

**Public Expenditure on Basic Social Services in South Africa.
An FFC Report for UNICEF and UNDP**

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EXECUTIVE SUMMARY

The purpose of this report is to provide a measure of public expenditure on basic social services (defined by UNICEF and UNDP as basic education - pre-primary and primary education- and primary health care) by focusing on the equity and efficiency of such expenditure. The study has several objectives: a) to determine how much of the national budget is being spent on basic social services (BSS); b) to estimate the level of this expenditure on the poor; c) to establish the scope for inter-sectoral and intra-sectoral budget restructuring in favour of BSS and the poor; and d) to identify areas where the cost-efficiency of the delivery system of BSS can be improved. The report also includes short discussions on water and sanitation, nutrition, social welfare and the Public Works Programme (PWP) as these could be considered part of BSS in South Africa.

The first chapter provides a description of some education, health and economic indicators for South Africa for the 1980s and 1990s. A feature of the South African economy is the wide divergence between its Gross National Product (GNP) per capita and Human Development Index (HDI) compared to countries with similar levels of GNP per capita. This divergence is best reflected in the indicators relating to education and health.

The South African education system was characterised during the 1980s and 1990s by relatively high and growing levels of public expenditure on education. Presently, enrolment rates compare favourably with countries in the region and to other upper middle income countries. However, the system is also characterised by high repetition rates at all levels, poor learning outcomes for those who do reach the secondary and tertiary levels and unacceptably high adult illiteracy levels.

The section on health indicators in this chapter shows that while infant and childhood mortality rates appear to have declined, racial disparities have widened. Also, there are higher mortality rates, lower life expectancies and higher incidence of illnesses in the poorer provinces. Serious problems include the high incidence of tuberculosis, the significant proportion of children not fully immunised, the poor nutritional status of children and the increasing significance of the HIV/AIDS epidemic.

The third aspect of this chapter reviews the macro-economic trends for the period 1980-1996. This analysis shows that the South African economy during the 1980s and up to the mid-1990s was characterised by low rates of economic growth, falling GDP per capita, stagnating employment in the formal sector and chronically high levels of unemployment. At the same time, there were declining levels of savings and investment. The racial pattern of income distribution has improved but by 1993 the overall pattern of income inequality has remained high, with inequality within race groups contributing to overall inequality. The limited available data on poverty suggest that more than half the population can be categorised as "poor", with over two-thirds of the poor living in the Eastern Cape, Kwazulu-Natal and the Northern Province.

The general overview of public finance in the second chapter shows inter alia, that real government expenditure increased on average by 5.2% per annum between 1980-1989 and by 1.5% between 1990-1996. As a proportion of GDP, government expenditure increased from 23% in 1980 to 32% in 1996. Government revenue, on the other hand, increased on average by 3.9% per annum between 1980-1989 and by 1.2% between 1990-1996. As a proportion of GDP, government revenue increased from 22% in 1980 to 27% in 1996.

The third chapter, which focuses on an analysis of budget expenditure, examines first the trends in and composition of government expenditure. An important change here was the increase in the share of the social services from about 10% of GDP and 34% of the budget in 1983 to 15% of GDP and 39% of the budget in 1995. The defence function was a major victim of budget cuts with its share of the budget being more than halved. The share of economic services also fell during this period. Other features of government expenditure included the increase of current expenditure from 78% to 90% between 1980 and 1996 and the share of interest payments increasing from 9% to 17% of total expenditure. The budget deficit and government debt as a proportion of GDP increased sharply during the 1980s and 1990s. The former increased from 0.9% of GDP in 1980 to 5.4% in 1996 while the latter increased from 32% to 55% of GDP during the same period.

Public expenditure on education comprised 22-24% of total government expenditure for the late 1980s and 1990s and around 7% of GDP in 1996. On both these indicators, South Africa compares favourably with countries having a similar GNP per capita and with countries in the Southern African region. The annual average increase in nominal expenditure between 1983 and 1995 was 15.9% and 15.5% for the period 1990-1995. In real terms the corresponding figures were 4.6% and 5.6%.

A feature of education expenditure is the high proportion of current expenditure devoted mainly to salaries. Current expenditure comprised over 93% of total education expenditure for the period 1987-1996. The share of basic education in the budget (approximately 47% in 1995) compares favourably with many developing countries. This figure increased from about 39% in 1987.

Real health care expenditure increased by an average of 2.9 per cent between 1980 and 1997 while real per capita expenditure increased by only 1.3%. Total public sector health care expenditure as a %age of GDP increased from 2.3% in 1980 to 3.3% in 1997.

With respect to the relationship between recurrent and development expenditure, a concern is that real recurrent expenditure has remained constant during the period under review despite significant increases in development expenditure (nearly 260%) over this period. As most of this new health facility development relates to clinics and given the difficulties associated with effecting a geographic redistribution of health personnel, it is likely that many new facilities will remain unoperational in the short- to medium-term.

The majority of health care expenditure is attributable to personnel costs (68%), while pharmaceutical supplies (13%) and other supplies (6%) accounted for the next largest component. The distribution of health care expenditure by level of care highlights the bias towards curative hospital-based health care. Acute hospitals accounted for 76% of recurrent public sector expenditure while non-hospital primary care services (i.e. clinics, community health centres, school and environmental health services) only accounted for 11% of expenditure. Academic and other tertiary hospitals accounted for 44% of recurrent public sector health care expenditure.

South Africa has a substantial private health sector, both in terms of human and physical resources. 59 % of doctors, 93 % of dentists and 89 % of pharmacists work in the private sector. In addition there are between 350,000 and 500,000 traditional healers. There is a range of hospitals within the private sector and there has been a proliferation of NGOs in recent years

Private sources of finance accounted for 60.8% of total health care expenditure in 1992/93 (i.e. approximately R18.3 billion). Expenditure on 'basic health services' (BHS) in the private sector was at R8 billion in 1992/93, which is equivalent to approximately 43 % of total private sector health care expenditure in that year.

Medical schemes are the principal financial intermediaries in the private sector, accounting for nearly two-thirds of total private sector health care funding. Direct out-of-pocket payments account for 23% of the total. Health insurance is a small (5.1%) but rapidly growing component of private health financing in South Africa.

High income earners are the major users of the private sector. They tend to be members of medical aid schemes and/or holders of medical insurance policies. Low to middle income earners also use private health services. The majority depend on public hospitals for inpatient treatment, except for those entitled to care in a company hospital. Poor households make relatively little use of private health services.

The fourth chapter provides a detailed analysis of expenditure on basic education and health care. In both nominal and real terms, expenditure on basic education for the total population in general and for Africans, Coloureds and Indians in particular grew substantially in the late 1980s and early 1990s. The annual average increase in nominal terms for the total population between 1987 and 1991 was 31%; for Africans it was almost 40%, for Coloureds 33%, for Indians 23% and for Whites, 17%. In real terms, the corresponding figure was almost 8% for the total population; 13% for Africans, 9% for Coloureds, 3% for Indians and - 0.7% for Whites. Basic education expenditure as a proportion of GDP increased steadily between 1987 and 1996 from 2.2% to 3.2%. With respect to total expenditure on basic education, similarly large increases occurred in both nominal and real terms between 1987 and 1991.

However, expenditure on pre-primary education is low, constituting less than 1% in 1995/96 and 1996/97. Primary education expenditure, on the other hand, averaged 48% in 1995/96 and 47% in 1996/97. The distribution of current and development expenditure in basic education shows that an even higher proportion of expenditure is devoted to current expenditure than in school education in general. At the primary level, current expenditure is around 94-95% of the total budget. The implications of these ratios for the development of the basic education sector are enormous. In effect, what it means is that unless some mechanism is found to reduce the proportion of funds being allocated to current expenditure, fewer resources will be available for the provision of buildings and equipment to increase access to better quality education to those that have been historically deprived of such opportunities.

This chapter also shows that public education expenditure is not pro-poor because the share going to the poor and the "ultra-poor" is substantially smaller than their share of the population. The poor in South Africa receive about 40% of education resources but they make up 53% of the population. The ultra-poor receive about 20% of education resources but they comprise about 29% of the population. In contrast, the richest household quintile receives almost twice its share, 23.4% of public education resources for 12.5% of the population.

In the health section an attempt is made to quantify expenditure on Basic Health Services (BHS). This is a rather difficult exercise, particularly with respect to determining whether particular institutions, e.g. district and other hospitals, should be considered. It is estimated that while only 12% of total public sector expenditure was devoted to BHS in 1992/93, the

budget for BHS had increased to 20% of the total health budget by 1995/96. The increase in the allocation to BHS was achieved through a budgetary shift away from hospitals. Although there has been a dramatic shift in budgets, it is impossible to determine the extent to which actual expenditure on primary care services has increased because of the slow movement of personnel to primary health care facilities.

With regard to the provision of water, official estimates suggest that between 12 and 14 million people do not have access to safe water; on the sanitation side, it is estimated that 21 million South Africans do not have access to adequate sanitation facilities. Government expenditure on water provision has, however, risen from R228 million in 1984 to R614 million in 1994. Funding via the RDP and financial donors facilitated the successful development of the Community Water Supply programme enabling water provision to a large number of households in rural areas. In urban areas a large quantity of funding for water and sanitation is being made available through the Consolidated Municipal Infrastructure Programme.

This chapter also notes that the two major components of nutrition in South Africa are under-nutrition and chronic diseases of lifestyle as reflected in obesity, heart disease and diabetes. The national government's budget on nutrition increased sharply, particularly during the 1990s, from R664 000 in 1980/81 to R446 million in 1994/95. In addition, funds were allocated to the Primary School Nutrition Programme (PSNP) from 1994/95 through the RDP. However, the PSNP has been plagued by problems relating to administration and management. Although the amounts of R473 million, R500 million and R496 million were budgeted for in 1994/95, 1995/96 and 1996/97 respectively, actual expenditure for these three fiscal years were respectively R135 million, R312 million and R326 million.

Chapter four concludes by showing that expenditure on basic education and health comprised almost 4% of GDP and 12% of the total budget in 1997.

Chapter five examines the scope for inter-sectoral and intra-sectoral restructuring to enable additional resources to be directed to BSS. With respect to inter-sectoral restructuring, several issues are analysed: the scope for redistributing from the security sector, from the economic sector and within the social services sector and the impact of the government's new macro-economic policy. The following conclusions are drawn:

- a) Given the substantial decline in the defence budget during the 1990s and the need for additional resources in the safety and security and correctional services portfolios, the scope for further redistribution of resources towards BSS from the security sector is extremely limited, if not totally absent.
- b) With regard to the economic sectors, given the current high levels of unemployment and the need to absorb increasing numbers of new entrants into the labour market, it is vital that government investment in this sector does not decline further. It is recommended that the diversion of resources from economic services to BSS should not be contemplated, however compelling the case for additional resources for the latter.
- c) A strong case cannot be made for intra-sectoral redistribution within the social services portfolio given the needs in each of Education, Health, Social Security and Housing.
- d) Government's macro-economic policy is likely to reduce both the level of resources available for discretionary expenditure in the short term as well as the amounts in real

terms that are available for education and health spending in the provinces. The impact of the latter is likely to be felt most obviously on development expenditure.

