HEALTH REFORMERS' RESPONSE TO ZAMBIA'S CHILDHOOD MORTALITY CRISIS

IDS WORKING PAPER 121

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SUMMARY[1]

This study examines the reasons for the rise in Zambian under-five mortality during the 1990s, paying particular attention to the relevance and effectiveness of health sector reform strategies and their impact on ordinary Zambians.

In the 1980s, economic crisis and structural adjustment led to reduced public health spending in real terms so that by the early 1990s, Zambia's health care delivery system was characterised by a low-supply, low-utilisation paradigm, typical of most of SSA. Health reform was designed to improve these trends by the integration and decentralisation of services, district capacity building and addressing issues of sustainability and financing. While large investments were made by the donors in the development of financial and health information systems, they did not actually improve the delivery of basic services. On the contrary, reform measures taken by government and donors appear to have further reduced access especially among the vulnerable populations through the implementation of user charges, and failed attempts to decentralise and integrate services.

Although a variety of shocks are contributing to the rise in under-five mortality, particularly the HIV epidemic, there is strong evidence that a key factor explaining the rise over the last 20 years is that vulnerable populations have not received adequate protection from restructuring operations. Government and donors had little or no motivation to see that the poor had access to effective health care, were protected from the worst drought in 50 years, food subsidy withdrawal, falling living standards and rising prices. Poverty interest groups have never participated in the policy process and agencies which ought to have represented the poor have been a disappointment. As a consequence, health restructuring as social policy has been far removed from the reality of ordinary Zambians. An alternative set of reform strategies might have provided better protection for the poor by incorporating a livelihoods perspective, by being more flexible, attentive and responsive to changing needs in a turbulent environment.

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARI	Acute Respiration Infections
BCG	Bacillus Calinette-Guerin
CBOH	Central Board of Health
CDD	Control of Diarrhoeal Diseases
CFR	Case Fatality Rate
CSO	Central Statistical Office
DANIDA	Danish International Development Agency
DHS	Demographic and Health Survey
DPT	Diphtheria Pertussis Tetanus
EPI	Expanded Programme for Immunisation
ESAF	Enhanced Structural Adjustment Facility
ESAP	Economic Structural Adjustment Programme
FAO	Food and Agriculture Organisation
FHANIS	Food, Health and Nutrition Information System
GDP	Gross Domestic Product
GRZ	Government of Republic of Zambia
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficient Syndrome
HMIS	Health Management Information System
HRIT	Health Reform Implementation Team
IMF	International Monetary Fund
IMR	Infant Mortality Rate
IV	Intravenous
MCH	Maternal and Child Health
MOH	Ministry of Health
MMD	Movement for Multi-Party Democracy
NFNC	National Food and Nutrition Commission
NGO	Non-governmental Organisation
NIDs	National Immunisation Days
ODA	Overseas Development Administration (DFID)
OPD	Out-patient Department
ORT	Oral Rehydration Therapy
PAG	Participatory Assessment Group
PHC	Primary Health Care
PRA	Participatory Rural Appraisal
PS	Priority Survey
RHC	Rural Health Centre
SAP	Structural Adjustment Programme
SIDA	Swedish International Development Agency
SSA	Sub-Saharan Africa
STD	Sexually Transmitted Disease
TB	Tuberculosis
TT2	Anti-Tetanus Vaccine
U5MR	Under-five Mortality Rate
UN	United Nations
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNICEF	United Nations Children's Fund
UNFPA	United Nations Family Planning Agency
UNIP	United National Independence Party
USAID	United States Agency for International Development
UTH	University Teaching Hospital
WHO	World Health Organisation
WB	World Bank
ZDHS	Zambia Demographic and Health Survey

1.0 INTRODUCTION

In 1965, approximately 20 per cent of Zambian children died before reaching the age of five years. By 1980, the under-five mortality rate (U5MR) had fallen to 15 per cent. In 1991, it had risen again to 19 per cent and in 1996, it had returned to over 20 per cent. Over the last two decades, Zambia has been in economic crisis. In the 1980s, public health spending cutbacks associated with structural adjustment programmes, led to severe deterioration in health care delivery systems so that by the early 1990s, they were characterised by a low-supply, low-utilisation paradigm, typical of SSA. Health sector reform sought to reverse these trends by the integration and decentralisation of services, district capacity building and addressing issues of sustainability and financing. This paper describes the main reasons for the rise in the 1990s and then considers the quality and appropriateness of donors response to Zambia's health crisis through the reform process. This section describes the methodology, data and structure of the paper.

1.1 Methodology

Economic crisis and restructuring programmes affect health mainly through two 'linkage' mechanisms: reduced incomes and reduced access to effective health services. Reduced incomes influence childhood mortality mainly through maternal factors, environmental contamination, and nutrient deficiency. Although quantifying these interactions is difficult, their influence is ultimately manifest in levels of growth faltering and sickness. Large increases in rates of mortality may also be the outcome of famine, flood, drought, war, political upheaval, epidemic and so forth. In all instances, the mechanism through which they affect mortality is through increased rates of malnutrition and disease. This paper therefore looks at morbidity trends to establish the influence of this linkage on childhood survival rates.

Economic crisis and restructuring policies may lead to reduced access to effective health care. Structural adjustment programmes, for example, may result in cutbacks in public health spending causing reductions in the availability of needed health care. On the other hand, health reform policies which seek to change the way health services are financed and delivered, have the potential to reduce access to effective health through user fees or contractions in service delivery - especially for low-income households.

There is a scarcity of data with which to describe changes in health service provision and access to basic health care services particularly in low-income countries. Traditional indicators such as percentage of the population with access to safe water and sanitation, a health facility, or, the number of beds, nurses or doctors per 1,000 population, tend to be unreliable given that many public services have not been maintained, and personnel are frequently untrained, unsupervised and unmotivated and, buildings and equipment are often unusable. However, two indicators - delivery assistance at birth and immunisation coverage rates - appear to be exceptions. Research (Simms *et al.* 1998) has shown that the percentage of women receiving trained delivery assistance at birth may be a useful indicator of the provision of other basic health care services and a good predictor of childhood mortality. Table 1 shows that when compared with other commonly used indicators (classified by 1995 levels of under-five mortality), births attended by trained

personnel appears to be a useful statistic.[2] A recent World Bank study (Peters *et al.* 1999) used linear regression models to better understand the contribution of health services to outcomes and found the relationship between supervised deliveries and infant mortality to be highly significant (p = .001). A further reason this statistic may be a useful access indicator is that, with the implementation of cost recovery in SSA, assistance at delivery became an important charged item at health facilities and often essential to the incomes of many underpaid health workers.

Table 1 Public health indicators by levels of under-five mortality in SSA in 1990s

	Immunisation Coverage (% population) 1990–96				**Access expressed as a percentage**				
Under-five mortality levels 1995	BCG	DPT3	Measles	TT2	Supervised Deliveries 1990–1996	Sanitation 1990–1995	Safe water 1990–1995	Under-fives under-weight 1990–1996	Physicians (per 1000 population) 1990–1995
0–74	82	84	80	64	81	63	79	15	1.8
75–99	74	66	61	44	60	46	55	18	0.17
100–149	71	60	59	35	55	36	51	27	0.16
150–174	83	60	60	44	38	43	51	32	0.06
175+	71	53	53	44	28	29	43	32	0.10

Data are from World Bank (1998)

The percentage of children who are fully immunised for diphtheria, pertussis and typhoid (DPT3), measles, polio, BCG and the percentage of pregnant women who receive two doses of the anti-tetanus vaccine (TT2) represent another useful set of access indicators (Table 1). In an era of health sector reform, the international community generally takes the view that 'the effectiveness of immunisation services is an excellent indicator of the effectiveness of the health systems' and coverage rates are a good indicator of the 'degree of efficiency of a particular reform process' (WHO 1999a). This is due to the fact that components needed to support a decentralised immunisation programme (supervision, training, transport, logistics and so forth) are also requisite to the efficient operations of other basic services.

