruit more teachers and medical personnel.

Domestic debt has a higher impact on government accounts than foreign debt. In 2006, domestic debt reached K9,336.9 billion, which represented 23.8 per cent of GDP or 59.8 per cent of total financing. Most of this debt corresponds to government securities (71.8 per cent in 2006 and 78.4 per cent in 2007). In parallel with this increase in government instruments, there was a reduction of arrears with suppliers and pension schemes – more sharply in 2007, when these arrears fell by K261.4 billion – that is expected to continue during 2008 (MoFNP, 2008).

Table 5-2 shows the composition of domestic debt. Pension arrears decreased in 2006, representing only 4.4 per cent of total domestic debt. The Government plans to pay off arrears to the Public Service Pension Fund (PSPF) and to suppliers of goods and services in full by 2009. This explains the increase in social protection expenditure in the 2008 Budget (MoFNP, 2007b; 2008) because, in other respects, social programmes are not being expanded (except for some funds reallocated from the Public Welfare Assistance Scheme (PWAS) to the street children programme).[2]

Table 5-2. Domestic debt (in billions of Kwacha), 2002-2006

	2002	2003	2004	2005	2006
Government securities	1700.0	2459.7	2522.6	5336.9	6706.4
GRZ consolidated bond	1675.0	1907.7	1646.7	1646.7	1120.9
Suppliers arrears	433.6	636.8	577.4	509.3	515.3
Pension arrears	270.7	263.7	429.5	414.0	386.5
Employees contributions	262.7	262.7	370.1	–	–
Other	504.8	737.6	718.3	885.7	607.8
Total	**4846.8**	**6268.2**	**6264.6**	**8792.6**	**9336.9**

Source: ILO calculations based on MoFNP and BoZ

[2] The 2008 Budget proposes a cut of 54 per cent in the allocation to the PWAS. By contrast, resources to the street children programme increase by 55 per cent.

Table 5-3. Operations of general government (as percentage of GDP), 2005-2006

	2005	2006		2005	2006
Revenues	26.9	26.7	**Expenditures**	28.2	27.7
I. Government revenue	23.6	23.4	**I. Government expenditure**	26.3	26.0
A Revenue	17.7	17.4	A Non-financial expenditure	23.6	23.6
Tax revenue	17.2	17.0	Current expenditure *	16.3	15.6
Non-tax revenue	0.5	0.5	Capital expenditure	7.3	8.0
B Grants	6.0	6.0	B Interest	2.7	2.3
			Domestic debt	2.3	2.0
II. Social security schemes	3.3	3.3	External debt	0.4	0.3
A Contributions	2.0	2.0			
From employees	0.9	0.9	**II. Social security schemes**	1.9	1.8
From private employers	0.6	0.6	Benefits paid	1.2	1.3
From public employers	0.5	0.5	Administration	0.7	0.4
B Investment income	0.7	0.6			
C Government transfer	0.6	0.7	Overall Result	-1.3	-1.0

* Current expenditure includes the social security contributions of Government and the transfers made to social security institutions.

Operations of the general government

Adding the operations of the social security institutions – to which the Government pays contributions, transfers money for specific benefits (e.g., severance pay of public service employees) or cancels arrears – to those of the central Government, we have a better picture of how efficiently the Government is providing social services and social security benefits.[3] Table 5-3 summarizes the main operations of general Government in 2005 and 2006.

In 2005 and 2006 the overall result was negative but lower than the result of the central Government thanks to the contribution of the social security institutions that are building up reserves. Hence, instead of a deficit of 2.5 per cent of GDP, the deficit of the general government was 1.0 per cent of GDP in 2006.

Extending the coverage of social security institutions as well as protecting more people against various contingencies would increase the possibilities for the government to re-allocate resources among priority social sectors.

[3] The operations of the general government include those of the central Government and social security institutions. For reasons of data constraints (see Appendix C), we do not include the operations of the local governments.

Development cooperation and government fiscal space 5.2

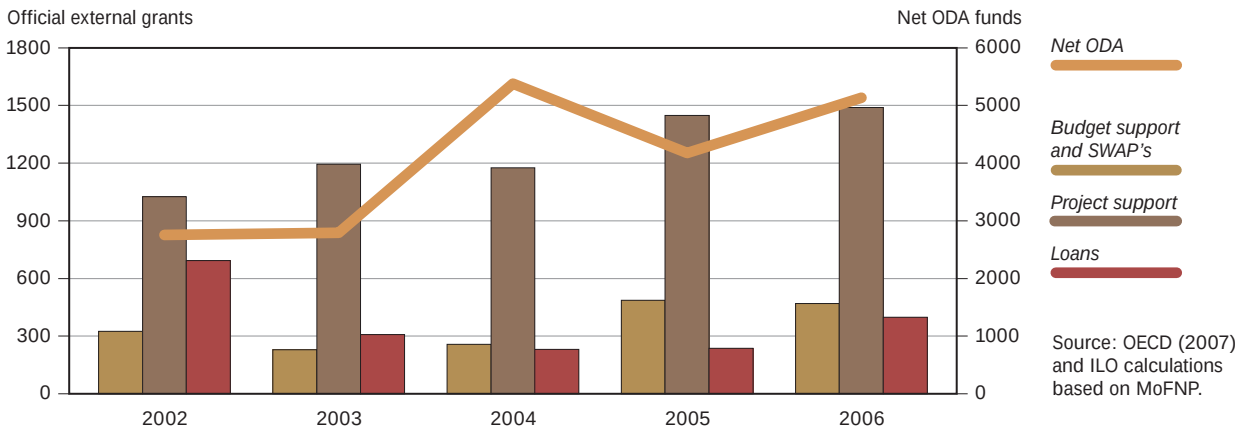
Over the past ten years, Zambia has relied on foreign aid to sustain its operations. As seen earlier, total expenditures decreased given the rigidity of the structure of expenditures and the unpredictability of aid funds. In this context, the intention of the cooperating partners (so far DFID and EU) is to move to budget support and also to move from project to programme grants, via pooled funds (e.g., health and education) so that the Government can manoeuvre and develop medium-term investment plans in priority social sectors with the cooperation of aid funders. In 2007, the Government implemented an aid management policy so that aid funds could be regularly reported on, monitored and their use evaluated in order to ensure that the development goals were achieved.

External funds come from two main sources: grants or non-reimbursable aid, and loans. During the decade, grants have been the main source of foreign funds for the central Government budget. Grants represented 52 per cent of total external financing to central Government's operations in 2000 and 85.5 per cent in 2006. MoFNP (2007b) projects that in 2010, around 62 per cent of grants would be linked to project support (lower than the 82.6 per cent of 2000).

Figure 5-5 shows the sources of external funds during 2002 and 2006. Project support still represents the largest part of funding (63.2 per cent of total in 2006) but the share of budget support and sector-wide approaches (SWAPs) has increased. This trend should continue if Zambia is to achieve one of the indicators agreed in the Paris Declaration: 'for 2010, 66 per cent of aid flows are provided in the context of programme-based approaches' (Paris Declaration, 2005, Indicator of Progress 9). However, this does not seem to be the case. External grants are still somewhat unpredictable and donors would prefer to fund directly specific projects under their control (see Box 5-1). Nevertheless, it could be that this may change as donors were still to confirm their aid flows at the time of writing this report.

The total external funds raised to finance fiscal deficit reached around 6.0 per cent of GDP in 2006 following a decreasing trend since their acme in 2002 (when they reached 12.6 per cent of GDP). Figure 5-5 shows in the right-side axis the funds recorded by OECD as official development assistance (ODA). The divergence is large and although we cannot exactly explain it (most likely debt relief and also technical cooperation projects are inflating the figures), it is useful to analyse the increasing trend.

Figure 5-5. External funds to central Government operations (in USD million)



Source: OECD (2007) and ILO calculations based on MoFNP.

Box 5-1. The challenges of foreign grants to mobilize resources

Apparently, the GRZ is finding it more difficult to secure grants. In the Fifth National Development Plan (GRZ, 2006), the Government expected to raise a minimum of foreign grants equivalent to 4.7 per cent of GDP in 2008, 4.6 per cent of GDP in 2009 and 4.7 per cent of GDP in 2010. Its targets to implement the new plan were much higher (see second row in table). However, the 2008-2010 MTEF (MoFNP, 2007b) significantly lowered the projections for 2009 and 2010, while the actual amount of grants in 2007 was quite disappointing (only 3.6 per cent of GDP).

Projections of external grants in official GRZ reports (percentage of GDP)

	Issued on	2007	2008	2009	2010
FNDP (baseline)	Dec. 2006	4.7	4.7	4.6	4.7
FNDP (target)	Dec. 2006	4.7	5.6	6.1	6.5
2008-2010 MTEF	Nov. 2007	4.8	4.6	4.2	3.6
2008 Budget	Jan. 2008	3.6	4.7	n.a.	n.a.

FNDP=Fifth National Development Plan, MTEF=Medium Term Expenditure Framework.
n.a.: not applicable

Looking in detail at the baseline scenario proposed in the FNDP and the 2008-2010 MTEF, it is clear that sector-wide approaches would reduce their share while general budget support still does not represent the main transfer modality which would be expected following aid trends. It could be that donors are expecting Zambia to improve its financial information systems, and prefer to continue providing funds for specific projects (the only modality of support in the table below that has not declined as percentage of GDP).

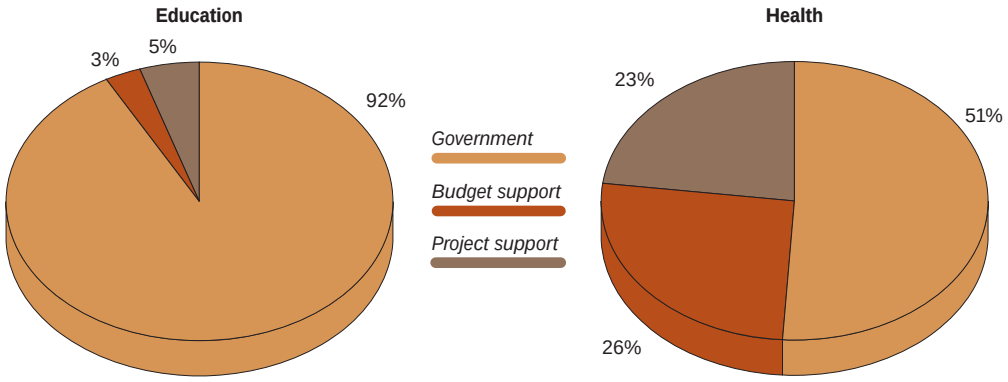
Structure of external grants estimated in the FNDP and the 2008-2010 MTEF (percentage of GDP)

	2008		2009		2010	
	FNDP	MTEF	FNDP	MTEF	FNDP	MTEF
External grants	4.7	4.6	4.6	4.2	4.7	3.6
General budget support	1.4	1.3	1.3	1.3	1.3	1.1
Sector wide approaches	0.9	0.8	1.1	0.6	1.2	0.2
Earmarked project support	2.4	2.6	2.2	2.3	2.2	2.3

It is relevant to analyse the financing structure of two sectors in which development cooperation has been very active: health and education. Figure 5-6 shows that education expenditure is mainly financed by domestic resources (92 per cent of total), while only half of health expenditure is financed by the central Government. On the other hand, project support is still an aid modality used in both sectors.

Debt relief (2005-2006) is an important vehicle for donors to transfer resources to aid-dependent countries such as Zambia. It reduced Zambia's external debt a great deal and freed resources from interest payments to be allocated to social sectors. Total external debt decreased from USD7,080 million in 2004 to USD1,516 million in 2006. Public external debt fell by 90 per cent between those two years to reach USD676 million.

Figure 5-6. Distribution of main sources of financing, 2006



Source: ILO calculations based on MoFNP, MoE, and MoH.

Table 5-4 shows the evolution of external debt and some debt ratios. In 2006, public external debt represented 6.2 per cent of GDP and 16.5 per cent of Zambian exports. The reduction of debt service was also impressive: from 18.2 per cent of exports of goods and services in 2004 to only 1.7 per cent in 2006. The external position of the country is more stable now (other indicators such as foreign reserve ratio are also improving) so that the IMF (2008c) in its updated debt sustainability analysis found that Zambia is at low risk of debt distress.

Indeed, debt relief significantly reduced the stock of external debt and mainly alleviated the fiscal position in the short run by reducing current expenditures (i.e., interest payments), but the possibilities of creating fiscal space based on this lower debt have proved to be limited as donor aid has significantly reduced as a percentage of GDP (see Weeks & McKinley, 2006).

Table 5-4. External debt (in USD million), 2000-2006

	2000	2001	2002	2003	2004	2005	2006
Public debt	5837.0	6405.5	6469.9	5948.4	6620.0	4123.8	676.0
Multilateral	3446.8	3313.7	3855.1	3703.0	3872.0	3715.7	390.5
Bilateral	2390.2	3091.8	2614.8	2245.4	2748.0	408.1	285.5
Private & parastatal	473.5	717.5	670.4	546.6	460.0	404.2	840.3
Total external debt	**6310.5**	**7123.0**	**7140.3**	**6495.0**	**7080.0**	**4528.0**	**1516.3**
Public external debt as:							
per cent of GDP	215.1	174.3	171.5	137.5	121.7	56.7	6.2
per cent of exports of goods and services	677.7	623.0	632.6	485.0	323.1	168.3	16.5

ILO calculations based on MoFNP, BoZ and CSO.

5.3 Zambia's Social Budget: 2005 and 2006

After reviewing the fiscal situation of Zambia, it is time to identify the revenues and expenditures involved in providing social protection in the country. An explanation of the methodology of the Social Budget model is in Appendix A. It must be said that we are including social protection sectors (contributory social protection, work-related benefits, and social assistance), together with education and health. Here, we will present the results for the most recent years. The projections will be discussed in the next chapter.

Table 5-5 summarizes the main components of the Social Budget, which will be explained in greater detail later. The main actors financing social expenditure are under the 'revenues' heading. The criterion used is source of financing so that resources managed by the Government but financed by donors are classified as 'donors'. Expenditures appear according to a customized classification thus including 'benefits' that are not directly consumed (i.e., administration). Change in reserves is the overall balance so that a positive change means surplus and a negative change, deficit.

Revenues

For 2005 and 2006, total resources of the Social Budget in Zambia are estimated at around K4,818 billion and K5,939 billion, respectively. These amounts represent 14.8 and 15.1 per cent of GDP.

The main actor in the provision of social protection is the Government with a share of 40 per cent of total revenues, which is financed by tax revenues. Its K2,425 billion are transferred in several ways: in-kind benefits (health and education), cash benefits (social assistance), grants, and contributions to social security institutions.

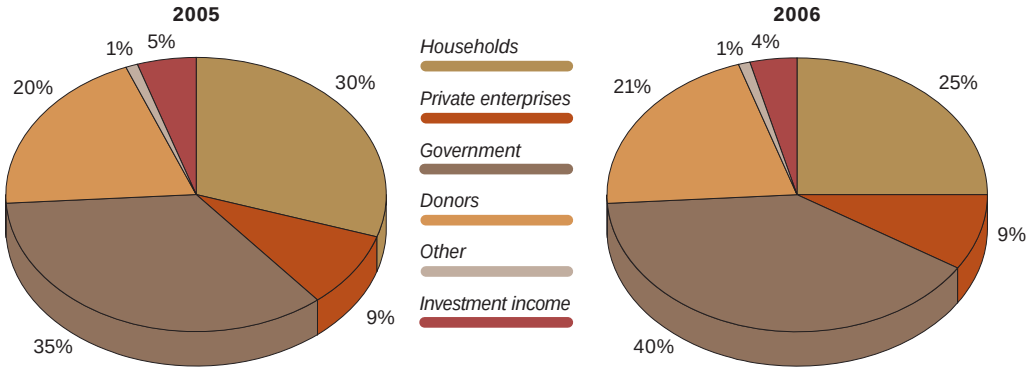
Next come households, financing 25 per cent of social expenditure through out-of-pocket expenditure and employees' contributions. Donors provide 21 per cent of resources through several mechanisms (e.g., grants to the Government and projects). Private enterprise contributes 9 per cent of resources via social security contributions, health insurance, etc. It must be noted that social security contributions are not so significant (13.6 per cent of total revenues) because of the low coverage of pension schemes

Table 5-5. Summary of the Social Budget, 2005-2006

	2005		2006			2005		2006	
	K billion	% GDP	K billion	% GDP		K billion	% GDP	K billion	% GDP
Revenues					*Expenditures*				
Government	1707	5.3	2353	6.0	Health	1920	5.9	2295	5.9
Households	1437	4.4	1505	3.8	Education	1451	4.5	1874	4.8
Donors	943	2.9	1236	3.2	Pension benefits	384	1.2	527	1.3
Private enterprises	426	1.3	508	1.3	Short term benefits*	141	0.4	172	0.4
Investment income	70	0.2	84	0.2	Administration	469	1.4	472	1.2
	232	0.7	253	0.6	**Total**	**4365**	**13.4**	**5341**	**13.6**
					Change in reserves	450	1.4	599	1.5
Grand total	**4815**	**14.8**	**5939**	**15.1**	**Grand total**	**4815**	**14.8**	**5939**	**15.1**

* Includes short-term work-related benefits and social assistance.

Figure 5-7. Resources of the social protection system, 2005-2006



influenced by the low level of formality in the economy. Others are private health insurance and non-profit organizations active in the health sector.[4] Finally, investment income from pension schemes represents 4 per cent of total resources. Figure 5-7 shows the distribution of revenues of the social protection system in Zambia.

Expenditures

Total expenditures of the social protection system in Zambia were K4,365 billion in 2005 and K5,341 billion in 2006. In both years, the overall balance of the system (revenues minus expenditures) was positive.

Core social expenditures include sectors such as education, health, social security, work-related benefits and social assistance. They reached 12.0 and 12.4 per cent of GDP in 2005 and 2006, respectively. In addition, administration costs (considered an in-kind benefit) represented 1.2 per cent of GDP in 2006.

Figure 5-8 shows the main groups of expenditures. The leading sector is health, with 44 per cent of total expenditure in 2006. Education has the second place with 33.2 per cent. Together they reach 10.7 per cent of GDP. Including administration costs, health expenditure represents 6.6 per cent of GDP, but the Government only finances 1.4 per cent of GDP, the share of donors being the most important: 2.8 per cent of GDP or almost 46 per cent of total health expenditure.[5] The opposite occurs in the case of education. This expenditure represents 4.8 per cent of GDP, while the Government finances the equivalent of 3.3 per cent of GDP.

Social security benefits represent 10 per cent of total expenditure; the reason for this low share is that the pension schemes are recently established (especially NAPSA). Furthermore, almost 50 per cent of the total administration costs are incurred by the social security schemes.

In Figure 5-8, short-term benefits include two groups: work-related benefits (e.g., severance pay, sickness and maternity benefit) and social assistance. Individually, the first represents 2 per cent of total expenditures and the second, 1 per cent. Now we present more detailed information about the sectors that allowed us to build the Social Budget.

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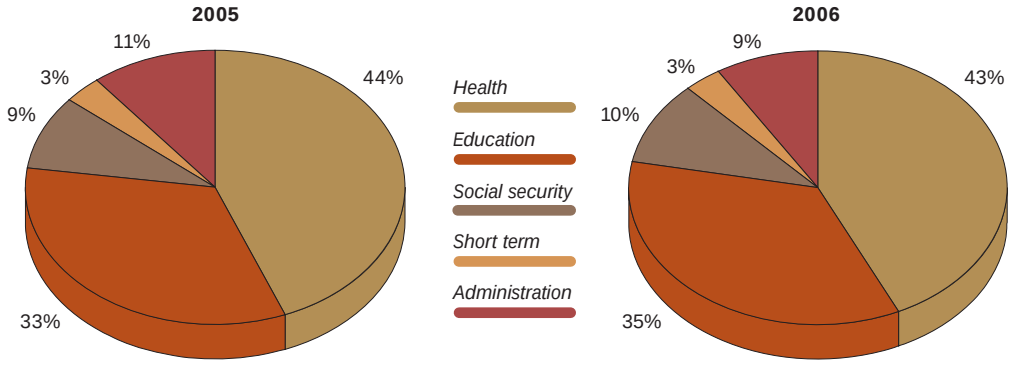
[4] We were not able to obtain information about other actors in the education sector so that this expenditure may be under-estimated.

[5] The rest is financed by: households, 1.8 per cent; private enterprise, 0.5 per cent; and others, 0.2 per cent of GDP:

Figure 5-8. Expenditures of the social protection system, 2005-2006



5.3.1 Health

Health is one of the most important sectors in the country given the catastrophic effect that HIV/AIDS has had on the population and the prospects for its development. There are pressing needs that the Government is not able to address so that it requires funds from its cooperating partners. Per capita government health expenditure in 2006 was USD13.1 and it was far from the recommended USD37.7 that would cover the cost of the basic health care package (BHCP) and the provision of the Highly Anti-retroviral Therapy (HAART) in Zambia (Nakamba-Kabaso et al., 2006).

Table 5-6 shows the participation of the main agents in the funding of health care.

Table 5-6. Health expenditure by funding source, 2004-2006

Agent	2004		2005		2006	
	K billion	% of GDP	K billion	% of GDP	K billion	% of GDP
Government	332.8	1.3	409.4	1.3	533.5	1.4
Donors	790.1	3.0	887.0	2.7	1090.9	2.8
Households	533.0	2.1	631.9	1.9	704.7	1.8
Employers	128.9	0.5	157.4	0.5	182.4	0.5
Others	91.9	0.4	70.2	0.2	84.0	0.2
Total	**1876.7**	**7.2**	**2156.0**	**6.6**	**2595.5**	**6.6**

Administration costs are included.

Source: UNZA & MoH (2006) for year 2004 and model projections for subsequent years

Donors are the main contributors to health expenditure and they transfer around 58.7 per cent of their health funds to the Government for the management of the sector budget. Households incur out-of-pocket expenditure which may have fallen a little after the gradual abolition of user fees in primary-care units in the rural areas started in April 2006. In 2007, the user fees in 54 rural districts were abolished and the GRZ recruited over 1,100 frontline medical personnel (MoFNP, 2008, p. 6).

The reorganization of the health system with the centralization of all health functions in the Ministry of Health and the dissolution of the Central Board of Health (CBoH) as provider may have enhanced the operational effectiveness of the sector.

Table 5-7. Education expenditure by funding source, 2004-2006

Source	2004		2005		2006	
	K billion	% of GDP	K billion	% of GDP	K billion	% of GDP
Domestic revenues	756.6	2.9	888.0	2.7	1277.1	3.3
Budget support	174.7	0.7	52.0	0.2	52.6	0.1
Project support	82.2	0.3	0.0	0.0	86.2	0.2
Households	389.5	1.5	511.3	1.6	458.1	1.2
Total	**1403.0**	**5.4**	**145.3**	**4.5**	**1874.0**	**4.8**
Donor financing:						
Total (1+2) in K billion	256.9		52.0		138.8	
As per cent of total	18.3		3.6		7.4	
As per cent of GDP	1.0		0.2		0.4	

ILO calculations based on MoH and MoFNP.

Education 5.3.2

The Zambian Government has supported education expenditure and applied part of the 'released' debt relief proceedings in the sector with the aim of eliminating illiteracy and improving the living conditions of the population. Since 2002, the Government provides free basic education in rural areas and this has had an important effect on enrolment rates. The net enrolment rate grew from 82.7 in 2004 to 95.7 in 2006. However, average completion rate of students for basic education was 43.1 per cent in 2006.

Total education expenditure reached 4.5 and 4.8 per cent of GDP in 2005 and 2006, respectively (see Table 5-7). The main financing agent is the Government which covered, with its own funds, 71 per cent of total education expenditure. Per capita government education expenditure reached USD25.9 in 2006.

We were not able to find historical figures for household expenditure, so that the fall in the household expenditures in 2006 is explained by the decrease in the number of private and church schools from 443 to 355 (MoFNP, 2007a, p. 88).

Social security schemes 5.3.3

Three main factors characterize the Zambian social security system: the low coverage of the statutory schemes, the relative youth of the main pension scheme (NAPSA) versus the huge demographic pressure of the old (closed) public schemes, and the preference of retirees for withdrawing lump sums instead of periodical pension payments. This means that the schemes do not fulfil their role of offering adequate income replacement at the onset of old age or other events that prevent people from continuing to work.

These features are reflected in the financial situation of the schemes. Table 5-8 presents the revenues of the statutory pension schemes and voluntary occupational schemes (see Appendix C, section 3, for a discussion about data). Contributions are the main source of income with around 60 per cent of total income. The statutory pension schemes with their relatively higher coverage – 21.4 per cent of paid workers versus 1.8 per cent of the voluntary schemes – have much higher contribution revenues. Statutory pension schemes collect an amount equivalent to 1.5 per cent of GDP while

Table 5-8. Revenues of the overall pension system, 2005-2006

	2005			2006		
	K billion	per cent total	% of GDP	K billion	per cent total	% of GDP
REVENUE						
Contributions	653	61.2	2.0	768	59.2	2.0
Statutory schemes	494	46.3	1.5	607	46.8	1.5
Employer	274	25.7	0.8	339	26.1	0.9
Employee	220	20.6	0.7	268	20.6	0.7
Occupational schemes	159	14.9	0.5	161	12.4	0.4
Employer	85	8.0	0.3	86	6.6	0.2
Employee	74	6.9	0.2	75	5.7	0.2
Investment income	232	21.8	0.7	253	19.5	0.6
Statutory schemes	134	12.6	0.4	161	12.4	0.4
Occupational schemes	98	9.2	0.3	92	7.1	0.2
Government transfer	182	17.1	0.6	277	21.3	0.7
Grand total	**1067**	**100.0**	**3.3**	**1298**	**100.0**	**3.3**

See Appendix D for individual financial information of the schemes. Appendices A and C explain the main data issues.

Table 5-9. Expenditures of the overall pension system, 2005-2006

	2005			2006		
	K billion	per cent total	% of GDP	K billion	per cent total	% of GDP
EXPENDITURE						
Benefits	384	62.3	1.2	527	75.4	1.3
Statutory schemes	286	46.3	0.9	442	63.2	1.1
Occupational schemes	99	16.0	0.3	85	12.2	0.2
Administrative & other	233	37.7	0.7	172	24.6	0.4
Total expenditure	617	100.0	1.9	699	100.0	1.8
Change of reserves	450		1.4	599		1.5
Grand total	**1067**		**3.3**	1298		**3.3**

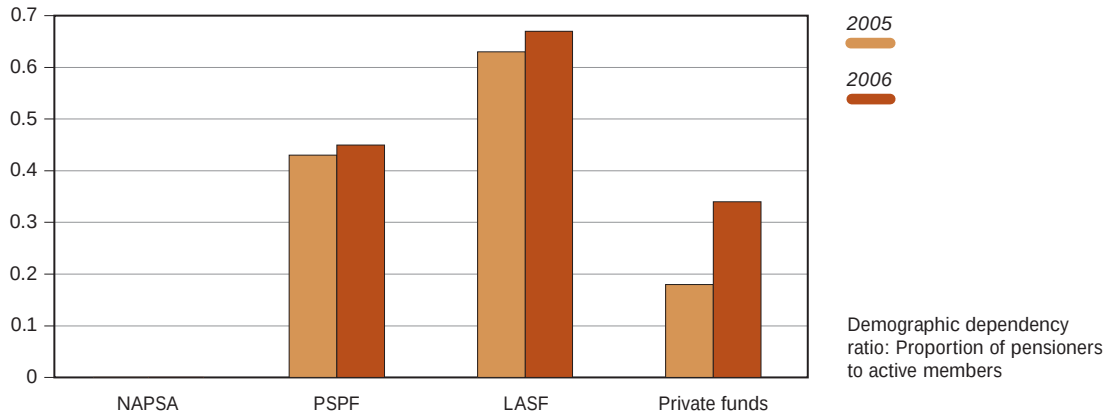
occupational schemes collect around 0.4 per cent of GDP. NAPSA is the scheme with highest coverage, and it collects around 49 per cent of total contribution income of the statutory pension schemes, or 0.7 per cent of GDP.

Table 5-9 shows the structure of the expenditure of the pension schemes considered all together. Benefit expenditure represents 62.3 and 75.4 per cent of total expenditure in 2005 and 2006, respectively. Statutory pension schemes provide the larger part of benefits, which reach around 1 per cent of GDP.

Administrative costs are quite high but decreased in 2006 with respect to 2005. The cash flow of the pension schemes is positive and this allows the schemes to build up reserves that in 2006 were 1.5 per cent of GDP.

Figure 5-9 shows the dependency ratio (i.e., the proportion of pensioners to active members) of the pension schemes. Among the statutory schemes, the LASF faces the highest dependency ratio, which complicates its financial situation because every year its benefit expenditure increases and its contribution collection falls as its

Figure 5-9. Demographic dependency ratio of social security schemes, 2005-2006



contributors grow older. Furthermore, this scheme is completely closed and has the lowest coverage (0.6 per cent of paid workers). Its administration costs are also the highest (in terms of percentage of contributions) but its reserves are still sufficient to cover benefit payments.

In contrast, NAPSA is the youngest scheme. The average age of its members is 35 years and its reserve ratio (i.e., proportion of fund reserves to benefit expenditure) reaches around 40 times (that the reserves cover the benefit expenditure). The financial outlook for NPS is healthy in the short to medium term on a cash flow basis, but in the longer term actions will be needed to keep income and expenditure (GAD Report, 29 August 2007) in line with one another. However, the ZNPF scheme will have exhausted its reserves before all scheme benefits will have been paid. This could have implications for the NPS if action is not taken to remedy the situation. Its administration costs represented 65 per cent of total expenditure in 2006.

Short-term and social assistance benefits 5.3.4

The Social Budget assesses how social priorities are addressed. In this section, two components are analysed: work-related benefits and social assistance. Figure 5-10 presents a possible classification of these benefits as of 2006.

Figure 5-10. Structure of social assistance benefits and other work-related benefits. 2006

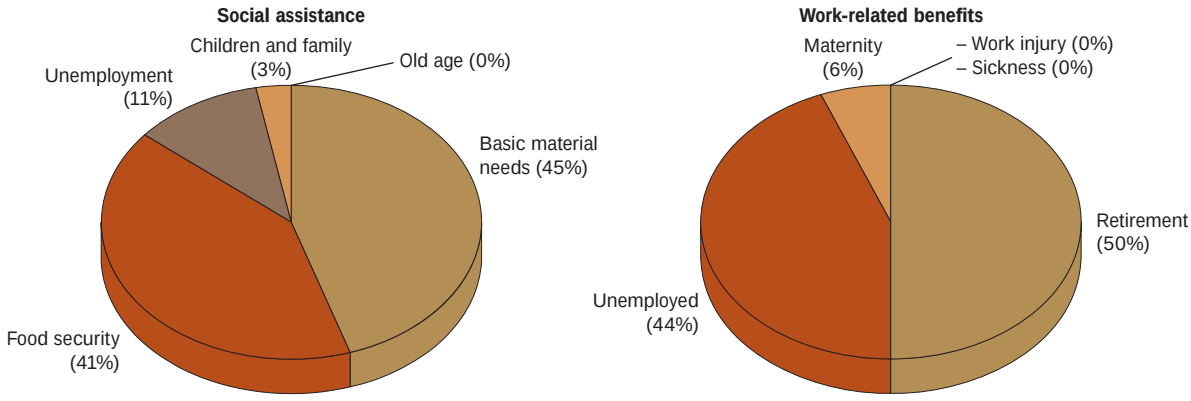


Table 5-10. Main social assistance programmes, 2005-2006

Contingency	Programmes	2005		2006	
		K billion	per cent total	K billion	per cent total
Basic material needs	Public Welfare Assistance Scheme, Social Cash Transfers	13	30.3	17	45.3
Food security	World Food Programme	21	48.4	15	41.1
Unemployment	Project Urban Self-Help	4	10.3	4	11.0
Old age	(Old age pensions)	0	0.0	0	0.0
Children and family	Street children, juvenile welfare, matero after care	5	11.0	1	2.7
Total		**43**	**100.0**	**37**	**100.0**

Social assistance expenditure reached around K37 billion in 2006 (see Table 5-10). Benefits related to the provision of basic material needs were more important with 45 per cent of the total. The benefits classified under that category are the PWAS, mainly financed by the GRZ, and the SCTS financed by donors.

The work-related benefits added up a total of K136 billion in 2006. The main two elements were the retirement benefit or severance pay that applies to those reaching age 55 years but without registration in NAPSA or other pension schemes. Severance pay, or the so-called 'redundancy benefit' is paid to those employees having worked the regular years and looking for a job. It represented 44 per cent of total work-related benefits. The amounts for these benefits were estimated based on our demographic and economic projections (see Appendix A, section 5b).

5.4 Challenges in the provision of social protection in Zambia

Zambia depends heavily on donor funds to finance the provision of social protection. This means that a reduction of external funds could affect the achievement of human development targets. In this context, the response of the GRZ has been to reallocate expenditure from non-social to social sectors and when the reduction has been unexpected, to cut investment expenditure. The implications of this latter decision are very important for the objective of reaching the poorest with adequate social and economic infrastructure and also to promote income-generating activities that require supportive infrastructure.

The Social Budget has shown that around 13.6 per cent of GDP are allocated to social expenditure, including education, and that the system has the resources to finance this expenditure and to build up reserves for the future. However, the question is who are protected and how they are getting these services. First, health and education are basic services that in theory are free to all Zambians, but households still cover a large part of the funds required to buy drugs, cover transportation costs and contribute with voluntary fees and materials. Indeed, household expenditure in these two items reaches 3.5 per cent of GDP, a high figure if we compare it with the amount spent by the GRZ: 4.0 per cent of GDP.

Second, social security schemes have very low coverage, which explains its low share in total revenues (2.0 per cent of GDP), but they are building up reserves.

However, these reserves are to finance future pensioners liabilities. The Government had arrears with pension funds (unpaid employers' and employees' contributions) and it has been paying them off over these years.

Third, the largest share of the population – those unable to spend out-of-pocket to cover unexpected contingencies – is left to social assistance. However, this sector provides benefits for only 0.1 per cent of GDP and the coverage is very low. The largest programme – the PWAS – still fails to cover the most destitute 2 per cent of the population.