Three major issues are identified as relevant in the debate about basic education and health expenditure: total basic education and health expenditure, the distribution of recurrent and capital expenditure, and the incidence of basic education and health expenditure.

To strengthen the financing of basic education and health and to promote equity and efficiency in funding, three sets of inter-related strategies are proposed, namely strategies to a) increase resources for basic education and health; b) improve the efficiency of basic education and health expenditure; and c) improve the incidence of public expenditure on basic education and health. Education and Health are dealt with separately.

Education

(a) Strategies to increase resources for basic education

All indications are that more resources for education in general are unlikely to be forthcoming from the public purse because government firmly believes that adequate levels of resources are being provided for education and what is required are improvements in the efficiency of education expenditure.

With regard to basic education, unlike many developing countries, it is evident that in South Africa public subsidies are high and growing faster than subsidies for education at higher levels. This means that basic education has been seen and continues to be seen as a priority in the education budget. In view of the high growth at the secondary and tertiary levels and the need to improve quality of provision at these levels as well, a strong case thus cannot be made for allocating resources from other levels of education to basic education. Moreover, as a high proportion of students entering these levels come from poor families, a strategy of higher fees that would be necessitated by a reduction in public resources would severely disadvantage them.

The burden of increased funding for basic education will therefore fall increasingly on private households, especially those who have the ability to pay. However, user fees will have to be imposed in a way that does not increase inequity in educational spending. There are two ways in which such inequities can be reduced. First, the mechanism for disbursing resources to provinces is now weighted in favour of poorer, more rural provinces - hence the problem of jurisdictional inequalities is addressed to some extent. Second, there will have to be some attempts to promote greater equity in the incidence of education expenditure through greater targeting of poor households, thus reducing inter-personal inequities.

Beyond implementing user charges, it is almost certainly necessary for the education sector to seek alternative sources of funding. One option is the raising of an earmarked national tax for education or some specific aspect of education such as a national textbook fund and a community fund for basic education.

Benefit taxation could also play an important role in financing basic education. Poll and property taxes are two examples of benefit-related tax measures that are potentially efficient and equitable ways of raising local funds for improving neighbourhood schools. A poll tax on households (other than poor households) and an education surcharge on the real property tax on houses and land could raise substantial amounts of money for basic and other education.

(b) Strategies to improve the efficiency of education expenditure

The most important task in basic education is to improve quality of provision. There is little doubt that more resources have to be shifted to capital expenditure and to the provision of learning materials if the issue of improving the quality of education is to be addressed seriously. There are two ways in which this problem could be tackled. First, any additional resources that might be made available for basic education through, for instance, donor or private household financing should be used exclusively for non-salary expenditure. Second, a strategy should be developed to reduce, over the medium term, the proportion of teacher salaries in education expenditure.

The teacher salary component cannot continue to constitute such a high proportion of total education expenditure. If it continues to do so, it will mean that qualitative improvements in the provision of basic and other education will not be financially feasible. A number of options are available: to gradually reduce teacher salaries in real terms over a 5-10 year period; implement productivity-enhancing mechanisms; use less-qualified teachers especially at the basic education level or increase in class size.

Serious consideration should be given also to the introduction of provincial bargaining forums, within a national framework, for determining teacher salaries. Currently these are decided at the national level. The provincial education departments are thus in the invidious position where they have no discretion over 90% of their budget. However, if the capacity for conducting provincial bargaining at provincial level is lacking, it is then imperative that the provincial inputs to the national bargaining process be strengthened.

There is also a high level of deprivation within the school system with respect to facilities such as water and electricity provision, toilet shortages, state of school buildings and provision of learning materials. The worst-off provinces in these respects are the Northern Province, Eastern Cape and Kwazulu-Natal.

(c) Strategies to improve the incidence of education expenditure

It is clear from the limited data available on the incidence of education expenditure in South Africa that there is a need to strengthen the commitment to distributing education funds through a system that explicitly favours schools in disadvantaged communities. The inequities of the past system have been recognised and thus provinces such as Northern Province, Eastern Cape and Kwazulu-Natal are now favoured in the formula that determines the bulk of provincial revenue.

In the interests of promoting equity, there is a convincing case for developing a targeting mechanism to increase the incidence of education expenditure on the poor. This will require the identification of poor households and/or communities. While there will undoubtedly be administrative costs attached to targeting, the costs of not targeting the poor will perpetuate inequality in education spending. It may be useful, as a starting point, to commence the targeting exercise on a pilot basis in the richer provinces.

Health

While a relatively low proportion of public health sector expenditure was devoted to basic health services (BHS) prior to 1994, the budget has been reprioritised in favour of these services in recent years. The lack of audited expenditure data, however, precludes drawing conclusions on the extent to which resourcing of BHS has improved in reality. These trends

suggest that there is scope for additional efforts to prioritise resource allocation to BHS, particularly in geographic areas which have historically been under-resourced.

As in education, there are three sets of inter-related strategies to strengthen the financing of basic health and to promote equity and efficiency in funding.

(a) Strategies to increase resources for basic health

There is some scope for generating additional revenue from within the health sector. Additional revenue may come from a number of sources, including the development of a social health insurance system, user fee revenue retention at facilities and the reduction of current government subsidies on non-discretionary services and personnel training. Presently, there is no direct mechanism for translating this revenue into increased funding for BHS. Clarity is required concerning the ability to retain revenue within the health sector, and whether this revenue can be used for BHS.

(b) Strategies to improve the efficiency of health expenditure

A number of policies are being pursued to improve the efficiency of the health system and ensure improvements in BHS. However, many of these changes will take considerable time to effect, and their success is critically dependent on improved management capacity at all levels of the health system. One step towards improved management is the decentralisation of control to hospitals and health districts. Priority should be given to translating policies into workable and affordable plans. There may be additional costs associated with transforming the public health sector into becoming more efficient and effective. The co-ordination of health care with water and sanitation, welfare services, nutrition and family planning will result in improved health outcomes. Those services which are preventative in nature (such as water and an integrated nutrition programme) have benefits which far outweigh their costs and should consequently be expanded.

The present budgeting procedures are very fluid and have contributed to the uncertainty within planning. Skills in financial management are scarce and systems are not working efficiently. The result is a breakdown of accountability and the undermining of budgets. Budgets do not reflect actual spending, nor are they co-ordinated with plans or national policy priorities. As a result, real resource availability and capital projects are not determined in conjunction with the recurrent implications of those projects.

Given that health personnel account for two-thirds of recurrent public sector health care expenditure, it is also important to reorient existing health care workers to ensure a relative redistribution of resources to BHS, and to ensure that primary care personnel are prioritised in future training programmes. There is little scope for wage restraint in the health sector. There may be some pressure for improved pay. An evaluation of pay rates within the health sector is required.

(c) Strategies to improve the incidence of health expenditure

Improving the incidence of health spending requires an additional shift from other parts of the public health budget towards BHS. Spatial planning has largely taken the form of equitable resource allocation to provinces through the use of conditional and unconditional population-driven grants. Intra-provincial restructuring to improve access and service in rural areas requires monitoring, as well as budgetary, real resource and fiscal support. One

approach for improving the impact of BHS spending is to target pockets of poverty as key priority areas, and ensure that BHS is effectively delivered in those areas.

In short, there is scope for improving resourcing for BHS in South Africa, both in relation to intra-sectoral redistribution and through efficiency improvements within the public health sector. However, these changes will take considerable time to effect, and their success is critically dependent on improved management capacity at all levels of the health system. Given that health personnel account for two-thirds of recurrent public sector health care expenditure, it is also important to reorient existing health care workers to ensure a relative redistribution of resources to BHS, and to ensure that primary care personnel are prioritised in future training programmes.

In conclusion, South Africa spends approximately 14% of budget on BSS as defined by UNICEF and UNDP and as calculated with the available data (see table below). This suggests the need for additional expenditure on BSS. A more comprehensive definition of BSS which includes social welfare increases the percentage to 22.5% and thus exceeds the 20% target for BSS. However, it is unclear whether the 20% target should then be raised to accommodate the wider definition.

Expenditure on Basic Social Services as a Percentage of Total Budget and GDP, 1996/97

Basic Social Services	Expenditure (R, m)	% of Total Budget	% of GDP
Basic Education	17604	10	3.2
Basic Health	3496	2	0.7
Total	21100	12	3.9
Water, Sanitation (1)	880	0.5	0.1
District Hospitals (2)	2777	1.5	0.5
Total	24757	14	4.5
Social Welfare (3)	14898	8.5	2.4
Total	39655	22.5	6.9

Notes:

- (1) An estimate of the component of water and sanitation expenditure dedicated to basic services.
- (2) District Hospitals.
- (3) Non contributory pension grants, other social security payments and social welfare services.

Chapter six sets out the recommendations based on the analysis of the preceding chapters. They are:

- Comparing the expenditure on BSS against the 20% normative level defined by UNICEF and UNDP suggests that there is some need to shift spending towards a greater emphasis on BSS. There is more scope for increased spending on BSS in health than in education. Additional spending on water and sanitation as well as on an integrated, pre-school nutrition programme is required.
- The narrow definition of BSS ignores spending on social welfare and on public works programmes. Extending the definition to include these functions suggests that over 20% of the budget is being spent on BSS. Extending the definition may require a revisiting of the 20% target.