This study therefore uses changes in the percentage of women receiving delivery assistance at birth and immunisation coverage rates as indicators of changes in access to effective health care in the 1990s and, the efficiency of the reform process itself. Used together with other key indicators such as levels of public health spending (an important determinant of outcome, at least in Africa - see Peters *et al.* 1999) and case fatality rates (CFRs), also considered a useful measure of the quality of health care, it is possible to gain some understanding of changes in health service provision in the 1990s.

In order to assess the relevance and effectiveness of donor's response to Zambia's health crisis, this paper asks whether serious efforts were made at reversing some of the deterioration which occurred between

[2] Replacing under-five mortality with infant mortality data yields similar results to those found in Table 1. Bloom *et al.* (2000) analysing life expectancy and the public access indicators included in Table 1 also found that trained delivery assistance at birth was the best predictor of survival.

the years 1980 and 1992, whether measures were taken protect low-income households from unintended effects of health restructuring, and whether, when a full-blown crisis did emerged, the reformers acted on new information to protect these vulnerable populations. Given the importance of these issues, it was thought useful to augment empirical data with quantitative information. A number of interviews were held with key informants in the Ministry of Health, the mission hospital sector, other ministries, health service providers, ordinary people and the donors, some of which have been paraphrased and included in this report.

1.2 Data

There have been a number of surveys covering a variety of issues relevant to health. Those used for this report include: the Zambian Demographic Health Surveys (1992 and 1996); National Census Reports produced by the Central Statistics Office (CSO) of Zambia; the CSO's Social Dimensions of Adjustment Priority Surveys I and II; CSO's Living Conditions Surveys; surveys and studies undertaken by the National Food and Nutrition Commission (NFNC) and the Food, Health and Nutrition Information System (FHANIS); analyses of public health expenditure undertaken by the World Bank and IMF; a series of studies using rural appraisal techniques to assess the impact of user fees on individuals and communities; district food insecurity and ecological vulnerability studies, and routinely collected health facility data on childhood morbidity and service utilisation.

ZDHS data provide useful information on childhood morbidity and service utilisation. It is necessary to take the following shortcomings into account in drawing inferences about levels of ill health in the community and service utilisation: its reliance on reports of symptoms by mothers with varying levels of education; its neglect of seasonality; and its limited information on inter-district variation. It provides information on the incidence of the major childhood diseases, but does not measure trends. The strength and weakness of other data used in this study are described elsewhere (see Simms *et al.* 1998).

1.3 Structure

This paper is structured as follows. Section 2 summaries the reasons for the rise in Zambian childhood mortality in the 1980s, drawing attention to the importance of access to effective health care and the need to improve basic health care services, Section 3 looks at the continuing rise in mortality in the 1990s. It examines the non-health service and service delivery factors which contributed to these trends. Section 4 focuses on health sector reform beginning about 1992, and considers the relevance and effectiveness of its policies and strategies during a period of severe social crisis. Section 5 summarises the findings and discusses their policy implications.

2.0 BACKGROUND

To set the story of Zambia's health crisis in the 1990s in context, it is helpful to first look at the reasons for the rise in mortality in the 1980s. Review[3] of possible explanations for the rise during this period indicates that the main non-health service factors which increase the risk of illness and death in Zambia are the common childhood illnesses (fever, acute respiratory infection and diarrhoeal disease), malnutrition and HIV. It is impossible to say whether or not there were increases in levels of ill health. However, the annual returns from health facilities did not report major increases in the number of consultations for childhood diseases, with the exception of malaria, which became endemic all year-round.

Malnutrition is an important direct cause of death and it makes children more likely to become ill and less likely to recover. Cross-country data on levels of moderate and severe stunting for a number of countries in Sub-Saharan Africa indicate that Zambia reported slightly below average levels of stunting and higher than average rates of under-five mortality. Although the evidence on Zambian malnutrition during the 1980s is somewhat contradictory,[4] Macro International concluded 'there has been little change in the level of malnutrition over the last twenty years' (1994: 5). The proportion of children who were wasted, stunted and underweight remained relatively constant at 5, 40 and 25 per cent, respectively. Analysis of health facility data also indicates that the number of children under 5 years of age presenting with a diagnosis of malnutrition between 1980 and 1989, changed very little. These trends may have been due in part to food subsidies, which kept the price of mealie meal low.

One possible explanation for mortality increases is that infection with HIV made children more susceptible to fatal infections. Review of Zambian childhood mortality trends shows that HIV was probably not an important factor explaining the rise in mortality in rural areas while in urban sectors, the epidemic contributed to the rise in mortality especially in the second half of the 1980s. While Zambia is one of the worst hit countries in Africa by the epidemic, it accounts for only a portion of the mortality reversal and explanations must be sought elsewhere.

There is strong evidence that prolonged financial constraints on the public health sector reduced access to effective services and that this was an important factor contributing to the rise in childhood mortality. Health service delivery indicators show that in 1980, existing levels and structures of Zambian health services compared favourably with other countries in Africa. Between 1980 and 1990, real health expenditure per capita fell by 50 per cent; the way the cuts were applied exacerbated their negative impact on delivery of basic health care services. The government substantially reduced allocations to rural provincial health services, which provide most public primary care services. It made disproportionately large cuts in non-personnel

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3 This section draws heavily from Simms *et al.* (1998) which analyses the reasons for the rise in Zambian childhood mortality in the 1980s.

4 The **Bulletin of Health Statistics** of the Ministry of Health (MOH 1988–92) suggests that 7.3 per cent of children, for whom growth monitoring data were collected, were underweight in 1980 and 24.5 per cent in 1990. However, all other studies (including, UNECA/CSO 1985; UNICEF 1986; GRZ/WHO/UNICEF 1984; National Nutrition Surveillance Programme [see NFNC 1984; CSO 1985a]) indicate that between 25 and 30 per cent of children were underweight during the early 1980s. The apparent rise in the proportion of children reported as underweight in routine monitoring may have been due to the recruitment of the less well educated mothers, living farther from the health facility, as the primary health care programme became established.

operating costs. Spending on materials and other non-personnel items fell substantially in real terms and this reduced the effectiveness of the available personnel. The Ministry of Health (MOH) has not documented the frequency of shortages of essential drugs, but a number of participatory rural appraisals found that people consistently complained that drugs were not available at health facilities. Another consequence of the unavailability of funds was a lack of transport. This made it difficult for health centres (most of which did not have doctors) to refer patients. It also left many rural health workers unsupervised. The cut in non-personnel expenditure was particularly severe for the provincial health services. This amplified the negative impact of the resource constraints on the provision of effective primary health care services. Although mothers had reasonably good access to a health worker when a child fell ill, children often did not receive the appropriate treatment. Drugs were often unavailable. One sign of these problems is the rise in inpatient case fatality rates for common childhood illnesses. This may reflect a change in the case mix, but it probably also indicates serious treatment failures.