What should be done? The major challenge to Zambia is certainly the health sector. This means that health care should be accessible which necessarily requires higher non-reimbursable financing. The possibility of using freed-up revenues consequential on further debt relief should be considered. However, this will only be possible if donors do not, at the same time, reduce their direct aid. The emphasis in the education sector seems adequate, although periodical assessments of quality are necessary – but this discussion is far from our work here.

Social assistance definitely needs priority attention because the large part of the population living in extreme poverty demands some protection from its Government. To do this, external funds will be necessary because although the Government is implementing tax reforms, the fiscal space is quite small by comparison with previous years. It is important for the cooperating partners to maintain or even increase aid, regardless of further debt relief, or because of a lack of confidence in the Government's capacity to execute, or because certain reforms of the public service are not taking place.

6

Previous chapters presented the existing arrangements to provide social protection in the country. This chapter presents the results of the projections carried out, based on the Social Budget model (see Appendix A) with respect to social protection schemes and simulations for specific modules.

First, the demographics and labour market projections are presented. The economic situation in the future is assumed stable with sustained rates of economic growth and decreasing inflation rates. Exogenous assumptions are in line with estimates of multilateral agencies and the Government, although a little more conservative.

The projections give special emphasis to the statutory social security schemes, the occupational pension schemes, health care, and social assistance. Some generalized assumptions were used to project education expenditure and work-related benefits (more details are given in Appendix A). In what follows, we focus on the presentation of revenues and expenditures projected for the period 2005-2025 and their impact on overall government accounts and the national Social Budget.

6.1 Demographic and labour force trends

Zambia has a young population that lives under the threat of the HIV epidemic. We based our assumptions on the life expectancy estimates of the UN Population Division, not on the official estimates, in order to have a conservative scenario (see details in Appendix B). In our base-case scenario, with a slow reduction in the total fertility rate from 6.0 to 4.9 children per woman, the population of Zambia almost doubles between 2000 and 2025: it grows from about 9.8 to 18.1 million inhabitants, which implies an average annual growth rate of 2.5 per cent. In the same way, the average age of Zambians increases from 20.8 to 22.1 years with a higher proportion of men than of women in the long term.

Future trends in social expenditure and financing

Table 6-1. Population structure by age group and sex, selected years

	2000	2005	2010	2015	2020	2025
Pre-working age (0-14), per cent	45.5	44.6	43.7	43.8	43.3	42.2
Working age (15-54), per cent	48.6	50.1	51.2	51.1	51.3	52.0
Post-working age (55+), per cent	5.9	5.3	5.1	5.1	5.4	5.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total dependency ratio *	1.06	0.99	0.95	0.96	0.95	0.92

* The number of people aged 0-14 plus those aged 55 and above, divided by the number of working-age people.

Source: ILO-POP calculations, base case scenario

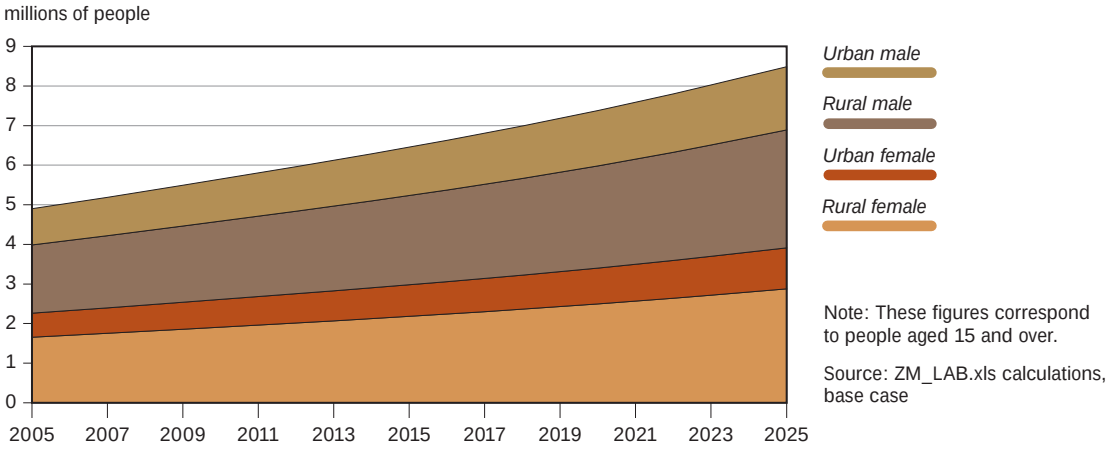
Table 6-1 shows the population structure considering the legal working age (15-54 years).[1] The youngest group reduces its share from 45.5 per cent to 42.2 per cent in a 25-year period which denotes that Zambia is indeed entering a period of demographic transition. The total dependency ratio decreases from 1.06 to 0.92 which means that the working-age population is larger than the youngest and oldest groups. Assuming that this group is healthy and employable, the country as a whole would be able to provide social protection to its population. However, there is uncertainty about how the health profile of the population would develop (the economic aspect will be included later).

The status quo projections for the labour force assumes that the behaviour of people in the labour market is the one reflected in the 2005 labour force survey, that is, the participation rates by cohort are constant over the projection period and the distribution of employment across cohorts varies in line with labour force growth. Hence, the main factor that affects the employment projections is the economic context.

Based on the macroeconomic assumptions for the status quo situation, total employment increases over time, which leads to a sustained reduction in the

[1] In addition to this legal feature, the threshold of 55 years (versus 60 or 65 years) is considered appropriate for analysing Zambia's demographic situation because of the extremely low life expectancy of Zambians (below 40 years at birth).

Figure 6-1. Labour force projections by sex and area of residence, 2005-2025



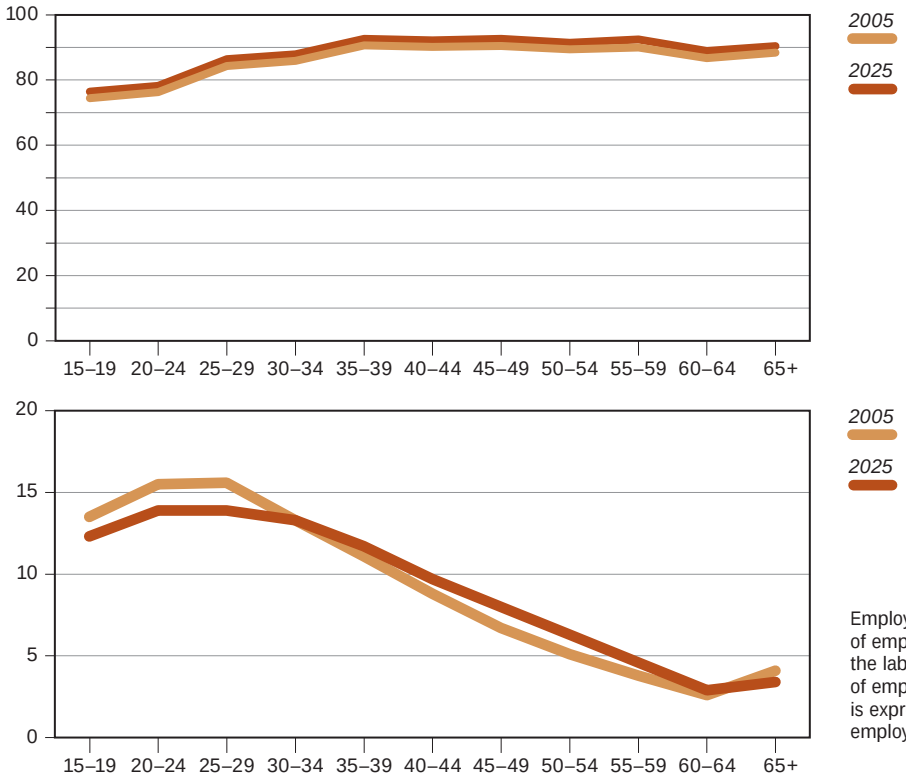
Note: These figures correspond to people aged 15 and over.

Source: ZM_LAB.xls calculations, base case

unemployment rate from 16.0 per cent in 2005 to 10.5 per cent in 2015. However, this positive trend changes towards the end of the projection period, when employment grows at rates lower than the labour force.

Looking at particular groups, the labour force participation rates grow slowly but the absolute number of people looking for a job increases steadily. From 2005 to 2025, the number of women in the labour market increases from 2.26 to 3.91 million and the number of men rises from 2.64 to 4.58 million. By area of residence, the labour force in rural areas grows from 3.38 to 5.85 million and the labour force in urban areas expands from 1.52 to 2.63 million. Figure 6-1 shows the evolution of the labour force over the projection period. It should be noted that the urbanization ratio was considered constant over the projection period (see Appendix B).

Figure 6-2. Employment rates and distribution of employment by age group, 2005 and 2025



Employment rate is the number of employed persons divided by the labour force. The distribution of employment for each age group is expressed as percentage of total employed persons (in all age groups).

Hence, the labour force is estimated to grow on average at 2.8 per cent per year. The number of employed persons resulting from the economic assumptions is distributed according to the age structure of the labour force. Therefore, the employment rates vary a little for each age cohort (and clearly are higher in 2025 than in 2005) but the participation of the age groups in total employment changes according to the ageing process of the population. As Figure 6-2 shows, for instance, those aged 15-19 represent 13.5 per cent of total employment in 2005 but 12.3 per cent in 2025, while those aged 50-54 represent 5.1 per cent in 2005 and 6.3 per cent in 2025. Because the behaviour of labour demand was assumed constant, the unemployment rates of younger generations are still high (as described in Chapter 1).

We have used two scenarios for employment. The first, scenario A (base-case) and the second, scenario B. Looking at the group aged 15-54, those of legal working age, the population grows on average at 2.7 per cent per year, the labour force at 2.8 per cent and employment at 2.9 per cent. Table 6-2 presents the labour force and employment figures for selected years and also the projections of employment by status considering two scenarios. Scenario A (base case) assumes that employment status (whether self-employed, paid employees, employers, and or family workers) during the projection period remains as it was in 2005. Scenario B assumes that there is an increase in the share of paid employees and parallel reduction in the share of unpaid family workers (see Appendix A, Section 2, for more details).

Under scenario B – a slightly larger number of workers to be covered by social security schemes is assumed than under scenario A. There will be around 140,000 more paid workers in 2025, although only 18 per cent of them will be in formal-sector employment.

Given that the majority of working-age people looking for a job are in the rural areas (the labour force in rural areas represents 67.4 per cent of the total), there is a strong reason to support more secure jobs in traditional sectors especially for the younger people (as seen in Chapter 1, they are more likely to be employed in rural areas).

Table 6-2. Labour force and employment indicators, selected years

	2005	2010	2015	2020	2025
Working-age population	5516462	6387639	7241664	8231826	9409114
Labour force	4416822	5124523	5850216	6657581	7604342
Total employment (1)	3687220	4534664	5205606	5827438	6515300
Employment rate (per cent)	83.5	88.5	89.0	87.5	85.7
Scenario A. No change in employment status					
Paid workers	2212336	2722388	3128739	3503365	3916077
Paid workers/total employment	60.0	60.0	60.1	60.1	60.1
Formal sector paid workers (2)	435588	536077	616679	691074	773006
Formal sector / total employment – (2)/(1)	11.8	11.8	11.8	11.9	11.9
Scenario B. Change in status: fewer unpaid workers					
Paid workers	2212336	2771977	3242541	3630662	4058266
Paid workers/total employment	60.0	61.1	62.3	62.3	62.3
Formal sector paid workers (2)	435588	545028	637243	714101	798749
Formal sector / total employment – (2)/(1)	11.8	12.0	12.2	12.3	12.3

Source: ILO calculations based on 2005 labour force survey and model projections.

Economic outlook

We drew up three scenarios (status quo, optimistic and pessimistic) around two main variables: real GDP growth and employment growth (see Appendix A, Section 3). The most likely scenario is the status quo with a GDP growth rate of around 6 per cent in 2007-2009 that decreases steadily to stay at around 3.0 per cent from 2016 onwards.

It is also possible that during the projection period the economy experiences a structural change, such as more investment in capital-intensive industries including the modernization of traditional activities (i.e., agriculture). MoFNP (2007b) indicates that the Government aims to 'diversify exports in the agriculture, manufacturing and tourism sectors... in addition to supporting the existing sources of growth like mining, construction, and wholesale and retail trade' (p. 2). Therefore, different scenarios regarding the elasticity of employment to GDP are also plausible.[2] The main assumptions of the status quo case are presented in Table 6-3.

Real GDP growth for 2006 was revised upwards from 5.9 to 6.2 per cent (CSO, 2007f). The Government is expecting growth of around 7 per cent for the next three years (MoFNP, 2007b). However, we consider that the external environment would not be as positive for Zambia as it was in 2006. Already the mining industry has experienced a certain slowdown since the first half of 2007. Furthermore, there is uncertainty about the effects of the world economic slowdown (led by the United States) and the response of investments to the tax reform. The optimistic scenario does incorporate growth rates of 7 per cent. Inflation picked up at the beginning of 2007 (it reached 12.7 per cent in March 2007) to close at 8.9 per cent in 2007 (CSO, 2007g). We project inflation levels that are decreasing in the long term but are still relatively high in the short term.

The real interest rate of the Central Bank of Zambia (BoZ) would slowly increase to reach 4.5 per cent, which implies that the nominal rate would decrease from 11.5 per cent in 2006 to 7.6 per cent in 2025. As seen in Chapter 1, the exchange rate is still somewhat volatile so that we prefer to be conservative and project a continuous depreciation of the Zambian Kwacha.

Table 6-3. Main macro-economic assumptions, base case scenario

	2007	2008	2009	2010	2011	2016	2025
Real Variables							
Real GDP (per cent change)	6.0	6.0	6.0	5.0	4.0	3.5	3.5
Employment (per cent change)	4.2	4.2	4.2	3.5	2.8	2.4	2.4
Implicit elasticity*	0.70	0.70	0.70	0.70	0.70	0.69	0.69
Prices							
GDP deflator (per cent change)	10.0	8.0	7.0	6.0	5.0	3.0	3.0
Inflation rate (per cent)	8.9	8.0	7.0	6.0	5.0	3.0	3.0
BoZ real interest rate (per cent)	3.0	3.0	3.0	3.0	4.0	4.5	4.5
Exchange rate (per cent change)	12.0	10.0	10.0	10.0	8.0	5.0	5.0

* Elasticity of total employment to GDP = Δ per cent employment / Δ per cent GDP

[2] The elasticity of employment to GDP indicates at which percentage the employment grows when the real GDP grows at 1 per cent. It refers to total employment, not necessarily formal-sector employment because the latter is more inflexible to expansive economic cycles while more flexible to restrictive cycles.

A point that deserves special attention is the evolution of wages. We consider that the official indicator called National Average Earnings (NAE) is not representative of the whole economy and has some measurement problems (see Appendix C, Section 2) shown by the high fluctuation from quarter to quarter. We assume that in the future, this indicator would follow real labour productivity – independently of the values that the reported NAE could have. The official NAE would be used for the adjustment of the pensions and insurable wages of the members of NAPSA (see Chapter 5). Based on the assumptions previously discussed (real GDP and employment), the growth rate in real wages would vary between 11.2 per cent in 2007 and 3.6 per cent in 2025, which means that it would always be above the inflation rate.

Trends in government accounts

As seen in Chapter 5, the Government heavily relies on donor funds. However, MoFNP (2007b) estimates that grants would decrease to reach around 3.6 per cent of GDP in 2010. We assume that the reduction in grants would be smaller and gradual and so that by 2011 grants would reach 3.8 per cent of GDP and by 2020, 3.5 per cent of GDP. The fiscal deficit (after grants) would fluctuate between 1.8 and 2.2 per cent of GDP between 2007 and 2025. We assume that the economic situation would remain stable and tax revenues would increase to the estimated 18 per cent of GDP in 2007 (which already implies a jump from the 17.2 per cent of GDP of 2006) to 19 per cent of GDP from 2020 onwards.

Figure 6-3 shows the evolution of resources mobilized by the central Government in Zambia under the assumptions explained in Appendix A (Section 6). Under the status quo scenario, the fiscal space slightly improves: total resources rise from 24 per cent of GDP in 2007 to 25.2 per cent in 2025. This is possible by keeping a fiscal deficit at the levels explained previously. The fiscal deficit would be higher than that projected for 2007 (1.2 per cent of GDP) because we assume that the Government is committed to expanding social expenditure and improves its capacity to implement investment plans (overcoming the problems faced in 2007).

Figure 6-4 shows a change in the distribution of resources. Non-social current expenditure decreases in relative terms and both social current expenditure and investment increase.

Social current expenditure (excluding pensions) goes up from 5.8 per cent of GDP in 2007 to 7.5 per cent of GDP in 2025. Social expenditure, including capital expenditure, grows from 6.5 to 8.8 per cent of GDP during the same period.

Figure 6-3. Evolution of resources managed by the central Government, 2005-2025 (per cent of GDP)

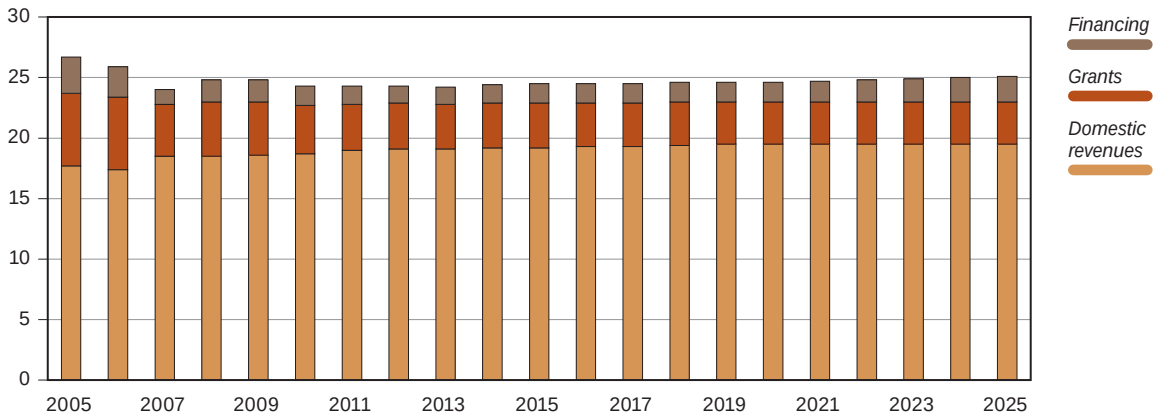
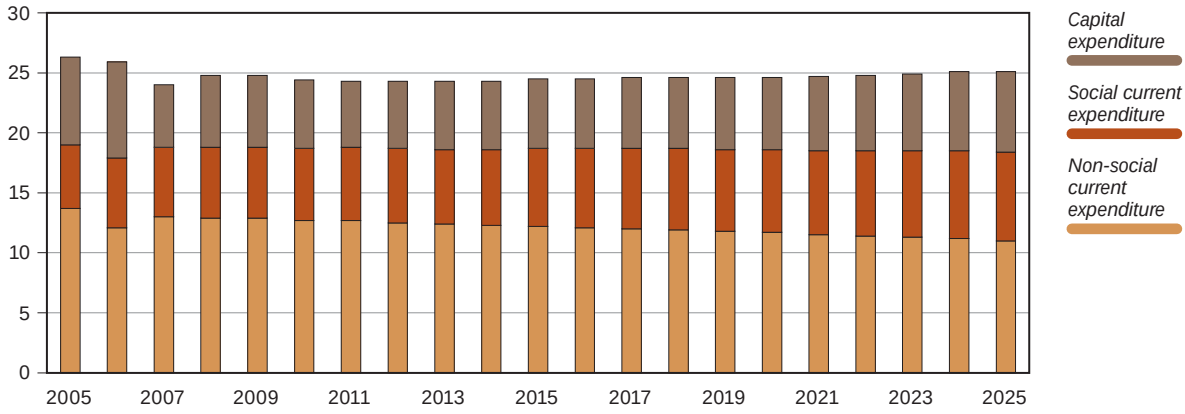


Figure 6-4. Evolution of expenditures of the central Government, 2005-2025 (per cent of GDP)



Regarding capital expenditure, it must be said that in 2006, foreign grants and loans financed 77.3 per cent of total capital expenditure. Hence, if donor grants increased, public investment in productive and social sectors would expand. This is not the case for Zambia (see Box 5-1 Chapter 5).

With regards to the operations of the general government, the overall result would be negative and fluctuate below 1 per cent of GDP. Central Government would provide resources to the social protection system in the country of around 10.8 per cent of GDP in 2025. By then, there would be a deficit of 0.9 per cent of GDP including grants or a deficit of 4.4 per cent of GDP excluding grants.

Financing the social protection system

During the projection period, the revenues of the total protection system would increase from 14.8 to 17.1 per cent of GDP (see Figure 6-5). The main contributor to this increase would be the central Government, shifting spending from non-social to social expenditure. The highest increase would be in the education sector. Central Government would increase its share in total education expenditure from 61.2 to 67.4 per cent over the projection period. The share of central Government in total health expenditure would rise from 19 to 36 per cent.

Figure 6-5. Main funding sources of the Social Budget, 2005-2025 (per cent of GDP)

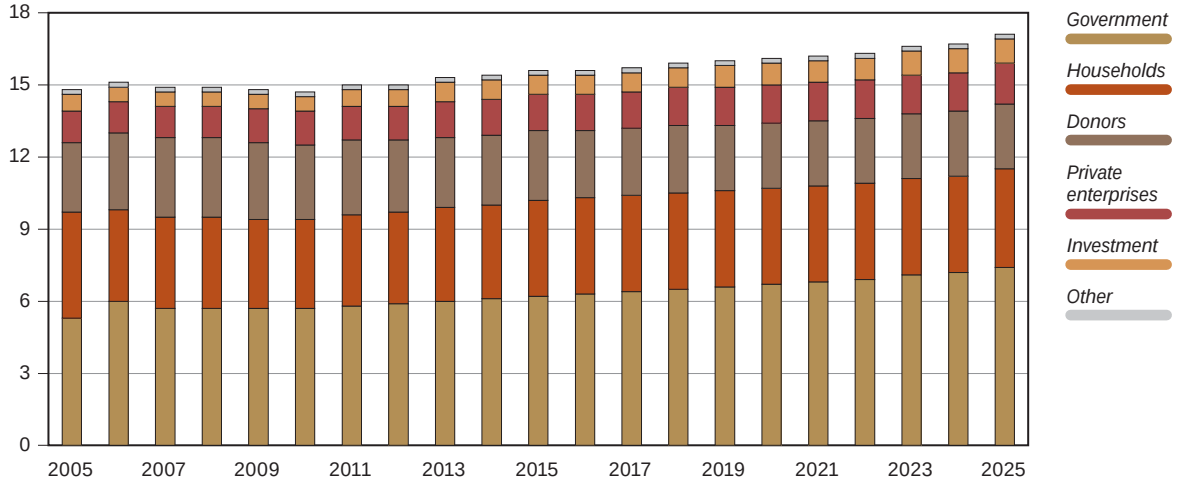
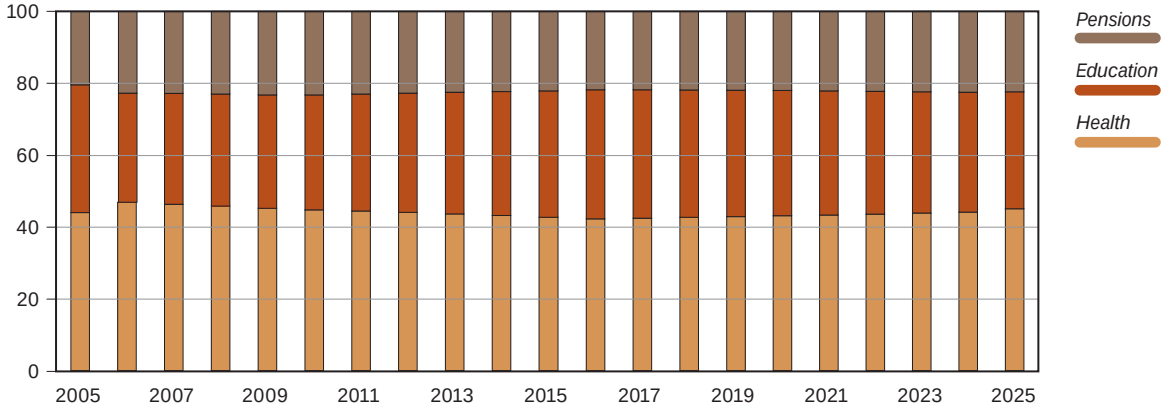


Figure 6-6. Distribution of household expenditure among sectors, 2005-2025 (percentage)



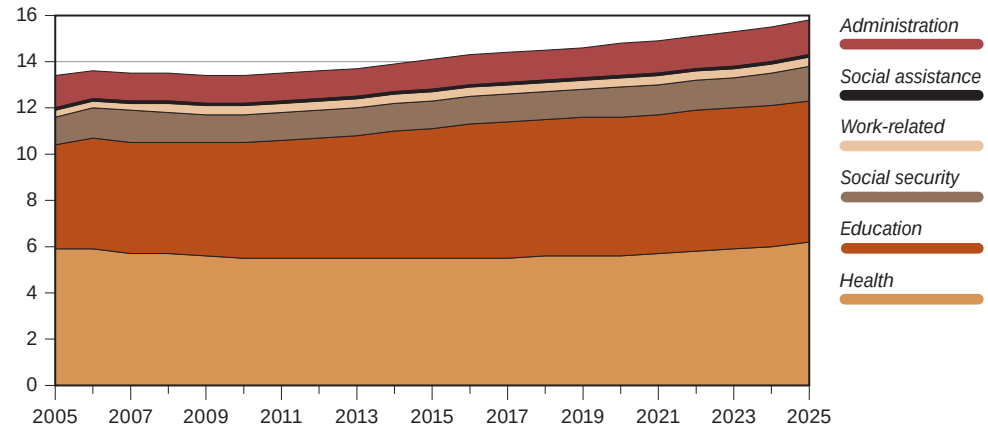
Households would be the second largest contributor to the social protection system. However, their share would fall from 29.8 to 23.8 per cent of total Social Budget. Around 45 per cent of their total social expenditure would be focused on health, as Figure 6-6 shows.

Donors would slightly reduce their funding to social expenditure from 2.9 to 2.8 per cent of GDP. In a context of decreasing external grants (to 3.5 of GDP in 2025), they would re-allocate their aid funds over time. The share of donor revenues to total revenues in the system would fall from 19.6 to 16.2 per cent.

Private enterprises would allocate more funds to social expenditure. In 2025, they would finance 7.8 per cent of total health expenditure, while their social security contributions would account for 5.0 per cent of total revenues in 2025 (versus 4.3 per cent in 2005). The Government would reduce its share in pension revenues as private employment would grow faster and the pension arrears would be cancelled at the beginning of the projection period.

Figure 6-7 shows the level and composition of total expenditure in the social protection system classified by social function (see discussion in Appendix A, Section 7). Social security benefits include pensions and the WCFCB fund. Work-related benefits include others such as maternity and paid sick leave, redundancy benefit, and so on. Under the status quo scenario, social assistance remains the least significant item, while social security benefits slightly increase (as the schemes age). A worrying aspect is the high administration cost of the system: between 1.2 and 1.5 per cent of GDP.

Figure 6-7. Level and composition of total social protection expenditure, 2005-2025 (per cent of GDP)



Health care: Growing needs and constraints on extending services

Health care expenditure would increase in real terms at 5 per cent annually. However, the share of health care expenditure in total social protection expenditure would decrease from 44 to 39.1 per cent, between 2005 and 2025, owing to the huge increase in education expenditure. The nominal per capita total health expenditure would increase from USD43.9 in 2005 to USD60.4 in 2025.

The main variable explaining the demand for health care services is the utilization rate (see Appendix A, Section 5c). Figure 6-8 depicts the evolution of utilization rates. The out-patient utilization rate grows from 1.017 to 1.516 consultations per person per year and in-patient utilization rate increases from 0.070 to 0.105 admissions per person per year, over the projection period.

The Government's efforts aim at extending a basic health care package offering services at different levels. Our projections follow this reasoning and especially the expansion of first-level health care to all Zambians. The demand for primary care (with increasing utilization rates) would be served by the Government, that would allocate 70.7 per cent of public health expenditure to this level of care in 2025, a much higher percentage than the 53.6 per cent of 2005.

In terms of composition of total government expenditure, personnel costs would increase from 29.4 to 33.9 per cent of the total during the projection period.

Figure 6-8. Intensity of utilization of health care services, 2005-2025

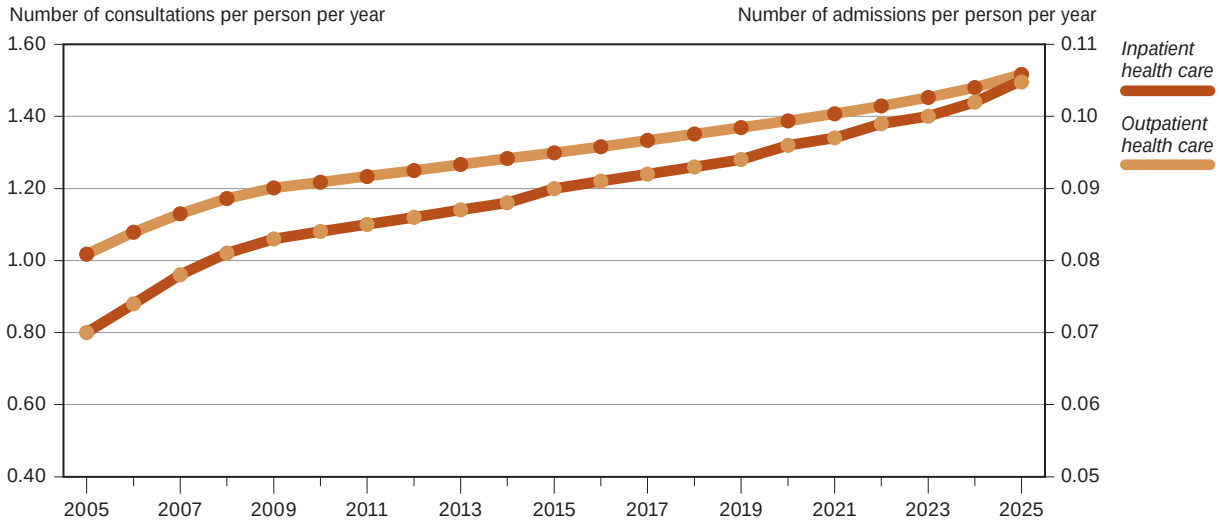


Table 6-4. Projection of health expenditure by source of financing, selected years

Source of financing	2007			2010			2015			2025		
	K billion	% total	% GDP	K billion	% total	% GDP	K billion	% total	% GDP	K billion	% total	% GDP
Government	636	21.4	1.4	993	23.9	1.5	2180	29.3	2.1	5056	36.0	2.6
Donors	1228	41.3	2.7	1616	38.8	2.4	2434	32.7	2.4	3889	27.7	2.0
Households	799	26.9	1.7	1106	26.6	1.7	1994	26.8	1.9	3563	25.4	1.8
Employers	212	7.1	0.5	315	7.6	0.5	601	8.1	0.6	1091	7.8	0.6
Others	96	3.2	0.2	134	3.2	0.2	238	3.2	0.2	444	3.2	0.2
Total	**2972**	**100.0**	**6.5**	**4164**	**100.0**	**6.3**	**7447**	**100.0**	**7.3**	**14043**	**100.0**	**7.2**

Table 6-4 shows the different sources of financing of total health expenditure in Zambia. As said earlier, the GRZ has increased its presence, taking the place of donors who had been the leading actors. However, Government budget constraints may affect extending health care services to more people.

Currently, primary health care is free in rural districts but drugs are not free and are quite expensive for people with low incomes. Private health insurance (in the table above under the heading 'others') only covers around 30,000 workers (UNZA & MoH, 2006, p. 23) or 1.4 per cent of paid workers in the country. Given this situation, the GRZ is studying the option of introducing a national health insurance scheme.

Education: Reaching all is not enough

Education expenditure would increase in real terms by 6.2 per cent annually, being the sector with the highest growth. Its share in total expenditure of the social protection system would rise from 33.2 to 38.5 per cent between 2005 and 2025.

Table 6-5 shows that resources from the three main funders would increase but those of the GRZ would expand more than the others. This is in line with the plans of the Government to build infrastructure and recruit and place more teachers (already 10,600 teachers in 2007).

A major variable explaining the development of education expenditure is the number of students enrolled in basic education, both in public and private schools. Figure 6-9 shows the baseline projections for basic education that includes grades 1 to 9 and children aged between 7 and 15 years.

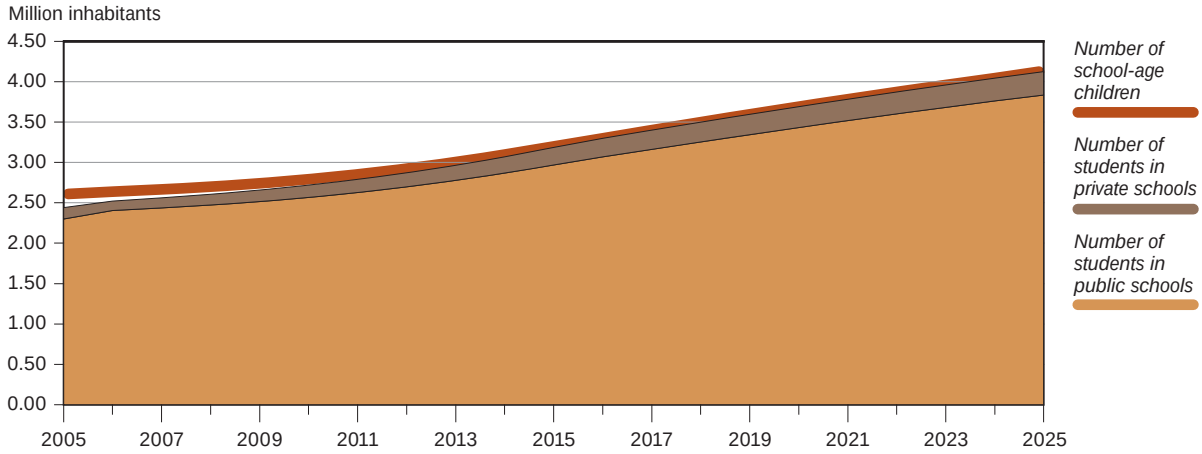
Net enrolment rate would rise to 100 per cent in 2016, from 95.7 per cent in 2006. Children enrolled in basic public schools would grow at a 2.6 average annual rate. However, this may prove to be optimistic as many children drop out of school to carry out productive activities as unpaid family workers. In 2006, the completion rate at grade 7 was 85.7 and the completion rate at grade 9 was 43.1 (MoFNP, 2007a).