- The wider definition of BSS requires clarity over the relationship between cash and in-kind benefits. It is recommended that both are essential components of an adequate BSS programme, but the levels of each and co-ordination thereof is required.
- There is little scope for raising additional revenue for BSS from other parts of the budget. The degree to which funds can be transferred for BSS is reliant on a clear statement of government priorities in this regard. The Medium Term Expenditure Framework (MTEF) process, once operational, will allow politicians to pursue such a priority. In the absence of such a mechanism, institutional rigidities (such as the inability to move personnel to areas where they are required, the lack of financial management and so on) will continue to limit the shift.
- There is scope for raising additional private funds if government can improve the quality of service provision. An alternative is that a greater degree of the middle class shift to the private sector for BSS (this is already apparent in health), thereby lowering the burden of the state.
- The sequencing and speed of the macro economic programme (not the targets) should be revisited. Under the present sequencing of the macro economic programme, an adverse effect on capital spending and delivery of BSS is apparent. In addition, in order to achieve the efficiency gains noted above, and to support the efficiency requirements of the macro programme, may require some additional spending in the short to medium term may be required. This spending must be aimed at training, additional posts and systems for developing greater financial and management capacity. The need to link the macro-programme to planning must be further refined through the MTEF.
- The greatest scope for improved outcomes from BSS spending is not through increased spending. Significant scope exists for efficiency improvements in all aspects of BSS expenditure.
- The incidence and cost-effectiveness of spending should be improved. This must be achieved through spatial reorganisation, the use of targeting and greater emphasis on preventative and integrated programmes.
- In order to achieve these efficiency improvements and to target effectively, a number of constraints have to be overcome.
 - Management and financial capacity is urgently required. The development of systems and training is needed as well as a more narrow focus on what can realistically be achieved.
 - Management, geographic and socio-economic information systems are needed. Emphasis should be given to a single agency to meet the general information requirements. Avoiding duplication would be cost-effective and provide a basis for comparison.
 - Institutional constraints, such as the inability to move personnel to areas where they are required, the need to train personnel and develop expenditure controls must be resolved.
 - In order to address the need for increased capital spending, changes to budgeting are required and the links between planning and budgeting must be established.

- Cost cutting through retrenchments of personnel and through the use of targeting is not a panacea. Without proper management and the ability to ensure efficiency gains, retrenchment will merely result in lower levels of service delivery.

The chapter further suggests some key actions which need to be taken by government if the goal of an efficient and effective delivery of BSS is to be achieved.

Firstly, government has to recommit itself to BSS, not only through the MTEF process (prioritising expenditure), since the level of expenditure is not the greatest constraint, but through the commitment to develop the capacity to deliver the services more efficiently, especially to the poor.

Secondly, this requires a recognition that the ability to achieve these goals is not reliant on simple panaceas (such as macro targets or retrenchments), but on restructuring which is difficult to achieve and which requires realistic time frames. Additional funds may be needed in the short to medium-term to ensure the development of management capacity, and sufficient control and information systems.

Thirdly, some specific actions can be identified:

- There is a need to enhance preventative services, specifically to extend water and sanitation provision, and to develop an integrated nutrition programme.
- Procedures for the development of new policies have to extend beyond paper policies. It is the responsibility of the departments developing new policies to test them against managerial capability. All new policies should in future have to be piloted, management responsibilities and systems determined, training provided and financial management organised prior to the commencement of a programme. All sub-national agencies must be aware of what is required and have adequately budgeted for such programmes. Such a procedure should become a norm or standard for all departments.
- There is an urgent need for policies and incentives to re-deploy personnel geographically - to where they are most required.
- There is a need for more management and finance posts, as well as resources for system development.
- There needs to be greater emphasis on information and monitoring, through rationalising the current data functions of government, creating additional posts, funding for information systems and the further development of the decentralised offices of the CSS. Greater links between the CSS and departmental information systems are urgently required. It must be noted that manual information systems can be improved significantly in the absence of computer-based data systems.

Finally, since the “second 20%” of the 20/20 refers to the spending of donor funds, their role in the delivery of BSS is examined.

The report shows that South Africa receives relatively little donor funding. The funding has not been well monitored but this could easily be rectified through the creation of a central register.

This report argues that donors should consider supporting the development of systems for financial management, human resource management, monitoring and capacity building both within the health and education sectors as well as within communities as an urgent priority. This type of assistance will improve the long-term capacity of the public service to deliver better basic social services that are cost-effective.

The implication of this is that spending should not concentrate on meeting the 20% goal per se as system development is difficult to classify as BSS. There is a temptation for donors to support capital projects, since capital spending has fallen over the last year. The problem is that the ability to manage these projects and ensure efficient utilisation of facilities is in doubt. The sustainable and long-term benefits to such expenditure should be questioned. The emphasis should therefore be on support to government to improve the efficiency of expenditure.

INTRODUCTION

The purpose of this study is to provide a measure of public expenditure on basic social services (here defined as basic education - pre-primary and primary education- and primary health care) by focusing on the equity and efficiency of such expenditure. The study has several objectives: a) to determine how much of the national budget is being spent on basic social services (BSS); b) to estimate the level of such expenditure on the poor; c) to establish the scope for inter-sectoral and intra-sectoral budget re-structuring in favour of BSS and the poor; and d) to identify areas where the cost-efficiency of the delivery system of BSS can be improved.

Chapter 1 provides a description of some education, health and economic indicators for South Africa for the 1980s and 1990s. With regard to education, the focus in this chapter is briefly on public expenditure, adult literacy levels and enrolment rates. In the section on health, data are provided with respect to a range of mortality and morbidity indicators. In addition, these health status indicators are provided by province. Finally there is an international comparison of health status indicators. The section on the macro-economy describes a number of economic indicators including GDP and GDP per capita growth, employment and unemployment, investment and savings, changes in the current and capital account of the balance of payments, total debt stock and income inequality and poverty.

Chapter 2 provides an overview of public finance by describing the trends in government expenditure and revenue. For the period 1980-1996, this chapter analyses the following: a) the trends in total expenditure and revenue; b) the trends in government expenditure and revenue as a proportion of GDP; and c) the composition of government revenue. A brief description is provided also of the tax system particularly with respect to personal income tax and value added tax. This chapter concludes with a brief description of the government's new macro-economic policy and an overview of the expenditure assignment and revenue means of the provinces.

Chapter 3 which provides an analysis of budget expenditure has three components. The first examines the structure of government expenditure for the period 1983-1995 by focusing particularly on the shifts in the functional and economic classification of expenditure. This section also analyses the growth of the budget deficit and government debt during the 1980s and 1990s and the sources of deficit financing. The second major component of this chapter is an analysis of public expenditure on education. In this section the trends in education expenditure as a proportion of total expenditure and of GDP as well as changes in nominal and real total education expenditure are analysed. Also, the changes in the ratio of current and capital expenditure and the composition of education expenditure by level of expenditure are described. The third and final component is an analysis of public expenditure on the health sector. Here the trends in total health care expenditure, as well as in recurrent and development expenditure are examined in detail. In addition, there is an analysis of health care expenditure by input and service categories and a brief analysis of the geographic and racial distribution of health care resources.

Chapter 4 provides a detailed analysis of expenditure on basic education and health care. In the latter case, reference is made also to expenditure on water and sanitation and nutrition. In education, a detailed analysis is provided of total expenditure on basic education in nominal and real terms for the period 1987-1996. In addition an assessment is provided of recurrent and development expenditure in basic education. This is followed by an analysis of

the composition of current expenditure particularly through comparing salaried and non-salaried expenditure.

In the health section, there is first an attempt at quantifying the scope of Basic Health Services and public expenditure on this element of health services. The sub-section on water and sanitation attempts to quantify government expenditure in spite of the paucity of data available in this area. It also describes the important role of donor financing in the water sector as well as outlining some key principles relating to the financing of sanitation. Finally, the brief section on nutrition provides data on budget allocations between 1980 and 1996 as well as funding of the Primary School Nutrition Programme since 1994.

Chapter 5, which deals with the scope for additional resource allocation for BSS, has two main aims. First, it examines the scope for re-allocating resources to basic education and health services from other parts of the government budget. In particular this section assesses the scope for redistributing from the security and economic sectors. It also briefly describes the scope for redistributing within the social services sector. Finally, it looks at the possible impact of government's new macro-economic policy on the potential for additional resources for basic social services. The second aim of this chapter is to examine the scope for intra-sectoral restructuring within the education and health sectors. With respect to education, three critical issues are identified: the level of total expenditure on basic education, the type of education expenditure and the incidence of public education expenditure. Flowing from an assessment of these three issues, strategies are suggested to a) increase resources for basic education; b) improve the efficiency of education expenditure; and c) improve the incidence of education expenditure through targeting of the poor.

The health section in this chapter begins by reviewing the main sectoral policy issues including the policy initiatives undertaken by government to reduce the disparities in health service delivery. It also raises concerns about the disproportionate levels of recurrent expenditure relative to development expenditure and recognises as a major challenge to policy makers the maldistribution of health personnel. As in the education section, strategies are suggested to a) increase resources for basic health; b) improve the efficiency of health expenditure; and c) improve the incidence of health expenditure.

Chapter 6 concludes by providing a summary of the policy recommendations.

CHAPTER 1

ECONOMIC AND SOCIAL TRENDS

1.1 Introduction

South Africa is regarded, in terms of World Bank classification, as an upper middle-income country. In the latest World Development Report, South Africa is categorised with such countries as Croatia, Mexico, Brazil, Malaysia and Argentina in terms of GNP(Gross National Product) per capita (Table 1.1). Table 1.1 shows also that there is substantial divergence between South Africa's Human Development Index (HDI) - derived from a weighted average of life expectancy at birth, adult literacy levels and real GDP (Gross Domestic Product) per capita - and that of these countries. South Africa in fact has a similar HDI to that of Peru (GNP per capita of 2310 US\$), Sri Lanka (700 US\$), Paraguay (1690 US\$), Latvia (2370 US\$) and the Dominican Republic (1460 US\$) (UNDP, 1997; World Bank, 1997)

Table 1.1: Some Upper Middle Income Countries - GNP per capita and HDI

Country	GNP per capita (US\$, 1995)	HDI (1994)
South Africa	3 160	0.716 (90)
Croatia	3 250	0.760 (77)
Mexico	3 320	0.853 (50)
Mauritius	3 380	0.831 (61)
Brazil	3 640	0.783 (68)
Czech Republic	3 870	0.882 (39)
Malaysia	3 890	0.832 (60)
Hungary	4 120	0.857 (48)
Chile	4 160	0.891 (30)
Argentina	8 030	0.884 (36)

Sources: World Bank, 1997; UNDP, 1997. Note: The figures in parenthesis in the HDI column reflect the HDI ranking. Canada, for instance, is ranked No. 1 and Sierra Leone lowest at No. 175.

This chapter provides a description of some education, health and economic indicators for South Africa for the 1980s and 1990s. The divergence between South Africa's income per capita and its HDI that is reflected in Table 1.1 is captured particularly in the indicators relating to education and health provision.

1.2 Education Indicators

Despite the fact that South Africa is considered to be an upper middle income country, its educational profile does not match this status. The education system is characterised by high rates of repetition, and poor learning outcomes for those who do reach the secondary level. These characteristics are not surprising if one considers that the policies of "Bantu" Education were primarily designed to prevent the intellectual development of African children and thus prepare them for the most menial physical jobs.