Childhood mortality varied considerably between districts. This is not explained by the proportion of households with incomes below the poverty line or the proportion of underweight children. On the other hand there is a strong negative relationship between the rate of assisted deliveries and childhood mortality. This points strongly to the importance of effective basic health services. The districts which did better than the rest of the country tended to be served by mission health facilities, which escaped the worst negative consequences of the severe resource constraints.

By the early 1990s, Zambia's health care system had severely deteriorated and access to basic health care, especially at the periphery, was an important factor explaining the rise in childhood mortality. Given that this was one of the largest and most prolonged rises in the developing world, these findings would suggest that government and donors, upon entering an era of restructuring the health sector, would have seize the moment and made coverage and quality of basic health care top priority issues in order to reverse some of the earlier trends. This remainder of this paper describes what actually happened.

3.0 THE RISE IN CHILDHOOD MORTALITY IN THE 1990s

The Zambian economy, which had expanded during the 1960s and early 1970s largely due to copper revenues, was hit hard by the oil crisis and economic recession in the mid-1970s; the government borrowed heavily domestically and internationally and was eventually was forced to negotiate with the International Monetary Fund (IMF). During the first phase of IMF involvement - 1976–86 - there were five stand-by arrangements and one extended arrangement all in support of adjustment. By 1987 adjustment programmes collapsed. In 1989 the government embarked upon a 'Zambian structural adjustment strategy' (IMF 1998). By 1991 when national elections were called, Zambia was in economic chaos.

The Movement for Multi-Party Democracy (MMD) came into power and immediately began to liberalise markets and initiate the reform process. Changes included exchange rate liberalisation, the withdrawal of government subsidies, decontrol of agricultural prices, introduction of user fees in health and education, tax reform and expenditure restructuring. Despite these reforms, GDP fell by 15 per cent between

1990 and 1997. Levels of extreme poverty increased from 69 per cent in 1991 to 76 per cent in 1993 and in 1996 returned to 69 per cent (CSO 1993, 1994, 1998).

There were a number of health system events which distinguished the 1990s from the 1980s, including: elimination of food subsidies in 1991; the failure of safety nets; the worst drought in 50 years in 1991/92; the continuing spread of the HIV/AIDS epidemic; and health sector reform. Under-five mortality increased from 191/1000 in 1991 to 197/1000 in 1996 and is now estimated to be 202/1000 according to UNICEF (see UNICEF's internet site).[5]

The following subsections first look at the non-health service delivery factors which may have contributed to the rise in mortality and then the linkage between public health spending, reduced access to effective health care and childhood mortality.

3.1 Non-health service delivery factors

There are several factors which increased the risk of illness and death among Zambian children in the 1990s which, though present in the 1980s, were substantially less important.

3.1.1 Drought and food security

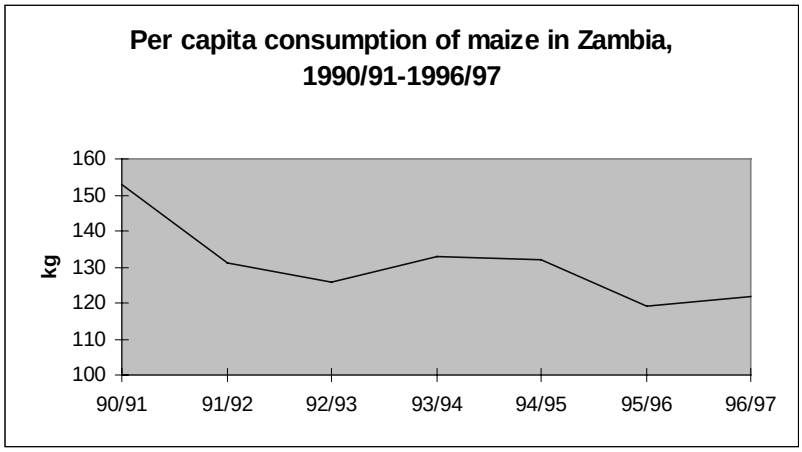
Between 1980–99, Zambia experienced eight national droughts where agricultural production was affected. This is the worst record in SSA. There is a widely-held view that Zambia's vulnerability is partially due to a switch from traditional crops such as sorghum, to maize which is more vulnerable to drought and requires costlier inputs.

UNDP (1998) notes the following trends in food security between the 1980s and 1990s: (1) a fall in per capita production of grain from 235 kg during 1985–89 to 173 kg during 1990–95; (2) a rise in net food imports from 161,000 tons during 1985–89 to 239,000 tons during 1990–95; (3) a sharp fall in per capita consumption of maize from 153.2 kg per capita in 1990/91 to 123.3 kg per capita in 1996/97 (Figure 1). The consumption of most other foods either stayed constant, declined or increase only slightly during this period.

In 1991–92 Zambia was hit by the worst drought in over a half a century. It reduced grain production in the country to about half of normal, in some districts by 95 per cent. In districts especially vulnerable to drought and food insecurity there was a doubling and tripling of infectious disease among under-fives. However, there is broad consensus that the international response to the drought was early and the distribution of food was effective (Green 1993). According to IMF (1998), the success of the food relief programme made unlikely any significant increase in malnutrition.

[5] http://www.unicef.org/sowc

Figure 1



Source:: UNDP (1998)

3.1.2 Malnutrition

There are several sources of 1990s malnutrition data. Table 2 summarises the findings of a number of surveys measuring childhood wasting, stunting and underweight between the years 1991 and 1996. These results indicate a large increase in stunting, from 39 per cent in 1991 (CSO 1993) to 53 per cent in 1995 (FHANIS 1996), and a further rise to 60 per cent in 1996 (MOH *et al.* 1997a, b). ZDHS 1996 (CSO 1997) 'corrected' these malnutrition data and reported stunting to have actually fallen to 42 per cent.[6] The prevalence of underweight under-fives increased during the same period from 22 per cent (CSO 1993) to 29 per cent (FHANIS 1996).

Table 2 Summary of malnutrition survey findings

Survey	Date	Wasting	Stunting	Underw't
Priority Survey I	Oct-Nov 1991	6	39	22
ZDHS	Jan–May 1992	5	40	25
Priority Survey II	Apr–June 93	6	48	25
FHANIS	July–Aug 95	6	53	28
ZDHS 1996	July 96–Jan 97	5	42	29

Sources: CSO (1993, 1994); Gaisie *et al.* (1993); MOH *et al.* (1997a, b); FHANIS (1996); CSO (1997)

Cross-country malnutrition data show that Zambia's 35 per cent increase in stunting between 1991 and 1995 was the largest in the developing world. Stunting is the probable consequence of several factors including drought, repeated episodes of childhood illness, loss of food subsidies and increases in food prices. The IMF (1998) found that withdrawal of food subsidies and failure of safety nets were important factors explaining the rise in malnutrition. These are discussed more fully in Section 3.2.5.

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6 These levels of stunting are controversial. The Zambian author of the chapter on malnutrition for ZDHS (1996) wrote to Macro International Inc. that she was 'very uncomfortable' with the cut-off points used in the final version of ZDHS and the consequent reduction of stunting from 60 to 42 per cent.

3.1.3 Common childhood illnesses

Table 3 summarises the prevalence rates for diarrhoeal diseases, malaria and acute respiratory as reported by ZDHS in 1992 (Gaisie *et al.* 1993) and ZDHS 1996 (MOH *et al.* 1997a, b). District-level health facility data for these infectious diseases show large increases in cases and admissions between 1992–95 and a recovery by 1996.