Table 6-5. Projection of education expenditure, selected years

	2007			2010			2015			2025		
	K billion	% total	% GDP	K billion	% total	% GDP	K billion	% total	% GDP	K billion	% total	% GDP
Source of financing												
Government	1372	63.2	3.0	2111	64.0	3.2	3717	64.2	3.6	8006	67.4	4.1
Donors	268	12.3	0.6	393	11.9	0.6	643	11.1	0.6	1286	10.8	0.7
Households	532	24.5	1.2	792	24.0	1.2	1433	24.7	1.4	2579	21.7	1.3
Agent managing funds												
Government	1560	71.8	3.4	2399	72.8	3.6	4224	72.9	4.1	9099	76.7	4.7
Donors	80	3.7	0.2	105	3.2	0.2	136	2.3	0.1	193	1.6	0.1
Others	532	24.5	1.2	792	24.0	1.2	1433	24.7	1.4	2579	21.7	1.3
Total	**2173**	**100.0**	**4.8**	**3296**	**100.0**	**5.0**	**5793**	**100.0**	**5.6**	**11871**	**100.0**	**6.1**

These projections rely on simplified assumptions (see Appendix A, Section 5d).

Figure 6-9. School-age children and those enrolled in basic education, 2005-2025



Social security schemes: Relatively young but expensive

The scheme's financial situation depends on the development of numbers of contributors. Figure 6-10 shows the assumed coverage rates for the schemes during the projection period. The trend is positive only for NAPSA which is open to new contributors. Our assumptions are conservative (keeping coverage rate constant for the three statutory pension schemes) so that the coverage of NAPSA increases from 16.1 to 20.1 per cent of paid workers between 2005 and 2010.

Table 6-6 presents our projections of the main financial indicators. Given that we do not have exact information about the insurable earnings of all pension schemes, we defined the indicators as follows:

- The financial ratio is calculated as the average paid benefit divided by the national average earnings (NAE). This means that the denominator is the same for all schemes despite the fact that the mix of contributors is different. For instance, registered members of NAPSA work in both private and public sectors while that is not the case for LASF and PSPF.
- The demographic ratio is the number of pensioners as percentage of contributors (active members).
- The PAYG cost rate is the amount of total paid benefits as percentage of total wage fund which is calculated using the NAE and the total number of contributors. Similarly, the PAYG cost is the product of the financial ratio multiplied by the demographic ratio.

The situation of the statutory pension schemes and the voluntary occupational schemes is different. The former – considered all together but strongly influenced by NAPSA, the largest scheme – have a lower demographic ratio than the latter at the beginning because of the low number of pensioners, but over time this ratio increases. The opposite occurs with the occupational schemes: the number of contributors grows less than in previous years given the slowdown of the economy and their very low coverage rates.

In terms of individual schemes, the demographic ratio of NAPSA increases from 0.1 to 6.2 per cent, the one of PSPF grows from 60.4 to 167.2 per cent, and the one of LASF rises from 69.6 to 288.1 per cent, between 2007 and 2025.

Figure 6-10. Coverage rate of social security schemes as percentage of paid workers, 2005-2025

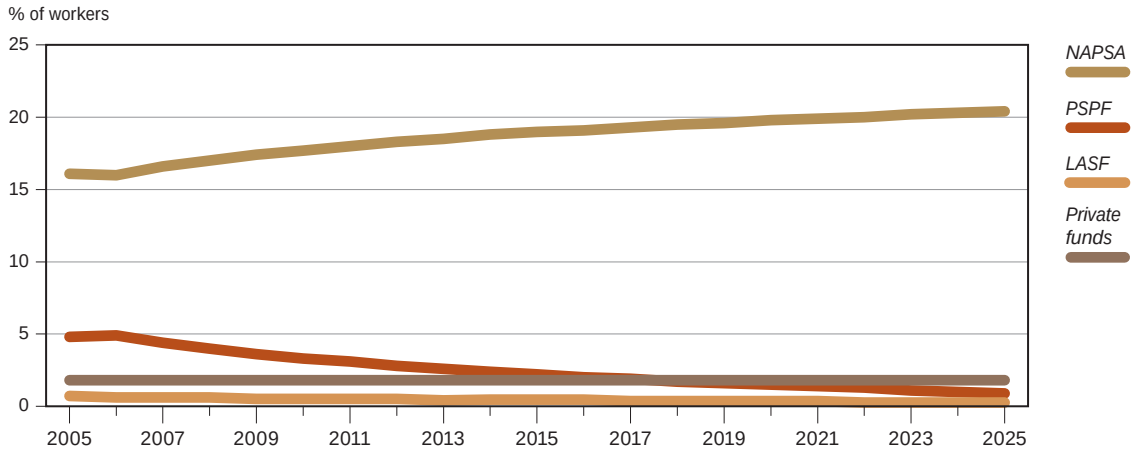


Table 6-6. Main indicators for pension schemes (in percentage), 2005-2025

	2007	2010	2015	2020	2025
Statutory schemes					
Demographic ratio	14.0	13.2	13.1	12.9	14.4
Financial ratio	40.1	33.8	32.7	37.4	42.3
PAYG cost rate	5.6	4.5	4.3	4.8	6.1
Occupational schemes					
Demographic ratio	33.5	34.5	38.5	36.7	33.0
Financial ratio	34.5	31.8	29.9	28.8	27.9
PAYG cost rate	11.6	11.0	11.5	10.6	9.2

'Statutory schemes' includes NAPSA, LASF and PSPF. Occupational schemes are over 200 private funds.

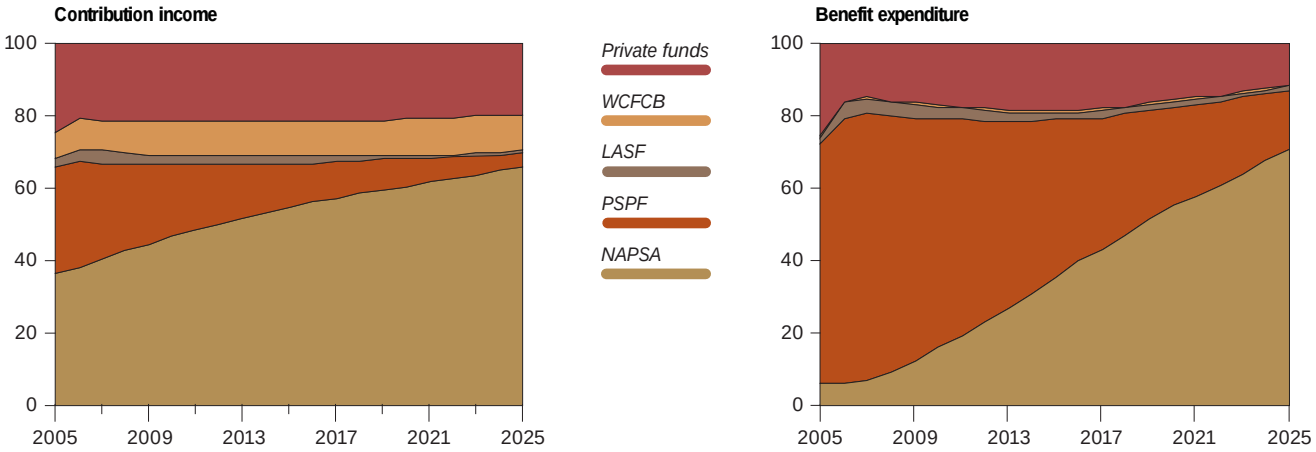
The financial ratios follow the demographic trends with a higher contribution base at the beginning and a higher growth rate in the paid benefits at the end of the projection period, except for the occupational schemes because the increase in the number of contributors was not so large in the first years.[3]

Finally, the PAYG cost rate of the statutory schemes grows from 5.6 per cent in 2007 to 6.1 per cent in 2025. This rate would continue increasing over time as the contributors age. Assumptions in the macro-environment could delay this trend if, for instance, Zambia experiences a long period of economic expansion or formal activity increases so that the number of contributors would be higher.

However, as a whole the social security schemes (statutory and occupational pension schemes) look young and would keep building reserves over the projection period. Reserves would rise from 7.1 per cent of GDP in 2007 to 16.0 per cent of GDP in 2025. By then, investment income would represent 31.1 per cent of total income of the social security funds and 69.1 per cent of total benefit expenditure. This is dependent on NAPSA taking necessary action to maintain income and expenditures

[3] The projections used for the occupational schemes did not follow the 'cohort-component' method (see Appendix A, Section 4c), which could affect the results.

Figure 6-11. Composition of contribution income and benefit expenditure, 2005-2025 *



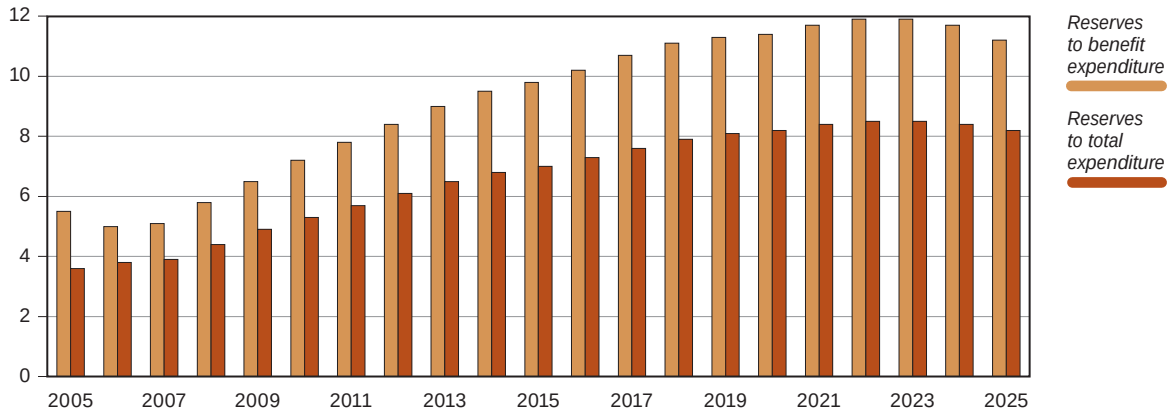
* In contrast to Table 6-6, this figure does include the WCFCB. Our projections assume that the fund membership follows the one of NAPSA.

in line with one another for NPS and early action being taken to be able to meet liabilities for the ZNPF.

Figure 6-11 shows the composition of the main items of the income statement of the pension funds and WCFCB. Clearly, NAPSA increases its share over time, while the PSPF is still an important player in 2025, collecting 5.9 per cent of total contribution income and paying off 19.1 per cent of total benefits. LASF, which is a closed scheme, has a very low contribution income by 2025: around 0.01 per cent of GDP, versus 1.35 per cent of NAPSA and 0.08 per cent of PSPF.

As already stated, administrative costs are high. Around 21.8 per cent of revenues were allocated to these costs in 2007. Figure 6-12 plots the development of two indicators of the reserve ratio: one considers the benefit expenditure, and the other the total expenditures. This makes clear the burden that administration costs still represent for the social security system (status quo scenario). It should be noted that the reserve ratio considering total expenditures increases from 3.6 in 2005 to 8.2 in 2025, although as from 2020 there is a slowdown linked to demographic trends.

Figure 6-12. Composition of contribution income and benefit expenditure, 2005-2025 (percentage)



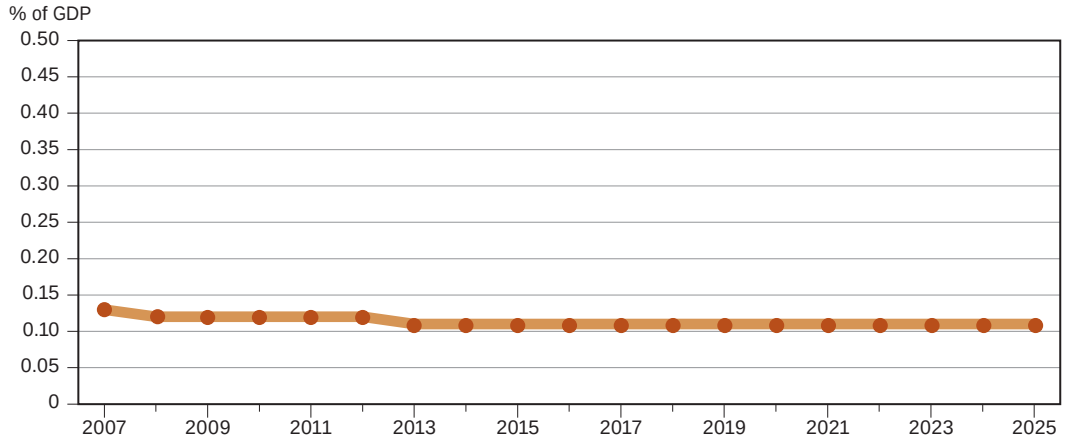
Work-related benefits and social assistance: Failure to reach

Work-related benefits and social assistance represent a very low percentage of total expenditure in the social protection system. They scarcely reach 3.5 per cent of total expenditure in 2025. They increase slightly from 0.4 to 0.5 per cent of GDP between 2005 and 2025 (see Figure 6-13). The main reason for this small increase is the low level of formality in the economy.

Non-contributory social assistance: how to reach those in need?

Currently, existing social assistance programmes represent only 1.5 per cent of all social protection expenditure (including health) and slightly over 4 per cent of all non-health social protection expenditure. Taking into account such programmes are aimed at alleviating poverty, and more than half of the Zambian population is classified as very poor, this allocation is certainly far from sufficient. Unless there is a substantial policy change, this expenditure will not increase and will remain over time at a level well below 0.2 per cent of GDP (see Figure 6-13).

Figure 6-13. Evolution of expenditure on social assistance benefits, 2005-2025 (status quo)



In recent years there has been a slight increase in social assistance expenditure due, to a large extent, to increased donor funding rather than greater budget allocations. The share of donor-funded social assistance has increased and may increase even more if plans to scale up cash transfer pilot schemes into a national programme are accepted. However, for there to be long-term sustainability, such financing will need to be gradually taken over by budgetary allocations.

Although a thorough analysis of policy options to extend social protection coverage will be the subject of the second phase of our project, it is by no means too early to begin consideration of the policy developments which will be needed to address poverty and the needs of vulnerable groups. We therefore present a set of initial and approximate estimates to illustrate the scale of additional financing that would be needed.[4]

[4] We do not cost separately here disability pension (persons with disabilities are, according to LCMS2004 about 2 per cent of Zambian population) but such a benefit should also be considered as one of the component of the future basic social protection system.

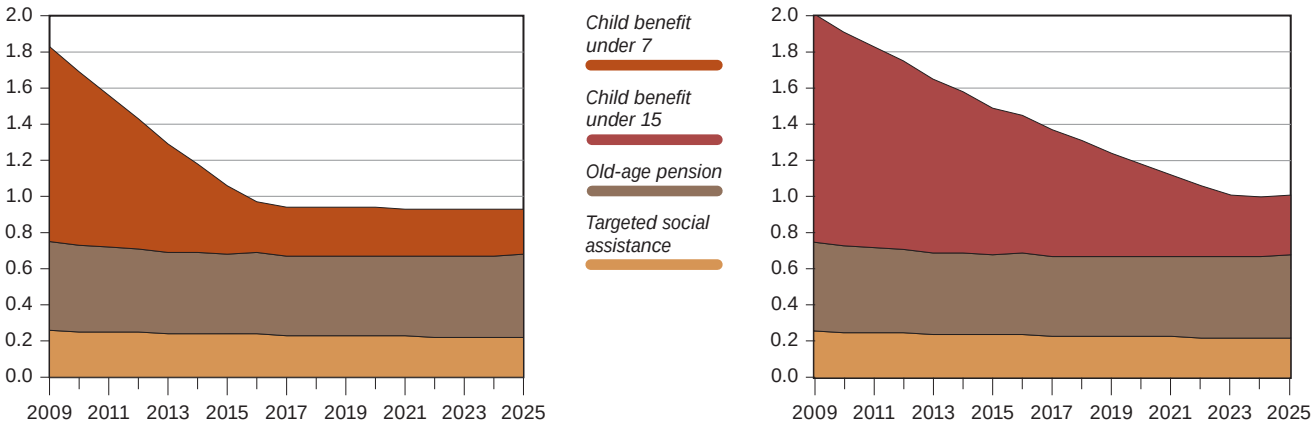
We looked at the future costs of three hypothetical benefits targeted at three specific groups of beneficiaries:

- a targeted social assistance scheme: vulnerable households and covering 10 percent of all households. We have assumed that this scheme and other simulated schemes will cover 100 per cent of the target group in the first year (2009). We have assumed a benefit per household equivalent to the average amount of benefit paid within the current cash transfer pilot schemes and adjusted annually for inflation (estimated to be K 52,725 per household per month in 2009);
- a universal pension for all persons aged 60 and over, starting with a monthly amount of K 60,000 in 2009;
- a child benefit with two variants:
  - paid to the first child up to age six, K 30,000 per month;
  - paid to the first child up to age fourteen, K 30,000 per month.

If fully implemented in 2009, such a targeted social assistance scheme would cost (without taking into account administration and delivery) K 154 billion. A pension for the elderly would cost K 291 billion – nearly twice as much due to a much greater number of beneficiaries. It is assumed for child benefit that in the first year of implementation all families with children will receive the benefit (at the level for one child); whereas, from then onwards claims will be paid only upon the birth of the first child. At the start the number of beneficiaries and the cost would be significantly higher than the two other programmes but would decrease quickly over the following years. Figure 6-14 shows benefit costs of all three hypothetical schemes until 2025 presented as percentage of GDP per capita.

These results should not be treated as policy recommendations, which should be developed as a result of a national debate involving all the stakeholders. These results illustrate that by allocating resources equivalent in the longer run to not more than 1.5 per cent of GDP, it would be possible to build the foundations of a social protection system.

Figure 6-14. Costs of benefits provided by hypothetical non-contributory schemes (per cent of GDP)



Simulations

We have carried out a sensitivity analysis of our economic assumptions about GDP growth and employment growth. We have used two alternative scenarios to the status quo (scenario (1)). The optimistic scenario (2) with GDP growth rates of around 7 per cent that would decrease very slowly to reach 5 per cent in 2025. The pessimistic scenario (3) with a GDP growth rate of 4 per cent that falls sharply to 2 per cent and continues falling to reach zero in the last years of the projection period. Employment growth follows economic performance with an elasticity of around 7 per cent (see Appendix A, Section 3).

Both scenarios are extreme but allow us to check the consistency of our model. Table 6-7 presents a comparative summary of results under the three scenarios.

The main changes are in respect of government accounts. In the optimistic scenario, the Government probably would not need to intervene as actively and could delegate the provision of social protection to other actors. The funding of the system would not face problems in the medium term because the expansion of employment would ensure the basis for contributory benefits. In the pessimistic scenario, the Government would need to mobilize more resources to act in the economy and this would probably imply higher fiscal deficits. The funding of the schemes would be at risk because households and private employers would be affected.

It is necessary to include some feedback mechanisms between the economy and the expenditure decisions of the Government (which could expand non-social expenditure to reactivate the economy and also focus on social assistance with donor support), the behavioural responses of the population (which could increase its labour force participation rate given the growing labour demand) and the functioning of the labour market (e.g., in the short term, wages may not follow real labour productivity).

Table 6-7. Results under three scenarios, 2007 and 2025

Changing	2007	2025		
		Scenario 1	Scenario 2	Scenario 3
GDP growth (per cent)	6.0	3.5	5.0	0.0
Employment growth (per cent)	4.2	2.4	3.4	0.0
Results				
Mobilized resources by GRZ (per cent of GDP)	24.0	25.2	25.0	25.9
Social current expenditure by GRZ (per cent of GDP)	5.8	7.5	7.0	8.9
Overall fiscal result (per cent of GDP)	-1.2	-2.2	-2.0	-2.9
Social Budget				
Total health expenditure (per cent of GDP)*	5.7	6.2	5.1	9.7
Total education expenditure (per cent of GDP)	4.8	6.1	5.8	7.1
Social security benefits (per cent of GDP)*	1.4	1.5	1.4	1.8
Other benefits (per cent of GDP)	0.5	0.5	0.5	0.6
Administration (per cent of GDP)	1.2	1.5	1.5	1.9
Overall result of the Social Budget (per cent GDP)	1.5	1.3	1.7	0.6
PAYG contribution rate (per cent) – 3 statutory schemes	**5.6**	**6.1**	**4.8**	**10.3**

* Excluding administration costs.

Implications

This chapter has presented the main results of the Social Budget modelling based on recent trends in the country. Zambia seems to be starting a demographic transition with an increase in the dependency ratios and, consequently, higher pressure on the working-age population to support children and elderly people. In the context of the HIV pandemic, the role of the State in promoting good health and living conditions is paramount.

A positive trend is expected with sustained economic growth that fuels employment over time. However, poverty alleviation and inequality reduction are not direct consequences of economic growth. Hence, the Government needs to implement some redistributive measures. It is attempting to do that with the current tax changes but the results are yet to be seen as this could affect investment decisions. However, even assuming a non-negative effect on investments, this positive economic environment would not be sufficient to provide jobs to unskilled young people in rural areas. Income-generating strategies need infrastructure and the Government needs resources for this. The projections indicate that the overall mobilized resources would not exceed 25 per cent of GDP, which is insufficient (and lower than the 26 per cent managed in 2004-2006 and the 30 per cent managed in 2001-2003).

The assumptions used in this version of the Social Budget are quite conservative and showed the GRZ has little maneuverability with the restricted funds available. However, the Government can redistribute some resources and then increase its social expenditure from 5.8 per cent of GDP in 2007 to 6.2 per cent of GDP by 2025. With the cancellation of pension arrears by 2010, the Government could really focus on extending social protection to the poorest. In this respect the support of donors is crucial.

The next step is to refine the model and where possible update information; and, to go on to develop a number of comprehensive policy options in consultation with the tripartite constituents and the cooperation partners. The intention would be to cost these options over a 15-year period and up to 25-year period for the social security schemes and to make recommendations as to their financing. As seen in this chapter, a universal old-age pension is affordable. Other alternatives can be tested as well.

7

This report has sought to present the results of the Social Protection Expenditure and Performance Review (SPER) and Social Budget (SB) for Zambia, undertaken in the framework of the ILO-DFID partnership on extending social protection and coverage for all as a means to reducing poverty. It has sought to describe the existing situation in Zambia for social protection generally and to undertake a number of status quo projections and to offer some preliminary options.

Poverty

Exploring the linkages between poverty and the social and economic conditions experienced by the population in Zambia, poverty was found to be associated with 'individual' characteristics such as disability, early or advanced age and poor health; 'social' attributes such as low levels of education, single-parenthood and widowhood; and 'economic' factors such as type of work and employment conditions. Almost half of the population was found to be 'extremely poor' living below the official poverty line, and almost two-thirds were found to be 'moderately poor', living below the basic needs poverty line (BNPL), implying that social protection measures will eventually have to be considered for the majority of the population.

Starting from the fact that half of Zambia's population is extremely poor (being unable to afford even basic food items on a sustainable basis), it was found that:

- Households headed by the elderly and by women are the most likely to experience extreme poverty. In the poorest decile 25 per cent of households were headed by elderly persons and 27 per cent by women.
- Households headed by persons with less than a secondary school education were also more likely to be extremely poor, with only 33 per cent of extremely poor households headed by a person with a secondary-school education.
- The majority of extremely poor households in Zambia have six or more members most of whom are children. Children alone account for nearly half of the extremely poor population.

Conclusions

- Nearly one-fifth of all children are orphans, most having lost their parents to HIV/AIDS. Most orphans are partial orphans and live with their mothers. Orphans experience higher poverty rates than non-orphan children, with full orphans (having lost both parents) experiencing the highest poverty rates. Orphans account for 10 per cent of the poorest population decile.
- There are disproportionately more women and disabled persons in the poorest decile. The vulnerability of individuals in this group is also evident in their higher exposure to unsafe sources of drinking water, lower likelihood of consulting a health professional in case of sickness or injury, and their higher susceptibility to chronic illness.
- Children in the poorest population decile are much less likely to attend school and, when they do, they begin at an older age.
- Although the poorest individuals seem to be the most economically active, almost all work in the informal economy, with four-fifths of workers in the poorest population decile based in traditional agriculture, and the forestry and fishing sectors.

Even among the 'majority poor', it is possible to distinguish the poorest and most vulnerable individuals. This includes especially those individuals found within the first and second expenditure deciles, whose monthly expenditures were on average only 20 per cent and 40 per cent of the BNPL, respectively. Altogether these two groups, representing 20 per cent of the population, include a higher-than-proportionate number of children aged under 15, elderly aged over 59 and orphans. Households in the two poorest deciles are also more likely to be headed by a woman or by a widowed person, compared with those in higher income deciles.

The Labour Market

The economy as a whole has a high degree of informalization, with 83 per cent of economically active persons being either unpaid household workers or self-employed, and 88 per cent of all those in paid employment (as self-employed or employees) with no social security entitlements (majority) or entitlements. That huge gap in coverage cannot be filled by existing non-contributory social assistance: as it is, existing social assistance programmes reach under 4 per cent of the population. There is hardly any coordination of these social assistance programmes, and thus the very scarce resources allocated to social protection (see below) are not used very effectively.

Non-Contributory Schemes

Although the existing social assistance programmes target a wide range of poor and vulnerable groups, including those affected by hunger, extreme poverty, sickness, old age, orphan-hood, disability and death of family members, the programmes fail to cover most persons within such groups, because of excessively narrow targets, inaccurate targeting and low and inconsistent levels of benefits and hugely inadequate funding. Additionally, the award of benefits has no legislative base and thus people have no well-specified rights to claim benefits when they need them or to appeal when they are refused. As a result of all this, taking the estimate of the poorest 10 per cent of the population who are most in need of social assistance, for example, around 900,000 highly vulnerable individuals miss out on PWAS assistance each year, while a similar number of vulnerable farmers miss out on the Food Security Pack. Also excluded are the 400,000 persons estimated to qualify for cash transfers, and 500,000-750,000 informal-sector unemployed workers not covered by existing work-for-aid schemes.

Major challenges to extending the coverage of social assistance programmes are thus the following:

- The government-funded programmes are under-funded and deliver low and inconsistent benefits. On the other hand donor-funded programmes are delivering more substantial benefits but cover only pilot areas, or small sections of the population, or are operated for limited periods.
- Targeting is in most cases decided on the basis of available funds, with little reference to the situation of poverty and vulnerability. Present community-based targeting methods may also lead to uncontrolled inclusion and exclusion errors.
- Insufficient and erratic funding for established government programmes compromises their ability to meet targets and extend coverage. On the other hand, donor-funded programmes are also uncertain and in many cases do not leave behind lasting arrangements for social protection.
- Until now, most government-funded programmes have failed to make adequate arrangements for monitoring and evaluation, limiting the extent to which design and implementation elements can be improved. The good news is that awareness of that fact has been raised.

Contributory Schemes

The coverage situation is different for those who have employee status: only 20 per cent of them are totally in the informal economy. But, on the other hand, only 22 per cent of them are in a totally formal environment. The majority work with a higher or lower degree of informality, enjoying some of the entitlements resulting from labour legislation but never all of them, including coverage by contributory social security. With respect to this group, formalization of their status is possible and does not have to take long.

It requires institutional efforts focusing on enforcing existing legislation, raising awareness of this legislation among employees and employers – apart from introducing new legislation wherever necessary. Some of these efforts are the responsibility of existing social security institutions: the data on membership provided by the pension schemes suggest that they cover around 79 per cent (550,000 out of about 700,000) of their target group – that is all those aged 15-55 years who are in employment. However, the results of the Labour Force Survey suggest that in fact effective coverage by these schemes may be lower.

These institutions and their supervisory bodies must increase coordinated efforts on more effective enforcement of obligations to register and contribute to social security, and also on raising employees' and employers' awareness of their social security rights and obligations. It is also important to create stronger incentives to contribute, by developing both well-designed social insurance policies and good governance of social insurance schemes.

For these objectives to be achieved by the contributory social insurance system in Zambia, the system needs to be significantly strengthened. Issues of equality and equity should be addressed in the respective legislation. Existing legislation should be revised to ensure gender equality. There is also a need to consolidate good governance principles into the management and supervision of social security institutions.

Health Care

Currently, Zambia's health profile is characterized by a very high mortality among children and women of reproductive age. Life expectancy at birth is only 40 years. Leading causes of death are infectious diseases, many of which could be prevented or treated with available medical technologies. Unfortunately, access to either effective technologies or preventive care is a major problem for most Zambians. Constraints on both supply and demand prevent many interventions reaching the people who need them.

Zambia still has a limited health care infrastructure which is unequally distributed across the country. Further, the distribution of the most important resource (health staff) is perhaps the most significant constraint on achieving greater health care coverage. Many preventable deaths occur because patients are too isolated from trained medical personnel who could save their lives.

The positive news is that the level of investments in the health sector has increased considerably since 2000, largely due to donor inflows. Many of the donor-funded programmes are targeted at priority diseases such as HIV/AIDS, TB and malaria and are making considerable progress in expanding health care coverage. However, health care expenditure is still skewed towards urban areas where most of the cost input (labour) is concentrated. The quality of most health infrastructure in rural areas falls below what is recommended and, in some cases, necessary to deliver life-saving interventions.

Importantly, the share of total health care resources mobilized through out-of-pocket payments is high. Private payment as source of health care revenue offers the least protection to the population, and hurts the poorest the most. There is strong evidence in Zambia that private payments have constrained access to care and offered no protection from the impoverishing health care expenditure. User fees are being phased out. The Ministry of Health is exploring the option of social health insurance, but which would most probably cover only those in the formal economy, at least at the beginning. That option can be supported only if such an additional source of financing would not crowd out current financing from general taxation and donor funds aimed at ensuring affordable basic health care services to everybody, particularly the poorer people.

Social Budget

Expenditure on health care dominates the social protection budget of Zambia surpassing 4 per cent of GDP, due to foreign financing. Non-health social protection expenditure is dominated by expenditure on government employees' pensions – at about 1 per cent of GDP. Expenditure on social security benefits to private-sector employees is still very low, as the contributory scheme is young and not many members are as yet entitled to benefits. However, NAPSA reserves are growing every year by more than 0.5 per cent of GDP and have already surpassed the level of 3 per cent of GDP but are expected to decrease from 2025 on current assumptions. A small group of beneficiaries of occupational pension schemes receives annually about 0.3 per cent of GDP in different benefits. Reserves of the occupational pension scheme surpassed another 3 per cent of GDP. At the same time budget allocations to all main government- and donor-funded non-contributory social assistance programmes is at 0.165 per cent of GDP. This seems barely sufficient in a country where half the population is said to live in extreme poverty.

Zambia depends heavily on donor funds to finance the provision of social protection. This means that any reduction in external funds would affect the achievement of human development targets. When this has happened previously, GRZ has responded by reallocating expenditure from non-social to social sectors and, when the reduction has been unexpected, to cut investment expenditure.

The Social Budget has shown that around 13.6 per cent of GDP is allocated to social expenditure, including education, and that the system has the resources, based on the existing status quo, to finance this expenditure. However, there are serious questions concerning equitable access to services and benefits:

- First, health and education are basic services that in theory are free to all Zambians, but households still cover a large part of the costs of buying drugs, covering transport costs and contributing with voluntary fees and materials. Indeed, household expenditure on these two items reaches 3.5 per cent of GDP, a high figure if compared with the amount spent by the GRZ (4.0 per cent of GDP).
- Second, social security schemes have very low coverage (which explains its low share in total revenues – 2.0 per cent of GDP) but they are building up reserves. However, these reserves are to finance the pensions of future retirees. Importantly, there are Government had arrears outstanding to the pension funds (unpaid employers' and employees' contributions) which it has been paying off gradually.

- Third, social assistance is the mechanism to provide for the majority of the population, i.e., those who cannot afford to make out-of-pocket payments to cover unexpected contingencies. However, this sector provides benefits for only 0.1 per cent of GDP and coverage is very low. The largest programme – the PWAS – still fails to cover the most destitute 2 per cent of the population.

Options

In recent years there has been a slight increase in social assistance expenditure due, to a large extent, to increased donor funding rather than greater budget allocations. The share of donor-funded social assistance has increased and may increase even more if plans to scale up cash transfer pilot schemes into a national programme are accepted. However, for there to be long-term sustainability, such financing will need to be gradually taken over by budgetary allocations.

Although a thorough analysis of policy options to extend social protection coverage will be the subject of the second phase of our project, it is by no means too early to begin consideration of the policy developments which will be needed to address poverty and the needs of vulnerable groups. We have therefore presented a set of initial and approximate estimates to illustrate the scale of additional financing that would be needed.[1]

We looked at the future costs of three hypothetical benefits targeted at three specific groups of beneficiaries:

- a targeted social assistance scheme: vulnerable households and covering 10 percent of all households. We have assumed that this scheme and other simulated schemes will cover 100 per cent of the target group in the first year (2009). We have assumed a benefit per household equivalent to the average amount of benefit paid within the current cash transfer pilot schemes and adjusted annually for inflation (estimated to be K 52,725 per household per month in 2009);
- a universal pension for all persons aged 60 and over, starting with a monthly amount of K 60,000 in 2009;
- a child benefit with two variants:
  - paid to the first child up to age six, K 30,000 per month;
  - paid to the first child up to age fourteen, K 30,000 per month.

If fully implemented in 2009, such a targeted social assistance scheme would cost (without taking into account administration and delivery) K 154 billion. A pension for the elderly would cost K 291 billion – nearly twice as much due to a much greater number of beneficiaries. It is assumed for child benefit that in the first year of implementation all families with children will receive the benefit (at the level for one child); whereas, from then onwards claims will be paid only upon the birth of the first child. At the start the number of beneficiaries and the cost would be significantly higher than the two other programmes but would decrease quickly over the following years. Figure 6-14 shows benefit costs of all three hypothetical schemes until 2025 presented as percentage of GDP per capita.

[1] We do not cost separately here disability pension (persons with disabilities are, according to LCMS2004 about 2 per cent of Zambian population) but such a benefit should also be considered as one of the component of the future basic social protection system.