The effects of apartheid policy in education are reflected in three broad ways. Firstly the poor quality of education offered to Blacks, particularly Africans, via inadequately trained teachers, limited access to educational materials and the complete lack of planning, management and accountability by administrators resulted in low learning outcomes, high levels of repetition and drop-outs. This meant that most Africans were insufficiently

prepared to go on to higher levels of education and training. In addition, in 1994, some 1.8 million children of school going age were not in school. (Pillay, 1994)

Secondly, the poor quality of education and the lack of educational opportunities have produced high rates of adult illiteracy and innumeracy. This has severely constrained the opportunities to obtain occupational skills. In the formal sector, apprenticeship schemes have historically been reserved for Whites while in the informal sector the chances for Blacks to acquire skills have been extremely limited.

Thirdly, given the poor quality of education offered to Blacks it is not surprising that few have been able to reach the advanced levels of education and training that lead to the acquisition of high level technical, professional and managerial skills. The number of Africans that do manage to surmount all the problems and advance through all these levels of education is minimal: out of every 10 000 African students who enter the school system, only 27 will qualify for university acceptance and only one of those will qualify in either Mathematics or Science. (World Bank, 1996).

The provision of high quality schooling for all is the main focus of the 20/20 exercise but the broader context must also be taken into account. Some of the other challenges facing the education system as a whole involve assisting families to ensure that all children have the developmental foundation that will enable them to benefit from formal schooling, ensuring skills upgrading and basic literacy and numeracy for the working age population, and restructuring primary, secondary and tertiary education to prepare future generations for economically and socially productive lives.

1.2.1 Public Expenditure

Overall the level of public spending on education is higher than that of other middle income countries in terms of its percentage of total government expenditure and percentage of GDP. This has remained on average 22.6% and 6.5% respectively from 1987/88 to 1997/98. However, this disguises the fact that within education the levels of spending between the population groups are vastly different; e.g. in 1991/92 the government was still spending 4.2 times as much on a White primary pupil as on the average African pupil. Wide disparities also existed within the former African departments. For example, the primary per capita expenditure in 1991/92 in the Qwaqwa homeland (R1 281) was nearly 2.6 times that of the Transkei homeland.(R486) (Buckland & Fielden, 1994)

An analysis of the budget by program indicates that historically, relatively few resources have been allocated to programs other than primary, secondary and tertiary education. On average, 2% of public education spending goes on technical education, less than 3% on teacher training, less than 1% on pre-school education and even less on adult and vocational education.

A favourable outcome from the expansion of education resources over the period has been a relative increase in the share going to primary education and a slight decline in the share of technical and tertiary education.

Table 1.2: Education Expenditure, 1995/96

	Expenditure R(000's)	% share	Enrolment	% share
Pre-primary	213 111	1	260 079	2
Primary	14 291 610	42	7 995 824	62
Secondary	10 313 405	30	3 665 876	29
Technical	522 944	2	65 477	1
Tertiary	4 072 808	12	559 985***	4
Other*	1 829 706	5	270 860****	2
Additional exp**	2 793 711	8		
TOTAL	34 037 295	100	12 818 101	100

Source: Provincial Education Budgets 1995/96, National Department of Education 1995/6

*includes expenditure on private ordinary education, specialised education and teacher training

**includes expenditure on national and provincial administration, support services and non-formal education

***includes university, technicon and teacher training students

****includes private school pupils and pupils with special needs

As can be expected with the introduction of compulsory schooling for all race groups, 72% of expenditure is accounted for by primary and secondary schooling (Table 1.2). Tertiary education only constitutes 12% of total expenditure. Few resources are expended on pre-primary and non-formal education, as this is an area where communities and non-governmental organisations are expected to make a greater contribution.

The largest enrolment is, as expected, at the primary phase (62% of all enrolments). The next largest is at the secondary phase (29%), while technical and tertiary education together only have 5% of all enrolments.

1.2.2 Adult literacy levels

There is considerable debate in the international literature about the definition of literacy. In this report the number of completed years of schooling is used as an indicator of literacy, and here at least seven years is the benchmark for being considered literate.

Table 1.3 shows that the overall level of literacy of the population is 63% but this disguises wide variation both in terms of race and gender. While Whites and Indians are largely literate (99% and 82% respectively), Africans and Coloureds are some way behind at 54% and 58% respectively. The gender disparities are greatest amongst Indians and Africans. There are many more Indian women who have no education or who are semi-literate than Indian men. A similar situation exists for African women.

Table 1.3: Literacy Levels by Race and Gender (in 000's), 1994

	WHITES		AFRICANS		COLOURED		INDIANS		SUB-TOTAL		TOTAL	
	M	F	M	F	M	F	M	F	M	F		%
None	4	4	1036	1604	86	97	5	29	1131	1734	2865	13
Grade 7 and Below	18	24	2122	2372	316	374	26	57	2482	2827	5309	24
Grade 8 and Above	1806	1844	4284	4258	593	614	285	242	6968	6958	13926	63
Sub-Total	1828	1872	7442	8234	995	1085	316	328	10581	11519	22100	100
Total	3700		15676		2080		644		22100			
WHITES		AFRICANS		COLOURED		INDIANS				TOTAL		
M	F	M	F	M	F	M	F			M	F	
None	0%	0%	7%	10%	4%	5%	1%	5%			5,1%	7,8%
Grade 7 and Below	0%	1%	14%	15%	15%	18%	4%	9%			11,2%	12,8%
Grade 8 and Above	49%	50%	27%	27%	29%	30%	44%	38%			31,5%	31,5%
Total % Literate	99%		54%		58%		82%				63,0%	

Note : Table uses the % of the over 20 population that have completed at least 7 years of schooling.

Source: October Household Survey, 1994

1.2.3 Enrolment Rates

The net enrolment rate is defined as the total number of school age children currently enrolled in each educational level as a percentage of the total school age population. The primary school net enrolment rate is defined for 6-12 year olds. The national net enrolment rate at the primary level in 1993 was 87%. At the secondary level, for 13-17 year olds, the national enrolment rate was 60%. The national rate for the tertiary level is substantially lower at 11% for 18-22 year olds. (Table 1.4)

Net enrolment rates by race show that at the secondary level Africans have the smallest net enrolment rates, at about 55% of 13-17 year olds. Whites and Indians have substantially larger tertiary net enrolments, at 32% and 36% respectively.

Table 1.4: Net Enrolment Rate by Race and Level of Education 1993

Level of Education	African	Coloured	Indian	White	TOTAL
Primary	86	90	92	90	87
Secondary	55	70	89	82	60
Tertiary	8	9	36	32	11

Source : Castro-Leal, 1996

The gross enrolment rate is defined as the total number of enrolments in each educational level, of any age, as a percentage of the total school age population at each level. For primary school this is 106%; for secondary 97%; and for tertiary 14%. It is only at the tertiary level that Whites and Indians have significantly higher rates than Africans and Coloureds, at 40% and 44% respectively. (Table 1.5)

Table 1.5: Gross Enrolment Rate by Race and Level of Education, 1993

Level of Education	African	Coloured	Indian	White	TOTAL
Primary	108	101	96	98	106
Secondary	97	88	99	98	97
Tertiary	11	12	44	40	14

Source : Castro-Leal, 1996

Enrolment rates are the same for both sexes at the primary level; and higher for females at the secondary and tertiary levels. However, the gender disparities show up more clearly when examining subject choice, e.g. females have much lower enrolments in Mathematics and Science than males.

**Table 1.6: Net Enrolment Rates :
Gender Disparities, 1993**

Level of Education	Female	Male	TOTAL
Primary	87	87	87
Secondary	63	56	60
Tertiary	11	10	11

Source : Castro-Leal, 1996

1.3 Health Indicators

1.3.1 Ill-health and mortality in South Africa

Mortality data in South Africa are extremely poor, while morbidity data are virtually non-existent. This applies particularly to the African population, for whom it is estimated that as many as 45 percent of deaths are not registered (Bradshaw, *et al* 1995). Where deaths are registered, the cause of death is frequently listed as 'ill-defined', particularly in rural areas. There is considerable variation between mortality estimates which are derived from different sources. Despite these data deficiencies, a broad overview of the major causes of ill-health, and the relative differences in the distribution of ill-health, can be provided.

Table 1.7: Trends in mortality rates by 'race' group

Indicator/Year	African	Coloured	Indian	White
Crude mortality rate per 1,000 population				
1980	11	10.3	5.9	8.4
1985	8.3	7.7	5.5	7.6
1990(most recent)	8.3	7.7	4.4	6.7
Infant mortality rate per 1,000 live births				
1980	70	60.7	24.4	13.1
1985	64	41.7	15.4	9.2
1990	55	42.8	11	8.7
1994 (most recent)	54.3	36.3	9.9	7.3
Childhood mortality rate per 1,000 population at risk				
1980	4.2	6.6	1.3	0.9
1985	2.5	3.7	0.9	0.6
1990 (most recent)	1.2	2.6	0.9	0.8
Maternal mortality rate per 100,000 live births				
1980	21	38	10	4
1985	21	29	24	1
1990	23	30	15	3
1992 (most recent)	58	22	5	8
Life expectancy at birth				
1980	55	58	65	70
1985	62	61	67	71
1990 (most recent)	60/67 (Male/Female)	59/65 (M/F)	64/70 (M/F)	69/76 (M/F)

Sources: DNHPD (1989); DNHPD (1992); Department of Health (1995a); Health Systems Trust (1996)

Table 1.7 summarises the disparities in mortality indicators between different 'race' groups. There are no desegregated data for under-five mortality, thus childhood mortality rates are included in the table. Under-five mortality for all groups has declined from 38 per 1 000 population at risk in 1980 to 29 in 1992 (Department of Health, 1995a). Africans and Coloureds bear a much higher burden of premature death than Whites and Indians.

While the infant mortality rate (IMR) has declined since 1980, the racial disparities in infant mortality have widened. The IMR for Africans was 5.3 times higher than that for Whites in 1980, and 7.4 times greater by 1994. In contrast, there has been a reduction in racial disparities for childhood mortality (i.e. for children between 1 and 4 years of age) between 1980 and 1990, while the disparities in maternal mortality have fluctuated during this period (largely due to poor death reporting). A large proportion of excess deaths in African and Coloured children was caused by gastro-enteritis and respiratory infections, which are largely related to bad living conditions and a lack of adequate primary health care services (Rispel and Behr, 1992). Life expectancy has increased in all race groups over the past decade, particularly for Africans and Coloureds.

It should be noted that Table 1.7 presents the official mortality estimates, as published by the national health department. These data are likely to underestimate the burden of ill-health in South Africa. For example, while the official IMR for Africans was 55 per 1 000 live births in 1990, Yach and Edwards (1992) estimate that it was 80 per 1 000 live births.

Similarly, while the official maternal mortality rate (MMR) for Africans was 23 per 100 000 live births in 1990, other research indicates that the actual MMR for African women was approximately 250 in 1991 (Fawcus *et al*, 1996).