Table 3 Under-five illness reported among children*

Infectious Disease	ZDHS (1992)	ZDHS (1996)
Diarrhoea	22.8%	25.0%
Fever/malaria	43.7%	40.0%
ARI	12.7%	13.0%

**Note*: two weeks prior to survey.
Sources: Gaisie *et al.* (1993), MOH *et al.* (1997 a, b).

3.1.4 HIV

Zambia is one of a handful of countries where the epidemic has significantly increased mortality. HIV prevalence (for ages 15–49) is reported at about 20 per cent, one of the highest rates in SSA. The epidemic has shifted from a mainly urban phenomenon in the 1980s, to one that has spread to all parts of the country; the ratio of urban to rural prevalence is about 2:1 (Fylkesnes *et al.* 1997). More than 50 per cent of bed-space goes to HIV infected patients. The education sector is reportedly loosing 600 teachers a year to AIDS, thus severely undermining efforts to rejuvenate the school system.

While the impact of HIV on Zambian adult mortality is well-defined (Timaeus 1997 and 1998), its impact on under-five mortality is less clear. Research indicates that vertical transmission rates from mother to child vary between 15 and 30 per cent (Singh 1999; Timaeus 1998). Using the higher infection rate, this suggest that the HIV epidemic may be accounting for 30 deaths per 1000 live births among children under five years of age in the 1990s; Hanmer and White (1998) estimated that AIDS caused 19 per thousand and 44 per thousand deaths per 1000 under-five deaths in rural and urban Zambia respectively in 1996. All research concludes that the epidemic is only accounting for a portion of under-five mortality and that explanations must be sought elsewhere (Timaeus 1997, 1998; Hanmer and White 1998).

3.1.5 Summary

In addition to the spread of the HIV epidemic during the 1990s, several other factors increased the risk of childhood illness and death. Among the most important of these were drought, a sharp fall in per capita consumption of maize, and a large rise in childhood malnutrition. They made it more likely that a child would fall ill and be less likely to recover.

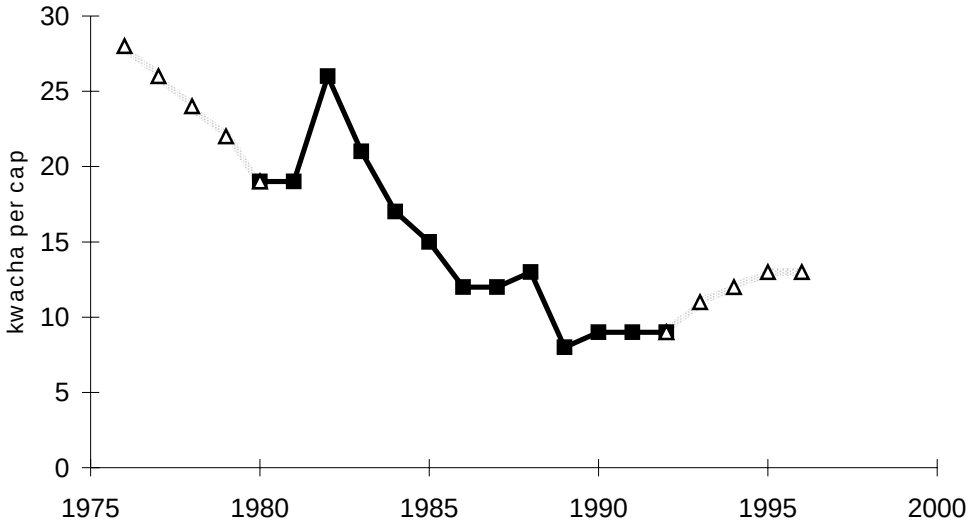
3.2 Health service delivery factors

This section assesses the line of transmission between changes in public health spending, accessibility to effective health care and mortality.

3.2.1 Public health spending in the 1990s

In the 1980s, public health spending as a percentage of the total government budget remained constant at about 6 per cent. This percentage increased in the 1990s and between 1994 and 1997 it ranged between 12–14 per cent. The large decline in per capita health spending in the 1980s was followed by improvements in the 1990s (Figure 2).

Figure 2 Government health expenditure per capita at constant (1984) prices



Notes: expenditure in 1970s and mid-1990s are estimated. Source: Freund (1986); Hammer and White (1998); MOH (1992); Kamanga (1995).

However, during the period 1991–96, the cost of providing services rose. This was because health services are labour-intensive and the real incomes of health workers were protected when economic productivity was falling. Table 4 shows that volume measures decline and that the government was getting less at a higher price (IMF 1998).

Table 4 Health budgets 1991–96*

	1991	1996
Health budget actuals per capita (volume)	100	91
Health budgets actuals per capita (value)	100	127
Health value-added per capita (volume)	100	85

**Notes:* The volume measure is derived by deflating expenditure by its own GDP deflator, which is dominated by government wages. The value measure is derived by deflating by the aggregate GDP deflator. Value-added measure is the health and education sectors deflated by the sector-specific GDP deflators as is the case of the volume measure
Source: IMF (1998)

The way MOH resources were spent in 1993 differed substantially from 1996. Table 5 shows that the proportion of the budget allocated to central and special hospitals decreased from 34 to 24 per cent and grants to district boards (non-salary expenditure) increased from 5 to 20 per cent. These changes reflect government's effort to decentralise services and reform the health system. Section 3 describes and analyses how these changes may have affected the delivery of basic health care services.

Table 5 The pattern of MOH budgeted expenditure 1993–96

	1993	1994	1995	1996
Head office and Central Health Board	0.8%	6.7%	6.7%	4.6%
Central drug purchases	18.2%	9.1%	10.7%	9.2%
Other non-personnel expenditure	7.2%	3.4%	3.0%	3.1%
Central and special hospitals	33.6%	33.2%	25.4%	23.7%
Provincial PEs and regional advisors	18.3%	15.5%	16.0%	22.4%
General hospitals	4.3%	4.0%	10.4%	6.8%
Mission facilities	6.8%	2.5%	(2)	3.5%
Grant to district boards	5.5% (1)	19.7%	22.3%	19.5%
Other Grants	5.3%	5.8%	5.5%	7.2%
Total	100%	99.9%	100%	100%

1. It was assumed that the hospital non-salary budgets for general hospitals increased by the same proportion between 1993 and 1994 as for central and special hospitals.
2. The grant to the mission hospitals was budgeted in the grants to the district boards during 1995
Source:: Bloom (1996).

3.2.2 Maternal and child health care

ZDHS 1992 and 1996 maternal health care data show a large decline in the percentage of women receiving delivery assistance at birth (Table 6). Based on the relationships described in Table 1 (see methodology), this decline suggests a large fall in access to effective health care services which may be associated with the rise in under-five mortality.

Table 6 Percentage of pregnant women obtaining maternal health care

	ZDHS (1992)	ZDHS (1996)
Delivery assistance	50.5%	46%

Source: ZDHS (1992 and 1996).

During pregnancy, the percentage of women receiving two or more doses of tetanus vaccine declined also from 39 to 37 per cent. Several studies have examined maternal and child health care services and treatment capacities for common childhood illnesses in the 1990s. The Family Health Unit of the Ministry of Health (MOH 1996) found anti-infective drugs were in critical short supply and even the broad spectrum drug, ampicillin, was available only 7 per cent of the time. WHO/CDD (1997) health facility survey found that only 3 per cent of children seen in health facilities were correctly diagnosed and treated. A study of basic services in Kaputa district (Reitsema 1996) found only 13.5 per cent of women received ANC. These

findings tend to confirm earlier studies which showed that rural health facilities were often no more than 'empty shells' (WB 1992) and do not provide evidence of improvement in the delivery of basic health care services.