The importance of this Report is that it provides a comprehensive picture of existing social protection and allows the reader to look into the future on the basis of status quo projections for the next twenty years. It also includes a preliminary look at the possible provision of three benefits: universal old age pension; targeted social assistance; and child benefit, in order to provide some indicators as to a possible future minimum benefit package aimed at poverty alleviation. It confirms much existing knowledge and points to issues in relation to which there is need for action.

Key Findings

There are six key findings:

- Half of Zambia's population is extremely poor and programmes that are targeted to alleviate poverty are under-funded by the Government and highly donor-dependent.
- The labour market is highly informalized.
- Zambia is entering a demographic transition in a period of sustained economic growth: the population almost doubles with a large increase in the working-age population.
- Coverage by both non-contributory and contributory schemes is low, and benefits inadequate. There is a lack of overall coordination.
- Zambia is highly dependent on donor funding for health care.
- Zambia's external debt was greatly reduced (2006) but at the same time donor aid was reduced so that very limited fiscal space was created.

Way Forward

- The Government needs to undertake a detailed public expenditure review with the aim of assessing the basis for, and redistributive impact of all kinds of existing transfers, subsidies and tax privileges in order to identify the fiscal space needed to finance priority social policies.
- The results of the work on informality of employment should feed into policy discussions on the extension of social protection coverage, together with a job creation strategy targeted at youth.
- There is scope to extend coverage by existing contributory and non-contributory schemes.
- A minimum package of universally acceptable benefits would be affordable – targeted social assistance and a universal pension would cost less than 1 per cent of GDP. A universal but limited child benefit scheme (first child only) would have higher start-up costs (1.2 per cent of GDP) but reduce over time.
- The next stage of the project needs to address the composition of a comprehensive social protection system and funding mechanisms.

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Appendix A.

The Zambian Social Budget model

Projections were made with the help of the ILO Social Budget model, which was adapted to the Zambian case. This is an accounting model that estimates, projects and simulates the revenues and expenditures of the social protection system in the country. It contains assumptions consistent with recent sectoral developments and long-term national plans.

The first step is mapping out the different benefits provided by the national social protection system (in different chapters of this report), which is mirrored in the structure of the Social Budget. The second step is projecting the revenues and expenditures based on assumptions made explicit throughout this Appendix and in Chapter 6. The third step is to make simulations or to explore the possible results of changes in the 'status quo' situation, for instance, in the benefit provisions or in their financing modalities.

The expenditures projected in this version of the Zambian Social Budget are:[1]

- ☐ employment-related social security expenditure: national pension and civil servant pension schemes; short-term cash benefits, such as work injury compensation, sickness and maternity leave, severance pay;
- ☐ publicly financed social protection expenditure: social assistance benefits such as cash transfers, public work and feeding programmes; and health care;
- ☐ non-public social protection expenditure: occupational (voluntary) pensions; and health care financed by employers, households or donors.

The revenues projected are: social security contributions, tax revenues, grants from donors, private contributions (to private insurance, enterprise-based benefits, or out-of-pocket spending), and investment income.

These items are arranged according to their function and presented in Table A-1. These revenues and expenditures are projected over a medium-term period, from 2005 to 2025.

[1] This is the first version of the Zambian Social Budget. The model should be improved with the participation of local stakeholders and whenever more accurate information is available.

Table A-1. Example of presentation of a Social Budget

Income (by economic sector)	Expenditure (by social function)
Government (domestic revenues)	Health care
Households	Education
Donors (grants to Government and projects)	Pension benefits
Private enterprises	Work-related benefits
Investment income	Social assistance
	Administration

A Social Budget should include the expenditures incurred by different institutions providing social protection and all the sources of financing of such expenditures. The Government is not the only provider and financier of benefits: contributions are the main source of funding of pension schemes and donors finance a large part of health expenditure.

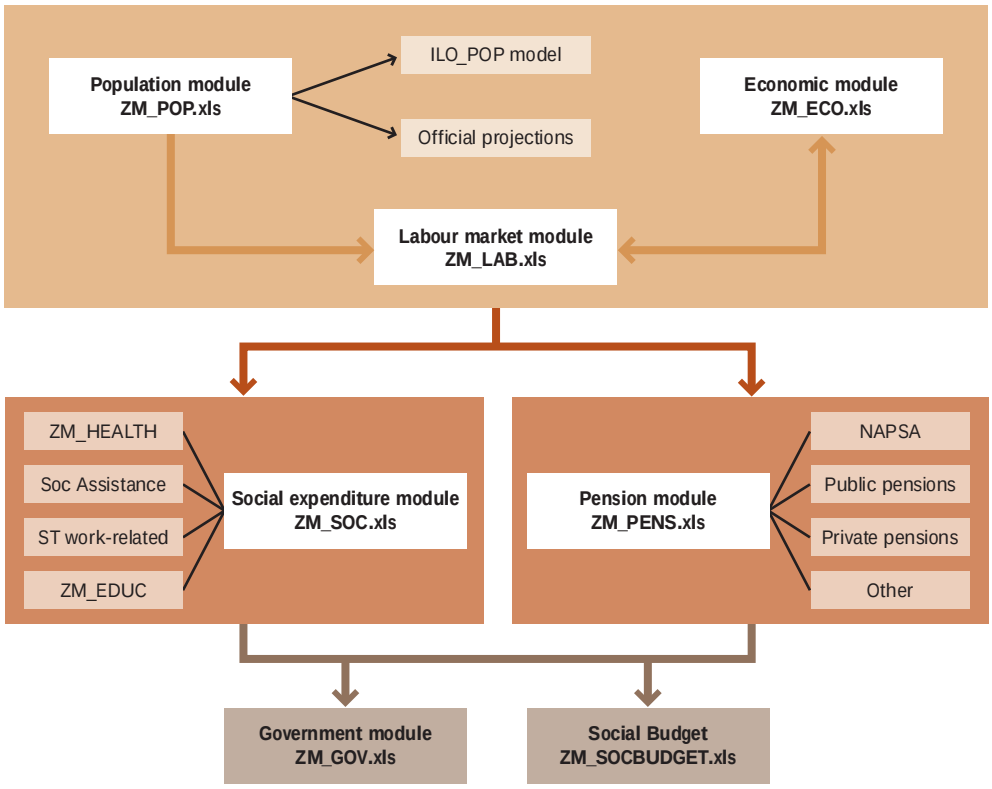
Expenditures financed by non-government bodies are included as much as possible, based on publicly available data (e.g., financial statements of pension schemes, reports of the pension regulatory agency, national health accounts, sectoral ministry reports, etc.). Nevertheless, social assistance benefits financed by donors and not channelled through the Government have not been included in this Social Budget model, given the high number of donors in Zambia. It is estimated that over 2,000 NGOs are active in the country (MS Zambia, 2007), providing different cash and non-cash benefits and they are not obliged to report their sources of funds to the Government. Trying to identify all of them would require a specific study that goes beyond this modelling exercise.

The projections have been carried out relying as much as possible on official national statistics, except for the population projections (see Appendix B). The aim of this study is not to judge the reliability of national statistical data (see Conclusions) but to build a tool that will be used by the Zambian Government to assess the impact of its plans and policy reforms in the social accounting system (for public and private institutions) and hence, the viability of such measures. This model is seen as a policy tool to analyse the effects of alternative economic, demographic or policy scenarios and to support the decision-making process as regards possible sources of financing of social protection expenditure.

1. The logic of the Social Budget model

Figure A-1 shows the structure of the Social Budget model. It is composed of modules built in the form of excel work files. These modules can be classified in three main groups: beneficiaries' base, social protection benefits, and balance sheets.

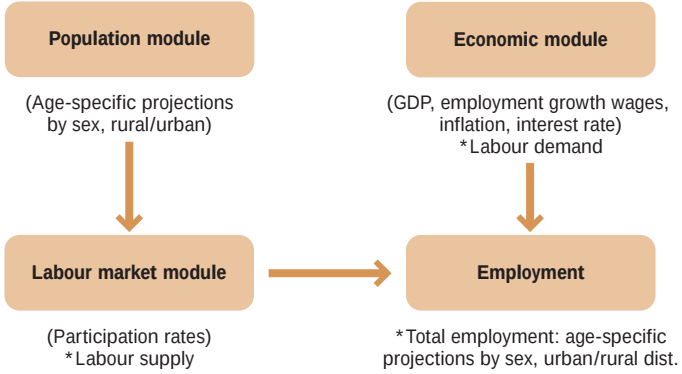
Figure A-1. The structure of the Zambian Social Budget model



a) Beneficiaries' base

The first group of modules includes the population module, the economic module and the labour market module. The combination of these three modules covers potential beneficiaries of social protection expenditure. In the case of employment-related benefits, the number of beneficiaries depends on the employment projections over time. In the case of other benefits, this number depends on the demographic projections (e.g., to define targeted groups such as under-5 children or elderly persons) or on labour force projections (e.g., to define benefits for unemployed persons or economically active young people). Figure A-2 shows the relationships between the basic modules in this first group.

Figure A-2. Basic modules to project beneficiaries



The population projections can be obtained from official projections or from an external model such as the ILO-POP (see Appendix B). The choice depends on the availability of detailed projections by sex age cohort. Population projections are the basis for the labour force projections or the *labour supply*. Assumptions about participation rates by age group are based on the most recent labour force survey (2005).

On the other hand, the economic module provides the *labour demand* based on exogenous assumptions about the economic performance of the country and the relationship between economic growth and employment. The aggregate number of employed persons projected in this module is distributed among cohorts according to the existing labour supply. Therefore, detailed employment projections are built simultaneously (this is indicated by the two arrows pointing to employment which is not a separate module but part of the labour market module). Details are given later.

b) Social protection benefits

Two main modules compose this second group: the pension and the social expenditure module.

The number of beneficiaries for each type of social protection expenditure is projected over time considering the beneficiaries' base, the specific *legal provisions* of the benefits and the historical records of each scheme (when available). For instance, social security schemes are mandatory for paid employees but voluntary for the self-employed so we could not assume a coverage of 100 per cent of employed persons. Legal provisions were checked for each benefit.

The expenditures and their source of financing are estimated based on information specific to the schemes or programmes. The amount and detail of information required depend on the type of benefit. For instance, in the case of employment-related benefits, this information would be necessary: collection rates, number of active and inactive contributors, number of pensioners, scheme-specific mortality and invalidity rates, earnings and benefits in payment, salary scale, and so on. Nevertheless, on several occasions the ideal data were not available and different methods were used.

In general, we had more information on the pension schemes than on other benefits. Nevertheless, it was necessary to make assumptions based on global trends; for instance, we consider a constant coverage of social security schemes so that the number of active contributors grows at the same rate as the number of formal employees.

Regarding the social expenditure module, the current version of the model has emphasized *health care expenditure* for which high-quality information was available (e.g., UNZA & MoH, 2006, CBoH, UNZA & IHE, 2004). Social assistance and (non-social security) work-related benefits are related to projected economic and demographic variables.

c) Balance sheets

The Government and Social Budget modules compose this third group. Both are fed by the previous detailed modules and are indeed summary sheets of the social protection expenditure. The Government module provides a balance of the *general government* accounts, that is, it includes accounts of the central Government, local Governments and social security schemes. It does not include accounts of parastatals or public

corporations (see IMF, 2001). Funds provided by donors to the central Government are also included. This module reveals the public financing needs according to the probable future behaviour of the social protection system and fiscal scenarios.

The *Social Budget* module includes those accounts of the government module that refer to social protection sectors and the expenditures of the private sector (e.g., households, employers, churches, etc.) which are financed by their own funds or by third-parties. This module provides a more complete picture of how the Zambian social protection system works: the relationships between agents and the system's financial sustainability.

Population and labour market module 2.

The method for projection of the population figures is explained in Appendix B. Here we explain how the figures of labour force and employment were obtained. Population projections provide numbers of people in each single-age cohort by sex and area of residence. Hence, four groups were identified: rural female, urban female, rural male, and urban male. The labour force projections are calculated based on the labour force participation rates of 2005 (labour force survey) but the model allows for changes in these rates over time.

It must be said that we use the *participation rates* but not the absolute numbers of the labour force coming from the labour force survey report. We rely on our population projections, so that –

For each 5-year age cohort 'f' in each of the four groups, the labour force for 2005 is:

Labour force f = Participation rate f * Population f

Where the participation rate comes from the LFS 2005 and the population is projected using the model.

The labour force for each single-age cohort is calculated using linear interpolation so that the assumption of participation rate for the five-year cohort holds.

Next, the total figures of employment that come from the economic module are distributed across these four groups, considering the average employment rate for each group.

For the base year (2005), the employment rates from the labour force survey were: 90 per cent for rural females, 64 per cent for urban females, 91 per cent for rural

For each of the four groups (g), the total number of employed persons in year (t) is:

Employment g (t) =
Share in employment g (t) * Total employment (t)

Share in employment g (t) =
Share in employment g (t-1) * [Labour force g (t)/Labour force g (t-1)]

Where the share in labour force after 2005 and the total employment are calculated by using the model.
The share in employment is adjusted to avoid a total over 100 per cent.

males, and 77 per cent for urban males. Having the projections of labour force for each group, a total number for employment was calculated which was adjusted so that the total employment rate in the country was 84 per cent. For the next years, the number of employed persons in each of the four groups is calculated assuming that *the initial distribution of employment varies with the labour force growth in each group*.

The employment within each group is distributed across cohorts following the same method, that is, taking into account the initial distribution of employment (2005) and the share of each cohort in the labour force for each year.

For each single-age cohort 'x' in each of the four groups, the number of employed persons in year 't' is:

Employment x (t) =
Share in employment x (t) * Total employment (t)

Share in employment x (t) =
Share in employment x (t-1) * [Labour force x (t)/Labour force x (t-1)]

The implicit assumption is that *employment follows the age structure of the labour supply over time*, which makes sense because over 80 per cent of total employed persons in the country are self-employed or unpaid family workers. This means that they work at whatever they can find to make a living. Hence, the higher the population, the higher the work activities despite the fact that the formal sector does not provide jobs.

Having the employment figures, the next step is to obtain the figures of *employment by status of employment*: self-employed, employer, paid employee and unpaid family worker (see Table A-2). We used the initial percentages for year 2005 which we kept constant over the projection period. However, a possible scenario linked to the expected favourable economic performance is that the share of unpaid family workers would decrease to push up the numbers of paid employees. This possibility was simulated, considering that in rural areas the share of paid employees would increase by two percentage points by year 2015 and that in urban areas, this share would increase by four percentage points by year 2015.

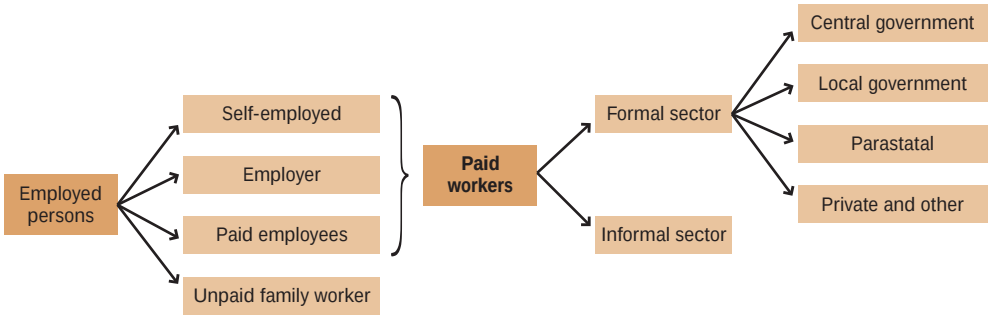
The classification of type of business (central Government, local government, parastatal and private sector) can also be incorporated to classify the workers who are potential contributors to social security schemes. However, there is a practical limit to the potential extension of social security schemes as currently designed: the degree of informality. As explained in Appendix C (Section 2), it seems that the different reports published by the CSO do not follow a unified criterion to classify employment in the formal sector or the informal economy. Therefore, we based our model on the definition of *formal-sector employment* (as Chapter 3 explains, based on establishments) and

Table A-2. Percentage of employed persons by status of employment, 2005

	Rural female	Rural male	Urban female	Urban male
Self-employed	36.1	57.6	37.4	30.8
Employer	0.5	0.5	0.4	0.6
Paid employees	1.8	6.6	35.5	56.3
Unpaid family worker and other	61.5	35.3	26.7	12.3
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: Cross-tabulation for people aged 15 and older, based on 2005 labour force survey.

Figure A-3. Disaggregating total employment by status, formal sector and type of business



implicitly assumed that those who are informal in the formal sector (i.e., employees who do not have access to pension schemes, sick leave or a permanent or fixed-term contract) can more easily be integrated into the formal sector and then into pension schemes than informal-sector workers. This would be the case for paid employees, employers and the self-employed who are called 'paid employees' to differentiate them from unpaid family workers and other categories. Figure A-3 plots the sequence to get the formal employees and the sub-division by type of business.

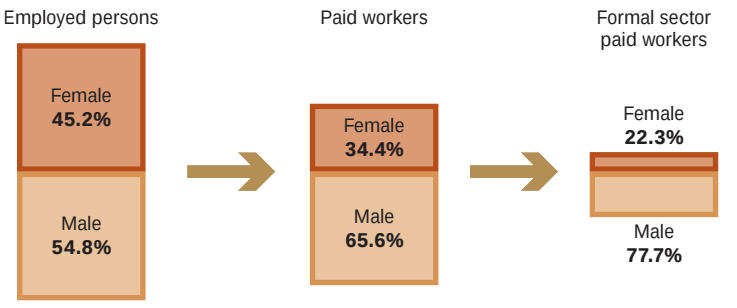
This version of the model at this stage (of calculating the number of potential members of social security schemes), aggregates the four groups into two: females and males, because this is the level of detail that we have for the data collected from the schemes (the datasets are not divided by area of residence). The initial distribution of formal-sector employment for all paid workers by sex presented in Chapter 1 is used as the basis for the Social Budget projections.

Paid workers represented around 60 per cent of total employed persons. This percentage was quite different for females and males: 46 per cent and 72 per cent, respectively. Likewise, the degree of formality of these jobs varied. Among those in formal sector employment, the private sector was the largest employer for both females and males. This situation would continue over the projection period.

The situation found in 2005 highlights the need to distinguish at least by sex. Furthermore, despite the fact that the numbers of employed persons were somewhat similar for females and males (45.2 per cent of total were female and 54.8 per cent were male), the numbers of total paid workers and formal-sector paid workers were different, as Figure A-4 shows.

The model assumes that this large distinction continues over the projection period; however, it is possible to change the assumptions about the degree of formality depending on different expectations about the economic environment in the country.

Figure A-4. Division of employment by sex, 2005



Source: Cross-tabulations based on labour force survey

Having the numbers of formal-sector paid workers, the next step is to identify the coverage rate of work-related benefits and social security schemes and to make the assumptions for future years to determine the number of beneficiaries and contributors. This discussion will be continued in Section 4 on the pension module. The total number of formal-sector paid workers is distributed across cohorts according to their share of total employment.

3. Economic module

This module has basic assumptions about real GDP growth and employment growth, inflation rates (GDP deflator and CPI), devaluation and interest rates. Furthermore, employment growth is assumed in line with GDP growth so that an implicit 'elasticity' is traced.

Elasticity of employment to GDP = Δ per cent employment / Δ per cent GDP

Real wages are assumed to vary in line with real labour productivity, which results from assumptions of employment and GDP.

Real labour productivity = Real GDP / Total employment

This model does not emphasize the behaviour of real wages or the share of wages of total GDP (wage share) as other ILO Social Budget models have previously done, because there are serious doubts about the accuracy of the official estimate for national average earnings (see Appendix C) and furthermore, the wage share is expected to fluctuate even in the short run, given the situation of the labour market (with high informality and temporary formal employment).

Two options for alternative scenarios complement the status quo projection. *Option A* is to change assumptions of GDP growth and employment growth, simultaneously assuming a more or less constant implicit elasticity. The objective is to test the effect of an optimistic and a pessimistic scenario. Changes in other variables that could also be affected, such as inflation and devaluation (that could become deflation and appreciation, respectively) and interest rates (that could be reduced to fuel growth in a pessimistic scenario), are not included in this version of the model.

Option B is to change assumptions of employment growth keeping the base assumption of GDP growth constant. The underlying idea is that the growth could be led by more labour-intensive (e.g., services or agriculture) or more capital-intensive (e.g., manufacturing) economic sectors. Hence, the scenarios are about the overall elasticity of employment.

The analysis of scenarios for these options is exclusive, that is, if scenarios about GDP are analysed (option A), the status quo situation is considered for option B –

Figure A-5. Types of scenarios to analyse

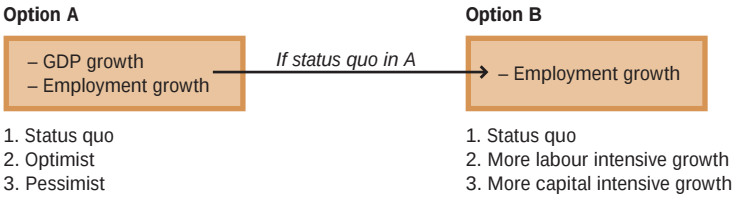


Table A-3. Assumptions for GDP growth and employment

	2007	2008	2009	2010	2011	2016	2025
Scenario 1: Status quo							
GDP	6.0	6.0	6.0	5.0	4.0	3.5	3.5
Employment	4.2	4.2	4.2	3.5	2.8	2.4	2.4
Scenario 2: Optimistic							
GDP	6.0	6.5	7.0	7.0	6.0	5.0	5.0
Employment	4.2	4.6	4.9	4.9	4.2	3.4	3.4
Scenario 3: Pessimistic							
GDP	6.0	4.0	2.0	2.0	1.0	0.0	0.0
Employment	4.2	2.8	1.4	1.4	0.7	0.0	0.0
Implicit elasticity	0.70	0.70	0.70	0.70	0.70	0.69	0.69

relatively constant elasticity of employment – while, if scenarios about elasticity of employment are considered (option B), the status quo situation is considered for option A. Figure A-5 shows the sequence of assumptions for options A and B.

Table A-3 shows the main assumptions for the scenarios in Option A. The assumptions in Option B consider that the elasticity that is currently 0.70 could vary in +/– 0.2.

These scenarios have different effects on the Social Budget because GDP has a relationship with poverty rates in the country and then it affects the need for social assistance, while employment figures determine the number of potential contributors to social security schemes (and future pensioners).

4. Pension module

Separate work files compose this module: a) NAPSA; b) 'public pensions' that include the other statutory schemes (PSPF and LASF); c) 'private pensions' that include the voluntary (occupational) pension schemes; and d) the WCFCB.

a) NAPSA module

This module also follows the 'cohort component' method so that the first step was to estimate the number of contributors by sex and age. It must be pointed out that there is uncertainty about this number (see Appendix C, Section 3); however, we decided to estimate it based on the statistics of the annual number of contribution payments.

This information was partially disaggregated by age and sex. Then we used the age structure of the part that was available (82 per cent) to allocate the total number. This number (by sex) was adjusted to calculate the number of contributors, using the following formula:

Number of contributions = Number of contribution payments / (12 * Density of contributions)

We assumed a density of 0.5 based on the historical records of contribution lag pattern 2000-2005. Then we decided to base our projection on this estimated number of contributors for year 2005 that is 355,197 people.[2] This number implies a coverage rate of 81.5 per cent of formal-sector paid employees (including self-employed, employers and paid employees) and 9.6 per cent of total employed persons aged between 15 and 54 years. An assumption about the coverage rate for the three statutory schemes was used to estimate the number of contributors to NAPSA for each year. Keeping the same coverage rate actually means increasing the number of contributors to NAPSA because the public schemes are almost closed. An expansive economic cycle (with higher employment) will increase this number further. This module is closely linked to the 'public pension' module in which this assumption can be changed.

The number of the contributors to the three statutory schemes (total contributors) for each year is:

Total contributors (t) = Num. paid workers (t) * Coverage rate (t)

For each single-age cohort 'x' between 16 and 54 years, the number of contributors in year 't+1' for each public pension scheme (PSPF or LASF) is:

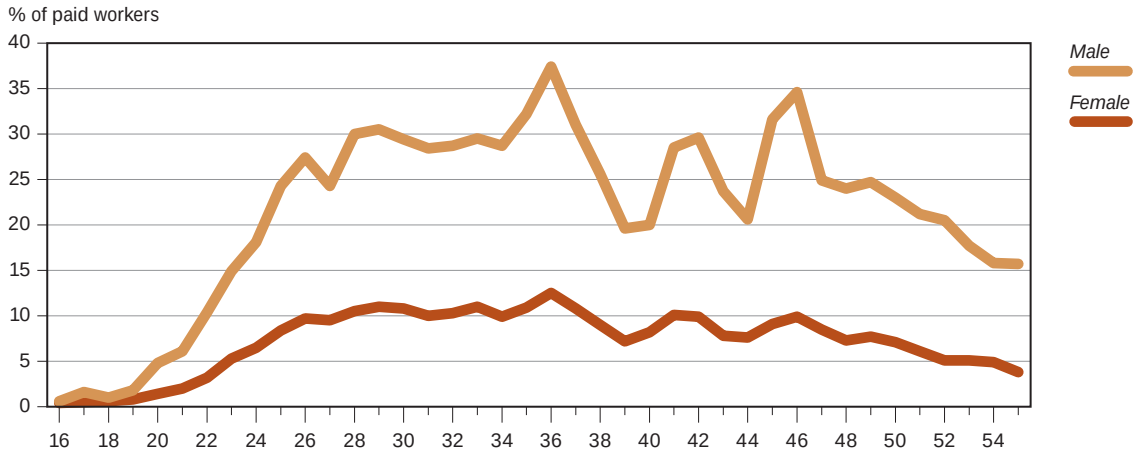
Contributors x (t+1) =
Contributors x (t) – Deceased contributors x (t+1)
+ New invalid pensioners x (t+1) + New entrants x (t+1)

Where only the PSPF has new entrants that are a small proportion of total contributors (teachers and armed forces).
Then, the number of contributors of NAPSA is:

Contributors NAPSA (t) =
Total contributors (t) – Contributors PSPF (t) – Contributors LASF (t)

In the case of some specific cohorts, the number of registered contributors to NAPSA exceeded the number of formal-sector paid workers; therefore, the coverage rates are expressed in terms of paid workers in both the formal and the informal sectors. Figure A-6 plots the initial coverage rates for year 2005.

Figure A-6. Initial coverage rates of NAPSA as percentage of female and male paid workers



[2] The assumption of overall density of 50 per cent was corroborated with staff of NAPSA. Although there are no accurate records of the total number of contributors, the audited financial statements of 2005 and 2006 indicated that there were 338,535 and 385,146 members provisionally registered (NAPSA, 2007a; 2007b).

The lower coverage for those younger workers (especially women) reflects the fact that contributors to NAPSA are older than the total employed persons in Zambia.

We assumed that all contributors are active, which means that their contribution payments are made at least once a year. The number of contributors grows to keep the overall coverage rate and decreases according to the mortality and invalidity incidence rates.

The mortality rates are the same as those used for population projections, adjusted by a factor of 90 per cent, which means that mortality for contributors to NAPSA is a little lower than for the general population. This does not necessarily mean that the HIV prevalence is lower – actually differences in prevalence rates across economic sectors exist (Vass, 2002) – but that once someone is infected, the onset of an AIDS-related illness in a HIV-positive person and the death after developing AIDS occur later than in other cases, such as people working in informal-sector employment (Wilkins, n.d.). The invalidity incidence rate was calculated combining several data sources (see Appendix C, Section 3) because we were not able to obtain accurate estimates from scheme data.[3]

The wages of the contributors grow with the average wages and an ageing factor that corresponds to an additional increase for the increase in the average age of the contributors (trying to follow a salary scale). Compliance was assumed constant, based on 2006 data.

Since 2006, NAPSA started paying pensions to those who qualified on the 'sliding scale' that covers those aged between 39 and 48 years at 1 February 2000 (see Chapter 4). Hence, we assume that there is early retirement but that the incidence is very low: between 0.5 per cent and 1.5 per cent for those aged 50-54 so that the calculated number of pensioners for 2006 is close to the actual number.

The number of retirees comes from the number of contributors and the mortality rates assumed. For those aged 55 and over, the next step is to place this number of retirees into two groups: those who receive lump sums and those who are entitled to receive monthly pensions. However, there is no record of contribution payments by member. In the actuarial valuation, GAD (2007) assumed two scenarios with distribution of career lengths called 'short records' and 'long records' for which in the long term on average contributors will have contributed: for one-third of a full career (i.e., 13 years out of 39) in the first case, and for two-thirds of a full career (i.e., 26 years out of 39) in the second case. So, the proportion of contributors receiving pensions is higher under the 'long records' scenario (50 per cent vs. 90 per cent in the 'short records' scenario, both for year 2010) and it grows over time. In our case, we decided to assume directly the proportion differentiating between men and women (i.e., women with shorter records given that some preferred to stay out of the labour market when their children were small). In 2006 almost all benefits are assumed to be lump sums except 2 per cent of retirement benefits. These percentages decrease steadily during the projection period so that in 2025, the percentages of benefits received as lump sums (instead of annuities) are those shown in Table A-4.

Replacement rates were also assumed given that we did not have accurate earnings records of the contributors. These assumptions are for the National Pension Scheme (NPS), not for the Zambian National Provident Fund (ZNPF). The 2006 financial statements indicate that the contributions of members of the ZNPF only reached K 28,000 billion (vs. K 292 billion of the NPS). Therefore, we assume that there is no

[3] At most, we obtained the number of deceased members whose survivors qualified for a funeral grant but this number was much higher than the number of deaths reported. Besides, as earlier explained, sex-age cohort-specific numbers of registered members were not available.

Table A-4. Assumptions to calculate benefit payments for NPS, 2025

	Retirement		Invalidity		Survivors	
	Female	Male	Female	Male	Female	Male
per cent lump sums/total benefits[1]	65	60	45	40	65	60
Replacement rate[2]	35	35	40	40	30	30

[1] Each number represents the percentage of those retirees who do not qualify for receiving pensions.
[2] Replacement rate is expressed as percentage of the average insurable wage (after ceiling) of NAPSA contributors which is lower than the NAE.

contribution income and that the ZNPF is basically paying benefits until the depletion of the reserve fund. Given the lack of information about pensioners, we assume that the benefit expenditure keeps growing in line with average earnings and that the maternity and funeral grants remain as a fixed percentage of pension expenditure.[4]

b) Public pensions module

Regarding the PSPF, the number of contributors was distributed according to the age structure of the labour force, considering that officers are recruited among relatively young people (between 18 and 45 years, by law). There is early retirement from age 45 years.

Mortality rates for the PSPF were assumed to be higher than those of NAPSA while invalidity rates would be higher than those of the general population because they are at greater risk of physical injury. For LASF, mortality and invalidity rates are the same as those of the general population. To project the numbers of contributors and pensioners for each scheme, we used the cohort component method.

We did not have access to financial statements of LASF for years 2005 and 2006. So we used the figures reported by the PIA and published information (i.e., LASF, 2006a) which means that the results for these two years may be inaccurate. On the other hand, we assumed that the current compliance rate would continue and that the paid benefits would maintain a one-and-a-half year delay (conservative assumption), which means that contribution arrears and pension arrears would stay in the balance sheet. This scheme has the lowest compliance of all the statutory pension schemes.

The insurable earnings were estimated taking into account the average wages reported by the CSO (2007b) by type of employer, that is, we used the wages of central and local Government for the PSPF and the LASF, respectively, and we assumed that these wages grow at the same pace as national average earnings.

For both schemes, there was no detail of the composition of benefit payments, that is, which portion was for old age, early retirement, invalidity, survivors or other special circumstances (e.g., national interest in the case of PSPF or reorganization in the case of the LASF). Hence, the benefits amounts were projected considering variations in number of pensioners and average benefit. Thus, the method is not the same as the one used in NAPSA that followed the cohorts. Here, the pension amounts grow at the same rate as the number of pensioners.

[4] Although maternity leave disappeared, the funeral grants will increase as pensioners grow older.

The transfers by the Government to the PSPF represented 54 per cent of 2006's income, continue so that the arrears are completely paid off in 2009 – one year after the official estimates (MoFNP, 2007b) – and the grants for retrenchment of civil servants are constant as a percentage of total benefits. The grant by the Government to cover retirees under the national interest and early retirement provisions is not explicitly projected given that we do not have specific projections for these benefits. Hence, we assume that this grant will be paid so that the scheme does not run a deficit. The arrears with LASF are also cancelled by 2009 and we assume that these were the only transfers to the scheme (these should appear in the central Government accounts as part of the grants to local Governments; see Appendix C).

c) Private pensions module

This module relies on aggregate information published by the PIA. Given the large number of occupational schemes, it is not possible to make individual estimations for each fund. The number of contributors grows with formal-sector private employment, while the insurable wages vary with the NAE. Total contribution income is projected based on average wages but it is expected that the wealthier employees are registered with these voluntary schemes and that compliance is not 100 per cent. Average contributions from employers and employees are assumed to be 5.9 and 5.1 per cent of insurable earnings, respectively.

The number of pensioners increases at the same pace as the number of pensioners of the ZNPF plus 5 per cent. The administrative costs would decrease steadily from 46 per cent of benefit expenditure in 2006 to 15 per cent in 2025.

d) WCFCB module

This module is less developed than the previous ones given that, although all workers are obliged to be registered, its coverage is very low: around 2.1 per cent of active members of NAPSA. This coverage was assumed constant over time, although the reorganization plans of the management board are expected to improve it. Furthermore, internal financial information was not complete and some assumptions had to be made. For instance, the fund reserves were unknown and we had to deduct it, assuming an average rate of return for 2000-2005. The module does not follow the cohort component method but includes assumptions about the average injury risk (based on the 2005 labour force survey) and average mortality rates (based on NAPSA module).

5. Social expenditure module

There are four elements to this module: a) social assistance; b) work-related benefits; c) health; and d) education. A new version of this Social Budget model should improve the education module that was prepared on the basis of much less information than the health module.

a) Social assistance

This module projects expenditures for the most relevant programmes currently in place, which are financed by the Government and by donors. The main programmes are: the public welfare assistance scheme (PWAS), the social cash transfer programme, the self-help project urban, and the three components of the WFP country programme: (i) school feeding programme, including assistance for basic education, (ii) nutritional programme for vulnerable groups (NPVG) and health and nutrition education (HNE), and (iii) food for assets (FFA). We collected historical data from publicly available reports, websites and secondary data and projected the future expenditures based on these historical data.