Table 1.8: Health status indicators by province

Indicator	Eastern Cape	Free State	Gauteng	KwaZulu-Natal	Mpumalanga	Northern Cape	Northern Province	North-West	Western Cape	National average
A. Mortality										
Infant mortality rate (1990)	44.7	45.8	32.3	44.9	45.1	42.9	52.9	40.1	24.4	40.2
Life expectancy at birth (1990)	59.6	63.6	65.6	62.6	63.5	64.0	62.7	64.1	64.8	63.4
B. Morbidity										
Incidence of TB (1993)	281	472	192	115	84	417	53	83	703	225
Incidence of measles (1992)	52	106	69	45	93	116	48	28	40	57
% HIV (antenatal) (1995)	6.0	11.0	12.0	18.2	16.2	5.2	4.9	8.3	1.7	10.4
% Wasting (child, 6-71 months)	3.2	4.5	1.2	0.7	1.7	2.5	3.8	4.5	1.3	2.6
% Stunting (child, 6-71 months)	28.8	28.7	11.5	15.6	20.4	22.8	34.2	24.7	11.6	22.9
% Underweight (child, 6-71 months)	11.4	13.6	5.6	4.2	7.3	15.6	12.6	13.2	7.0	9.3
C. Coverage indicators										
Immunisation cover (documented)	50.5	62.8	71.4	53.9	64.3	69.6	73.1	74.9	69.7	63.0

Sources: McIntyre (1997a); Bradshaw *et al* (1995); Bradshaw and Buthelezi (1996); Health Systems Trust (1996)

Table 1.8 provides an overview of differences in mortality and morbidity rates between provinces. The table indicates that there tends to be higher mortality rates and lower life expectancies in the poorer provinces (although due to data deficiencies, a consistent pattern does not emerge). In particular, the Eastern Cape, Mpumalanga, North-West and Northern Province bear the major burden of premature death. These data understate provincial disparities due to the particularly poor mortality and morbidity data in the former 'homeland' areas which have been incorporated into these provinces.

Table 1.9: Major causes of potential years of life lost (PYLL)¹ in South Africa, 1990

Cause of death	Percent of PYLLs
Accidents, poisoning and violence	22
Perinatal conditions	17
Infectious diseases	15
Ill-defined causes	14
Respiratory diseases	8
Circulatory diseases	7
Neoplasms	5
Other	12

Source: Bourne (1994)

¹ PYLLs are calculated from age-specific death rates, by subtracting the age at death from 65. Thus a death of a 1 year old is counted as 64 years lost, and of a 60 year old as 5 years. This is a composite measure of burden of disease in that it combines the number of deaths with the age at death.

Table 1.9 indicates the major causes of potential years of life lost (PYLL) in South Africa in 1990. The largest single cause was the category 'non-natural deaths', which includes accidents, poisoning and violence. This category accounted for 22 percent of the total. Poverty, unemployment and overcrowded living conditions are key factors in violence, while unsafe working conditions and inadequate housing play a major role in occupational and household accidents. Alcohol misuse and the condition of roads are important factors in motor vehicle accidents (World Health Organisation, 1995). The second major source of excess deaths was prenatal causes, which are often related to inadequate primary care services. Infectious diseases, many of which could have been prevented or effectively treated, accounted for a further 15 percent (McIntyre *et al*, 1995).

This distribution of the major causes of premature death indicates that diseases of the rich and the poor coexist in South Africa. As noted by Bradshaw and Buthelezi (1996: 19), "Apartheid policies have resulted in a correlation between socio-economic status and population groups, and in certain respects the morbidity and mortality profile of Whites and Indians is characteristic of more developed societies as degenerative diseases gain prominence. On the other hand, the disease and death profiles of Africans and Coloureds reflect the situation of less developed societies, with a prominence of "social diseases" (deficiency diseases, tuberculosis, gastro-intestinal diseases and measles)."

Premature death is only one of the effects of a high burden of ill-health. Other effects include personal suffering, high levels of disability and disruption to normal activities. It also imposes an additional burden of unpaid labour on those who care for ill family members, usually women. There are no routine statistics on *general* levels of morbidity in South Africa. Where information is available, it primarily relates to diseases which are legally notifiable.

Tuberculosis is a significant public health problem, accounting for 80 percent of disease notifications (McIntyre *et al* 1995). The incidence of tuberculosis was estimated to be 224 per 100 000 people in 1993 (Department of Health, 1994). Tuberculosis is particularly a problem in the Western Cape, and the incidence varies between race groups (Coloured - 612; African - 159; Indian - 64; White - 14) (Department of Health, 1995b). Measles is the second most commonly notified disease, with an estimated incidence of 32 per 100 000 people. The incidence of malaria (29 per 100 000), viral hepatitis (4.2 per 100 000) and typhoid fever (4.1 per 100 000) are also regarded as major health problems (Department of Health, 1994).

The proportion of children who are fully immunised is currently 63 percent (Health Systems Trust, 1996). Immunisation coverage varies significantly between different provinces, ranging from about 50 percent in the Eastern Cape to 75 percent in North-West.

Poor nutritional status is another important cause of ill-health and suffering in South Africa. In a review of nutritional surveys in South Africa, Fincham *et al*, (1993) estimated that about 15 percent of children under the age of five years are underweight while between 25 and 40 percent are stunted. The most recent estimates indicate that there is a 2.6 percent incidence of wasting and a 22.9 percent incidence of stunting in children between the ages of 6-71 months, while 9.3 percent of children in this age group are underweight (Health Systems Trust, 1996).

The HIV/AIDS epidemic is growing in significance as a cause of morbidity and premature mortality. Approximately 2 million people are currently HIV-positive and there are approximately 43 000 AIDS cases. It has been estimated that there are approximately 1000 new infections daily and that the doubling time is between 11 and 13 months.

There are extremely poor data on disabilities in South Africa. A recent household survey indicated that 17 percent of adults between the ages of 16 and 64 years and 55 percent of those aged 65 years and older reported at least one disability (Hirschowitz and Orkin, 1995). The most frequently reported disabilities were difficulties with seeing, hearing and walking or moving.

Table 1.10: International comparison of health status and other indicators (1990/1991)

Country	GNP per capita (US\$)	Human Development Index (HDI) (1993)	Infant mortality rate (IMR) per 1,000 live births	Life expectancy at birth (Years)	Incidence of tuberculosis (per 100,000 population)	% of children (12-23 months) with wasting	% of children (24-59 months) with stunting
South Africa	2,560	0.649	54	62	250	10	53
Southern African countries							
Mozambique	80	0.261	149	43	189	--	--
Malawi	230	0.321	143	47	173	8	61
Zambia	360	0.411	106	47	345	10	59
Zimbabwe	650	0.534	48	62	207	2	31
Botswana	2,530	0.741	36	68	--	6	37
Selected middle-income countries							
Malaysia	2,520	0.826	15	71	67	6	32
Venezuela	2,730	0.859	34	72	44	4	7
Argentina	2,790	0.885	25	72	50	--	--
Uruguay	2,840	0.883	21	74	15	--	16
Brazil	2,940	0.796	58	66	56	6	29
Mexico	3,030	0.845	36	70	110	6	22

Sources: World Bank (1993): Tables 1, 28, A.3, A.6 and A.7; World Bank (1994): Tables A-1 and A-8; UNDP (1996): Table 1

Table 1.10 compares some of the key health status indicators with other Southern African countries. In addition, data are provided for other middle-income countries (predominantly from Latin America and Asia) which have a similar GNP per capita to that for South Africa. While South Africa has better health status indicators than some of the Southern African countries, its health status is worse than two of its closest neighbours, namely Botswana and Zimbabwe. The differences in health status between South Africa and Zimbabwe are particularly striking, given that Zimbabwe has a GNP per capita which is four times lower than that of South Africa. The level of economic development is more comparable to some Latin American countries than the majority of Southern African countries. South Africa's health status indicators, and its Human Development Index (HDI), are considerably worse than the Latin American countries whose data are presented in Table 1.10.

The limited data available indicate that South Africa has relatively high levels of ill-health, in comparison to other countries with similar levels of economic development. Much of the burden of ill-health and premature death in South Africa is attributable to potentially preventable diseases, many of which are related to poor living conditions, and to causes which could be addressed through access to primary care services (e.g. maternal and perinatal morbidity and mortality). This overview also indicates that there are certain geographic areas and population groups who suffer a greater burden of disease than others. Although access to health services is not the only determinant of health status, it has been shown that excess suffering and premature death could be reduced at relatively low cost through basic primary care interventions, such as increased coverage by preventive programmes and improved access to basic medical care (World Bank 1993; World Bank 1994).

1.4 Macro-Economic Trends: 1980-1996

1.4.1 Introduction

This section reviews a number of macro-economic indicators for the period, 1980-1996. Included in this analysis are economic growth indicators (GDP and GDP per capita), employment, changes in domestic saving and investment and changes in the consumer price index as well as a brief description of income inequality and poverty. These macro-economic indicators illustrate to a large extent, the economic legacy of apartheid that was inherited by the government of national unity in April 1994.

1.4.2 Economic Growth

The South African economy has been characterised by sluggish growth rates since the early 1980s. In the immediate post-World War 2 period through to 1960, real GDP grew at around 3.5% annually. From 1960 to 1965, the rate of growth accelerated to more than 6% and then declined to an average of 5% from 1965 to 1970. The 1970s saw the start of a slowdown in the growth of GDP that has yet to be reversed. Between 1970 and 1975 the growth rate fell to less than 4% a year, and for the next five year period to 3% a year. In the 1980s the average growth rate fell dramatically to less than 1.5%, and to 0.5% between 1990 and 1994 (Pillay, 1996).

Table 1.11 shows growth rates of GDP and GDP per capita for the period 1980-1996. Although there were several years during the 1980s during which GDP growth exceeded 4%, the overall trend was poor. The average annual growth of real GDP for 1980-1996 was 1.7%. For the period 1980-89 it was 2.2% and for 1990-96, it was 1%.

Table 1.11 : Growth Rates of GDP and GDP per capita

Year	GDP	GDP per capita	Year	GDP	GDP per capita
1980	6.6	4.00	1989	2.4	0.03
1981	5.4	2.66	1990	-0.3	-2.61
1982	-0.4	-2.89	1991	-1.0	-3.26
1983	-1.8	-4.28	1992	-2.2	-4.35
1984	5.1	2.53	1993	1.3	-0.92
1985	-1.2	-3.59	1994	2.7	0.56
1986	0	-2.38	1995	3.4	1.23
1987	2.1	-0.29	1996	3.1	-1.00

Source : South African Reserve Bank, (SARB) Various Years

The combination of a declining growth rate and an increasing population has resulted in falling GDP per capita. Real GDP per capita grew until 1981, rising from R4360 in 1946 to R8544 in 1981. Since 1981 real per capita incomes have declined, reaching R6832 in 1994, which corresponds to the level in the mid-1960s (Pillay, 1996).