Vaccination

Comparison of ZDHS 1992 (Gaisie *et al.* 1993) and 1996 (MOH *et al.* 1997a, b) data shows (except for BCG) a decline in all vaccination coverage rates including 'all vaccinations.' The percentage of children receiving no vaccinations more than doubled (Table 7). Since 1996, WHO's (1999) EPI data show large declines in coverage rates despite National Immunisations Days (NID).[7] These findings are consistent with the decline in delivery assistance coverage rates and support the notion that reduced access to effective health care was contributing to the rise in childhood mortality. These data bring into question the efficiency of the health reform process itself.

Table 7 Percentage of Zambian children 12–23 months vaccinated

ZDHS	BCG	DPT3	Polio 3	Measles	All vac.	No vac.
1992	95.1	89.3	90.3	89.8	82.6	0.8
1996	97.4	85.7	84.4	86.5	78.3	1.9

Note:: Vac. means vaccination.
Source:: Gaisie *et al.* (1993) and MOH *et al.* (1997a, b).

3.2.3 Case Fatality Rates (CFRs)

District-level health facility data on hospital CFRs for common childhood illnesses for the period 1988 to 1995 show large increases. CFR trends are used as a crude indicator of changes in the quality of these services. The under-five hospital CFRs for ARI increased from 4.8 per cent in 1988 to 12.6 per cent in 1995; diarrhoeal disease CFR increased from 8 to 12 per cent; malnutrition CFR increased from 27 per cent in 1988-91 to 36 per cent in 1995; and malaria CFRs increased from 4.8 to 6 per cent during this time period.

3.2.4 Water and sanitation

The average annual spending during the period 1980–88 was 29 million *kwacha* in 1985 prices. During the early 1990s, there was a large decline in public works spending, reaching an all-time low of 3 million *kwacha* in 1993. Since 1994 large investments have been made in water and sanitation and the percentage of urban and rural household with access to clean drinking water has improved (Table 8). The number of households with a pit latrine improved in rural Zambia and declined slightly in urban areas.

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7 NIDs draw substantial criticism especially from the donors. There is no delivery system to ensure good vaccination coverage rates therefore they must resort to this extreme form of vertical programming. It is cost ineffective and uses up a large proportion of district budgets otherwise meant for delivery of other basic services. One of the larger donors said people in the districts 'laugh in your face' when NIDs come because its a time when there is plenty of money around for the health workers. UNICEF which supported it at the last minute in 1999, is adamant that this delivery system should change.

Table 8 Access to water and sanitation in urban and rural Zambia 1991 and 1996

	1991	1996
Rural		
Households with clean drinking water	42%	52%
Households with pit latrines	20%	31%
Urban		
Households with clean drinking water	92%	100%
Households with pit latrines	90%	88%

Source:: IMF (1998)

While access to water and sanitation has improved, existing public services have not been maintained. One indicator of this failure is the presence of cholera. Since 1990, there have been repeated outbreaks of cholera during the rainy season in Lusaka; in 1999 they have been particularly severe, dominating the agenda of MOH and Central Board of Health. In part, they have been attributed to a failure to treat piped water due to budget cuts (Bloom 1996).

3.2.5 Food subsidies

By 1991, the government could no longer afford the 90 million-pound price tag for food subsidies, and through external pressure, subsidies were reduced and finally removed by 1992. The immediate consequence of ending subsidies was that, in 1992, breakfast meal prices rose by 700 per cent and roller meal by 175 per cent, while wages rose by 100 per cent for low- and middle-income groups (WB 1994; UNICEF 1996). Maize contributes 70 per cent of the calorie requirements of Zambians.

There is some consensus that withdrawal of producer and food subsidies contributed to the large rise in childhood malnutrition and poverty during the period 1991–96 through increased mealie meal prices (see Dzekedzeke 1994). The ESAF External Review (IMF 1998: 167) states that the drought could have contributed to increased malnutrition but 'drought relief programmes were quite effective.' It suggests that the withdrawal of food subsidies influenced malnutrition because safety nets, which were supposed to protect vulnerable populations especially the smallholders in remote rural Zambia, were poorly designed. These populations were hit through several channels: the elimination of fertiliser subsidies reduced food production and food consumption; the elimination of pan-territorial pricing removed the implied subsidy in remote Zambia; the design of safety nets 'the scale of resources was not commensurate with the problem;' 'insufficient analytic attention was paid to the identification of target groups' and monies freed-up by removal of subsidies which were supposed to protect vulnerable populations never did (IMF 1998: 167, 170). A senior donor official in Lusaka says:

> There was elimination of subsidies overnight, elimination of government control over marketing agriculture produce, there was an elimination of guaranteed prices and nothing in its place. Overnight you get a situation where everything was babied through, from cradle to grave; any farmer could find a market for his product at a guaranteed price. All of a sudden the new government comes in (and

changes course) and everybody is growing maize, everybody is in competition with one another, no guaranteed prices, prices drop and no fertiliser around.

3.2.6 Summary

The removal of food subsidies and failure of safety nets hit vulnerable populations hard. Despite the severe decline in health service delivery in the 1980s, this section also shows that while per capita spending on health increased modestly in real terms, the cost of providing services rose. The result was actual volume measures decline and that the government was getting less at a higher price. While there were some improvements in water and sanitation, the percentage of women receiving delivery assistance at birth and vaccination coverage rates decline but CFRs continued to worsen.

4.0 HEALTH REFORM

By the early 1990s, the GRZ recognised that the health sector was in crisis. Health needs were not being met and the existing health system was no longer affordable. GRZ took up the main ideas put forward by World Bank's 1993 **World Development Report** by committing itself to re-financing a basic package of cost effective health care services 'as close to the family as possible.'

The donor community in Zambia gave strong support to the health reform process. Table 9 summarises donor funding for the period 1994–98. It shows the levels of investment of DANIDA, SIDA in building integrated systems, the importance of AIDS and the need to build up basic services. World Bank was a key donor and its job was to contribute to policy formulation, programmes and monitor and evaluate outcome.

This section assesses several key aspects of the Zambian health reform: user fees, decentralisation - the balance between building district management capacities and improving the delivery of basic health care services - and the responsiveness of the reform process to the worsening crisis.

4.1 User fees

User fees had been a key component of Zambian health sector reform since 1993. They were introduced to help refinance health service delivery and bring a sense of ownership to community services. Several studies have assessed the impact of cost recovery on accessibility to health services. They sought to establish whether basic health services such as ANC and under-five clinics were excluded from payment (PAG 1995; Booth and Milimo 1994; Kalyanlya and Milimo 1996; Milimo 1997). Table 10 summarises the findings of some of these studies.