Many changes are envisaged in the Zambian social protection system – for instance, a social cash transfer programme that would be scaled up has been planned to replace the PWAS – but at this point we do not know with certainty the feasibility of planned changes and ways of financing. So we used the official projections for the social cash transfers (MCDSS, 2007, p. 6) and assume that donors will continue their support. Likewise, the PWAS will continue according to the new baseline of the 2008 Budget and keep its current coverage (below 2 per cent of the population). A second scenario considered that, in place of these two programmes, a new universal old-age benefit would be available for all individuals aged 60 years and over.

b) Work-related benefits

This module includes the following benefits: retirement, severance pay (redundancy benefit), paid maternity leave, paid sick leave, and invalidity.The coverage rates or how many employees would benefit are assumed to be very low. In principle, severance pay covers only those who are not registered in a pension scheme and have at least ten years of service. Hence the coverage is zero for public-sector employees and 10 per cent for private-sector employees. The incidence of redundancy benefit is around 2 per cent and the coverage is 70 per cent for public employees and 20 per cent for private employees. The highest coverage rates are assumed for maternity and sickness benefits: 85 per cent in the public sector and 25 per cent in the private sector. There were no data with which to contrast the validity of our assumptions. Therefore, these projections must be taken with caution.

c) Health module

This is the most elaborate element of the module based on official figures for year 2004. This means that it needs to be calibrated when new information is available. Here, we explain the general features of the module and some details of the projection of government health expenditure.

The module identifies different sources of funding and financing agents (see UNZA & MoH, 2006). The latter concept refers to those who manage the funds coming from own or third-party sources. As seen in Chapter 4, the Government is the most important financing agent although it finances less than half of the funds it administers. In contrast, donors are the main source of funding (whose funds are partially managed by the Government), followed by households. The general approach for projecting health expenditure for each financing agent is explained below:

- Government expenditure on health (as financing agent) is projected following a demand-driven approach that considers (i) specific age-group utilization rates, and (ii) referral rates between different levels of health care service. Unit costs are projected for specific items (e.g., drugs and supplies, and transport) of government expenditure and also for missions and other statutory bodies.
- The percentage of total Government health expenditure financed by donors is assumed to decrease from 55.6 per cent in 2005 to 48 per cent in 2012 and to 35 per cent in 2025. In contrast, the proportion of donor funds allocated to the Government (vs. the resources directly managed by donors) increases from 42.2 per cent in 2005 to 70 per cent in 2020, so that the overall donor resources decrease over time as a percentage of total health expenditure.
- Household expenditure is projected separately according to the type of provider: (i) for private and pharmacies, the calculation is based on unit costs; (ii) for traditional healers, the costs decrease from 20 per cent (of total household expenditure) in 2004 to 15 per cent in 2025; (iii) for user fees in MoH facilities, the expenditure decreases in 2006 from 5 to 4.3 per cent of total household expenditure;[5] and (iv) for other providers, the expenditure is a fixed 2 per cent of the total.
- Private expenditures include those of private health insurance and employers. In the first case, the number of covered people depends on private-sector employment; in the second case, that number depends on both public-sector (assumed coverage rate: 95 per cent) and private-sector (assumed coverage rate: 40 per cent of those without health insurance) employment.

The module gives more importance to the projection of *government health expenditure* which is the expenditure originating in government facilities. Hence, it includes the expenditure allocated by donors to the Government and also the services provided by missions and other statutory bodies that receive grants from the Government and whose medical staff are paid by the MoH. In what follows, we explain the calculation of number of cases (consultations and admissions to hospitals) and the calculation of health costs.

[5] The reduction in user fees expenditures is low because rural health centres only collected 5.3 per cent of total user fees in 2005 (MoH & UNZA, 2007).

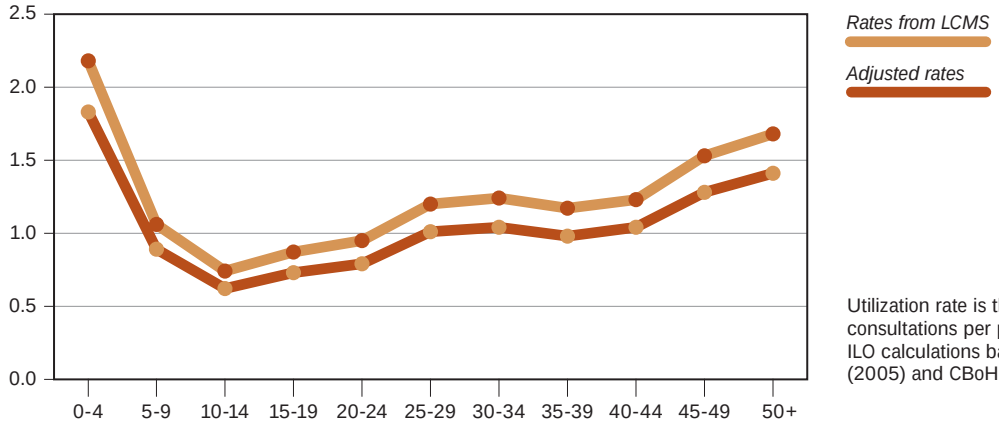
Number of cases for government health expenditure

The utilization rates for 2003-2004 were based on the 2004 living conditions measurement survey (CSO, 2005) – that includes statistics of those who reported illness in last two weeks and consulted health personnel or an institution – and CBoH et al., 2004 – that estimates the number of consultations and admissions in 2003. Figure A-7 shows the derived J-curve that has a constant shape during the projection period. It must be noticed that the average and total utilization rates vary according to the change in the age structure of the population, which means that demand for health care services increases as the overall population grows old and consequently, health expenditure also increases. Other factors explaining increases in health care utilization are the abolition of user fees for primary health care in rural areas since 2006 and the development of real per capita GDP (cf., ILO, 1999).

The average utilization rates for outpatient and inpatient care are separately calculated by level of care and type of provider. The initial utilization rates are: 1.002 for outpatient care, 0.069 for inpatient care, and 0.104 for mission health centres. Cases are distributed among different levels of health care using a referral system. Figure A-8 shows the logic of the referral system and the assumed rates that are kept over the projection period.

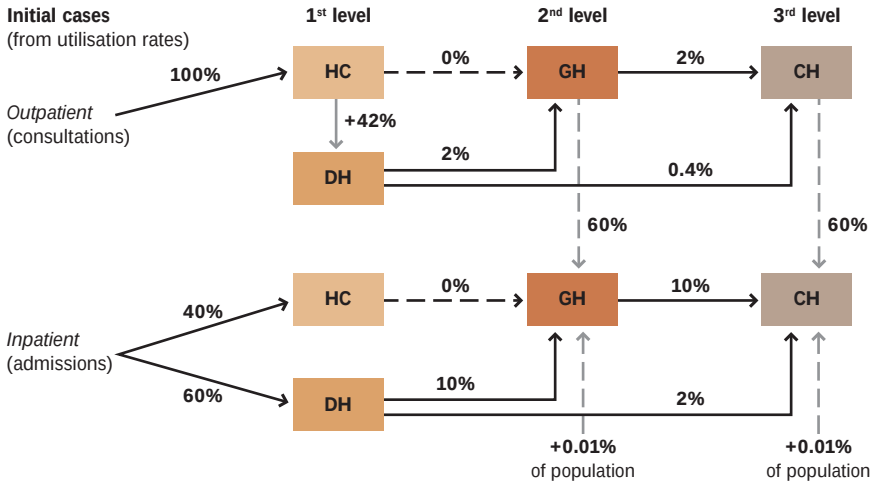
In the case of outpatient care, 42 per cent of consultations in health centres are referred to district hospitals. From there, 2 per cent of people who consulted are

Figure A-7. J-curve or utilisation rates by age group



Utilization rate is the number of consultations per person per year. ILO calculations based on CSO (2005) and CBoH et al. (2004)

Figure A-8. Assumed referral rates across different levels of health care



Legend:
HC=health centres,
DH=district hospitals,
GH=general hospitals, and
CH=central hospitals

Based on CBoH et al. (2004) and Nakamba-Kabaso et al. (2006)

referred to general hospitals (second level) and 0.4 per cent of them are referred to central hospitals (third level). In the case of inpatient care, 40 per cent of admissions are to health centres and 60 per cent to district hospitals. Besides, there are cases that are transferred from outpatient to inpatient care at higher levels (60 per cent) and acute cases (0.01 per cent of population) that are directly admitted to general and central hospitals. Given the inter-relations between different levels of care, for example, the conditional probability of someone who consulted a government health institution being admitted to a general hospital (second level) is 0.85 per cent.

Costs for government health expenditure

Wage and non-wage costs are projected separately. Wage costs are calculated assuming that the ratios of population to medical staff will improve to reach almost twice those recommended in MoH (2006a) by 2025. The aggregate ratio that was 475 in 2005 would decrease to 364 in 2025, which implies an average annual growth of 3.9 per cent in the number of medical staff over the period 2005-2025. As a result of the increase in medical staff, the health care utilization rate grows assuming a constant one-third elasticity (i.e., the utilization rate grows by one-third per cent when the ratio of staff to population increases by 1 per cent).

Non-wage costs are calculated for each level of health care. The main assumption is that the costs of outpatient care are 40 per cent those of inpatient care. The driver of the projections is the number of bed-days that depends on the inpatient utilization rate and length of stay (assumed to be three days for primary care, eight days for secondary care, and 14 days for tertiary care).

Then, the following formulas were used:

Number of bed-days = Number of admissions (ADM) * Length of stay

Number of beds = Number of bed-days / (Bed occupancy * 365 days)

Num. adjusted bed-days =
Number of bed-days + consultations (OPD) * 0.4

The number of beds results from the number of bed-days and the bed occupancy, which is supposed to decrease, in the case of the first level of care, from 0.86 in 2004 to 0.80 in 2020. The calculation of the number of bed-days is a way to work with unit costs. The main items of non-wage costs are projected based on those unit costs, which increase at assumed inflation rates, with drugs and supplies increasing at a higher rate. Capital expenditure increases in line with the growth in the number of beds. Capital expenditure varies with the number of patients and with the inflation rate in the case of missions and other statutory bodies, respectively.

For each level of health care, the unit costs for each type of expenditure (s) are in year 't' are:

Unit cost of s (t) = Total costs s (t) / Num. adjusted bed-days (t)

In the case of drugs and supplies (D&S), the total costs are projected as follows:

Costs D&S (t+1) = Unit cost D&S (t) * Num. adjusted bed-days (t+1) * [1+ Inflation (t+1)] * [1+Extra D&S inflation (t+1)]

It should be noted that the nature of the module (demand-based approach) requires adjustments to government health expenditure to be done over time, as fund constraints can determine the retraction of non-wage costs (e.g., drugs and supplies). As seen in Chapter 4, this seems to have been the case in 2007.

d) Education module

This module was prepared based on preliminary figures from the MoFNP that reports Government-financed expenditure in local currency and donor-financed expenditure in foreign currency. Historical information may not be accurate because the exchange rate varied significantly during 2005-2006. The projections were prepared in line with the following criteria:

- The projection of government education expenditure was made separately for capital expenditures and recurrent expenditures, and non-wage and wage costs. Capital expenditures were assumed to increase from 16.7 per cent of total expenditure in 2006 to 18 per cent in 2025. Non-wage costs that were 24.8 per cent of wage costs in 2006 are expected to reach 33.3 per cent in 2011.

- Wage costs were projected using the number of students enrolled in basic education (level 1 to 9) and the ratio of students per teacher. The projected number of students enrolled in public schools depends on assumptions of net enrolment rates, attendance at private schools and projections of the number of school-age children (from ILO_POP.xls). The main assumptions are: (i) the ratio of students per teacher decreases from 54.2 in 2006 to 45 in 2016 and 40 in 2025; (ii) the net enrolment rate increases from 95.7 per cent in 2006 to 100 per cent in 2016; and (iii) the number of private school students to total basic school students increases from 4.6 per cent in 2006 to 7 per cent in 2016.

- The wage unit costs (calculated with the number of teachers) were used to project recurrent expenditures, using the formulae:

Recurrent costs =
Unit wage cost * Num. teachers * [1 + per cent non-wage /wage costs]

Capital expenditure =
Recurrent costs / [1 + per cent capital /total expenditure]

Government health expenditure =
Recurrent costs + Capital expenditure

- Regarding donor funds, their high variability over time led us to base our assumptions on the behaviour of the last five years. Donor funds as a percentage of government education expenditure are assumed to be 12 per cent (the 2002-2006 average) over the projection period. The amount of donor funds allocated to the GRZ as percentage of total donor funds in education are 70 per cent in 2007 and were assumed to reach 85 per cent in 2025, which is in line with efforts of harmonization of aid funds and mutual accountability.

- Regarding household expenditure in health, we used the estimate in CSO & ORC Macro (2003) for the household expenditure per pupil in private school, which was projected to grow with the overall inflation rate.

- Given the lack of information, we were not able to project expenditures by type of provider so implicitly assumed that the cost structure of the public schools and community schools is the same, which is not necessarily the case.

MoFNP (2007b) proposes to increase the number of teachers by 15,000 up to 2010, resulting in an important decrease of the students-to-teacher ratio. The projections presented in this report are more conservative considering the unpredictability of aid funds. However, our projections of total government expenditure are close to the official ones.

Government module 6.

The objective of this module is to compare the social expenditure with the general fiscal situation of the country, that is, to analyse the possibilities of sustaining such expenditure over the long term. Following IMF (2001), the general Government includes the central Government and social security institutions. The accounts of local Governments are not included because no updated information was available.

The projections were based on general assumptions that allow us to have an overview of the fiscal space of the country. We do not go deeper into the detail of specific items of the government accounts, so that our estimates such as the overall balance may differ from other estimates.

Table A-5 presents the main assumptions used to project revenues and expenditures of central Government.

Domestic revenues experienced an important increase in 2007, which supports the assumption of tax revenues of about 18.5 per cent of GDP in 2011. Furthermore, the new fiscal and regulatory framework for the mining sector would generate additional inflows. We assume that this would not affect investment decisions in the sector or short-term inflows.

A reduction of grants in the long run is expected from the improvement of economic conditions in the country. Likewise, the GRZ would increase the allocation to wages and salaries to improve the coverage of basic education and health services to the population. This variable is included in the projections of the specific modules.

In the short term, current expenditure (excepting social sectors included in this model) would increase because of the Government's commitment to pay off domestic arrears. After 2009, the current expenditure would show a declining trend owing to the re-allocation of spending from non-social to social sectors.

Table A-5. Main assumptions to project central Government accounts

	2006A	2007	2011	2025
Tax revenues (as per cent of GDP)	17.0	18.0	18.5	19.0
Grants (as per cent of GDP)	6.0	4.3	3.8	3.5
Initial current expenditure, except social sectors (as per cent of GDP)	12.1	12.9	12.6	11.0
Capital expenditure (as per cent of GDP)	8.0	5.2	6.5	7.0

A = actual; P = projected

Over the long term, capital expenditure, mainly related to rural infrastructure, would increase. Capital expenditure as a percentage of GDP is lower in 2011 than in 2006 because of the low absorption capacity of different units of the Government (see Appendix C, Section 1). MoFNP (2007b) estimates that capital expenditure would be 5.85 per cent of GDP in 2007 and that it would increase to reach 7.23 per cent of GDP in 2010. However, we prefer more conservative estimates that would vary with the assumptions of donor grants.

The module also projects the situation of the general Government which includes central Government and social security institutions.

7. Social Budget

The Social Budget module, in addition to including the figures from the government module, considers all those expenditures incurred by non-government agents with the aim of providing social protection. Therefore, it includes private expenditure, services provided by employers and coverage secured by households, etc. Although households do rely on informal mechanisms to secure a certain level of well-being, we were not able to have access to this information. So, informal mechanisms are not included in the Social Budget. An important point is that the Government is also an employer and it is important to differentiate between the social security contributions of the Government and other transfers (e.g., grants to the PSPF and transfers to cover specific legal benefits).

The Social Budget can be presented using different classifications. For revenues, we used the criterion of economic sector. For expenditures, we used the criterion of social function. In the case of some pension schemes, we were not able to separate the paid benefits by specific functions such as old age and invalidity. In the latter case, for the PSPF, we were not able to say whether the invalidity was caused by work injury or an external cause. For these reasons, we used general categories for social function: health care, education, pension benefits, work-related benefits, and social assistance. However, some work-related benefits (e.g., paid sick leave) and health care could come under the same category. Likewise, some social assistance benefits (e.g., school feeding programme) and education could come under the same category.

To help with the presentation of results, work-related benefits and social assistance are shown together under the heading of 'short-term benefits', but this is not necessarily the case. Redundancy benefits – that are paid at once after a worker is made redundant – depend on the years of service and then are not purely short-term. A universal old-age pension would be considered a long-term non-contributory benefit.

The expenditures of the Social Budget include the item 'administration' that basically includes the management costs of social security funds and the general costs of the health system. We were not able to identify the administrative costs of the education sector, social assistance programmes and other benefits, given the lack of accurate information. It could be that these costs are under-estimated, which means that the social protection system would be more inefficient.

Appendix B.

Population projections

The population projections were based on the ILO population projection model (ILO-POP) developed by the Financial, Actuarial and Statistical Services Branch of the ILO (see ILO-FACTS, 2002). The base year for the projection was 2000 because it is the year of the last population census. The projections then covered the period 2000-2025.

A description of the assumptions used and the logic of the model is provided below. In addition, these projections are compared with two other projections available: the official projections from the Central Statistical Office of the Republic of Zambia and the projections of the Population Division of the Department for Economic and Social Affairs of the United Nations Secretariat (named hereafter: UN population division). The reasons for using the ILO-POP are discussed throughout the appendix.

1. Application of the ILO-POP model to Zambia

The model relies on the 'cohort component' method that consists of dividing the total population of the base year into cohorts or sex-age components and estimating the year-by-year transitions of each cohort. These transitions take into account the cohort-specific survival and migration rates and the number of newborns based on the fertility rates and female population estimates.

The calculations require the following information: official estimates of population for the base year, mortality rates by age and sex, the total and age-specific fertility rates, the sex ratio of the newborn, and the migration rates. However, the model allows the use of regional patterns and generalized assumptions to get some inputs based on aggregate national estimates.

Table B-1. Population by five-year age group, in 2000

Age	0- 4	5- 9	10-14	15-19	20-24	25-29	30-34	35-39	40-44
Females	847 030	745 401	645 870	556 927	472 814	391 176	304 194	239 280	176 991
Males	850 635	738 167	629 335	538 660	454 692	379 715	305 420	245 915	187 914

Age	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80 +	Total
Females	137 270	106 760	83 750	65 790	48 528	32 178	16 710	21 099	4 891 768
Males	147 848	113 518	89 626	71 287	54 795	39 696	25 978	25 394	4 898 595

Based on CSO (2006d)

Initial population

The official estimates of population by age and sex at the middle of the base year (2000) were obtained from the Central Statistical Office (CSO, 2006d). Table B-1 shows that the official figures were not separated by single age. The model interpolated these figures to distribute individuals across single-age cohorts.

Mortality assumptions

The model calculates mortality rates based on three elements: (i) initial life expectancy at birth for females and males; (ii) an assumed age pattern of mortality rates; and (iii) a trend for mortality decline.

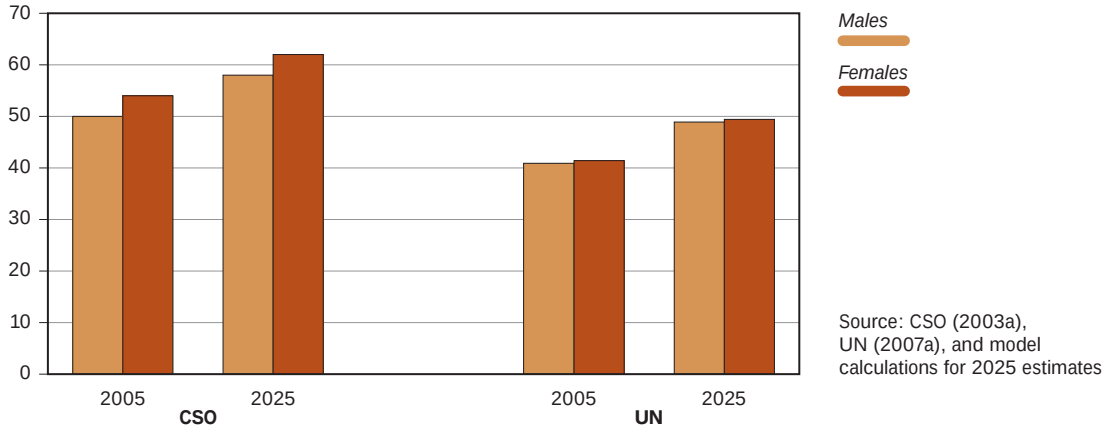
The official estimates of life expectancy at birth were 52 for females and 48 for males in 2000 (CSO, 2003a). For the mortality rates, a regional pattern called 'general' was chosen, based on the UN model life tables.[1] The mortality rates were assumed to decline slowly. The projection period ends in 2025; over a longer period, the mortality decline could go faster. The model then calculated that the life expectancy for females and males would increase in the ten years following the projection period.

However, official estimates of initial life expectancy are much higher than the ones calculated by other sources. For instance, the UN population division calculated a life expectancy at birth of 39.4 years for females and 38.9 years for males for the period 2000-2005 under a medium variant scenario. For year 2005 (base year for the Social Budget model), the World Health Organisation (WHO) calculated the life expectancy at birth at 40 years for both females and males (WHO, 2007). Figure B-1 shows the magnitude of such a difference comparing the values of life expectancy for year 2005 and 2025 according to the CSO and the UN population division.

This discrepancy in estimates reflects different assumptions about the strength of the negative effect of HIV/AIDS on life expectancy. CSO (2003c) calculates – based on the progression of life expectancy experienced between 1969 and 1990 – that the effect on life expectancy in 2000 would be six years. For the UN population division (2006), the effect would be much higher: around 17 years.

[1] The UN life tables comprise five regional age patterns: general, South Asian, Far Eastern, Latin American and Chilean. Each pattern contains 41 life tables according to the life expectancy at birth (ILO-FACTS, 2002, p. 35).

Figure B-1. Different estimates of life expectancy



Source: CSO (2003a), UN (2007a), and model calculations for 2025 estimates

Regarding HIV prevalence, CSO considers under a medium variant scenario that adult HIV prevalence would decrease from 15.6 per cent in 2000 to 9.6 per cent in 2015 and 5.6 per cent in 2025 (CSO, 2003c, p. 11). In contrast, the UN population division projects that adult HIV prevalence would slightly decrease to reach 14.6 per cent in 2015 (UN, 2006, p. 68) under the medium variant scenario.[2]

Consequently, the overall results of the Social Budget model will vary a great deal depending on which estimates are chosen. The implications of using different scenarios are discussed in the next section.

Fertility assumptions

The model calculates age-specific fertility rates based on (i) the estimated total fertility rate, at the beginning and at the end of the projection period; (ii) an age fertility pattern out of 30 regional patterns; and (iii) an age of child-bearing pattern out of three options (late, intermediate, and early).

The official estimates for total fertility rate (TFR) are 6.0 and 4.9 children per woman for 2000 and 2025, respectively (CSO, 2003c). The age fertility pattern selected was the one of Eastern Africa and the age childbearing pattern chosen was the intermediate one. The resulting age-specific fertility rates are shown in Table B-2. In this table, the official estimates for 2000 are also included.

The sex ratio of newborns or the proportion of male to female births was 0.971 in year 2000 according to the demographic and health survey 2001-2002 (CSO, 2003e). However, official estimates of this ratio have fluctuated significantly even in the short run.[3] Therefore, we use the estimate from the UN population division (1.03) and keep it over the projection period.

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[2] Other HIV/AIDS-related scenarios considered are the most extreme cases: one in which no treatment is available; and another in which a perfectly effective vaccine against HIV is instantly available to everyone by 2010 (UN, 2007, 'Assumptions').

[3] CSO (2003e) reports that the sex ratio at birth was 109.5 in 1999 and 77.9 in 2002 (Table C-4, p. 277).

Table B-2. Age specific fertility rates

	Model (2000)	Model (2025)	Census 2000	ZDHS 2001/2002
15-19	0.1400	0.1176	0.1407	0.1600
20-24	0.2828	0.3038	0.2768	0.2660
25-29	0.2773	0.3038	0.2692	0.2490
30-34	0.2244	0.1568	0.2317	0.2180
35-39	0.1539	0.0784	0.1748	0.1720
40-44	0.0900	0.0196	0.0855	0.0790
45-49	0.0315	0.0000	0.0501	0.0300

Source: CSO (2003a; 2003e) and model calculations.

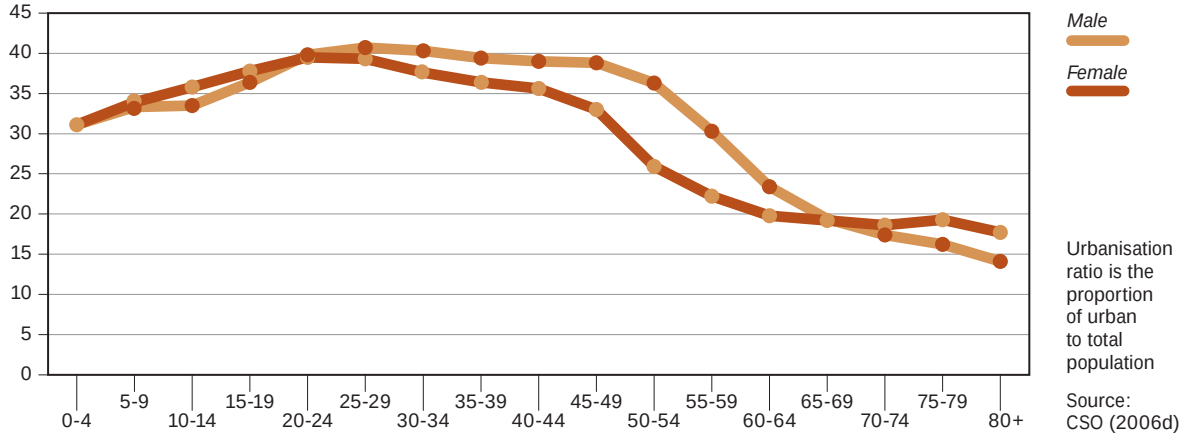
Migration assumptions

The model relies on aggregate assumptions and then calculates the national population of females and males. It does not calculate the population by area of residence or province. Therefore, internal migration was not taken into account. International migration was not included either because official figures of emigration were not available (CSO, 2003c). Furthermore, international migrants in 2000 represented only 1 per cent of total population and most of them were refugees or asylum-seekers from Angola and the Democratic Republic of Congo (CSO, 2003d). Immigration fuelled by such specific reasons would not necessarily be recurrent over the projection period. The UN population division provides estimates for net migration but there are no separate figures for immigrants and emigrants.

On the other hand, regarding internal migration, it is important to have separate projections for rural and urban population because people engage in different economic activities depending on their area of residence. People in urban areas depend more on paid dependent employment than those in rural areas. The latter depend more on subsistence agriculture and then are less protected by formal social protection schemes than are people in urban areas.

As explained in Chapter 1, during the 1990s there was internal migration from urban to rural areas caused by worsened economic conditions. The opposite would

Figure B-2. Urbanization ratio in 2000 (percentage)



Urbanisation ratio is the proportion of urban to total population

Source: CSO (2006d)

have been expected to occur in the 2000s. Keeping migration assumptions based on the 2000 census (if available) would be inaccurate as we are unable to trace national migration trends based on single cases. The approach chosen here is to keep a constant ratio of urbanization (ratio of urban to total population) per cohort during the projection period (see Figure B-2).

It should be noted that according to official population projections this ratio decreases over time from 35.1 per cent in 2000 to 28.6 per cent in 2025 (on average for all age groups). This trend would be signalling the different fertility rates of rural and urban population – the total fertility rate in 2001/2002 was 6.9 for rural and 4.3 for urban population (CSO, 2003e) –that would explain a higher population growth in rural areas than that in urban areas even assuming a constant migration pattern. In contrast, the UN population division projects an increase in the urbanization ratio from 34.8 per cent in 2000 to 41.5 per cent in 2025.

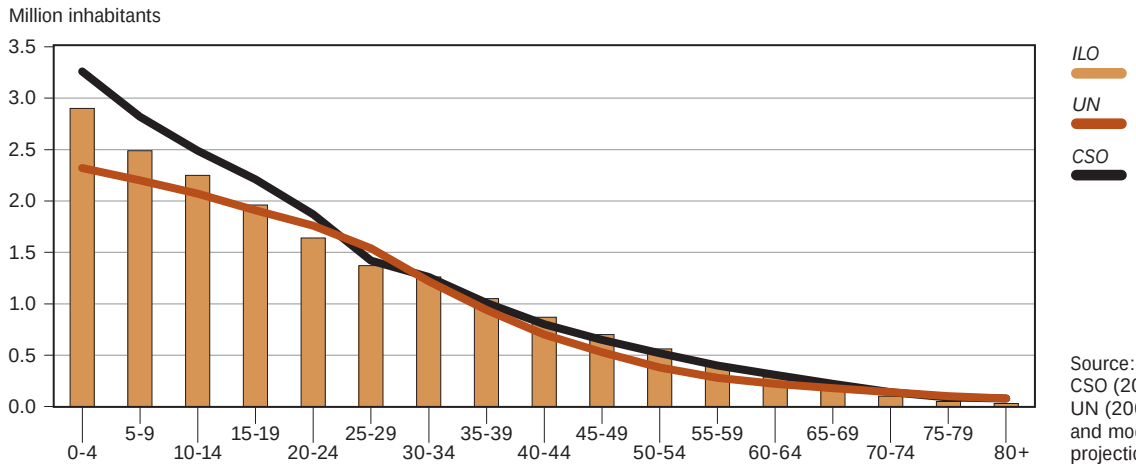
Comparison of model results with projections from different sources 2.

We would have liked to use the official assumptions of life expectancy but as explained earlier there are divergent estimates from other sources. This results in divergent population projections. The total population of Zambia in 2025 would be 19.6 million according to official projections and 16.5 million according to the UN projections, under a medium variant scenario.

Inputting the official estimates of life expectancy in the ILO-POP model brings quite different results from using the UN estimates: the difference is of around 4.3 million inhabitants. Furthermore, because this version of the model does not deal with the effect of HIV/AIDS separately, we decided to use the most conservative estimates of life expectancy.

Our model then produces results that seem to be at a mid-point between the official projections and the UN projections: 18.1 million inhabitants. Figure B-3 shows three series: (i) our projections using UN life expectancy; (ii) UN projections; and (iii) official CSO projections. Our series is plotted in bars to differentiate it from the other two series.

Figure B-3. Population distribution in 2025 (three projections)



Source: CSO (2006d), UN (2007a) and model projections

Figure B-3 shows that the slope of the series of the UN projections is flatter than the other two, which is a consequence of the lower estimates for total fertility rate (TFR): 5.65 children per woman for 2000-2005 and 3.69 children per woman for 2020-2025 (UN, 2007). However, the UN population division also considers a high-fertility scenario that assumes the values of 5.65 and 4.19, respectively.

In this respect, the UN population division assumes that the TFR in all countries will converge towards a level of 1.85 children per woman in a given period of time (in the case of Zambia, a high-fertility country, this rate would be reached after 2050). Hence, it estimates a decline path for each country based on fertility models that consider the past experience of all countries during 1950-2000 and current fertility trends in each country.

So, we decided that the Social Budget model would be based on our projections using the official estimates of total fertility rate but that a second scenario with the UN estimates would be explored. If detailed official projections were available, they could be used in a third scenario. Analysing at least two scenarios is important because the other modules of the Social Budget depend on the population projections (see Appendix A). Hence, the portions of working-age to total population, the labour force and employment projections calculated under these two scenarios will be different.

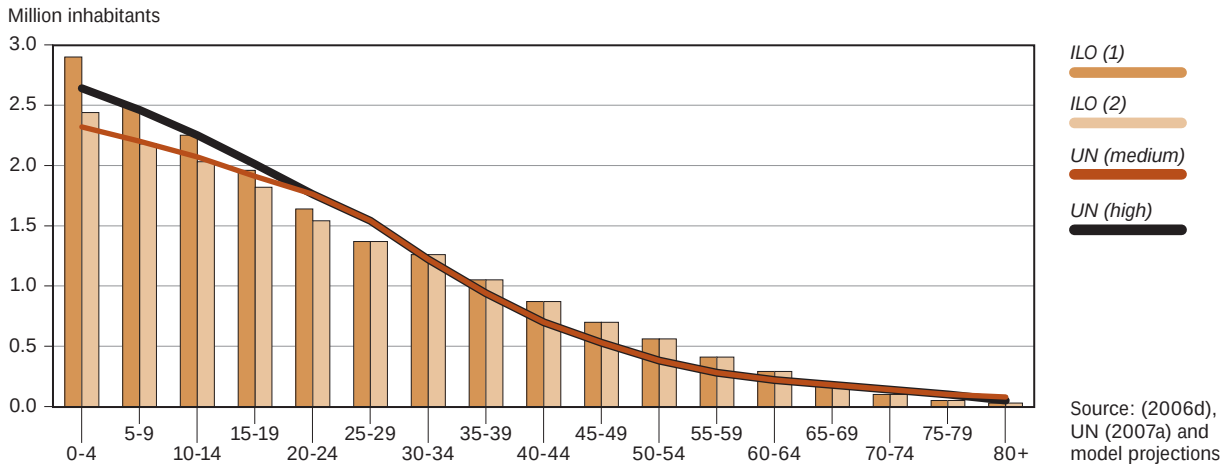
Figure B-4 shows four series of projections. Our projections using the ILO-POP model appear in bars. Results for scenario 1 come from using the official estimates for TFR and results for scenario 2, from using the UN estimates. The UN projections appear in lines. The thicker (and flatter) line corresponds to the medium-fertility scenario, and the upper line to the high-fertility scenario.

Table B-3 shows the population figures and some relevant ratios to compare the four cases depicted in the figure above.

The table shows that the population is ageing – the child dependency ratio decreases in all cases in relation to the situation in 2000 – and that this process seems to be less marked in official statistics and more marked in those cases where fertility rates are assumed to decrease fast (scenario 2 for ILO projections and medium-fertility case for UN projections).