Table 1.11 also shows the annual growth rate in GDP per capita for 1980-96. The average growth rate for the period was minus 0.67%.

The underlying growth rate of “potential output” or ‘productive capacity’ has declined significantly, falling from 6.3% in 1960-65 to 0.98% in 1981-94 (Harber, 1995).

If the economy continues to grow at the present rate, its 'excess capacity' could be quickly eliminated, resulting in either a reduction in the growth rate associated with recovery, or mounting inflationary pressures, which will force a tightening of financial policies, thus restraining growth. This point highlights one of the basic dilemmas facing South Africa's economy, i.e. the basic need for economic restructuring in order to increase the long-term growth of the economy (Pillay, 1996).

Economic growth has been capital intensive; the capital intensity of production has risen throughout the post-World War 2 period. Moreover, there is significant negative correlation between the decline in growth rates and the rise in capital intensity. This correlation does not, however, necessarily imply causation, since an explanation of either the decline in growth rates or the increase in the capital intensity is neither readily available nor clear (Harber, 1995).

1.4.3 Employment and Unemployment

As described earlier, economic growth has been characteristically capital-intensive. Except for a short period in the 1960s, there has been a substantial divergence between GDP growth rates and the growth of employment. (Table 1.12)

Table 1.12: Growth of GDP and Employment

PERIOD	GDP	EMPLOYMENT
1960-1965	6.01	4.22
1965-1970	5.33	7.28
1970-1975	3.94	3.82
1975-1980	3.02	1.47
1980-1985	1.37	1.20
1985-1990	1.46	0.65
1990-1994	-0.72	-2.28

Source : Pillay, 1996

**Table 1.13: Growth of Employment,
1980 - 1995 (percentage change)**

Year	% Change in employment
1980	3.94
1985	-0.98
1990	-0.10
1995	0.27

Source : SARB, Various Years

During the 1980s and early 1990s the labour supply grew by at least 2.5% per year. However, formal sector employment after growing in the early 1980s, declined in the mid-1980s, peaked in 1989 and has declined ever since. Consequently, there has been a growing imbalance between labour supply growth and employment, which has been corrected only partially by growth in the informal sector of the economy (Pillay, 1996).

Moreover, as Table 1.14 shows, private sector employment has been shrinking consistently since 1991. Public sector employment grew marginally in the early 1990s but had also declined by 1993. However, total employment by public authorities increased in both 1994 and 1995.

**Table 1.14: Employment growth by public and private sectors
(% change on prior year)**

Sector	1989	1990	1991	1992	1993
Public	1.0	0.1	1.6	0.1	-2.5
Private	0.4	-0.9	-3.6	-3.1	-2.5
Total	0.6	-0.6	-2.1	-2.1	-2.5

Source : Pillay, 1996

Unemployment

There is widespread agreement that unemployment has reached chronically high levels. Estimates of the level of unemployment vary from 30 to 50% of the labour force. The 1993 household survey conducted by the Southern African Labour and Development Research Unit (Saldrus) at the University of Cape Town, and the World Bank, revealed that the unemployment rate was 39% for Africans, 21% for Coloureds, 17% for Indians, and 5% for Whites. Females are disproportionately affected. For instance, 44% of African females are unemployed, as against 34% of African males.

The Central Statistical Services' household survey for October 1994 revealed that about 4.7 million or 33% of the labour force, were unemployed.

However, race and gender are not the only determinants of unemployment. Also, important are location (urban or rural), age, and educational levels. Among the African population, rural unemployment is the most serious. There is, moreover, an inverse correlation between age and unemployment, with an estimated two thirds of the African population in the cohort 16-24 unemployed. Finally, the data from the October Household Survey also show that African people with a secondary education are just as likely to be unemployed as those with no schooling at all.

1.4.4 Investment and Saving

1.4.4.1 Investment

A high level of saving - and hence investment - is crucial for economic growth. The trend in South Africa in recent times has been one of declining levels of saving and investment. Gross and net domestic investment have generally followed similar trends, but from the 1980s onwards the gap between net and gross investment widened, indicating that a greater share of total investment was required to maintain the existing capital stock, and was thus not available to expand the capital stock and productive capacity.

By 1986 the absolute level of real net domestic investment had fallen to levels less than those of the mid-to late 1950s, and it has essentially remained at those levels since that time, despite an increase in 1994. After 1981 net domestic investment fell to less than 10% of GDP, and to less than 5% of GDP after 1985. In 1992, net domestic investment was a mere 1.1% of GDP, and only 7.1% of GDI. In 1993 net domestic investment rose to 1.9% of GDP, and 11.6% of GDI. For 1994 the figures were 4.3% and 2.4% respectively (Pillay, 1996).

Gross domestic investment relative to gross domestic product has been declining similarly. From 34% in 1981, this ratio declined to a rate of 15.2% in 1993 although there was a temporary increase in 1989 (SARB, 1996). Domestic investment has been declining as a result of lower capital expenditure by public authorities since 1983. According to the South African Reserve Bank (1996), the removal of external constraints on economic growth and the encouragement of investment through tax incentives for certain approved projects

inspired a wave of fixed investment activity in the period since 1993, which lifted the fixed investment ratio to 17% in the first half of 1996.

1.4.4.2 Saving

Gross and net domestic saving rose rapidly in the latter half of the 1940s and through most of the 1950s. In the early part of this period, foreign saving provided a significant but declining supplement to domestic savings. Beginning in 1959, net and gross domestic saving levelled off until the latter part of the 1970s. Foreign saving was negative (representing capital outflows which preceded but were aggravated by the Sharpeville massacre) until 1964. From 1965 to 1977 and from 1981 to 1984, foreign saving supplemented domestic saving. Beginning in 1985, and extending through 1993, foreign saving has been negative, significantly so from 1985 through 1988 and less so since 1988 (Pillay, 1996).

Net and gross domestic saving rose in 1979 and 1980, but quickly fell to previous levels in 1981 and began to establish new lows relative to GDP thereafter. This decline was much more severe for net domestic saving, which fell from over 21% of GDP in 1980 to 6% in 1982. Despite some recovery following 1982, net domestic saving remained less than 10% of GDP, and has remained less than 5% since 1990 (Pillay, 1996).

Prior to 1983 the public sector made a positive contribution to net domestic saving of between 25% and 40% of total net domestic saving. Following 1983, however, the public sector became a net consumer of domestic saving. Since 1990, the public sector consumption of domestic saving has become very significant; it did decline in 1994 relative to the peak in 1993, but still remains at historically high levels (Pillay, 1996).

The ratio of domestic saving to gross domestic product declined from 36.5% in 1980 to 19.3% in 1993. According to the South African Reserve Bank (1996), this ratio decreased further to 16.5% in 1995 and the first half of 1996. The deterioration in the savings ratio was due to a decline in the saving of the private sector relative to gross domestic product. The strong growth in private household spending which exceeded household income growth by a relatively wide margin, was the main reason for the deterioration of the national saving rate. Dissaving by general government relative to GDP contributed to this deterioration in the savings ratio. The extent of government dissaving was also related to its excess expenditure. Dissaving by the general government relative to GDP decreased from 5% to 4% in 1995 but started to improve during the first half of 1996. Private household saving in 1995 was equal to only 1% of GDP, compared with 3% in the previous year (SARB, 1996).

Table 1.15: Gross Domestic Saving and Investment

Year	Gross domestic saving as % of GDP	Gross domestic investment as % of GDP
1980	36.5	28.3
1985	29.2	20.1
1990	23.1	17.1
1993	19.3	15.2

Source : South African Reserve Bank, Various Years

1.4.5 National government debt and the budget deficit

National debt

The government of national unity also inherited a huge debt burden and a rising budget deficit from the previous regime. In nominal terms, the national government debt increased from R81 billion in 1989 to R220 billion in 1994 (Pillay, 1996). In 1990 this debt comprised 32.9% of GDP; by 1994 this figure had risen to 48.1%. As a percentage of national government expenditure, interest payments amounted to almost 18% in 1994, up from 14% in 1990.

Budget deficit

The budget deficit as a percentage of GDP increased from 0.6% in 1989/90 to 8.3% in 1992/93, and then fell to 6.6% in 1994/95 (Pillay, 1996). (See Chapter 3)

1.4.6 Prices

For most of the 1980s and 1990s, South Africa has had double digit inflation. The average annual inflation rate as reflected in the Consumer Price Index for the period 1980-1996 was 13.2% (SARB, 1996). For the period 1980-89 the average was 14.6% and for 1990-96 it was 11.2%.

From 1993 there has been a significant decline in consumer price inflation so that by 1996 it had been reduced to 7.4%. According to the South African Reserve Bank (1996), this was the lowest rate recorded since the 6.1% recorded in 1972. This decline was attributed to factors such as the consistent application of a counter-inflationary monetary policy, the decline in inflation expectations, owing to the strengthening of monetary policy credibility, excellent climatic conditions in the second half of 1995 and the beginning of 1996, which caused food prices to rise slowly and even to decline at times.

1.4.7 Degree of Openness in the Economy

1.4.7.1 Current Account

Between 1981 and 1984 the current account of the balance of payments recorded a deficit and from 1985 - 1993 it was in surplus. In 1994 the current account recorded a deficit for the first time in 10 years as the value of imports outstripped that of exports and in 1995 further growth resulted in the widening of the deficit (-2,1%) of GDP.

Table 1.16: Degree of Openness of the South African Economy

Year	Current account/GDP ratio	Total net capital flows	Terms of trade	Total debt stock	US\$/Rand % change
1980	4,2	-3,3	11,7	31,6	8,2
1985	4,2	-5,67	1,4	32,8	-34,4
1990	1,9	-0,72	-2,5	37,2	1,2
1993	1,6	-4,41	0,7	48,6	-12,7
1995	-2,1	4,46	-0,7	56	2,2
1996	-1,6	0,8	2,2	55,3	-15,0

Source: South African Reserve Bank, various years.

1.4.7.2 Capital Account

Between 1981 and 1984, the capital account was strengthened by a substantial net inflow of funds particularly through loans raised abroad by the Treasury, the South African Transport Services and the Department of Posts and Telecommunications. There was a net outflow of capital between 1985 and 1993. The rise in the outflow of capital was due to a recurrence of outflows of both long-term and short-term capital.

According to the South African Reserve Bank (1996), South Africa's successful transition to a new political order, growing international confidence in the future of the country, favourable credit ratings and the inclusion of the country with a high ranking in emerging market indices, led to a total net inflow of capital in 1995. This capital inflow consisted largely of capital that flowed to the private sector. The turmoil in the South African foreign exchange market and sharp depreciation in the external value of the rand, made international investors wary of investment opportunities in South Africa and led to speculative outflows of capital from the middle of February 1996. Only after the rand had depreciated to substantially lower levels and some stability had again become apparent in domestic financial markets, did the outflow change to a moderate inflow of capital.