Table 9 Summary of committed/anticipated donor support 1994–1998

Donor Agency	Activity	Amount (US$million)	Duration
DANIDA	Planning and management, district capacity building, management information system, quality assurance	25	1995–9
European Union (1)	Blood transfusion services, hospital rehabilitation, management support, water and sanitation, laboratory support	12	1995–9
Netherlands	Essential drugs, PHC in two provinces, supplementation of salaries of Dutch doctors, TB drugs	approx. 32	1994–8
ODA	Human resources, hospital management, School of Medicine, population/family health, urban primary care, AIDS	22.5	1994–8
SIDA	Health planning and management, sexual and reproductive health, AIDS, essential drugs	21.25	1994–8
UNFPA	Population/family health trust, AIDS	7	1994–6
UNICEF	Mental health, Child health, district strengthening, HIV/AIDS	10	1994–6
USAID	Population and family planning, AIDS, child survival	39 20	1994–8 7 years
World Bank	Policy development, investment programme, recurrent budget, monitoring and evaluation	56	1995–8
WHO	Human resources, health system research, PHC, malaria, child health, vaccines	5	1995–9

1. This does not include funding provided by the microprojects for construction of rural health facilities
Source: MoH (1995) Table 1.4

Table 10 Changes in utilisation rates after increases in user charges

Chongwe (four RHCs), Kabwe (Kabwe General Hospital and two urban clinics), Kitwe (three urban clinics and Kitwe Central Hospital) and Senanga (Senanga District Hospital and two RHCs) (Kalyanlya and Milimo 1996)	There was a general decline in utilisation of health services. 'Contrary to expectation, antenatal, under-five and STD services were subject to user fees ... Available information suggested that user fees tended to discourage utilisation of under-five services' ... 'there was a general resentment of the user fees such that in a number of cases they were viewed as a new form of tax' (page viii).
Lewanika general hospital (PAG 1995)	The average number of outpatients per month fell from 6353 in 1992 to 1771 in 1993 and 1164 in 1994.
Arthur Davidson Hospital for Children (Booth *et al.* 1994)	Substantial downward drift in the use of hospital facilities since charges were first introduced in 1989 with an overall fall of 37 per cent in the number of outpatient registrations and admissions between 1989 and 1993
Jumbe Mission Hospital (Booth *et al.* 1994)	The number of outpatient visits per month fell from 3500 during 1989 to under 1000 since the introduction of a charge of K240 in August 1993. The number of deliveries fell by almost half between 1991 and 1993.
Clinic of Lusaka Urban District Council (Kahenya and Lake 1994)	The average number of outpatient visits was 44% lower during Aug–Nov 1993 than during the same period in 1992. Clinic-based deliveries fell by 23 per cent and the number of antenatal visits fell by 17 per cent: There was a 76 per cent drop in the number of visits by people with an STD.

Source: Bloom (1996); Kalyanlya and Milimo (1996)

These studies found a large portion of the community stopped using health services because they could not afford the cost. This was particularly the case among the very poor and children, who in effect, were not exempt from paying. One consequence of this was that the poor tended to self-administer with medicines from local pharmacies or use traditional medicines; others simply stayed at home and died (PAG 1995; Booth and Milimo 1994). Another consequence was seen in Mongu where new-borns were not being registered at the under-five clinics, and therefore not getting vaccinations. This may have accounted for the drop in immunisation from 80 to 50 per cent (PAG 1995). Kalyanlya and Milimo (1996) show that charges were improperly applied to OPD emergencies, deliveries, antenatal care, under-five treatment and STD clinics. Milimo (1997: 37) found for example, 'access to health services is often determined by one's ability to pay for them ... Expectant mothers in Chadiza complained of the K500 they have to pay to the antenatal clinic. Those who do not have the money are denied access to the clinic.'

Retrospectively, many observers agree that the implementation of user fees in 1993, at the time of the drought, was inappropriate. IMF (1998: 166) found that the timing was poor because 'the rural population had faced a depletion of its real cash balances as a result of inflation, and it was not in a good position to replenish them in view of drought and the breakdown of the marketing system.' A senior donor official in Lusaka says:

> To some extent, some of the policies in the early 1990s were ill-conceived, not just in the health sector but across the board. Any new government is going to make mistakes. Its possible that the application immediately of user fees could be seen retrospectively as a mistake - but that doesn't deny the validity of the theory on which they were based - that you cannot depend on government for free care.

Currently, opinions about user fees are quite polarised. Most donors consider user fees as a fundamental part of reform with established policy guidelines and exemptions. It is an issue of the past, or has never been an issue. A senior health policy advisor to Central Board of Health did not know that fees were being charged for services for pregnant women and children despite the exemptions. He stated:

> As long as I have been working in Zambia since 1994, I never heard that user fee exemptions were an issue. There were always exemptions for children under-five and pregnant women. I thought there were always exemptions for children under-five. I hadn't realised that they were not applied. That's insane, that's crazy, that's a policy failure.

On the other hand, beneficiaries and many working in the field perceive users fees and exemptions as important issues; they are still being erratically applied and are reducing entry into the health care system especially among vulnerable populations. Another senior donor official in Lusaka says:

> I think we have made a series of mistakes which have been absolutely disastrous. There were exemptions for user fees but districts don't know what they are. Some districts are asking for money and some are not. But it's all because the districts don't know the exemptions. They were so strapped for cash last year that if you wanted services you would be charged.

Users fees are dissuading mothers from seeking timely treatment. Nursing staff from Mukinga Mission Hospital in North-Western Province point out that under-fives who are admitted with malaria these days are much sicker than they were ten years ago. Their microscopy field count is likely to be over 100 whereas before it was usually below; they are much more likely to need an IV than not. One important explanation is that mothers delay in coming to the clinic because they can not afford the user fees. Similarly in Lusaka, Mutinta Hambayi of FHANIS says that mothers are undernourished, their children are under-weight and more fragile. User fees are causing mothers to delay seeking treatment and often the children do not survive.

Donors seem unaware of the difficulties entailed by the levy of service fees. There is for example, the widely-held view that Zambians are willing and capable of paying tuition and user fees and that they apportion their budget accordingly. Says Wisdom Kanganga, a community worker in Kabanana Township:

> In rural and peri-urban Lusaka there are many health facilities but you have to pay. For the under-five clinics, ANC and delivery assistance, you have to pay. Of course. How do the very poor pay? They do anything, collect garbage, collect papers and sell them again, crush stone. It's a question of survival. Some use their children. Imagine sending your children at night to sell themselves in the bars. The security guards control them and they bring back the profits to their parents. Children ages 11, 12, 13 and 14. They get pregnant and there's HIV.

4.2 District management capacity building

Another mainstay of health reform's decentralisation involved the devolution of responsibilities for financing, planning, management and service delivery to the district health boards and management teams. The government supported the development of a package of essential health services (based on disease burden and productivity loss) by grants to the districts.

From the outset, large investments were made by the donors in the development of integrated information and accounting systems. In contrast, only modest advances were made in the actual delivery of services. A senior donor official in Lusaka says:

> There were pilot studies and that took a long time to happen. As to the actual services themselves, training never happened. Nursing and institutional jobs have never been really addressed. CBOH did not have the capacity to provide technical assistance to districts. Guidelines have not been forthcoming; policy development has taken two or three years to develop in certain areas including family planning. In 1995–96, the family planning policy which was widely disseminated, was not actually finished. The policy which was developed was not put in practice, so all we have is a strengthening of our central office.

In 1999, it is generally recognised that greater efforts should have been made to improve basic health care services. Another senior donor official in Lusaka says:

> Something has gone terribly wrong...we spent our money on management capacities and what has it produced? A lot of workshops, courses and FHANIS.

Another senior donor official in Lusaka says:

> The claim that the focus of health reform was mistakenly on building district management capacities rather than improving services is a very valid issue. The reforms focused on management and financial capacity building for districts and there was no focus on technical issues and service delivery.