On the other hand, the percentage of working-age to total population increases in all cases while the percentage of people aged 25-39 – those who were at highest risk of HIV infection in 2002 – varies according to the case. Comparing all cases, it seems that our scenario 1 describes an intermediate situation in terms of total number of

Figure B-4. Population distribution in 2025, two models and different fertility assumptions



Source: (2006d), UN (2007a) and model projections

Table B-3. Demographic ratios

	2000	2025				
		CSO	ILO (1)	UN (high)	ILO (2)	UN (medium)
Totals						
Total population (million inhab.)	9.79	19.55	18.10	17.37	16.88	16.54
Average annual growth (per cent)		**2.8**	**2.5**	**2.3**	**2.2**	**2.1**
Demographic ratios						
Child dependency ratio	87.9	81.9	75.6	76.8	67.5	69.5
Old-age dependency ratio	5.2	5.0	3.7	4.8	3.7	5.1
Total dependency ratio	93.1	87.0	79.2	81.6	71.2	74.7
Percentages for age groups						
per cent working-age (15-54)	48.6	49.8	52.0	52.2	54.3	54.2
per cent at-higher-risk group (25-39)	19.1	18.9	20.4	21.2	21.8	22.3

Note: Child dependency ratio is the ratio of the population aged 0-14 to the population aged 15-64. Old-age dependency ratio is the ratio of the population aged 65 years or over to the population aged 15-64. Total dependency ratio is the sum of the two previous ratios. People aged 25-39 are named 'at-higher-risk' because HIV prevalence rates were above 20 per cent for these groups in 2002.

Source: CSO (2006d), UN (2007a) and model calculations

inhabitants, dependency ratios and percentages of target age groups. This is the base case on which the projections of the Social Budget model have been based.

In line with previous results, the average age of the population increases from 20.8 years in 2000 to 22.1 years in 2025 under our scenario 1.

Reasons for using the ILO-POP model 3.

In this report we use the ILO-POP population projections for several reasons. The most important one is that the ILO-POP model allows us to carry out a sensitivity analysis about different assumptions (see section above). This means that we can test the effect of different assumptions on the Social Budget projections because the other modules of the Social Budget model are also built according to the cohort component method.

Another related reason is that we need the number of inhabitants by single-age cohort, not only the number by 5-year age group as the data that we obtained from the Central Statistical Office of Zambia (as of 19 November 2007) and the data that are publicly available from the UN population division. If detailed official projections are available in the future, these can be used and their results in the overall Social Budget can be compared with the results produced under this base scenario (with ILO-POP projections).

In Table B-4, we summarize the assumptions used in our model.

Table B-4. Summary of assumptions used in the ILO-POP model

Indicator	Estimate	Source
Mortality assumptions		
Life expectancy at birth	39.4 years for females 38.9 years for males	UN population division
Age pattern	General	UN life tables
Trend of mortality decline	Slow	
Fertility assumptions		
Scenario 1 (base case)		
Total fertility rate (2000)	6.00 (children per woman)	CSO
Total fertility rate (2025)	4.90 (children per woman)	CSO
Scenario 2		
Total fertility rate (2000)	5.65 (children per woman)	UN population division
Total fertility rate (2025)	3.69 (children per woman)	UN population division
All scenarios		
Age fertility pattern	Southern Africa	
Age child bearing pattern	Intermediate	
Sex ratio of newborns	1.03 (male to female births)	UN population division
Migration assumptions		
International migration	Zero	
Internal migration	(Constant urbanisation ratio)	

Appendix C.

Data issues

In this appendix we should like to make several points in order to signal the constraints we faced during the preparation of this report and, most importantly, ways in which the information system could be improved.

Appendix B already pointed out that the project team did not receive timely and accurate population projections for single-age cohorts for a period of several months (since the start of the project in February 2007 until January 2008 when this report was written). This situation significantly delayed the work of the team because, as explained in Appendix A, the population projections are the foundation for all other projections in the Social Budget model. In future, if detailed official projections are available and the assumptions underlying these projections are checked against other estimates and successfully agreed, the Social Budget model can be based on these official projections. Indeed, this would be ideal, because the Social Budget model is at its most useful when it is adopted and improved by policy-makers in a country relying on a sound statistical system with the resources to produce high-quality input data.

Because we are projecting the Social Budget of Zambia and the Government is the main provider of social protection in the country, reliable quantifiable information of the main operations of the central Government are necessary. However, we had difficulty obtaining official data from different ministries, especially from the MoFNP. The CSO was starting its very first economic census, which means that key staff were involved in meetings and training sessions and did not have much time to discuss data issues with the project team. As IMF (2007a, p. 56) states, there are resource constraints and organizational weakness within this institution that affected its performance.

Our work took place in a context in which the country was adapting its information system and reporting procedures to the requirements of the cooperating partners and the multilateral institutions. Programmes such as the Poverty Reduction Budget Support (PRBS) and the Public Expenditure Management and Financial Accountability (PEMFA) currently underway were intended to improve the financial information systems. Indeed, 'the Integrated Financial Management Information System (IFMIS) pilot sites will "go live" in 2008' (MoFNP, 2008, p. 12). This means that in future, the Social Budget model developed here could benefit from better information and become a complementary tool to assess the Government's capacity to address the needs of its population and improve their well-being.

In the meantime, we used several data sources to carry out our work. Historical data for our modules of the Social Budget come mainly from:

- For the population module: the Central Statistical Office and the Population Division of the United Nations
- For the labour market module: the Central Statistical Office
- For the economic module: the Central Statistical Office (electronic data, annual statistics, and monthly bulletins), the MoFNP (electronic data of aggregate macroeconomic indicators) the Bank of Zambia (website), and the LuSE.
- For the pension module: data come from audited (only in the case of NAPSA) or preliminary reports provided by the specific schemes and from reports and electronic data from the PIA.
- For the social assistance module: financial report, with exact figures collected by the consultant
- For the health module: the 2002-2004 national health accounts and other sources explained in Appendix A for projections.
- For the education module: the consultant's figures.

Specific points related to data used by the project team are explained below.

1. Government accounts

One important limitation was the lack of updated data for local Government accounts which means that our balance of general Government only included central Government and social security institutions. For instance, we were not able to identify the grants to the LASF and the official amount of pension arrears, so that we had to rely on secondary sources (e.g., the Superannuation Update).

Most importantly, there were reporting and recording issues regarding the figures of central Government. We observed that there were large differences between the figures reported in the annual economic reports and the financial reports. Furthermore, we could not obtain official reports in which the figures of preceding years were reviewed. For instance, in the economic report of 2006 (which was produced in 2007), we could not get the reviewed figures of 2005 for each item of revenues and expenditures. Similarly, the last financial report to which we had access was the one of 2005, and the figures reported there conflicted with the economic report (i.e., an apparent surplus in the financial report). In addition, there are extra-budgetary items that are not included in the official reports.

So, we relied on preliminary figures and audited figures from previous years that were provided by a local consultant who looked at several reports issued by the Ministry of Finance and National Planning, the Bank of Zambia, the Ministry of Education, the Ministry of Health, and the pension funds.

Table C-1 shows the magnitude of the differences in the figures provided by three different sources. According to figures reported in the annual economic reports of the MFoNP, the fiscal deficit decreased in 2006 with respect to previous years (1.1 per cent of GDP in 2006 vs. 3.3 per cent of GDP in 2004). On the contrary, according to the IMF records (which are based on data provided by the CSO) and our

Table C-1. Comparing main fiscal operations by different source (in billions of Kwacha), 2004-2006

	2004			2005			2006		
	MoFNP	IMF	Used	MoFNP	IMF	Used	MoFNP	IMF*	Used
Revenues	6088.0	6173.0	6173.1	7743.8	7467.0	7670.6	8241.3	8415.0	9191.5
Domestic	4678.3	4740.0	4740.5	5643.3	5642.0	5736.1	6601.2	6618.0	6835.7
Grants	1409.7	1433.0	1432.7	2100.5	1825.0	1934.4	1640.1	1797.0	2355.8
Expenditures	6951.8	6918.0	6918.9	8845.8	8349.0	8527.7	8664.7	9051.0	10183.0
Current	4667.3	4653.0	4653.7	6056.2	6082.0	6160.4	7368.8	7450.0	7026.4
Capital	2284.5	2265.0	2265.2	2789.6	2267.0	2367.3	1295.9	1601.0	3156.6
Balancing items	0.0	545.0	303.7	0.0	24.0	0.0	0.0	-483.0	0.0
Overall result	-863.9	-200.0	-442.0	-1102.0	-858.0	-857.2	-423.4	-1119.0	-991.5
per cent GDP	-3.3	-0.8	-1.7	-3.4	-2.6	-2.6	-1.1	-2.9	-2.6

* The original figures reported by the IMF included the debt reduction as grants, reaching over K8,000 billion.

Sources: MoFNP (2005, 2006a, 2007a), IMF (2008b) and local consultant

figures, the fiscal deficit was the lowest (in this three-year period) in 2004, while the deficits in both 2005 and 2006 were around 2.6 per cent of GDP.

This implies that our data for government social expenditure could not be quite accurate. Furthermore, there may be 'hidden' expenditures related to specific projects (cf., IMF, 2008a) and lack of reporting by lower-level spending agents, e.g., at the provincial and district levels, that cause some reports to underestimate social expenditure. Indeed, the budget allocates monies to different sectors, the ministries receive the releases but their capacities to actually spend these funds vary. Indeed, the MoFNP (2008) indicated that:

"Due to the slow absorption by the Ministries, Provinces and other Spending Agencies, the 2007 Budget allocations could not be disbursed in full. This was, in part, a reflection of capacity constraints within spending agencies and contractors in the private sector, delayed procurement, and structural factors associated with the Budget cycle" (p. 7).

Concomitantly, the IMF (2007a) found that 'decentralization of government activities in earlier years had led to the creation of numerous extra-budgetary institutions... [and] currently, an estimated 35 per cent of Government activities are not captured in the data' (p. 57).

It is difficult to know with certainty the past trends in major social expenditures – and it is not our work to audit the Government accounts – but this work contributes by identifying the factors in each major social sector which can be influenced by social policy. The Social Budget model is built on main relationships and assumptions which can be affected by policy decisions.

2. Labour market statistics

The main problem was to get an accurate indicator for the national average wage. The Central Statistical Office (CSO) estimates an indicator called the national average earnings (NAE). The CSO runs quarterly employment and earnings enquiries but they were not carried out every year (apparently there was no enquiry in 2005 but an estimate for that year circulates) and furthermore, there is no way to cross-check the information provided by employers as they only fill in a questionnaire sheet which they receive by post. The estimates of average earnings from the labour force survey (LFS) are not comparable with the previous ones because the LFS collects information from households (self-reported income) and covers both the formal and the informal economy. In contrast, the enquiry targets formal establishments, the definition being used that of 'employed in the formal sector' (see Chapter 3) which is different from the one used in the LFS ('employed in the formal economy'). In the sector with the lowest degree of informality (central government), the numbers reported by these two instruments may be somewhat similar but in the case of other sectors (even the parastatal for which both tools report similar numbers of employed persons) the differences can be large (see Figure C-1).

On the other hand, the information reported in the enquiries fluctuates a great deal, despite the fact that they cover only the formal sector. This could be signalling the precariousness of the conditions of employment (i.e., formal sector employment is still irregular and casual despite the fact that people can have contracts) or inaccuracies in data collection or both.

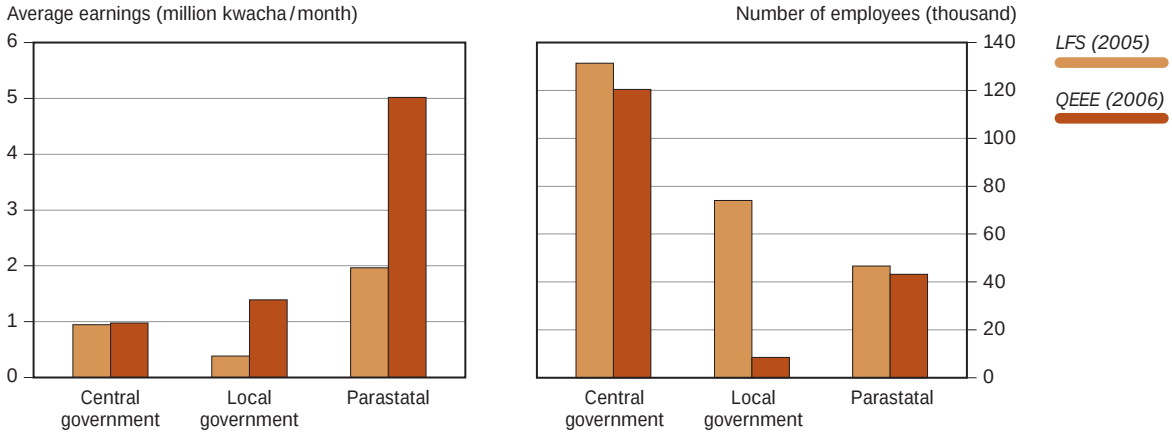
Table C-2 indicates that the NAE of the first quarter of 2006 was almost twice the one in the first quarter of 2004. Furthermore, in the case of the parastatal sector it would suggest that people fired towards the first quarter of 2006 had very low wages (so that this would partially explain the increase in average earnings).

More could be hypothesized about these figures, but the main points are:

- ☐ It is difficult to have a clear idea of the development of wages in the country.
- ☐ NAPSA uses the NAE to define the ceiling to insurable wages, to adjust them over time (to calculate the final balance at retirement age), and to adjust the pension payments. The fact that the NAE is inaccurate and extremely variable implies that NAPSA's financial situation is at risk –although it applies these adjustments with a one-year lag.

An additional problem was tracing employment trends. There have been official statistics for formal employment since the 1960s; however the definition used is not spelled out. Furthermore, as a result of the economic context during the 1980s and 1990s, formal employment shrank and this series does not help the analysis of how economic growth is affecting total employment. On the other hand, it was not possible to get an annual series of total employment (not only formal) drawn up by official institutions.

Figure C-1. Average earnings and employment in public sector



LFS (2005) is the 2005 labour force survey. QEEE (2006) is the 2006 quarterly employment and earnings enquiry. The enquiry report presents information for each quarter but here we took the averages of the four periods.

Source: CSO (2007a, 2007b)

Table C-2. Average earnings and formal employment reported from enquiries 2004 and 2006

	Average earnings (kwacha per month)			Number of employees		
	1Q 2004	1Q 2006	2006	1Q 2004	1Q 2006	2006
All Zambia	808 375	1 600 003	1 372 054	416 228	468 107	477 580
Central Government	676 489	1 021 275	974 385	117 041	117 056	120 433
Local Government	410 410	974 828	1 390 190	7143	7395	8457
Parastatal	1 924 071	6 351 687	5 021 309	48 399	36 134	43 214
Private	659 646	1 699 570	1 116 316	243 645	307 522	305 477

Source: CSO (2004; 2007b)

Information from pension schemes 3.

As seen in Appendix A, the model projects with more detail revenues and expenditures of the three statutory pension schemes: NAPSA, PSPF, and LASF. We requested audited financial statements of the three schemes and their respective actuarial valuations. However, we only received – at the end of November – the audited financial statements and reports of NAPSA (2004-2006). The last actuarial valuation for NAPSA corresponds to 2004 and the last one for PSPF corresponds to 2002. Apparently, the last actuarial valuation for LASF corresponds to 1997.

We tried to overcome the lack of official information about PSPF and LASF with provisional information provided by the schemes (which would need to be compared to official reports once prepared and approved by the respective administration boards) and with aggregate information reported by the PIA. This is the reason why we developed a separate sub-module for NAPSA (on which we had more information) and we present the projections of PSPF and LASF in a different sub-module called 'public pensions'. However, we obtained much less information from LASF than from PSPF. The occupational schemes have their own sub-module called 'private pensions' because we had to make generalized assumptions. Projecting flows for each scheme would be insurmountable given the high numbers involved (over 200) and our tight deadlines.

Regarding the number of contributors of each scheme, we were provided with a total number of contributors for PSPF (as at 2006), LASF (as at 2005, coming from PIA reports), and occupational schemes (as at 2006, coming from PIA reports). In the case of PSPF, the number of contributors was provided separately by sex and grouped into three age groups. However, some assumptions were made to distribute a portion of contributions with 'unknown' sex and age.

In the case of NAPSA, there was no accurate estimate for the number of contributors (i.e., some estimates were even higher than the number of people in formal-sector employment and varied a lot from month to month). Looking at different estimates and files provided, we decided to work with the number of contribution payments (explained in Appendix A) which led to a consistent age structure of contributors.

The points expressed above indicate that the pension schemes have problems with their information systems. Although these systems seem to be more developed in NAPSA's case, and indeed there are plans to improve the registration process of new members, there is still uncertainty about the contribution records of older members, especially those who contributed to the provident fund. It seems that many pension payments are made based on the documentation that the new pensioners themselves provide.

Regarding the number of pensioners of each scheme, NAPSA (being a young scheme) had the lowest number of them because it started paying pensions (not only lump sums) in 2006 and for those who qualified for a retirement pension under the 'sliding scale' (NAPSA, 2007b). However, the numbers corresponding to the former provident fund were not available. PSPF gave us data of pensioners for different types of benefits (i.e., old age, early retirement and survivors). We did not receive any more details from LASF than the numbers reported by the PIA.

Regarding the earnings of current contributors, we could infer them – in NAPSA's case – from the data of contribution payments (including some assumptions). Regarding the pension amounts we only had this information for NAPSA and PSPF although with different degrees of detail and consistency. In order to match the totals of pension expenditure from specific cohorts' numbers and average pensions with the totals reported in the income statements, we had to make assumptions. In other cases, we used aggregate figures of benefit expenditure reported to the PIA and published in the annual industrial reports.

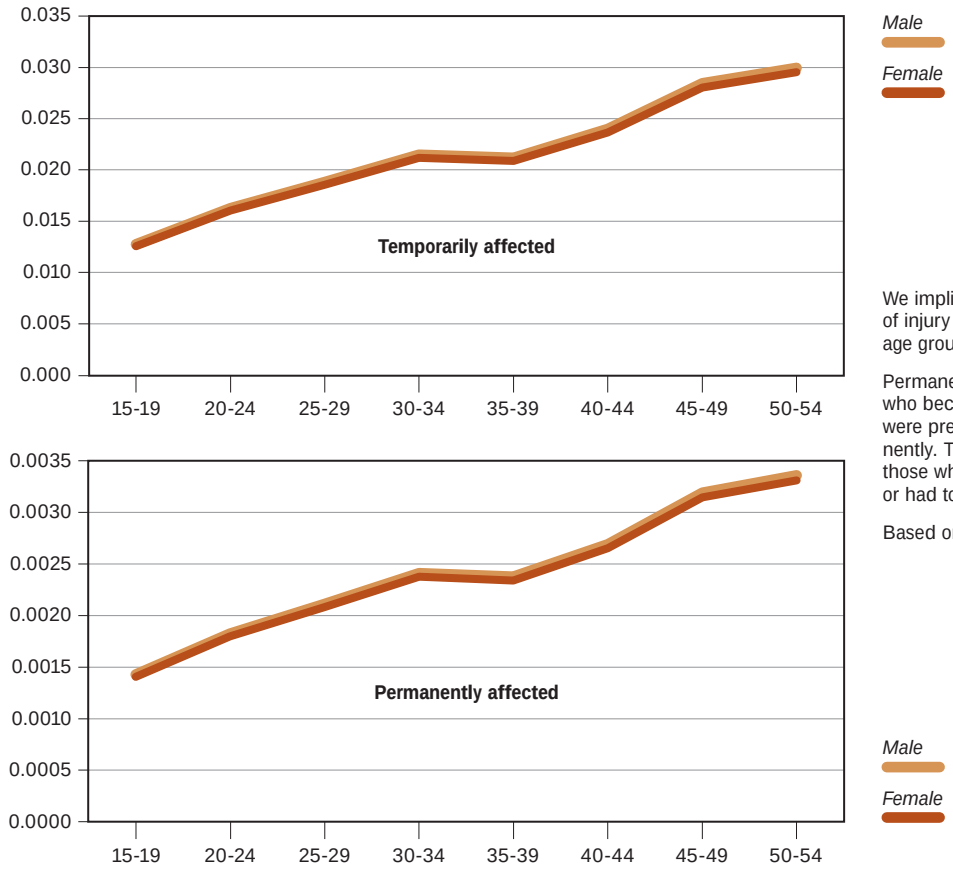
We did not obtain estimates of mortality rates or invalidity incidence rates from the schemes. So, we used the mortality rates applied for our population projections (see Annex A). Regarding incidence of invalidity, we tried to capture two elements: (i) work-related injuries with permanent incapacitating effect, by using information from the 2005 labour force survey (see Figure C-2); and (ii) HIV-related illnesses.

The second element was the most challenging one and so we used the information about HIV prevalence (CSO, 2003e) and adjusted it by an estimate of AIDS mortality.[1] Then, we took into account the work-related injuries reported in the 2005 labour force survey (permanently affected workers in Figure C-2), earlier estimates from the PROST model and HIV-related illness (see Figure C-3).[2] Our estimates show

[1] Roughly, based on UNAIDS and WHO (2007), there are 1.6 million deaths out of 22.5 million people living with HIV in sub-Saharan Africa, which implies a mortality rate of around 7.1 per cent.

[2] The PROST model is the Pension Reform Options Simulation Toolkit developed by the World Bank. It was used for the PSPF in 2002. We did not directly apply the incidence rates used there because the base year was 2002 (we incorporate some more updated data such as from the demographic and health survey and the labour force survey) and because we are not certain about the origin of these rates, which moreover were applied indiscriminately for females and males.

Figure C-2. Incidence of work-related injuries by age group among all employed persons

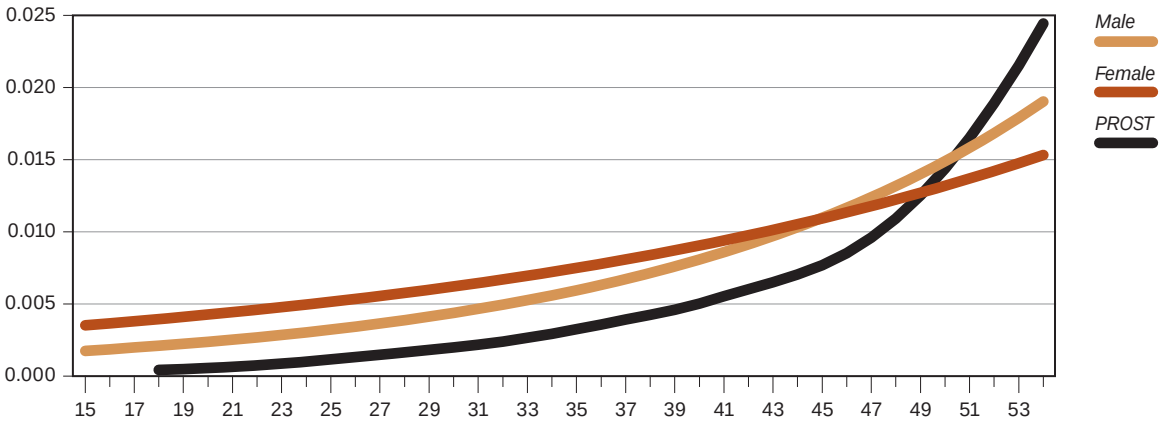


We implicitly assumed that the gravity of injury was evenly distributed across age groups.

Permanently affected workers are those who became permanently disabled or were prevented from working permanently. Temporarily affected workers are those who stopped working temporarily or had to change jobs.

Based on CSO (2007).

Figure C-3. Comparison of invalidity incidence rates



1) The invalidity incidence rate is assumed to be an exponential function based on observed values calculated as two thirds of the maximum between the work-related injury rate (LFS) and the PROST rate plus one third of the HIV-related illness incidence rate.
2) The PROST model did not use separate incident rates for males and females.

Based on CSO (2003e; 2007), PROST model provided by PSPF, and UNAIDS & WHO (2007)

that females are more at risk of invalidity than males during their early years while the opposite occurs for males during their late years. These trends are consistent with HIV prevalence rates. This assumption can be changed in the model when more accurate information is available. Figure C-3 shows also the calculated invalidity incidence rates by comparison with those coming from the PROST model.

The resulting invalidity incidence rates correspond to the whole population and again we used adjustment factors for the pension schemes, assuming a higher incidence for PSPF workers than for others, but a lower incidence for workers in all schemes in comparison to the general population. In the case of NAPSA, the adjustment was very high (the incidence rates were very low) following the observations by GAD (2007) that members of NAPSA do not claim so many invalidity benefits.

4. Social assistance programmes

We had to rely on historical trends of social assistance to project the future trends as we did not have access to multi-year budget or plans for all the programmes, except for the Social Cash Transfer Scheme, which is to be scaled up, although with no clear financing source.

But in the main, we based our figures on the financial reports, as well as on secondary sources, but with different dates; this means that data differed and we thus had to make assumptions. For instance, regarding the three components of the World Food Programme (WFP) we did not know the exact contribution of the Government and we then assumed that the whole budget was financed by donors.

Appendix D.

Tables of the Social Budget model

Pension schemes: Table 1

STATUTORY AND PRIVATE PENSION SCHEMES (figures in millions of Kwacha)

	2005	2006	2007	2008
INCOME				
Contributions	***652 717***	***767 653***	***887 274***	***1 021 248***
Statutory schemes	494 023	606 918	699 134	802 875
– Employer	274 002	339 152	392 299	451 854
– Employee	220 021	267 766	306 835	351 021
Occupational schemes	158 694	160 735	188 139	218 373
– Employer	85 118	86 213	100 911	117 127
– Employee	73 577	74 523	87 228	101 246
Investment income	***232 396***	***253 006***	***288 342***	***331 124***
Statutory schemes	134 397	160 995	215 908	255 264
Occupational schemes	97 999	92 011	72 435	75 860
Government transfer	182 059	276 957	328 906	335 071
TOTAL INCOME	**1 067 172**	**1 297 615**	**1 504 522**	**1 687 443**
EXPENDITURE				
Benefits	***384 162***	***527 056***	***644 536***	***687 409***
Statutory schemes	285 531	442 082	550 291	580 562
– Old age	148 778	277 561	342 397	363 154
– Invalidity	115 877	130 640	162 522	164 861
– Survivors	6 050	10 631	12 211	16 405
– Work injury	13 654	18 884	19 900	21 051
– Other	1 173	4 366	13 260	15 092
Occupational schemes	98 630	84 973	94 245	106 847
Administrative & other, net	*232 722*	*171 907*	*188 034*	*214 848*
Change of reserves	*450 289*	*598 652*	*671 952*	*785 186*
TOTAL EXPENDITURE	**1 067 172**	**1 297 615**	**1 504 522**	**1 687 443**

2009	2010	2011	2012	2013	2014
1 167 069	***1 303 726***	***1 422 971***	***1 555 651***	***1 703 274***	***1 867 225***
915 939	1 022 133	1 115 168	1 219 072	1 335 072	1 464 313
516 746	577 761	631 278	690 889	757 271	831 127
399 193	444 372	483 890	528 183	577 801	633 186
251 130	281 593	307 802	336 579	368 202	402 912
134 697	151 036	165 094	180 529	197 490	216 107
116 433	130 557	142 708	156 050	170 712	186 805
369 631	***400 796***	***474 965***	***557 264***	***649 398***	***752 235***
291 292	320 749	384 324	455 102	534 474	623 171
78 339	80 047	90 641	102 162	114 925	129 064
300 439	272 059	279 409	285 355	291 473	300 041
1 837 140	**1 976 581**	**2 177 344**	**2 398 270**	**2 644 145**	**2 919 502**
736 693	***792 695***	***853 948***	***922 555***	***999 815***	***1 091 685***
617 038	658 941	705 550	758 943	819 420	892 859
389 682	421 122	457 412	499 986	548 078	606 952
167 313	170 502	174 163	178 076	182 971	189 411
20 852	25 477	30 048	34 681	39 671	45 116
22 100	22 754	22 972	23 209	23 455	23 660
17 091	19 086	20 956	22 990	25 245	27 719
119 655	133 754	148 398	163 613	180 395	198 826
243 609	*271 459*	*301 932*	*334 978*	*371 997*	*413 499*
856 839	*912 427*	*1 021 465*	*1 140 737*	*1 272 334*	*1 414 317*
1 837 140	**1 976 581**	**2 177 344**	**2 398 270**	**2 644 145**	**2 919 502**

STATUTORY AND PRIVATE PENSION SCHEMES (figures in millions of Kwacha) (cont.)

	2015	2016	2017	2018
INCOME				
Contributions	***2 048 692***	***2 188 119***	***2 337 797***	***2 498 080***
Statutory schemes	1 608 169	1 720 082	1 840 782	1 970 489
– Employer	913 009	976 325	1 044 325	1 117 234
– Employee	695 160	743 756	796 457	853 255
Occupational schemes	440 523	468 038	497 015	527 591
– Employer	236 280	251 038	266 581	282 981
– Employee	204 242	216 999	230 434	244 611
Investment income	***865 768***	***820 596***	***919 562***	***1 026 119***
Statutory schemes	721 065	686 399	771 123	861 780
Occupational schemes	144 702	134 197	148 440	164 340
Government transfer	301 173	299 330	293 893	293 496
TOTAL INCOME	**3 215 633**	**3 308 046**	**3 551 253**	**3 817 695**
EXPENDITURE				
Benefits	***1 207 687***	***1 315 212***	***1 396 390***	***1 498 393***
Statutory schemes	988 141	1 076 007	1 149 194	1 243 470
– Old age	687 985	763 537	823 243	901 230
– Invalidity	194 589	198 674	202 974	209 784
– Survivors	51 070	56 979	63 724	70 734
– Work injury	24 028	23 974	23 984	23 945
– Other	30 468	32 844	35 268	37 776
Occupational schemes	219 546	239 205	247 196	254 924
Administrative & other, net	*459 677*	*500 890*	*539 886*	*582 358*
Change of reserves	*1 548 269*	*1 491 944*	*1 614 978*	*1 736 945*
TOTAL EXPENDITURE	**3 215 633**	**3 308 046**	**3 551 253**	**3 817 695**

	2019	2020	2021	2022	2023	2024	2025
	2 670 055	***2 854 984***	***3 053 971***	***3 267 775***	***3 497 418***	***3 744 092***	***4 009 376***
	2 110 147	2 260 983	2 423 982	2 599 757	2 789 199	2 993 388	3 213 779
	1 195 545	1 279 939	1 370 920	1 468 825	1 574 204	1 687 630	1 809 745
	914 602	981 043	1 053 062	1 130 932	1 214 995	1 305 758	1 404 034
	559 908	594 001	629 988	668 018	708 218	750 704	795 597
	300 314	318 601	337 903	358 301	379 863	402 651	426 729
	259 594	275 401	292 086	309 717	328 356	348 054	368 868
	1 139 563	***1 259 256***	***1 386 011***	***1 520 814***	***1 662 834***	***1 809 836***	***1 958 568***
	957 510	1 057 536	1 162 512	1 273 234	1 388 662	1 506 353	1 622 847
	182 052	201 720	223 499	247 580	274 173	303 483	335 721
	293 426	296 910	296 831	297 370	306 769	312 379	329 169
	4 103 044	**4 411 151**	**4 736 813**	**5 085 959**	**5 467 021**	**5 866 307**	**6 297 112**
	1 629 736	***1 779 033***	***1 916 113***	***2 065 993***	***2 266 018***	***2 511 049***	***2 832 385***
	1 366 750	1 507 403	1 635 569	1 776 800	1 968 028	2 203 826	2 515 392
	1 006 564	1 124 968	1 227 986	1 340 819	1 498 317	1 699 083	1 968 580
	217 383	228 319	241 029	256 257	275 852	295 333	320 309
	78 479	86 974	96 230	106 042	116 657	128 447	141 405
	23 865	23 804	23 871	23 922	23 902	23 805	23 754
	40 460	43 338	46 454	49 760	53 300	57 158	61 345
	262 986	271 630	280 544	289 193	297 990	307 223	316 992
	628 808	*679 537*	*735 119*	*795 502*	*861 219*	*932 727*	*1 010 328*
	1 844 499	*1 952 580*	*2 085 580*	*2 224 464*	*2 339 784*	*2 422 531*	*2 454 400*
	4 103 044	**4 411 151**	**4 736 813**	**5 085 959**	**5 467 021**	**5 866 307**	**6 297 112**

Pension schemes: Table 2

NAPSA (figures in millions of Kwacha)

	2005	2006	2007	2008
INCOME	**360 252**	**431 188**	**547 986**	**659 786**
Income from contributions	241 350	292 247	359 599	435 765
– Employers	120 675	146 123	179 800	217 883
– Employees	120 675	146 123	179 800	217 883
EXPENDITURE	**81 543**	**86 817**	**112 773**	**148 997**
Benefit Expenditure	***23 706***	***30 678***	***41 205***	***61 667***
– Old age	16 273	20 117	30 557	47 779
– Survivors	5 721	9 586	9 104	11 368
– Invalidity	1 117	975	1 544	2 520
– Other	594	550	9 515	11 410
Administrative cost	57 837	56 139	71 568	87 330
OPERATIVE RESULT	**159 807**	**205 430**	**246 827**	**286 768**
Investment Income	118 902	138 941	188 387	224 021
Net other items	-61 821	33 257	0	0
SURPLUS / DEFICIT	**216 888**	**377 628**	**435 214**	**510 789**
Reserve flows				
Reserve at the start of the year	835 593	1 052 482	1 429 690	1 855 389
Reserve at the end of the year	1 052 482	1 430 110	1 864 904	2 366 178
Reserve Ratio	12.91	16.47	16.54	15.88
CHANGE OF RESERVE	**216 888**	**377 628**	**435 214**	**510 789**

2009	2010	2011	2012	2013	2014
778 298	**891 889**	**1 031 567**	**1 187 839**	**1 363 389**	**1 560 382**
521 834	607 442	687 523	777 436	878 592	992 462
260 917	303 721	343 762	388 718	439 296	496 231
260 917	303 721	343 762	388 718	439 296	496 231
194 124	**245 685**	**302 917**	**370 339**	**447 645**	**539 499**
88 743	***121 426***	***159 942***	***206 802***	***260 635***	***325 679***
70 781	98 551	131 484	171 785	217 614	273 044
14 011	16 995	20 119	23 536	27 524	32 100
3 951	5 880	8 340	11 481	15 497	20 535
13 476	15 586	17 556	19 637	21 957	24 535
105 381	124 260	142 975	163 537	187 010	213 820
327 711	**361 757**	**384 607**	**407 097**	**430 947**	**452 963**
256 463	284 447	344 044	410 403	484 797	567 920
0	0	0	0	0	0
584 174	**646 203**	**728 651**	**817 500**	**915 744**	**1 020 883**
2 354 768	2 925 465	3 556 083	4 267 177	5 065 040	5 958 827
2 938 942	3 571 669	4 284 734	5 084 677	5 980 784	6 979 710
15.14	14.54	14.14	13.73	13.36	12.94
584 174	**646 203**	**728 651**	**817 500**	**915 744**	**1 020 883**

NAPSA (figures in millions of Kwacha) (cont.)