1.4.7.3 Exchange Rates and Exchange Control

An increase of 10,9 percent in the effective exchange rate of the commercial rand during 1980 was followed by a decline of 13,9 percent during 1981. The depreciation was basically due to the balance of payments changes, but also reflected the strengthening of the U.S. dollar in foreign exchange markets. The effective exchange rate of the rand declined further by 13,0 percent during the fourth quarter of 1984 and for 1986 as a whole the average effective exchange rate of the rand declined by 12 percent.

In 1995 the real effective exchange rate of the rand rose on average by 0,2 percent as a result of the increase in the nominal effective exchange rate of the rand during the period June to December 1995 as well as the rapid narrowing of the inflation differential between South Africa and its main trading partner countries. By the end of December 1995 the real exchange value of the rand was stronger than a year later. The rand equivalent of the U.S. dollar rose from R3,65 at the end of December 1995 to R4,73 at the end of December 1996. However, in February 1997 for the first time in 5 months the rand appreciated at a level of R4,48 bid against the U.S. dollar which went down to -15%.

In view of the many inherent disadvantages of exchange control, such as distortion of the price mechanism, the problems encountered in the application of monetary policy, the detrimental effects on inward foreign investment and the large administrative cost, the government has committed itself to dismantling all remaining exchange controls as soon as circumstances are favourable. In line with this, the financial rand was abolished in 1995. The gradual approach to the abolition of exchange control is designed to allow the economy to adjust more smoothly to the removal of controls that have been in place for a considerable period (Department of Finance, 1996). The presence of exchange controls in South Africa distort exchange rates and interest rates. Therefore, the eventual removal of exchange controls are likely to make South Africa competitive, more free and realistic.

1.4.7.4 Total Debt Stock

As a ratio of gross domestic product, government debt increased from 31,1 percent at the end of fiscal 1980/81 to the high level of 56% in 1995 (SARB 1996). Such unsustainability of

government finance is accentuated by economic indicators such as the high level of fiscal deficits, the level of real interest rates relative to economic growth, the ratio of interest payments to government expenditure and changes in the net asset value of government. Between 1981 and 1996, foreign debt as a ratio of total government debt increased from 3.4% to 4.1%, because government made use of foreign capital markets for its financing needs. Government stock as a percentage of total government debt increased from 75.0% to 88.1%. The ratio of the non-monetary private sector's holdings of government stock to total government stock outstanding increased from 30.5% to 56.3%.

1.4.8 Income Inequality and Poverty

It has often been said that South Africa is at the top of the income inequality league. In the mid-1970s, South Africa had the highest Gini coefficient among all measured countries (0.68 in 1975, as against 0.3 for Taiwan, and 0.3-0.4 for industrialised countries). (Pillay, 1996)

In the post-World War 2 period the racial pattern of income distribution remained virtually unchanged between 1945 and 1970, with Blacks receiving 30% and Whites 70% of personal income. In the 1970s this ratio began to change, so that by 1980 the ratio was about 60:40 (Pillay, 1996).

It is interesting to note that it was largely Black people in formal employment that benefited from this redistribution. Redistribution was being effected in an environment of slow or no growth, and the benefits were accruing mainly to employed Africans, who received on average, disproportionately higher real wage increases throughout the 1970s and 1980s.

The Saldru survey of 1993 showed that total personal income amounted to almost R280 billion of which less than 30% accrued to Africans, despite the fact that they account for more than three quarters of the population. The per capita income of the White population was almost 12 times higher than that of Africans.

Table 1.17 : Racial Incomes, 1993

Race	Pop. Share (%)	Income share	Per capita income R, p.a.	Disparity ratio; White to other
African	76.2	29.3	2717	11.8
Coloured	8.3	7.4	6278	5.1
Indian	2.6	4.8	12963	2.5
White	12.9	58.5	32076	1.0
Total	100.0	100.0	7062	4.5

Source : Pillay, 1996

The Gini coefficient of 0.65 measured in 1993 for the total population remains one of the highest ever recorded. The intra-race Gini coefficients are also very high, suggesting that inequality within races is contributing to overall inequality.

Poverty

Poverty has long been and continues to be an endemic feature of South African society. The most recent analysis, based on measures of consumption expenditure and conducted by the World Bank on the Saldru data, shows that about 53% of the population can be classified as poor, and 29% as 'ultra-poor'. Furthermore, about 75% of the poor live in rural areas. Nearly all the poor are Africans - their poverty share is 95%. Finally, poverty is distributed

unevenly regionally, with two thirds of the poor living in the Eastern Cape, Kwazulu-Natal and the Northern Province (World Bank, 1995).

Poverty and Inequality in the Provinces

Although South Africa is an upper-middle income country with a GDP per capita of US\$ 3160 and an HDI of 0.716 in 1996 (Human Development Report, 1997), these indicators mask huge differences in income and development between the nine provinces. Table 1.18 shows the GGP (Gross Geographic Product) per capita in each of the provinces as well as the HDI for each province.

Table 1.18: Provincial GGP per capita (1996 US\$) and HDI (1994)

Province	GGP Per Capita	HDI
Western Cape	4 096	0.826
Eastern Cape	1 550	0.507
Northern Cape	3 368	0.698
Kwazulu/Natal	2 323	0.602
Free State	3 003	0.657
North West	2 202	0.543
Gauteng	6 290	0.818
Mpumalanga	3 662	0.694
Northern Province	1 072	0.470
South Africa	3 160	0.677

Source: GGP Per capita - Own calculations

HDI - CSS, 1994 (An HDI for each province is not available for 1996 so the 1994 provincial HDI is used here.)

Income per capita in the provinces range from US\$ 1072 in the Northern Province to US\$ 6290 in Gauteng. This would make the Northern Province as poor as the Philippines or Uzbekistan and Gauteng almost as rich as Greece. The HDI also reflects disparities in human development with the Northern Province and the Eastern Cape having a similar HDI to that of Ghana or Zimbabwe and the Western Cape and Gauteng similar to that of Malaysia or Poland.

Although these indicators are useful, they mask disparities within the provinces. Klasen (1996) argued that these indicators mask the depth and level of poverty that exists in each province. He uses two additional indicators to measure poverty: the poverty rate and the poverty gap. The poverty rate is the percentage of people who live below a particular income level and the poverty gap is the amount of money required to raise a person from poverty to the poverty line. Since it incorporates the depth of poverty (a poorer person would require a higher transfer than a less poor person to reach the poverty line), the poverty gap gives a more accurate picture of the magnitude of the problem. The poverty gap is determined relative to a poverty line which was defined as R 3600 per annum in 1993. According to Klasen, it would cost R 20 billion (in 1993) or 4% of GDP to lift the poorest 40% of the population above the poverty line (Klasen, 1996).

Table 1.19: The percentage of their income that poor households would require to reach the poverty line

Province	Poverty Gap
Western Cape	38%
Eastern Cape	95%
Northern Cape	70%
Kwazulu/Natal	52%
Free State	83%
North West	65%
Gauteng	43%
Mpumalanga	60%
Northern Province	76%

Source: Klasen (1996)

Table 1.19 indicates that the level of poverty varies across provinces. Poverty is deepest in the Eastern Cape , the Free State and the Northern Province. In these provinces, poor households would need to boost their incomes by 95%, 83% and 76%, respectively, to reach the poverty line. While 35% of the national population are resident in these three provinces, they have 58% of the total poverty gap (Klasen, 1996).

In his paper, Klasen (1996) developed a composite index to measure deprivation and poverty. This index comprises twelve indicators of socio-economic, nutritional, health and education indicators. The focus of the index examines access to basic services such as energy, education, health and transport. This index confirms the differences in poverty between the provinces as shown by the per capita GGP and the provincial HDI. This index shows that deprivation is lowest in the Western Cape even though it has a GGP per capita more than 50% lower than Gauteng. By contrast, deprivation in Kwazulu/Natal is extremely high for its level of income.

1.5. Conclusion

This chapter provided a range of indicators relating to education, health and the economy. On the basis of income per capita South Africa appears to be a relatively wealthy country. However, this indicator masks a level of inequality and underdevelopment comparable only to countries at a much lower GNP per capita.

South Africa's economic growth rate has been declining for 30 years and unemployment is over 30%. Domestic debt stands at over 55% of GDP, and interest payments have risen sharply. Most importantly, poverty is widespread, and despite high levels of public spending in the social sectors, the country's social indicators are not comparable to countries at a similar level of development.

CHAPTER 2

GENERAL OVERVIEW OF PUBLIC FINANCE

2.1 Introduction

This chapter provides an overview of public finance in South Africa by describing the trends in government expenditure and revenue. For the period 1980-1996, this chapter analyses the following: a) the trends in total expenditure and revenue; b) the trends in government expenditure and revenue as a proportion of GDP; and c) the composition of government revenue. A brief description is then provided also of the tax system particularly with respect to personal income tax and value added tax. The next section provides a brief description of the government's new macro-economic policy. The chapter concludes with an overview of the expenditure assignment and revenue means of the provinces.

2.2 Government Expenditure, 1980 - 1996

Government expenditure in real 1990 terms increased from R56.4 billion in 1980 to R93.6 billion in 1996 (Table 2.1). During the period under review, real government expenditure increased consistently on an annualised basis except for a few years. Relatively high increases occurred during 1982 (10%), 1984 (16%) and 1992 (9%) (Budget Review, 1997). The average increase in real government expenditure for the period 1980-1989 was 5.2% and for 1990-1996 it was 1.5%.

Table 2.1: Overview of Public Finances - (Rm, 1990 = 100)

Year	Real Govt expenditure	% change of govt expenditure	Real total national revenue	% change of national revenue
1980	56 416	-	54 275	-
1985	72 617	5.7	63 908	3.5
1990	81 126	2.3	72 117	2.6
1995	91 598	2.6	74 737	0.7
1996	95 742	4.5	80 084	7.2
1997	93 607	-2.2	81 734	2.1

Source: 1997 Budget Review and IFS

Notes: Data for 1997 is preliminary

2.3 Government Expenditure as a Proportion of GDP

In 1980, government spending was just over 23% of GDP. This share increased steadily throughout the period under review reaching a peak of almost 36% in 1993. From 1994 this share declined such that it is estimated that in 1997 government spending as a percentage of GDP will be approximately 31%. Figure 2.1 illustrates this trend.