Still another senior donor official in Lusaka says:

> I think you could safely say that if we had done things differently over the last years we could have perhaps made some kind of difference ... What a lot of people are saying just now is that while health sector reform is a good concept, there is quite a strong feeling that we put too much time for too long on trying to strengthen the capacities themselves in finance and administration. What's suffered as a result is the delivery of basic health care services. What's being said is that we should have done this hand in hand, together.

4.3 Responding to crisis

Strategic frameworks, like those used in health reform, are intended to host an iterative process of planning and management. A well-conceived strategy helps to link the planning function with operations by uncoupling planning from organisation and seeks to push planning as deep into the districts as possible. The process is supposed to be monitored and evaluated. A feedback loop informs the centre of what is happening in the field so that it can assess and adjust strategies to ensure their relevance and effectiveness.

Key questions which need to be answered are: Why did the health reform process not respond more appropriately to the deepening crisis of the 1990s - to increasing health demands due to rises in poverty, malnutrition and infectious disease, drought and declining access to effective health care? What happened to the monitoring function?

Part of the explanation seems to be that, from the beginning, there was enthusiasm for health reform among the donors. Large advances were made in the restructuring of government and redeploying personnel in areas of new/revised institutions, new policies, innovations, accounting and HMIS and legal framework. Though little progress had been made in the delivery of health services, there was nonetheless a sense of accomplishment. In 1993, 1994 and 1995, there was a widespread perception among the reformers that the reform process was effective. A senior donor official in Lusaka says:

> In 1993, 1994 and 1995 the spirit was very high. There was a process whereby we constantly asked questions, it was an open process and there were reasonable discussions. There was almost an academic openness. At central level it was carried by a very small group but at least they were open and willing to experiment. We were asked to create guidelines but we said don't just take us, include Zambians from district level and they accepted that. The process was incredible. They listened to people like us. Quite a few people were open to the process. We developed guidelines and said let's review them after one year. People were open, mistakes were made. It was discussed.

During this period, there was a large amount of information on increased health needs arising from a severe decline in food production in 1991/92. PSI was published in 1993, PSII in 1994, numerous studies on accessibility between 1994-96 and FHANIS showed in 1995 stunting had jumped from 39 to 53 per cent. In addition, there were many studies showing the very low level of maternal and child health care. Some donors were not aware of some of these surveys. When a senior policy advisor to CBOH was asked about whether he knew about the rise in under-five stunting (from 39 per cent to 53 per cent) between 1991–95, he replied:

> No, I haven't seen any malnutrition data that says that. That's incredible!

Other donors were fully cognisant of health status and service delivery research. One senior donor official in Lusaka said 'the process was good but services were incredibly bad.' In either case, there was no obvious response from HRIT. A department head at CSO stated at this time that 'HRIT does not have any idea of the misery taking place in the districts and they certainly were not responding to it.' A WHO field representative working in family and child health planning was interviewed at the same time and asked about this continued focus on integrated systems rather than improving basic services. She stated:

> The decisions being taken by the donor group are very scary. It does not look like they know what they are doing. They should be improving treatment protocols, the delivery of basic services. Even what they are planning is the bare minimum. They are ignoring what's really happening in the field. They are in another world; it's like dealing with a monster.

During the 1993–95 period, such was the enthusiasm for the health reform process in the Ministry of Health and among the donors that they asked for an external review to assess the reform process representing the UN agencies, under the leadership of Dr Mahler, former head of WHO. According to a senior donor official, 'the government asked for the Review and they expected praise, praise, praise.' They received 'praise' but also stinging criticism. The Mahler Report (1996: 6) stated:

> emphasis seems to have been given to management of service delivery, while less attention was given to quality of care and the technical support for the peripheral staff in their efforts to raise the health of the population ... (I)t needs to be redressed.

The Mahler Report (1997: 5) went on to state:

> We exhort the reformers to listen carefully to the 'noise' (turbulence?) produced by the implementation practices at various levels within the system in order not to lose touch with the reality on the ground.

GRZ and the donors were furious both with this criticism and the way it was presented. The donors did not accept the Report. A senior donor official in Lusaka says:

> The Report was straight-away not accepted. There were donors who wanted a success so badly for health reform and decentralisation in 1996 and 1997 - including the World Bank. The first draft was

> embargoed. I was very upset. 'Hey we discussed this in the open in 1993 and 1994. If you embargo it everyone will jump on it.'

The Report concluded that the reform process was off-track and had to consolidate and focus on delivery of basic health care services. The response of the donors was to ignore the Report and push ahead with reform. World Bank simply took the Report out of the public domain and it disappeared. A senior donor official in Lusaka says:

> I complained because it took one and a half years before the Mahler Report was out officially by the World Bank. I wrote to the World Bank. I said 'What is this? Do you accept this? Is this the way you do business? Is this the way you deal with Government?' But we never had an official discussion. Every time I raised it I was given silence. 'Hey don't be too critical, this is past.' Well it's not past. Most of the issues are still there.

During this period 1997–98, after the embargo of the first draft Mahler Report and before the release of the final report, health reform continued on its previous course despite the fact that there were more reports on the poor quality of health care services and ZDHS 1996 (MOH 1997 a, b) showed another rise in childhood mortality. The idea was to push ahead and ram decentralisation through or it would never happen. A DANIDA official interviewed in 1997 said simply, 'We do not consider the Mahler Report a working document.' Another senior donor official in Lusaka says:

> The donors made a big mistake. It was the time for the donors to say 'Stop! Put on the brakes. Let's see it as a new start.' I have never understood why the donors never used the opportunity. I asked myself 'Should I shout "Stop! Put on the brake" after the Mahler Report?' You asked for a review and you got a good group of people out. Use it as a new start.

Still another senior official in Lusaka states in retrospect that:

> The other donors thought some of the decisions we made were a bit hasty and we had not consulted them. I am aware that in 1996 we pushed full steam ahead and were not listening. That's a problem we have discussed here at the Embassy - that we shouldn't push forward, we should not develop new things, that we should consolidate rather than come up with new ideas and try to build on that. I think that's the general view. I am aware that there are bad feelings.

4.4 Current situation

In April 1998 a new Minister of Health was appointed. She argued that the since reform process had produced very little that was visible, it should be halted. The Central Board of Health, user fees, delivery of health services and how vulnerable populations are treated are now being re-examined.

In 1999, health reform is in a shambles. The donors are fighting among themselves and with the new minister. The donors say 'the children are worse off than ever before; they are not obtaining needed health care.' A senior donor official in Lusaka says:

> The health sector has deteriorated considerably. Certainly at district level the services are of a poorer quality, less reliable, no drugs. Nothing! A total mess! There's no procurement plan to ensure there's no stoppage in essential drugs. We don't have a TB programme. There's been a complete collapse. The National AIDS Programme shut down in 1997. There's not been a TB programme for two years. All of the last year there was no one at CBOH to head the secretariat so effectively there has been no manager of the HIV directorate. So none of the last mid-term plans for 1996, '97, '98 has been implemented so that means TB has suffered. So we don't have a TB Programme and we don't have TB drugs.