	2015	2016	2017	2018
INCOME	**1 777 310**	**1 850 816**	**2 041 328**	**2 246 895**
Income from contributions	1 117 729	1 221 168	1 332 552	1 453 475
– Employers	558 864	610 584	666 276	726 737
– Employees	558 864	610 584	666 276	726 737
EXPENDITURE	**661 972**	**783 859**	**894 262**	**1 024 833**
Benefit Expenditure	***417 923***	***510 197***	***590 621***	***688 069***
– Old age	353 995	433 832	500 118	581 893
– Survivors	37 392	43 096	48 899	54 958
– Invalidity	26 536	33 270	41 604	51 218
– Other	27 388	29 823	32 305	34 915
Administrative cost	244 049	273 662	303 641	336 764
OPERATIVE RESULT	**455 757**	**437 309**	**438 290**	**428 642**
Investment Income	659 581	629 648	708 776	793 420
Net other items	0	0	0	0
SURPLUS / DEFICIT	**1 115 338**	**1 066 957**	**1 147 067**	**1 222 062**
Reserve flows				
Reserve at the start of the year	6 955 175	8 043 125	9 080 259	10 195 021
Reserve at the end of the year	8 070 513	9 110 082	10 227 326	11 417 083
Reserve Ratio	12.19	11.62	11.44	11.14
CHANGE OF RESERVE	**1 115 338**	**1 066 957**	**1 147 067**	**1 222 062**

2019	2020	2021	2022	2023	2024	2025
2 467 561	**2 702 417**	**2 952 762**	**3 221 127**	**3 507 866**	**3 811 702**	**4 129 195**
1 584 818	1 726 449	1 879 029	2 044 304	2 223 686	2 418 357	2 628 352
792 409	863 225	939 514	1 022 152	1 111 843	1 209 179	1 314 176
792 409	863 225	939 514	1 022 152	1 111 843	1 209 179	1 314 176
1 187 833	**1 368 311**	**1 543 179**	**1 735 488**	**1 975 074**	**2 269 150**	**2 633 287**
814 493	***954 749***	***1 085 495***	***1 229 377***	***1 415 831***	***1 651 696***	***1 952 282***
690 618	810 267	916 695	1 033 382	1 189 998	1 392 808	1 657 408
61 822	69 731	78 468	87 667	97 803	109 423	122 700
62 053	74 751	90 333	108 328	128 030	149 465	172 173
37 744	40 821	44 113	47 571	51 281	55 313	59 684
373 340	413 562	457 683	506 111	559 244	617 454	681 005
396 985	**358 139**	**335 850**	**308 817**	**248 612**	**149 207**	**-4 935**
882 743	975 968	1 073 733	1 176 823	1 284 180	1 393 344	1 500 844
0	0	0	0	0	0	0
1 279 727	**1 334 106**	**1 409 584**	**1 485 640**	**1 532 791**	**1 542 551**	**1 495 909**
11 382 169	12 624 152	13 917 437	15 282 908	16 720 977	18 202 487	19 689 725
12 661 896	13 958 259	15 327 021	16 768 547	18 253 768	19 745 039	21 185 634
10.66	10.20	9.93	9.66	9.24	8.70	8.05
1 279 727	**1 334 106**	**1 409 584**	**1 485 640**	**1 532 791**	**1 542 551**	**1 495 909**

Pension schemes: Table 3

PSPF (figures in millions of Kwacha)

	2004	2005	2006	2007
INCOME	**176 846**	**361 700**	**492 710**	**488 437**
Income from contributions	153 871	187 890	225 753	235 032
– Employers	76 778	93 834	111 849	116 446
– Employees	77 093	94 056	113 904	118 586
Government contribution	6 000	146 823	266 803	253 405
Other govt receipts	16 975	26 987	154	50 000
EXPENDITURE	**238 865**	**296 850**	**399 577**	**488 437**
Benefit Expenditure	214 890.0	252 834	384 148	472 373
– Old age	124 946	127 278	240 828	294 835
– Survivor	0	0	0	2 038
– Disability	81 711	113 721	126 854	158 357
– Work injury	8 233	11 836	16 466	17 142
Administrative cost	23 975	44 016	15 429	16 064
OPERATIVE RESULT	**-62 019**	**64 850**	**93 132**	**0**
Investment Income	5 852	10 768	3 038	11 465
Net other items	103 102	28 244	-42 304	
SURPLUS / DEFICIT BEFORE TAX	**46 935**	**103 862**	**53 866**	**11 465**
Reserve Development				
Reserve at the start of the year	128 814	175 749	279 612	333 478
Reserve at the end of the year	175 749	279 612	333 478	344 943
Reserve Ratio	0.74	0.94	0.83	0.71
CHANGE OF RESERVE	**46 935**	**103 862**	**53 866**	**11 465**

2008	2009	2010	2011	2012	2013	2014
496 595	**504 011**	**510 744**	**516 213**	**520 134**	**523 805**	**528 736**
245 773	254 821	258 685	257 031	255 170	252 878	249 450
121 768	126 251	128 165	127 345	126 423	125 288	123 589
124 005	128 571	130 520	129 685	128 746	127 590	125 860
250 822	249 190	252 059	259 182	264 964	270 927	279 286
53 000	20 000	20 000	20 226	20 391	20 546	20 755
496 595	**504 011**	**510 744**	**516 213**	**520 134**	**523 805**	**528 736**
479 797	486 595	493 064	498 646	502 694	506 522	511 687
298 016	301 047	304 215	307 151	309 172	311 200	314 282
3 945	5 718	7 328	8 748	9 948	10 936	11 782
159 910	161 244	162 654	164 000	164 962	165 943	167 429
17 926	18 586	18 868	18 747	18 611	18 444	18 194
16 798	17 416	17 680	17 567	17 440	17 283	17 049
0	**0**	**0**	**0**	**0**	**0**	**0**
10 955	10 267	9 498	9 765	10 019	10 280	10 547
10 955	**10 267**	**9 498**	**9 765**	**10 019**	**10 280**	**10 547**
344 943	355 898	366 165	375 663	385 428	395 448	405 728
355 898	366 165	375 663	385 428	395 448	405 728	416 275
0.72	0.73	0.74	0.75	0.76	0.77	0.79
10 955	**10 267**	**9 498**	**9 765**	**10 019**	**10 280**	**10 547**

PSPF (figures in millions of Kwacha) (cont.)

	2015	2016	2017	2018
INCOME	**528 096**	**520 464**	**509 892**	**503 150**
Income from contributions	247 657	241 575	236 027	229 427
– Employers	122 701	119 688	116 939	113 669
– Employees	124 956	121 887	119 088	115 758
Government contribution	280 439	278 888	273 865	273 723
Other govt receipts	20 734	20 442	20 028	19 773
EXPENDITURE	**528 096**	**520 464**	**509 892**	**503 150**
Benefit Expenditure	511 169	503 953	493 761	487 469
– Old age	313 905	309 556	302 871	298 795
– Survivor	12 415	12 616	13 551	14 485
– Disability	166 786	164 162	160 123	157 456
– Work injury	18 063	17 620	17 215	16 734
Administrative cost	16 926	16 511	16 132	15 680
OPERATIVE RESULT	**0**	**0**	**0**	**0**
Investment Income	10 821	9 214	9 413	9 616
Net other items				
SURPLUS / DEFICIT BEFORE TAX	**10 821**	**9 214**	**9 413**	**9 616**
Reserve Development				
Reserve at the start of the year	416 275	427 096	436 310	445 722
Reserve at the end of the year	427 096	436 310	445 722	455 338
Reserve Ratio	0.81	0.84	0.87	0.90
CHANGE OF RESERVE	**10 821**	**9 214**	**9 413**	**9 616**

2019	2020	2021	2022	2023	2024	2025
495 791	**491 707**	**484 348**	**476 824**	**476 270**	**470 403**	**475 209**
221 860	214 148	206 591	198 245	188 298	176 615	164 859
109 920	106 099	102 355	98 220	93 292	87 504	81 679
111 940	108 049	104 236	100 025	95 006	89 112	83 180
273 930	277 559	277 757	278 578	287 972	293 787	310 350
19 496	19 351	19 074	18 792	18 797	18 591	18 819
495 791	**491 707**	**484 348**	**476 824**	**476 270**	**470 403**	**475 209**
480 627	477 071	470 228	463 274	463 401	458 332	463 941
294 712	292 844	288 893	284 715	285 197	282 710	287 218
15 321	15 869	16 354	16 946	17 400	17 543	17 198
154 413	152 739	149 914	147 154	147 070	145 198	147 502
16 182	15 619	15 068	14 459	13 734	12 882	12 024
15 163	14 636	14 120	13 549	12 869	12 071	11 267
0	**0**	**0**	**0**	**0**	**0**	**0**
9 823	10 035	10 252	10 473	10 699	10 929	11 165
9 823	**10 035**	**10 252**	**10 473**	**10 699**	**10 929**	**11 165**
455 338	465 161	475 196	485 448	495 920	506 619	517 548
465 161	475 196	485 448	495 920	506 619	517 548	528 713
0.94	0.97	1.00	1.04	1.06	1.10	1.11
9 823	**10 035**	**10 252**	**10 473**	**10 699**	**10 929**	**11 165**

Pension schemes: Table 4

LASF (figures in millions of Kwacha)

	2004	2005	2006	2007
INCOME	**20 343**	**25 706**	**35 535**	**53 386**
Income from contributions	18 481	17 456	25 535	27 885
– Employers	12 881	12 166	17 797	19 435
– Employees	5 600	5 290	7 738	8 450
Government		8 250	10 000	25 501
Other income	1 862			
EXPENDITURE	**20 622**	**10 651**	**31 704**	**33 247**
Benefit Expenditure	16 606	7 173	22 654	24 440
– Old age		5 251	16 893	17 005
– Invalidity		1 016	2 536	2 621
– Survivor		327	1 052	1 069
– Funeral		579	3 817	3 745
Administrative Cost	4 016	3 478	9 050	8 807
OPERATIVE RESULT	**-279**	**15 056**	**3 831**	**20 139**
Investment Income	1 912	1 432	15 011	10 777
SURPLUS/DEFICIT BEFORE TAX	**9 786**	**16 488**	**18 842**	**30 916**
Reserve Development				
Reserve at the start of the year	26 561	36 347	52 835	71 676
Reserve at the end of the year	36 347	52 835	71 676	102 592
Reserve Ratio	1.76	4.96	2.26	3.09
CHANGE OF RESERVE	**9 786**	**16 488**	**18 842**	**30 916**

2008	2009	2010	2011	2012	2013	2014
61 387	**63 276**	**33 432**	**34 462**	**35 371**	**36 020**	**36 613**
30 138	32 027	33 432	34 462	35 371	36 020	36 613
21 005	22 322	23 301	24 019	24 653	25 105	25 518
9 133	9 705	10 131	10 443	10 718	10 915	11 095
31 250	31 250					
32 917	**32 351**	**31 666**	**31 729**	**31 578**	**31 418**	**31 350**
24 563	24 710	24 980	25 181	25 211	25 295	25 492
17 359	17 854	18 356	18 777	19 029	19 264	19 626
2 431	2 118	1 969	1 823	1 633	1 532	1 447
1 092	1 123	1 154	1 181	1 197	1 211	1 234
3 682	3 614	3 501	3 400	3 353	3 288	3 184
8 355	7 642	6 686	6 548	6 367	6 123	5 858
28 470	**30 925**	**1 766**	**2 733**	**3 793**	**4 602**	**5 263**
14 228	17 784	19 385	21 583	24 060	26 877	30 048
42 698	**48 709**	**21 151**	**24 317**	**27 854**	**31 479**	**35 311**
102 592	145 291	193 999	215 150	239 467	267 321	298 800
145 291	193 999	215 150	239 467	267 321	298 800	334 111
4.41	6.00	6.79	7.55	8.47	9.51	10.66
42 698	**48 709**	**21 151**	**24 317**	**27 854**	**31 479**	**35 311**

LASF (figures in millions of Kwacha) (cont.)

	2015	2016	2017	2018
INCOME	**37 423**	**37 240**	**36 607**	**35 506**
Income from contributions	37 423	37 240	36 607	35 506
– Employers	26 083	25 955	25 514	24 747
– Employees	11 340	11 285	11 093	10 760
Government				
Other income				
EXPENDITURE	**31 309**	**30 893**	**30 497**	**30 066**
Benefit Expenditure	25 695	25 680	25 738	25 805
– Old age	20 085	20 149	20 254	20 541
– Invalidity	1 267	1 242	1 247	1 111
– Survivor	1 263	1 267	1 274	1 292
– Funeral	3 080	3 021	2 964	2 862
Administrative Cost	5 613	5 214	4 759	4 261
OPERATIVE RESULT	**6 114**	**6 346**	**6 111**	**5 440**
Investment Income	33 611	31 189	34 285	37 599
SURPLUS / DEFICIT BEFORE TAX	**39 725**	**37 535**	**40 395**	**43 039**
Reserve Development				
Reserve at the start of the year	334 111	373 836	411 371	451 766
Reserve at the end of the year	373 836	411 371	451 766	494 805
Reserve Ratio	11.94	13.32	14.81	16.46
CHANGE OF RESERVE	**39 725**	**37 535**	**40 395**	**43 039**

2019	2020	2021	2022	2023	2024	2025
33 835	**32 241**	**30 729**	**28 892**	**26 881**	**24 644**	**22 037**
33 835	32 241	30 729	28 892	26 881	24 644	22 037
23 582	22 471	21 417	20 137	18 736	17 176	15 359
10 253	9 770	9 312	8 755	8 146	7 468	6 678
29 925	**29 802**	**30 003**	**30 004**	**30 035**	**30 026**	**29 959**
26 203	26 577	26 930	27 115	27 347	27 561	27 755
21 234	21 858	22 398	22 721	23 122	23 565	23 954
918	829	782	775	751	670	634
1 335	1 375	1 409	1 429	1 454	1 482	1 506
2 716	2 516	2 341	2 190	2 019	1 844	1 661
3 722	3 224	3 073	2 889	2 688	2 464	2 204
3 910	**2 440**	**726**	**-1 112**	**-3 154**	**-5 382**	**-7 921**
41 096	44 758	48 592	52 596	56 771	61 114	65 620
45 006	**47 198**	**49 318**	**51 484**	**53 617**	**55 732**	**57 698**
494 805	539 811	587 009	636 327	687 811	741 428	797 160
539 811	587 009	636 327	687 811	741 428	797 160	854 858
18.04	19.70	21.21	22.92	24.69	26.55	28.53
45 006	**47 198**	**49 318**	**51 484**	**53 617**	**55 732**	**57 698**

Pension schemes: Table 5

WORKERS COMPENSATION (figures in millions of Kwacha)

	2005	2006	2007	2008
INCOME	**48 057**	**64 361**	**77 800**	**92 606**
Income from contributions	47 326	63 383	76 618	91 199
Other income	730	978	1 182	1 407
EXPENDITURE	**34 695**	**46 436**	**55 858**	**66 224**
Benefit Expenditure	1 818	2 418	2 758	3 125
– Short term (medical aid + periodical)	145	160	177	196
– Long term (pensions + lump sums)	1 673	2 258	2 580	2 929
Administrative Cost	32 876	44 018	53 100	63 099
OPERATIVE RESULT	**13 362**	**17 924**	**21 942**	**26 382**
Investment Income	3 295	4 006	5 279	6 059
SURPLUS / DEFICIT BEFORE TAX	**16 657**	**21 930**	**27 221**	**32 441**
Reserve Development				
Reserve at the start of the year	71 840	88 497	110 426	137 648
Reserve at the end of the year	88 497	110 426	137 648	170 089
Reserve Ratio	2.55	2.38	2.46	2.57
CHANGE OF RESERVE	**16 657**	**21 930**	**27 221**	**32 441**

	2016	2017	2018	2019
INCOME	**223 494**	**239 230**	**255 969**	**273 793**
Income from contributions	220 099	235 595	252 080	269 634
Other income	3 395	3 634	3 889	4 160
EXPENDITURE	**157 844**	**168 903**	**180 669**	**193 199**
Benefit Expenditure	6 355	6 769	7 212	7 683
– Short term (medical aid + periodical)	355	375	397	420
– Long term (pensions + lump sums)	6 000	6 394	6 815	7 263
Administrative Cost	151 490	162 134	173 458	185 516
OPERATIVE RESULT	**65 650**	**70 326**	**75 300**	**80 594**
Investment Income	16 348	18 649	21 145	23 849
SURPLUS / DEFICIT BEFORE TAX	**81 998**	**88 975**	**96 445**	**104 443**
Reserve Development				
Reserve at the start of the year	566 273	648 270	737 246	833 691
Reserve at the end of the year	648 270	737 246	833 691	938 134
Reserve Ratio	4.11	4.36	4.61	4.86
CHANGE OF RESERVE	**81 998**	**88 975**	**96 445**	**104 443**

2009	2010	2011	2012	2013	2014	2015
108 911	**124 465**	**138 252**	**153 426**	**170 168**	**188 655**	**208 529**
107 257	122 574	136 152	151 095	167 583	185 789	205 361
1 655	1 891	2 100	2 331	2 585	2 866	3 168
77 616	**88 484**	**98 132**	**108 752**	**120 470**	**133 410**	**147 335**
3 514	3 886	4 225	4 598	5 011	5 466	5 965
214	232	249	268	289	311	335
3 300	3 654	3 975	4 330	4 722	5 155	5 629
74 102	84 598	93 907	104 154	115 459	127 943	141 370
31 295	**35 981**	**40 120**	**44 674**	**49 698**	**55 245**	**61 194**
6 778	7 420	8 931	10 619	12 520	14 656	17 053
38 073	**43 401**	**49 051**	**55 293**	**62 218**	**69 901**	**78 247**
170 089	208 162	251 562	300 614	355 907	418 125	488 026
208 162	251 562	300 614	355 907	418 125	488 026	566 273
2.68	2.84	3.06	3.27	3.47	3.66	3.84
38 073	**43 401**	**49 051**	**55 293**	**62 218**	**69 901**	**78 247**

2020	2021	2022	2023	2024	2025
292 590	**312 380**	**333 381**	**355 738**	**379 538**	**404 679**
288 144	307 634	328 316	350 334	373 772	398 531
4 445	4 746	5 065	5 404	5 766	6 148
206 419	**220 488**	**235 426**	**251 333**	**268 271**	**286 181**
8 185	8 803	9 463	10 169	10 923	11 730
444	475	507	542	579	618
7 740	8 328	8 956	9 627	10 345	11 112
198 234	211 686	225 963	241 164	257 348	274 451
86 170	**91 891**	**97 955**	**104 405**	**111 266**	**118 498**
26 775	29 935	33 342	37 013	40 965	45 218
112 945	**121 826**	**131 297**	**141 418**	**152 231**	**163 716**
938 134	1 051 079	1 172 906	1 304 203	1 445 621	1 597 852
1 051 079	1 172 906	1 304 203	1 445 621	1 597 852	1 761 569
5.09	5.32	5.54	5.75	5.96	6.16
112 945	**121 826**	**131 297**	**141 418**	**152 231**	**163 716**

Pension schemes: Table 6

PRIVATE FUNDS (figures in millions of Kwacha)

	2005	2006	2007	2008
INCOME	**161 573**	**160 735**	**188 139**	**218 373**
Income from contributions	158 694	160 735	188 139	218 373
– Employers	85 118	86 213	100 911	117 127
– Employees	73 577	74 523	87 228	101 246
Transfers	2 878			
EXPENDITURE	**160 299**	**124 175**	**133 923**	**147 520**
Benefit expenditure	98 630	84 973	94 245	106 847
Administrative cost	61 669	39 202	39 678	40 674
OPERATIVE RESULT	**1 273**	**36 560**	**54 217**	**70 852**
Investment income	97 999	92 011	72 435	75 860
SURPLUS/DEFICIT BEFORE TAX	**99 272**	**128 571**	**126 651**	**146 713**
Reserve Development				
Reserve at the start of the year	754 800	854 072	982 643	1 109 294
Reserve at the end of the year	854 072	982 643	1 109 294	1 256 007
Reserve Ratio	5.33	7.91	8.28	8.51
CHANGE OF RESERVE	**99 272**	**128 571**	**126 651**	**146 713**

	2016	2017	2018	2019
INCOME	**468 038**	**497 015**	**527 591**	**559 908**
Income from contributions	468 038	497 015	527 591	559 908
– Employers	251 038	266 581	282 981	300 314
– Employees	216 999	230 434	244 611	259 594
Transfers				
EXPENDITURE	**296 614**	**304 051**	**311 007**	**318 213**
Benefit expenditure	239 205	247 196	254 924	262 986
Administrative cost	57 409	56 855	56 083	55 227
OPERATIVE RESULT	**171 424**	**192 964**	**216 585**	**241 696**
Investment income	134 197	148 440	164 340	182 052
SURPLUS/DEFICIT BEFORE TAX	**305 621**	**341 404**	**380 924**	**423 748**
Reserve Development				
Reserve at the start of the year	2 895 457	3 201 079	3 542 483	3 923 407
Reserve at the end of the year	3 201 079	3 542 483	3 923 407	4 347 155
Reserve Ratio	10.79	11.65	12.62	13.66
CHANGE OF RESERVE	**305 621**	**341 404**	**380 924**	**423 748**

2009	2010	2011	2012	2013	2014	2015
251 130	**281 593**	**307 802**	**336 579**	**368 202**	**402 912**	**440 523**
251 130	281 593	307 802	336 579	368 202	402 912	440 523
134 697	151 036	165 094	180 529	197 490	216 107	236 280
116 433	130 557	142 708	156 050	170 712	186 805	204 242
160 378	**173 880**	**191 433**	**209 425**	**229 102**	**250 521**	**274 433**
119 655	133 754	148 398	163 613	180 395	198 826	219 546
40 723	40 126	43 035	45 812	48 707	51 695	54 887
90 753	**107 713**	**116 369**	**127 155**	**139 100**	**152 391**	**166 090**
78 339	80 047	90 641	102 162	114 925	129 064	144 702
169 092	**187 760**	**207 010**	**229 317**	**254 025**	**281 455**	**310 792**
1 256 007	1 425 098	1 612 859	1 819 869	2 049 185	2 303 210	2 584 665
1 425 098	1 612 859	1 819 869	2 049 185	2 303 210	2 584 665	2 895 457
8.89	9.28	9.51	9.78	10.05	10.32	10.55
169 092	**187 760**	**207 010**	**229 317**	**254 025**	**281 455**	**310 792**

2020	2021	2022	2023	2024	2025
594 001	**629 988**	**668 018**	**708 218**	**750 704**	**795 597**
594 001	629 988	668 018	708 218	750 704	795 597
318 601	337 903	358 301	379 863	402 651	426 729
275 401	292 086	309 717	328 356	348 054	368 868
325 957	**333 848**	**341 248**	**348 648**	**356 379**	**364 541**
271 630	280 544	289 193	297 990	307 223	316 992
54 326	53 303	52 055	50 658	49 156	47 549
268 045	**296 141**	**326 770**	**359 570**	**394 326**	**431 055**
201 720	223 499	247 580	274 173	303 483	335 721
469 765	**519 640**	**574 350**	**633 743**	**697 809**	**766 777**
4 347 155	4 816 920	5 336 560	5 910 909	6 544 652	7 242 461
4 816 920	5 336 560	5 910 909	6 544 652	7 242 461	8 009 238
14.78	15.99	17.32	18.77	20.32	21.97
469 765	**519 640**	**574 350**	**633 743**	**697 809**	**766 777**

Social expenditures: Table 1

SOCIAL EXPENDITURES MODULE – By financing source (figures in billions of Kwacha)

	2005	2006	2007	2008
HEALTH	**2 156**	**2 595**	**2 972**	**3 368**
Government	409	534	636	749
Employers	157	182	212	245
Donors	887	1 091	1 228	1 366
Households	632	705	799	899
Other (Private health insurance + organisations)	70	84	96	109
SOCIAL ASSISTANCE	**43**	**37**	**61**	**80**
Government	39	31	26	26
Donors	4	6	35	54
ST WORK-RELATED BENEFITS	**98**	**136**	**159**	**185**
Government	38	52	61	71
Non-Government employers	60	83	98	114
EDUCATION	**1 451**	**1 874**	**2 173**	**2 520**
Government	888	1 277	1 372	1 599
Donors	52	139	268	307
Households	511	458	532	613

	2016	2017	2018	2019
HEALTH	**6 943**	**7 447**	**7 992**	**8 587**
Government	1 977	2 180	2 405	2 656
Employers	558	601	648	698
Donors	2 327	2 434	2 547	2 668
Households	1 859	1 994	2 138	2 292
Other (Private health insurance + organisations)	222	238	255	274
SOCIAL ASSISTANCE	**184**	**196**	**208**	**221**
Government	53	57	61	65
Donors	131	139	148	157
ST WORK-RELATED BENEFITS	**411**	**441**	**472**	**504**
Government	150	159	169	179
Non-Government employers	261	282	304	325
EDUCATION	**6 351**	**6 839**	**7 358**	**7 908**
Government	4 073	4 413	4 775	5 162
Donors	695	748	804	863
Households	1 582	1 679	1 779	1 883

2009	2010	2011	2012	2013	2014	2015
3 773	**4 164**	**4 541**	**4 956**	**5 415**	**5 921**	**6 478**
871	993	1 118	1 259	1 416	1 594	1 794
280	315	348	384	424	469	517
1 500	1 616	1 719	1 830	1 952	2 085	2 226
1 002	1 106	1 210	1 324	1 448	1 584	1 733
121	134	146	159	174	190	207
93	**108**	**122**	**139**	**149**	**161**	**173**
29	31	34	37	41	45	50
64	76	88	101	108	116	124
212	**238**	**260**	**285**	**313**	**346**	**383**
81	91	99	109	119	130	142
131	147	161	176	194	216	241
2 902	**3 296**	**3 695**	**4 115**	**4 599**	**5 156**	**5 793**
1 852	2 111	2 371	2 638	2 948	3 307	3 717
350	393	435	477	525	581	643
700	792	889	1 000	1 126	1 269	1 433

2020	2021	2022	2023	2024	2025
9 235	**9 976**	**10 792**	**11 700**	**12 728**	**14 043**
2 936	3 249	3 601	4 004	4 475	5 056
752	810	873	941	1 013	1 091
2 796	2 967	3 153	3 360	3 596	3 889
2 456	2 633	2 822	3 024	3 241	3 563
294	317	343	371	403	444
235	**250**	**266**	**283**	**300**	**319**
69	73	78	82	87	92
166	177	188	200	213	227
536	**571**	**607**	**646**	**691**	**739**
190	201	213	226	239	253
346	370	394	421	452	486
8 489	**9 100**	**9 743**	**10 418**	**11 127**	**11 871**
5 572	6 007	6 466	6 952	7 464	8 006
925	991	1059	1131	1207	1286
1 991	2 103	2 217	2 335	2 455	2 579

Social expenditures: Table 2

SOCIAL EXPENDITURES MODULE – By function (figures in billions of Kwacha)

	2005	2006	2007	2008
HEALTH	**2 156**	**2 595**	**2 972**	**3 368**
Social assistance	43	37	71	91
Basic material needs	13	17	15	26
Food security	21	15	49	54
Unemployment	4	4	1	1
Old age	0	0	0	0
Children and family	5	1	7	11
ST WORK-RELATED BENEFITS	**98**	**136**	**159**	**185**
Retirement	48	67	79	92
Unemployed	43	60	70	81
Sickness	0	0	0	0
Maternity	6	8	9	11
Work injury	0	0	0	0
EDUCATION	**1 451**	**1 874**	**2 173**	**2 520**

	2016	2017	2018	2019
HEALTH	**6 943**	**7 447**	**7 992**	**8 587**
Social assistance	202	214	226	240
Basic material needs	85	90	95	100
Food security	96	102	108	115
Unemployment	1	1	1	1
Old age	0	0	0	0
Children and family	20	21	22	23
ST WORK-RELATED BENEFITS	**411**	**441**	**472**	**504**
Retirement	215	233	252	270
Unemployed	174	185	196	208
Sickness	1	1	1	1
Maternity	21	22	23	24
Work injury	0	0	0	0
EDUCATION	**6 351**	**6 839**	**7 358**	**7 908**

2009	2010	2011	2012	2013	2014	2015
3 773	**4 164**	**4 541**	**4 956**	**5 415**	**5 921**	**6,478**
106	121	137	154	165	177	191
34	43	53	64	69	74	80
59	65	70	75	80	85	91
1	1	1	1	1	1	1
0	0	0	0	0	0	0
12	12	13	15	16	17	18
212	**238**	**260**	**285**	**313**	**346**	**383**
106	119	130	143	158	176	198
94	105	115	125	137	150	164
0	1	1	1	1	1	1
12	14	15	16	17	19	20
0	0	0	0	0	0	0
2 902	**3 296**	**3 695**	**4 115**	**4 599**	**5 156**	**5,793**

2020	2021	2022	2023	2024	2025
9 235	**9 976**	**10 792**	**11 700**	**12 728**	**14 043**
254	270	286	303	322	341
106	112	118	125	132	140
122	130	139	148	158	168
1	2	2	2	2	2
0	0	0	0	0	0
24	26	27	28	30	31
536	**571**	**607**	**646**	**691**	**739**
289	308	329	352	379	409
221	235	249	264	279	296
1	1	1	1	1	1
25	26	28	29	30	32
0	0	0	0	0	0
8 489	**9 100**	**9 743**	**10 418**	**11 127**	**11 871**

Social expenditures: Table 3

TOTAL HEALTH EXPENDITURE – By financing agent (figures in millions of Kwacha)

	2004	2005	2006	2007
TOTAL HEALTH EXPENDITURE (million)	**1 876 660**	**2 155 996**	**2 595 472**	**2 971 773**
Government	786 085	922 532	1 173 394	1 366 684
Household	524 287	631 919	704 662	798 964
Private HI	4 616	5 482	6 083	6 791
Employers	128 938	157 447	182 440	212 308
Other FA	79 895	64 703	77 891	89 184
Donors (as FAs)	352 839	373 913	451 002	497 842
TOTAL HEALTH EXPENDITURE (per cent)	**100.0**			
Government	41.9	42.8	45.2	46.0
Household	27.9	29.3	27.1	26.9
Private HI	0.2	0.3	0.2	0.2
Employers	6.9	7.3	7.0	7.1
Other FA	4.3	3.0	3.0	3.0
Donors	18.8	17.3	17.4	16.8

	2015	2016	2017	2018
TOTAL HEALTH EXPENDITURE (million)	**6 478 079**	**6 943 468**	**7 446 774**	**7 992 141**
Government	3 262 465	3 531 158	3 824 725	4 146 287
Household	1 732 869	1 858 814	1 993 509	2 137 541
Private HI	12 980	13 710	14 480	15 292
Employers	517 334	557 783	601 221	647 888
Other FA	194 410	208 377	223 482	239 848
Donors (as FAs)	758 021	773 626	789 358	805 285
TOTAL HEALTH EXPENDITURE (per cent)				
Government	50.4	50.9	51.4	51.9
Household	26.7	26.8	26.8	26.7
Private HI	0.2	0.2	0.2	0.2
Employers	8.0	8.0	8.1	8.1
Other FA	3.0	3.0	3.0	3.0
Donors	11.7	11.1	10.6	10.1

2008	2009	2010	2011	2012	2013	2014
3 367 990	**3 773 422**	**4 164 201**	**4 540 980**	**4 956 139**	**5 415 212**	**5 921 414**
1 573 082	1 786 906	1 993 786	2 196 198	2 421 416	2 672 306	2 951 910
898 640	1 001 606	1 106 105	1 210 093	1 323 901	1 448 365	1 584 371
7 519	8 248	8 965	9 653	10 394	11 194	12 055
244 936	279 887	314 547	347 633	384 137	424 366	468 658
101 075	113 242	124 970	136 277	148 736	162 513	177 705
542 737	583 533	615 829	641 126	667 554	696 468	726 716
46.7	47.4	47.9	48.4	48.9	49.3	49.9
26.7	26.5	26.6	26.6	26.7	26.7	26.8
0.2	0.2	0.2	0.2	0.2	0.2	0.2
7.3	7.4	7.6	7.7	7.8	7.8	7.9
3.0	3.0	3.0	3.0	3.0	3.0	3.0
16.1	15.5	14.8	14.1	13.5	12.9	12.3

2019	2020	2021	2022	2023	2024	2025
8 587 204	**9 235 239**	**9 976 247**	**10 792 375**	**11 700 051**	**12 727 770**	**14 043 475**
4 501 797	4 893 670	5 325 691	5 808 867	6 356 332	6 991 440	7 778 589
2 291 570	2 456 336	2 632 673	2 821 550	3 024 024	3 241 288	3 562 920
16 149	17 052	18 007	19 014	20 078	21 202	22 388
698 076	752 112	810 332	873 043	940 560	1 013 194	1 091 337
257 706	277 154	299 392	323 885	351 125	381 967	421 452
821 907	838 915	890 151	946 015	1 007 933	1 078 679	1 166 788
52.4	53.0	53.4	53.8	54.3	54.9	55.4
26.7	26.6	26.4	26.1	25.8	25.5	25.4
0.2	0.2	0.2	0.2	0.2	0.2	0.2
8.1	8.1	8.1	8.1	8.0	8.0	7.8
3.0	3.0	3.0	3.0	3.0	3.0	3.0
9.6	9.1	8.9	8.8	8.6	8.5	8.3

Social expenditures: Table 4

TOTAL HEALTH EXPENDITURE – By funding sources (figures in millions of Kwacha)

	2004	2005	2006	2007
TOTAL HEALTH EXPENDITURE (million)	**1 876 660**	**2 155 996**	**2 595 472**	**2 971 773**
Government	332 756	409 411	533 516	636 280
Household	532 972	631 919	704 662	798 964
Private HI	4 616	5 482	6 083	6 791
Employers	128 938	157 447	182 440	212 308
Other	87 311	64 703	77 891	89 184
Donors	790 067	887 034	1 090 880	1 228 246
TOTAL HEALTH EXPENDITURE (per cent)	**100.0**	**100.0**	**100.0**	**100.0**
Government	17.7	19.0	20.6	21.4
Household	28.4	29.3	27.1	26.9
Private HI	0.2	0.3	0.2	0.2
Employers	6.9	7.3	7.0	7.1
Other	4.7	3.0	3.0	3.0
Donors	42.1	41.1	42.0	41.3
External Financing as per cent to THE	**42.5**	**41.1**	**42.0**	**41.3**

	2015	2016	2017	2018
TOTAL HEALTH EXPENDITURE (million)	**6 478 079**	**6 943 468**	**7 446 774**	**7 992 141**
Government	1 794 356	1 977 449	2 180 093	2 404 846
Household	1 732 869	1 858 814	1 993 509	2 137 541
Private HI	12 980	13 710	14 480	15 292
Employers	517 334	557 783	601 221	647 888
Other	194 410	208 377	223 482	239 848
Donors	2 226 130	2 327 335	2 433 990	2 546 726
TOTAL HEALTH EXPENDITURE (per cent)	**100.0**	**100.0**	**100.0**	**100.0**
Government	27.7	28.5	29.3	30.1
Household	26.7	26.8	26.8	26.7
Private HI	0.2	0.2	0.2	0.2
Employers	8.0	8.0	8.1	8.1
Other	3.0	3.0	3.0	3.0
Donors	34.4	33.5	32.7	31.9
External Financing as per cent to THE	**34.4**	**33.5**	**32.7**	**31.9**

2008	2009	2010	2011	2012	2013	2014
3 367 990	**3 773 422**	**4 164 201**	**4 540 980**	**4 956 139**	**5 415 212**	**5 921 414**
749 498	870 828	993 356	1 118 113	1 259 136	1 416 322	1 594 031
898 640	1 001 606	1 106 105	1 210 093	1 323 901	1 448 365	1 584 371
7 519	8 248	8 965	9 653	10 394	11 194	12 055
244 936	279 887	314 547	347 633	384 137	424 366	468 658
101 075	113 242	124 970	136 277	148 736	162 513	177 705
1 366 322	1 499 610	1 616 259	1 719 211	1 829 834	1 952 452	2 084 594
100.0	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
22.3	23.1	23.9	24.6	25.4	26.2	26.9
26.7	26.5	26.6	26.6	26.7	26.7	26.8
0.2	0.2	0.2	0.2	0.2	0.2	0.2
7.3	7.4	7.6	7.7	7.8	7.8	7.9
3.0	3.0	3.0	3.0	3.0	3.0	3.0
40.6	39.7	38.8	37.9	36.9	36.1	35.2
40.6	**39.7**	**38.8**	**37.9**	**36.9**	**36.1**	**35.2**

2019	2020	2021	2022	2023	2024	2025
8 587 204	**9 235 239**	**9 976 247**	**10 792 375**	**11 700 051**	**12 727 770**	**14 043 475**
2 656 060	2 936 202	3 248 672	3 601 498	4 004 489	4 474 521	5 056 083
2 291 570	2 456 336	2 632 673	2 821 550	3 024 024	3 241 288	3 562 920
16 149	17 052	18 007	19 014	20 078	21 202	22 388
698 076	752 112	810 332	873 043	940 560	1 013 194	1 091 337
257 706	277 154	299 392	323 885	351 125	381 967	421 452
2 667 643	2 796 383	2 967 171	3 153 385	3 359 775	3 595 598	3 889 294
100.0	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
30.9	31.8	32.6	33.4	34.2	35.2	36.0
26.7	26.6	26.4	26.1	25.8	25.5	25.4
0.2	0.2	0.2	0.2	0.2	0.2	0.2
8.1	8.1	8.1	8.1	8.0	8.0	7.8
3.0	3.0	3.0	3.0	3.0	3.0	3.0
31.1	30.3	29.7	29.2	28.7	28.3	27.7
31.1	**30.3**	**29.7**	**29.2**	**28.7**	**28.3**	**27.7**

Social expenditures: Table 5

SHORT TERM WORK RELATED BENEFITS (figures in millions of Kwacha)

Benefit	Eligibility	Sector	2005	2006
BENEFIT TOTALS				
Redundancy benefit		**Total**	**43 151**	**59 854**
2 months of basic salary per each completed year of service	Workers with contract	Public	33 861	46 968
		Private	9 291	12 886
Retirement		**Total**	**48 404**	**67 279**
3 months of basic salary per each completed year of service	Workers aged 55 years and with 10 years of service if no pension scheme	Public	0	0
		Private	48 404	67 279
Paid maternity leave		**Total**	**5 890**	**8 109**
120 days full pay	2 years at current job	Public	3 641	5 013
		Private	2 249	3 097
Paid sick leave		**Total**	**186**	**286**
3 months full pay		Public	115	188
3 months half pay		Private	71	99
Medical discharge		**Total**	**41**	**58**
2 months of basic salary per each completed year of service	Workers with contract	Public	0	0
		Private	41	58
Benefit provided by the government (public sector workers)			*37 617*	*52 169*
Benefit provided by the private sector			*60 056*	*83 417*
TOTAL BENEFIT			**97 673**	**135 586**

2007	2008	2009	2010	2011	2012	2013	2014	2015
70 063	**81 325**	**93 527**	**104 873**	**114 632**	**125 344**	**137 112**	**150 027**	**164 026**
54 980	63 819	73 395	82 298	89 956	98 361	107 595	117 727	128 711
15 083	17 506	20 132	22 574	24 676	26 983	29 518	32 300	35 315
79 102	**92 085**	**105 897**	**118 722**	**130 087**	**142 711**	**157 816**	**176 246**	**197 505**
0	0	0	0	0	0	0	0	0
79 102	92 085	105 897	118 722	130 087	142 711	157 816	176 246	197 505
9 410	**10 821**	**12 319**	**13 667**	**14 771**	**15 960**	**17 241**	**18 620**	**20 070**
5 817	6 689	7 615	8 449	9 132	9 868	10 660	11 514	12 411
3 593	4 132	4 704	5 218	5 639	6 093	6 581	7 106	7 659
335	**389**	**447**	**502**	**548**	**599**	**656**	**717**	**784**
220	255	293	329	360	393	430	471	514
115	134	154	173	189	206	226	247	270
67	**78**	**90**	**101**	**110**	**120**	**132**	**144**	**157**
0	0	0	0	0	0	0	0	0
67	78	90	101	110	120	132	144	157
61 017	*70 763*	*81 304*	*91 076*	*99 447*	*108 622*	*118 685*	*129 712*	*141 636*
97 960	*113 935*	*130 977*	*146 787*	*160 700*	*176 112*	*194 272*	*216 044*	*240 906*
158 977	**184 698**	**212 281**	**237 863**	**260 147**	**284 734**	**312 957**	**345 755**	**382 542**

SHORT TERM WORK RELATED BENEFITS (figures in millions of Kwacha) (cont.)

Benefit	Eligibility	Sector	2016	2017
BENEFIT TOTALS				
Redundancy benefit		**Total**	**174 264**	**185 047**
2 months of basic salary per each completed year of service	Workers with contract	Public	136 743	145 203
		Private	37 521	39 844
Retirement		**Total**	**214 660**	**233 205**
3 months of basic salary per each completed year of service	Workers aged 55 years and with 10 years of service if no pension scheme	Public	0	0
		Private	214 660	233 205
Paid maternity leave		**Total**	**21 002**	**21 959**
120 days full pay	2 years at current job	Public	12 988	13 581
		Private	8 014	8 378
Paid sick leave		**Total**	**833**	**885**
3 months full pay		Public	547	580
3 months half pay		Private	287	304
Medical discharge		**Total**	**167**	**178**
2 months of basic salary per each completed year of service	Workers with contract	Public	0	0
		Private	167	178
Benefit provided by the government (public sector workers)			*150 278*	*159 364*
Benefit provided by the private sector			*260 649*	*281 909*
TOTAL BENEFIT			**410 927**	**441 273**

2018	2019	2020	2021	2022	2023	2024	2025
196 426	**208 453**	**221 142**	**234 534**	**248 686**	**263 646**	**279 455**	**296 160**
154 130	163 566	173 522	184 030	195 133	206 870	219 274	232 379
42 295	44 886	47 619	50 504	53 553	56 776	60 182	63 781
251 977	**270 276**	**288 646**	**308 371**	**329 098**	**352 346**	**379 122**	**408 756**
0	0	0	0	0	0	0	0
251 977	270 276	288 646	308 371	329 098	352 346	379 122	408 756
22 950	**23 988**	**25 089**	**26 265**	**27 535**	**28 918**	**30 437**	**32 121**
14 195	14 838	15 520	16 248	17 034	17 891	18 831	19 874
8 755	9 150	9 570	10 017	10 501	11 028	11 606	12 247
939	**996**	**1 057**	**1 121**	**1 189**	**1 260**	**1 336**	**1 415**
616	654	694	736	780	827	876	929
323	343	364	385	409	433	459	487
188	**200**	**212**	**225**	**238**	**253**	**268**	**284**
0	0	0	0	0	0	0	0
188	200	212	225	238	253	268	284
168 941	*179 058*	*189 735*	*201 013*	*212 947*	*225 588*	*238 981*	*253 182*
303 539	*324 855*	*346 410*	*369 503*	*393 799*	*420 836*	*451 636*	*485 554*
472 480	**503 913**	**536 146**	**570 516**	**606 746**	**646 423**	**690 618**	**738 736**

Social expenditures: Table 5

SOCIAL ASSISTANCE (figures in millions of Kwacha)

Scheme	Elegibility	Source of Funds	2004	2005
TOTAL BENEFITS (000 000)			**38 434**	**42 995**
Public Welfare Assistance Scheme	means-tested	Government	3 409	10 345
Social cash transfer	means-tested	Donors	185	2 669
Food Security Pack	means-tested	Government	29 000	19 926
Project Urban Self Help	work	Government	1 500	4 417
Street children		Government		580
Juvenile welfare				231
Matero after care			70	125
Social safety net			3 806	3 806
WFP Comp. 1 – School Feeding Programme	**targeted schools**	**Government & donor**	**464**	**895**
of which: Government				
Donor			*464*	*895*
WFP Comp. 2 – NPVG and HNE	**vulnerable groups**	**Government & donor**		
of which: Government				
Donor				
WFP Comp. 3 – Food for Assets (FFA)	**work**	**Government & donor**		
of which: Government				
Donor				

2006	2007	2008	2009	2010	2011	2012	2013	2014
36 533	**61 025**	**80 051**	**93 266**	**107 598**	**122 314**	**138 642**	**149 498**	**160 962**
10 564	9 295	4 293	4 883	5 497	6 124	6 814	7 574	8 409
5 971	5 438	21 808	29 245	37 575	46 685	56 960	61 334	66 017
14 999	19 765	21 892	24 028	26 130	28 149	30 325	32 667	35 186
4 030	605	650	690	738	796	858	922	988
465	6 450	10 000	10 889	11 800	12 723	13 774	14 962	16 231
360	392	423	453	480	504	529	556	583
144	157	169	181	192	202	212	222	233
	11 260	**12 386**	**13 624**	**14 987**	**16 159**	**17 494**	**19 003**	**20 614**
	11 260	*12 386*	*13 624*	*14 987*	*16 159*	*17 494*	*19 003*	*20 614*
	10 197	**11 217**	**12 338**	**13 572**	**14 291**	**15 014**	**15 732**	**16 441**
	10 197	*11 217*	*2 338*	*13 572*	*14 291*	*15 014*	*15 732*	*16 441*
	7 663	**8 430**	**9 273**	**10 200**	**10 971**	**11 676**	**12 258**	**12 700**
	7 663	*8 430*	*9 273*	*10 200*	*10 971*	*11 676*	*12 258*	*12 700*

SOCIAL ASSISTANCE (figures in millions of Kwacha) (cont.)

Scheme	Elegibility	Source of Funds	2015	2016
TOTAL BENEFITS (000 000)			**173 366**	**184 226**
Public Welfare Assistance Scheme	means-tested	Government	9 327	9 851
Social cash transfer	means-tested	Donors	71 080	75 102
Food Security Pack	means-tested	Government	37 893	40 021
Project Urban Self Help	work	Government	1 060	1 131
Street children		Government	17 574	18 645
Juvenile welfare			613	631
Matero after care			245	253
Social safety net				
WFP Comp. 1 – School Feeding Programme	**targeted schools**	**Government & donor**	**22 320**	**23 680**
of which: Government				
Donor			*22 320*	*23 680*
WFP Comp. 2 – NPVG and HNE	**vulnerable groups**	**Government & donor**	**17 140**	**17 500**
of which: Government				
Donor			*17 140*	*17 500*
WFP Comp. 3 – Food for Assets (FFA)	**work**	**Government & donor**	**13 256**	**14 912**
of which: Government				
Donor			*13 256*	*14 912*

2017	2018	2019	2020	2021	2022	2023	2024	2025
195 804	**208 111**	**221 178**	**235 114**	**249 976**	**265 780**	**282 561**	**300 364**	**319 271**
10 402	10 982	11 591	12 233	12 908	13 620	14 371	15 164	16 003
79 367	83 888	88 679	93 754	99 129	104 823	110 854	117 244	124 012
42 260	44 615	47 091	49 697	52 440	55 332	58 382	61 605	65 015
1 208	1 290	1 378	1 473	1 577	1 688	1 808	1 937	2 075
19 761	20 920	22 121	23 363	24 641	25 951	27 290	28 659	30 060
650	669	690	710	732	753	776	799	823
260	268	276	284	293	302	311	320	329
25 097	**26 569**	**28 095**	**29 672**	**31 295**	**32 959**	**34 660**	**36 398**	**38 178**
			-	-	-	-	-	
25 097	*26 569*	*28 095*	*29 672*	*31 295*	*32 959*	*34 660*	*36 398*	*38 178*
17 864	**18 238**	**18 633**	**19 061**	**19 533**	**20 068**	**20 668**	**21 345**	**22 107**
17 864	*18 238*	*18 633*	*19 061*	*19 533*	*20 068*	*20 668*	*21 345*	*22 107*
16 799	**18 911**	**21 257**	**23 928**	**26 962**	**30 354**	**34 109**	**38 239**	**42 775**
16 799	*18 911*	*21 257*	*23 928*	*26 962*	*30 354*	*34 109*	*38 239*	*42 775*

General Government: Table 1

GENERAL GOVERNMENT OPERATIONS (in billions of Kwacha)

	2005	2006	2007	2008
REVENUES	**8 738**	**10 489**	**11 928**	**13 725**
I. Government budget revenue	**7 671**	**9 192**	**10 423**	**12 037**
A Revenue	5 736	6 836	8 456	9 681
Tax revenue	5 578	6 654	8 232	9 424
Non-tax revenue	158	181	224	257
B Grants	1 934	2 356	1 967	2 356
II. Social security schemes	**1 067**	**1 298**	**1 505**	**1 687**
A Contributions	653	768	887	1 021
– From employees	294	342	394	452
– From private employers	209	242	291	346
– From public employers	150	183	202	223
B Investment income	232	253	288	331
C Government transfer	182	277	329	335
EXPENDITURES	**9 145**	**10 882**	**11 807**	**13 894**
I. Government budget expenditure	**8 528**	**10 183**	**10 975**	**12 992**
A Non-financial expenditure	7 645	9 276	9 934	11 939
Current expenditure	5 278	6 120	7 556	8 797
Capital expenditure	2 367	3 157	2 378	3 141
B Interest	882	907	1 041	1 053
Domestic debt	747	777	895	893
External debt	135	130	145	160
II. Social security schemes	**617**	**699**	**833**	**902**
Benefits paid	384	527	645	687
Administration	233	172	188	215
OVERALL RESULT	**-407**	**-393**	**120**	**-169**
Overall result of Central Government	**-857**	**-991**	**-552**	**-955**

2009	2010	2011	2012	2013	2014	2015
15 506	**17 011**	**18 636**	**20 390**	**22 311**	**24 418**	**26 717**
13 669	**15 034**	**16 459**	**17 992**	**19 667**	**21 499**	**23 501**
11 056	12 391	13 716	15 023	16 454	18 021	19 738
10 763	12 062	13 352	14 625	16 018	17 544	19 215
293	329	364	398	436	478	523
2 613	2 644	2 743	2 969	3 213	3 477	3 763
1 837	**1 977**	**2 177**	**2 398**	**2 644**	**2 920**	**3 216**
1 167	1 304	1 423	1 556	1 703	1 867	2 049
516	575	627	684	749	820	899
407	466	519	578	643	716	796
244	263	277	293	311	331	353
370	401	475	557	649	752	866
300	272	279	285	291	300	301
15 733	**17 192**	**18 702**	**20 409**	**22 332**	**24 465**	**26 832**
14 752	**16 127**	**17 546**	**19 152**	**20 961**	**22 960**	**25 165**
13 708	15 107	16 466	18 012	19 757	21 688	23 822
10 145	11 332	12 486	13 613	14 892	16 305	17 860
3 563	3 775	3 981	4 399	4 865	5 384	5 962
1 044	1 021	1 080	1 140	1 204	1 271	1 342
868	828	871	914	960	1 008	1 059
176	193	209	225	243	263	284
980	**1 064**	**1 156**	**1 258**	**1 372**	**1 505**	**1 667**
737	793	854	923	1 000	1 092	1 208
244	271	302	335	372	413	460
-226	**-181**	**-66**	**-19**	**-21**	**-46**	**-116**
-1 083	**-1 093**	**-1 087**	**-1 160**	**-1 293**	**-1 461**	**-1 664**

GENERAL GOVERNMENT OPERATIONS (in billions of Kwacha) (cont.)

	2016	2017	2018	2019
REVENUES	**28 387**	**30 315**	**32 378**	**34 582**
I. Government budget revenue	**25 079**	**26 763**	**28 561**	**30 479**
A Revenue	21 104	22 565	24 126	25 795
Tax revenue	20 545	21 966	23 486	25 111
Non-tax revenue	560	598	640	684
B Grants	3 975	4 199	4 435	4 683
II. Social security schemes	**3 308**	**3 551**	**3 818**	**4 103**
A Contributions	2 188	2 338	2 498	2 670
– From employees	961	1 027	1 098	1 174
– From private employers	858	924	996	1 072
– From public employers	369	386	405	424
B Investment income	821	920	1 026	1 140
C Government transfer	299	294	293	293
EXPENDITURES	**28 706**	**30 629**	**32 697**	**34 930**
I. Government budget expenditure	**26 890**	**28 692**	**30 616**	**32 671**
A Non-financial expenditure	25 687	27 447	29 328	31 338
Current expenditure	19 288	20 576	21 948	23 409
Capital expenditure	6 399	6 871	7 380	7 929
B Interest	1 203	1 245	1 289	1 334
Domestic debt	905	932	960	989
External debt	298	313	329	345
II. Social security schemes	**1 816**	**1 936**	**2 081**	**2 259**
Benefits paid	1 315	1 396	1 498	1 630
Administration	501	540	582	629
OVERALL RESULT	**-319**	**-314**	**-319**	**-348**
Overall result of Central Government	**-1 811**	**-1 929**	**-2 056**	**-2 193**

2020	2021	2022	2023	2024	2025
36 936	**39 410**	**42 050**	**44 872**	**47 874**	**51 080**
32 525	**34 674**	**36 964**	**39 405**	**42 008**	**44 783**
27 580	29 401	31 343	33 413	35 620	37 973
26 848	28 622	30 512	32 527	34 676	36 966
731	780	831	886	944	1 007
4 946	5 272	5 621	5 992	6 388	6 810
4 411	**4 737**	**5 086**	**5 467**	**5 866**	**6 297**
2 855	3 054	3 268	3 497	3 744	4 009
1 256	1 345	1 441	1 543	1 654	1 773
1 154	1 241	1 334	1 435	1 543	1 658
445	468	493	519	548	578
1 259	1 386	1 521	1 663	1 810	1 959
297	297	297	307	312	329
37 324	**39 925**	**42 767**	**45 868**	**49 254**	**52 816**
34 865	**37 274**	**39 905**	**42 741**	**45 810**	**48 973**
33 484	35 845	38 426	41 208	44 223	47 330
24 964	26 578	28 341	30 229	32 262	34 294
8 520	9 267	10 084	10 980	11 961	13 036
1 381	1 429	1 480	1 532	1 587	1 643
1 018	1 049	1 080	1 113	1 146	1 181
362	380	400	419	440	462
2 459	**2 651**	**2 861**	**3 127**	**3 444**	**3 843**
1 779	1 916	2 066	2 266	2 511	2 832
680	735	796	861	933	1 010
-387	**-515**	**-717**	**-996**	**-1 379**	**-1 736**
-2 340	**-2 600**	**-2 942**	**-3 336**	**-3 802**	**-4 190**

General Government: Table 2

GENERAL GOVERNMENT OPERATIONS (as percentage of GDP)

	2005	2006	2007	2008	2009
REVENUES	**26.9**	**26.7**	**26.1**	**26.2**	**26.1**
I. Government budget revenue	**23.6**	**23.4**	**22.8**	**23.0**	**23.0**
A Revenue	17.7	17.4	18.5	18.5	18.6
Tax revenue	17.2	17.0	18.0	18.0	18.1
Non-tax revenue	0.5	0.5	0.5	0.5	0.5
B Grants	6.0	6.0	4.3	4.5	4.4
II. Social security schemes	**3.3**	**3.3**	**3.3**	**3.2**	**3.1**
A Contributions	2.0	2.0	1.9	2.0	2.0
– From employees	0.9	0.9	0.9	0.9	0.9
– From private employers	0.6	0.6	0.6	0.7	0.7
– From public employers	0.5	0.5	0.4	0.4	0.4
B Investment income	0.7	0.6	0.6	0.6	0.6
C Government transfer	0.6	0.7	0.7	0.6	0.5
EXPENDITURES	**28.2**	**27.7**	**25.8**	**26.5**	**26.5**
I. Government budget expenditure	**26.3**	**26.0**	**24.0**	**24.8**	**24.8**
A Non-financial expenditure	23.6	23.6	21.7	22.8	23.1
Current expenditure	16.3	15.6	16.5	16.8	17.1
Capital expenditure	7.3	8.0	5.2	6.0	6.0
B Interest	2.7	2.3	2.3	2.0	1.8
Domestic debt	2.3	2.0	2.0	1.7	1.5
External debt	0.4	0.3	0.3	0.3	0.3
II. Social security schemes (NET)	**1.9**	**1.8**	**1.8**	**1.7**	**1.7**
Benefits paid	1.2	1.3	1.4	1.3	1.2
Administration	0.7	0.4	0.4	0.4	0.4
OVERALL RESULT	**-1.3**	**-1.0**	**0.3**	**-0.3**	**-0.4**
Overall result of Central Government	**-2.6**	**-2.5**	**-1.2**	**-1.8**	**-1.8**

2010	2011	2012	2013	2014	2015	2016	2017
25.7	**25.8**	**25.9**	**25.9**	**26.0**	**26.0**	**25.9**	**26.0**
22.7	**22.8**	**22.8**	**22.9**	**22.9**	**22.9**	**22.9**	**22.9**
18.7	19.0	19.1	19.1	19.2	19.2	19.3	19.3
18.3	18.5	18.6	18.6	18.7	18.7	18.8	18.8
0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4.0	3.8	3.8	3.7	3.7	3.7	3.6	3.6
3.0	**3.0**	**3.0**	**3.1**	**3.1**	**3.1**	**3.0**	**3.0**
2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8
0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
26.0	**25.9**	**25.9**	**25.9**	**26.0**	**26.1**	**26.2**	**26.3**
24.4	**24.3**	**24.3**	**24.4**	**24.4**	**24.5**	**24.6**	**24.6**
22.9	22.8	22.9	23.0	23.1	23.2	23.5	23.5
17.1	17.3	17.3	17.3	17.3	17.4	17.6	17.6
5.7	5.5	5.6	5.7	5.7	5.8	5.8	5.9
1.5	1.5	1.4	1.4	1.4	1.3	1.1	1.1
1.3	1.2	1.2	1.1	1.1	1.0	0.8	0.8
0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
1.6	**1.6**	**1.6**	**1.6**	**1.6**	**1.6**	**1.7**	**1.7**
1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
-0.3	**-0.1**	**0.0**	**0.0**	**0.0**	**-0.1**	**-0.3**	**-0.3**
-1.7	**-1.5**	**-1.5**	**-1.5**	**-1.6**	**-1.6**	**-1.7**	**-1.7**

GENERAL GOVERNMENT OPERATIONS (as percentage of GDP) (cont.)

	2018	2019	2020	2021	2022
REVENUES	**26.0**	**26.1**	**26.1**	**26.2**	**26.2**
I. Government budget revenue	**23.0**	**23.0**	**23.0**	**23.0**	**23.0**
A Revenue	19.4	19.5	19.5	19.5	19.5
Tax revenue	18.9	18.9	19.0	19.0	19.0
Non-tax revenue	0.5	0.5	0.5	0.5	0.5
B Grants	3.6	3.5	3.5	3.5	3.5
II. Social security schemes	**3.1**	**3.1**	**3.1**	**3.1**	**3.2**
A Contributions	2.0	2.0	2.0	2.0	2.0
– From employees	0.9	0.9	0.9	0.9	0.9
– From private employers	0.8	0.8	0.8	0.8	0.8
– From public employers	0.3	0.3	0.3	0.3	0.3
B Investment income	0.8	0.9	0.9	0.9	0.9
C Government transfer	0.2	0.2	0.2	0.2	0.2
EXPENDITURES	**26.3**	**26.4**	**26.4**	**26.5**	**26.6**
I. Government budget expenditure	**24.6**	**24.6**	**24.7**	**24.7**	**24.8**
A Non-financial expenditure	23.6	23.6	23.7	23.8	23.9
Current expenditure	17.7	17.7	17.7	17.6	17.6
Capital expenditure	5.9	6.0	6.0	6.2	6.3
B Interest	1.0	1.0	1.0	0.9	0.9
Domestic debt	0.8	0.7	0.7	0.7	0.7
External debt	0.3	0.3	0.3	0.3	0.2
II. Social security schemes (NET)	**1.7**	**1.7**	**1.7**	**1.8**	**1.8**
Benefits paid	1.2	1.2	1.3	1.3	1.3
Administration	0.5	0.5	0.5	0.5	0.5
OVERALL RESULT	**-0.3**	**-0.3**	**-0.3**	**-0.3**	**-0.4**
Overall result of Central Government	**-1.7**	**-1.7**	**-1.7**	**-1.7**	**-1.8**

2023	2024	2025
26.2	**26.2**	**26.3**
23.0	**23.0**	**23.0**
19.5	19.5	19.5
19.0	19.0	19.0
0.5	0.5	0.5
3.5	3.5	3.5
3.2	**3.2**	**3.2**
2.0	2.1	2.1
0.9	0.9	0.9
0.8	0.8	0.9
0.3	0.3	0.3
1.0	1.0	1.0
0.2	0.2	0.2
26.8	**27.0**	**27.1**
25.0	**25.1**	**25.2**
24.1	24.2	24.3
17.7	17.7	17.6
6.4	6.6	6.7
0.9	0.9	0.8
0.7	0.6	0.6
0.2	0.2	0.2
1.8	**1.9**	**2.0**
1.3	1.4	1.5
0.5	0.5	0.5
-0.6	**-0.8**	**-0.9**
-1.9	**-2.1**	**-2.2**

Social Budget: Table 1

SOCIAL BUDGET (in billions of Kwacha)

	2005	2006	2007	2008	2009
EXPENDITURES					
Health	1920	2295	2622	2965	3316
Education	1451	1874	2173	2520	2902
Social security	384	527	645	687	737
Work-related	98	136	159	185	212
Social assistance	43	37	61	80	93
Administration	469	472	538	618	701
Change in reserves	450	599	672	785	857
Total	**4815**	**5939**	**6869**	**7840**	**8818**
REVENUES					
Households	1437	1505	1725	1964	2217
Private enterprises	426	508	602	705	818
Government	1707	2353	2627	3003	3377
Donors	943	1236	1531	1727	1914
Other	70	84	96	109	121
Investment income	232	253	288	331	370
Total	**4815**	**5939**	**6869**	**7840**	**8818**

	2017	2018	2019	2020	2021
EXPENDITURES					
Health	6467	6930	7434	7982	8613
Education	6839	7358	7908	8489	9100
Social security	1396	1498	1630	1779	1916
Work-related	441	472	504	536	571
Social assistance	196	208	221	235	250
Administration	1519	1644	1782	1933	2099
Change in reserves	1615	1737	1844	1953	2086
Total	**18475**	**19849**	**21323**	**22906**	**24633**
REVENUES					
Households	4699	5015	5349	5704	6080
Private enterprises	1808	1947	2095	2252	2421
Government	7489	8108	8779	9508	10294
Donors	3321	3498	3687	3888	4135
Other	238	255	274	294	317
Investment income	920	1026	1140	1259	1386
Total	**18475**	**19849**	**21323**	**22906**	**24633**

2010	2011	2012	2013	2014	2015	2016
3654	3979	4336	4731	5166	5643	6039
3296	3695	4115	4599	5156	5793	6351
793	854	923	1000	1092	1208	1315
238	260	285	313	346	383	411
108	122	139	149	161	173	184
782	864	955	1056	1169	1295	1405
912	1021	1141	1272	1414	1548	1492
9783	**10795**	**11893**	**13121**	**14504**	**16042**	**17197**
2473	2726	3008	3323	3674	4065	4402
927	1027	1138	1262	1401	1554	1676
3762	4179	4622	5127	5706	6357	6923
2086	2242	2408	2586	2781	2993	3154
134	146	159	174	190	207	222
401	475	557	649	752	866	821
9783	**10795**	**11893**	**13121**	**14504**	**16042**	**17197**

2022	2023	2024	2025
9305	10072	10938	12052
9743	10418	11127	11871
2066	2266	2511	2832
607	646	691	739
266	283	300	319
2283	2489	2723	3002
2224	2340	2423	2454
26494	**28514**	**30712**	**33270**
6479	6902	7350	7915
2601	2796	3008	3235
11148	12090	13125	14315
4401	4692	5016	5402
343	371	403	444
1521	1663	1810	1959
26494	**28514**	**30712**	**33270**

Social Budget: Table 2

SOCIAL BUDGET (as percentage of GDP)

	2005	2006	2007	2008	2009
EXPENDITURES					
Health	5.9	5.9	5.7	5.7	5.6
Education	4.5	4.8	4.8	4.8	4.9
Social security	1.2	1.3	1.4	1.3	1.2
Work-related	0.3	0.3	0.3	0.4	0.4
Social assistance	0.1	0.1	0.1	0.2	0.2
Administration	1.4	1.2	1.2	1.2	1.2
Change in reserves	1.4	1.5	1.5	1.5	1.4
Total	**14.8**	**15.1**	**15.0**	**15.0**	**14.8**
REVENUES					
Households	4.4	3.8	3.8	3.8	3.7
Private enterprises	1.3	1.3	1.3	1.3	1.4
Government	5.3	6.0	5.7	5.7	5.7
Donors	2.9	3.2	3.3	3.3	3.2
Other	0.2	0.2	0.2	0.2	0.2
Investment income	0.7	0.6	0.6	0.6	0.6
Total	**14.8**	**15.1**	**15.0**	**15.0**	**14.8**

	2017	2018	2019	2020	2021
EXPENDITURES					
Health	5.5	5.6	5.6	5.6	5.7
Education	5.9	5.9	6.0	6.0	6.0
Social security	1.2	1.2	1.2	1.3	1.3
Work-related	0.4	0.4	0.4	0.4	0.4
Social assistance	0.2	0.2	0.2	0.2	0.2
Administration	1.3	1.3	1.3	1.4	1.4
Change in reserves	1.4	1.4	1.4	1.4	1.4
Total	**15.8**	**16.0**	**16.1**	**16.2**	**16.4**
REVENUES					
Households	4.0	4.0	4.0	4.0	4.0
Private enterprises	1.5	1.6	1.6	1.6	1.6
Government	6.4	6.5	6.6	6.7	6.8
Donors	2.8	2.8	2.8	2.8	2.7
Other	0.2	0.2	0.2	0.2	0.2
Investment income	0.8	0.8	0.9	0.9	0.9
Total	**15.8**	**16.0**	**16.1**	**16.2**	**16.4**

2010	2011	2012	2013	2014	2015	2016
5.5	5.5	5.5	5.5	5.5	5.5	5.5
5.0	5.1	5.2	5.3	5.5	5.6	5.8
1.2	1.2	1.2	1.2	1.2	1.2	1.2
0.4	0.4	0.4	0.4	0.4	0.4	0.4
0.2	0.2	0.2	0.2	0.2	0.2	0.2
1.2	1.2	1.2	1.2	1.2	1.3	1.3
1.4	1.4	1.4	1.5	1.5	1.5	1.4
14.8	**15.0**	**15.1**	**15.2**	**15.4**	**15.6**	**15.7**
3.7	3.8	3.8	3.9	3.9	4.0	4.0
1.4	1.4	1.4	1.5	1.5	1.5	1.5
5.7	5.8	5.9	6.0	6.1	6.2	6.3
3.2	3.1	3.1	3.0	3.0	2.9	2.9
0.2	0.2	0.2	0.2	0.2	0.2	0.2
0.6	0.7	0.7	0.8	0.8	0.8	0.8
14.8	**15.0**	**15.1**	**15.2**	**15.4**	**15.6**	**15.7**

2022	2023	2024	2025
5.8	5.9	6.0	6.2
6.1	6.1	6.1	6.1
1.3	1.3	1.4	1.5
0.4	0.4	0.4	0.4
0.2	0.2	0.2	0.2
1.4	1.5	1.5	1.5
1.4	1.4	1.3	1.3
16.5	**16.7**	**16.8**	**17.1**
4.0	4.0	4.0	4.1
1.6	1.6	1.6	1.7
6.9	7.1	7.2	7.4
2.7	2.7	2.7	2.8
0.2	0.2	0.2	0.2
0.9	1.0	1.0	1.0
16.5	**16.7**	**16.8**	**17.1**