Another senior donor official in Lusaka says:

> Over the last 18 months there has been a breakdown. A couple of the big donors are going to walk away. There's a breakdown in confidence and trust in the health sector. On the delivery side, there are no TB drugs whatsoever. People are trying but the structure is clearly not working. The donors themselves, some of them are so committed to their idea of reform - their concept of reform, not the government's - that we have got a completely polarised community. I would say that in the last few years we've seen a massive acceleration in the social crisis. 50–60 per cent of the donors' money is going on palliative care and at the moment there is little money for anything else - almost no preventive health care. We have measles, cholera, anthrax and so on. Nobody realises that this government cannot project a way that it can deliver any services even if it had the money.

A new Minister of Health was finally appointed by the end of 1999 who began the new millennium with an extremely bitter and confrontational physicians' strike which paralysed the health system.

4.5 Summary

The 'blueprint model' of health sector reform was implemented in Zambia without taking into full account, the main health system problems. Key questions about the rise in case fatality rates, the decline in utilisation and coverage rates were neither asked nor answered. Reform was consequently not tailored to the local situation. Health reforms (MOH 1992) used data which showed the under-five mortality rate at 120/1000 not the actual 191/1000. These new mortality data should have signalled the way for measures aimed at relieving the social and economic causes of childhood deaths, preventing exposure to specific illnesses and treating sick children. This did not happen; neither did it happen after ZDHS 1996 showed another rise in mortality. This incapacity to alter course in the face of sudden change is the most worrisome aspect of the reform process.

The reformers were a small, tightly-knit group enjoying full government support. They described themselves as intellectually open, willing to experiment but also quite elitist and isolated from what was happening in the field. A senior donor official says 'people at CBOH really don't get out of Lusaka.' One

sign of this isolation was the notion that reform was really about sustainability and refinancing of the health sector, not about people. It was stated that 'as far as health status is concerned, it should be pointed out that the reforms never claimed to address by itself the complex issue of health status' (Mahler 1997). This perspective may have reduced its sense of accountability and need to respond to the emerging crisis of the 1990s.

One aspect of this isolation was the exclusion of poverty interests groups from participation in the reform process - even though it was these groups who would probably be hit hardest by reform. It would have been expected that some donors, particularly the UN agencies, would have spoken for vulnerable populations. A senior donor official in Lusaka says:

> There should be poverty interests represented. But UNICEF is too close to the government and the government sees them as part of themselves. But as a UN agency they should be neutral. There should be someone there to ask provocative questions - someone you really respect who could guide the process. That's not happening, unfortunately. There were times when UNICEF was no longer invited to the meetings because they had nothing to add, they were just like damn parrots, sitting there repeating the government position. I think in general UN agencies lost their vision and their role.

There is consensus among the donors that significant mistakes have been made, that this may be, at least partially, a policy-induced mortality crisis and that many under-five deaths were preventable. It is clear to most that children are worse off than ever before. It is especially disconcerting that while Zambia has one of the worst HIV profiles in Africa, its National HIV/AIDS Strategy Plan has been inoperable since 1996, with no TB and HIV/AIDS drugs and few essential drugs. However, the donors do not see that health reform has failed ordinary Zambians and has hurt the poor. The donors say that they do not know what steps should have been taken to protect the poor or what policies and strategies would have looked like had they done so.

5. CONCLUSION

Several key points which emerged from analysis of the Zambian health sector during the period 1980–92 were highly relevant to reform efforts in the 1990s. Children were not dying with increased rates of probability primarily because they were becoming sicker but rather because they were increasingly less likely to obtain needed health care. Those children living in the poorest and most remote sectors of the country were hit hardest by cuts in public health spending. By the early 1990s, World Bank (1992) was reporting from field observations that:

> The people have nowhere to turn for help. Those (rural) buildings which have been historically primary health care centres or district hospitals are often empty shells. Many institution are losing qualified health personnel, are utterly devoid of basic health materials.

Failure to protect access to basic health care for children in greatest need, laid the foundation for future vulnerability. A senior donor official states:

> This may be a policy-induced mortality crisis. But I would maintain that policies during the 1980s were the culprit. Resources were pulled out of rural support for health services and put in urban centres and left them totally bare and they still haven't recovered. We're in the process of recovery so we're still seeing this marked decline in the health situation.

These trends, in part, are attributable to structural adjustment. While it cannot be said that Zambia was particularly diligent in implementing adjustment policies, the basic criticism of SAPs of the 1980s - that very few proactive steps (through social conditionalities) were taken to protect the position of vulnerable groups - seems especially applicable to Zambia. In retrospect the World Bank (1996: 113) states:

> Structural adjustment programmes of the 1980s paid little or no attention to the situation in the social sectors ... It has been the experience in Zambia that structural adjustment programmes need to address poverty issues directly.

Districts which did better than the rest of the country tended to be served by mission health facilities, which escaped the worst negative consequences of the severe resource constraints and protected delivery of basic health care services. This is an important finding because it suggests that if all districts performed as well as the best, then substantial improvements in outcome indicators could be realised. A strategy to improve basic services would have seemed the best way forward in 1992 as health sector reform policies were being formulated. This did not happen.

Several important points emerge from analysis of the health sector between the years 1992 to the present: (1) most importantly, reformers did not grasp the opportunity to improve access to effective health care. The main focus was rather on improving district capacities by investing in administrative and financial management systems in support of decentralisation; (2) key reform strategies which were implemented, in fact, tended to further reduce access to effective health care especially among vulnerable populations (via the integration and decentralisation of services, and the introduction of cost recovery without ensuring that exemptions were in place); (3) throughout the 1990s, Zambian households were hit by a series of shocks (including the HIV epidemic, drought, a sharp fall in per capita consumption of maize, removal of food subsidies and fiasco with safety nets, and large rises in childhood malnutrition and poverty), which made it more likely a child would fall ill and less likely to recover - especially in low-income households. The reformers did not respond appropriately to the deepening crisis of the 1990s. Few steps were taken to monitor events in the districts, and negative information which did come to light at the central level tended to be ignored. Reformers pushed forward undeterred with the reform agenda.

Although the reasons for the rise in under-five mortality in the 1980s and 1990s differed, and it is clear the HIV epidemic is having a dramatic impact on the health of Zambians, there is strong evidence that an important factor explaining the reversal in childhood mortality over the last 20–25 years is that vulnerable populations have not received adequate protection from adjustment and reform operations. Children in

greatest need lost access to effective health care which, in 1980, was sufficient to protect them from a hostile environment. These disastrous policies and strategies might never have happened if the big losers were not the poor who, per se, were without political or economic power. The main players in the health sector had little or no motivation to see that the poor had access to effective health care. Blueprint models of reform demonstrated no sense of how ordinary people cope; their rigidity and failure to show concern towards the deepening human crisis is reflected in a widening gap between rhetoric and reality of health reform as social policy.

Evidence is now coming to the fore which suggests that the Zambian situation is not unique. Over the last two or three years, third-round DHS surveys are showing significant reversals in childhood mortality in many countries in SSA which cannot be explained by the HIV epidemic. Reversals in public health indicators such as immunisation and delivery assistance at birth, especially at the periphery, suggest that loss of access to effective health care is an important factor explaining these new patterns of insecurities and inequalities. At an international meeting of donors and key stakeholders held in Washington D.C., to discuss the impact of health reform on priority programmes (immunisation), the World Bank's response was to state that despite the difficulties, health reform was the way forward, and for the stakeholders, 'resistance is futile and can be counter-productive ... the changes demand proactive support from agencies associated with priority programs' (World Bank 1999a) - a response remarkably similar to Zambia's donor community in the 1990s.

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