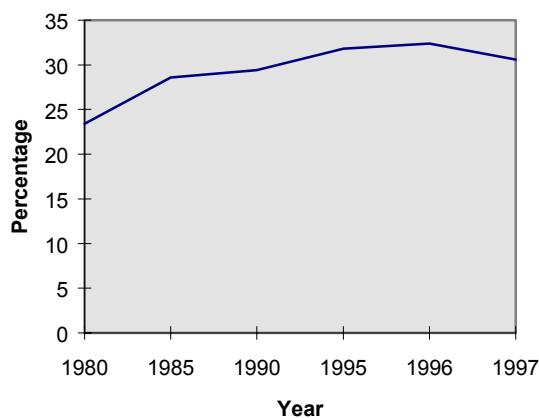
Table 2.2: Government Expenditure as a Percentage of GDP

Year	Total expenditure
1980	23.4
1985	28.6
1990	29.4
1995	31.8
1996	32.4
1997	30.6

Source: South African Reserve Bank

Note: Figures for 1997 are based on estimated data

Figure 2.1: Total Government Expenditure as % of GDP



Source: Computed from Table 2.2

Table 2-3 compares South Africa with a range of industrialised and similar middle-income countries with respect to total government expenditure as a proportion of GNP for 1980 and 1992. As the table indicates, South Africa's proportion is high relative to both the industrialised and developing countries with one exception in each case (the United Kingdom and Botswana).

There are two other interesting features to this table. The first is that South Africa showed the largest percentage increase for the period 1980-1992 (47%). The second is that only the three Asian countries experienced a decline in their proportions.

Table 2.3: Total Expenditure as a Percentage of GNP

Countries	1980	1992
United States	21.7	24.3
United Kingdom	38.2	39.5
Japan	18.4	15.8
Korea	17.9	17.6
Thailand	19.1	15.4
Venezuela	18.7	22.4
Mexico	17.4	17.9
Botswana	36.4	40.4
South Africa	23.5	34.5

Source: World Development Report, 1992

2.4 Government Revenue, 1980 - 1996

For the period 1980-1996 government revenue was consistently below the level of government spending (Table 2.1). In real 1990 terms, total national revenue increased from R54.2 billion in 1980 to R80.0 billion in 1996. There were significant double-digit real increases during two of the years of this period (1984 and 1988) (Budget Review, 1997). The average increase in real government revenue for the period 1980-89 was 3.9% and for 1990-96 it was 1.2%.

Table 2.1 does not include own source revenues of provincial and local governments. Provincial governments derive 'own' revenues from user charges (e.g. hospitals), motor vehicle licences, horse racing and other gambling and a range of other licences. For the 1997/98 fiscal year those sources are expected to generate approximately R3.8 billion (Budget Review 1997). The major sources of revenue for local government are surpluses on utilities such as electricity and water, property taxes, and the pay roll and turn over taxes (the RSC levies). Local government revenue for 1996/1997 was estimated at R41 billion. (FFC, 1997)

2.5 Government Revenue as a Proportion of GDP

As Table 2.4 shows government revenue as a proportion of GDP increased from 22.5% to 26.6%. The average for the early 1980s was 22.1% and for the latter part of the decade 25.3%. The annual average between 1990 and 1996 was 25.7%. Figure 2.2 illustrates these trends.

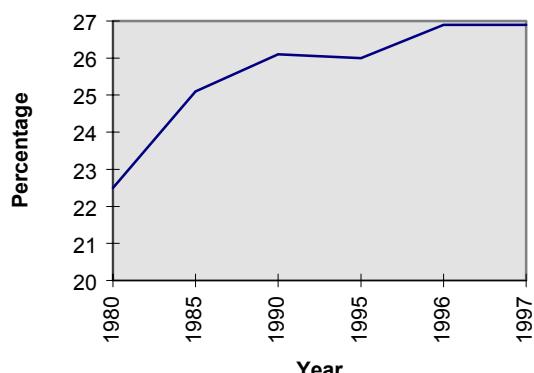
Table 2.4: Government Revenue as a Percentage of GDP

Year	Total Revenue
1980	22.5
1985	25.1
1990	26.1
1995	26.0
1996	26.9
1997	26.6

Source: South African Reserve Bank

Note: Figures for 1997 are based on estimated data

Figure 2.4: Total Government Revenue as a % of GDP



Source: Computed from Table 2.4

Table 2.5 compares South Africa's revenue as a proportion of GDP with a range of industrialised and middle-income countries for the period 1984 and 1994. South Africa's ratio is relatively low compared to the relatively high tax countries such as the United Kingdom and France but higher than most of the other countries especially during the 1990s.

Table 2.5: Total Revenue as Percentage of GDP

Countries	1984	1994
United States	19.4	20.1
United Kingdom	37.0	n/a
France	41.7	37.9
Korea	17.1	20.0
Thailand	16.0	19.7
Venezuela	26.0	19.6
Chile	29.0	22.1
Ghana	8.0	n/a
South Africa	24.0	25.3

Source: IMF Government Finance Statistics Yearbook 1995

Notes: N/A: Data not available:

2.6 Composition of Government Revenue

The major revenue sources for the South African government in 1996 were personal income tax (39% of the total), value-added tax (VAT) (24%), company tax (12%), excise duties (12%), fuel levy (7%) and customs duties (4%) (Budget Review, 1997).

Since the 1980s, taxes on income and profits were responsible for bringing in between 52% and 59% of government revenue (Table 2.6). The contribution to taxation of the gold mines declined dramatically between 1980 and 1996 from 20.4% to 0.4%. Personal income tax, on the other hand, has continued to increase, its contribution to government revenue growing from 16% in 1980 to 39% in 1996. The contribution of GST(1980s)/VAT increased significantly from 12% in 1980 to 24% in 1996 (Budget Review, 1997).

Table 2.6: Classification of National Revenue by Source (% Shares)

Source of revenue	1980	1996
1. Taxes on income and profits	58.76	55.69
Persons and individuals	16.23	39.14
Gold mines	20.43	0.41
Other mines	2.02	0.92
Companies	17.68	12.29
Secondary tax on companies	0.00	0.87
Tax on retirement fund industry	0.00	1.63
Other	2.39	0.44
2. Taxes on property	1.83	1.60
Donations tax	0.01	0.03
Estate duty	0.45	0.11
Marketable securities tax	0.25	0.26
Transfer duties	1.12	1.19
3. Domestic taxes on goods and services	21.49	36.66
GST/VAT	12.19	24.55
Excise duties	9.26	11.74
Fuel levy	0.00	7.13
Levy on financial services	0.00	0.34
Other	0.04	0.03
4. Taxes on international trade and transactions	5.71	4.75
Custom duties	5.38	4.63
Import surcharges	-0.02	0.00
Other	0.35	0.12
5. Stamp duties and fees	1.01	0.82
Sub-total	88.80	99.52
Less: Customs Union Agreement	2.20	2.96
Total net tax revenue	86.59	96.56
Non-tax revenue	13.38	2.25
Total current revenue	99.98	98.81
Capital revenue	0.02	1.09
Total revenue	100.00	99.91
Grants	0.00	0.09
Total revenue and grants	100.00	100.00

Source : Budget Review, 1997

Minor contributions to revenue accrue through secondary taxes on companies (0.9% in 1996), taxes on the retirement fund industry (1.6%) and transfer duties (1.1%) (Budget Review, 1997).

Almost all of total government revenue is current revenue. Capital revenue contributed less than 1% of total government revenue. This changed only in 1986, when capital revenue contributed 2.9% to total government revenue. After 1986, the percentage share declined and remained below 1% increasing to 1.5% in 1993. Between 1995 and 1996, the percentage share of capital revenue averaged 1% per annum. In 1997 it is expected that capital revenue will bring in less than 1% of total government revenue (Budget Review, 1997).

Grants did not play a significant role in government revenue in South Africa's budget except for 1995 and 1996. During these two years, the grants were specific to projects in the

Reconstruction and Development Programme (RDP) and they amounted to less than 1% of total revenue (Budget Review, 1997).

As a percentage of GDP, total national revenue made up 21% in 1981 and almost 27% in 1996. With respect to the components of revenue as a proportion of GDP, the contribution of taxes on income and profits was 12% in 1981 and almost 15% in 1996. The corresponding figures for GST/VAT were 3% and 6% (Budget Review, 1997).

2.7 The Tax System

2.7.1 Personal Income Tax

Before 1994, different rates applied to the same income groups in the Republic of South Africa and the TBVC states. After 1994, the same tax rates were applied to the same income groups.

In 1994, the Minister of Finance, announced the appointment of a *Commission of Inquiry into Certain Aspects of the Tax Structure of South Africa* (Katz Commission). This commission of enquiry submitted three interim reports and most of its recommendations have been implemented by the government of national unity.

The personal income tax system was seen as a complicated one which discriminated on the basis of gender and marital status. There were three schedules of rates: (a) married persons without children; (b) unmarried persons; and (c) married women. Tax was imposed according to these persons. Further, there were child rebates (R100 - R150 per child, depending on the number of children), and an old age rebate for those over 65 years of age, according to the three schedules mentioned above (Katz Commission Interim Report, 1996).

During the 1995/96 fiscal year, a single scale of rates for all individuals was implemented. The maximum marginal rate was 45% at a taxable income of R80 000. A primary rebate of R2 625 was granted to all individuals and an additional rebate of R2 500 was granted for individuals aged 65 years and older (Budget Review, 1995).

For the 1996/97 fiscal year, a single scale of rates for all individuals was proposed, reaching a maximum marginal rate of 45% at a taxable income of R100 000. A primary rebate of R2 660 was granted to all individuals, with an additional rebate of R2 500 for individuals aged 65 years and older. The tax threshold increased from R14 600 for those below the age of 65, in the fiscal year 1995/96, to R15 580 in 1996/97 (Budget Review, 1996).

The proposals for the 1997/98 fiscal year decrease the tax brackets to seven from the ten prior to 1996/97 and eight in 1996/97. The primary rebate and the tax thresholds for both those below the age of 65 and those above the age of 65 are also to be increased. The proposed tax rates for the 1997/98 fiscal year are presented in Table 2.7 (Budget Review, 1997).

Table 2.7: Proposed Tax Rates for Natural Persons, 1997/98 Tax Year

Taxable Income, (R)	Rates of tax, (R)
0 - 30 000	19% of each R1
30 001 - 35 000	5 700 + 30% of the amount over 30 000
35 001 - 45 000	7 200 + 32% of the amount over 35 000
45 001 - 60 000	10 400 + 41% of the amount over 45 000
60 001 - 70 000	16 550 + 43% of the amount over 60 000
70 001 - 100 000	20 850 + 44% of the amount over 70 000
100 001 and over	34 050 + 45% of the amount over 100 000

Source: Budget Review, 1997

Notes: Rebates of Tax: Primary R 3 215; Age 65 and over (additional to primary rebate) R 2 500

Tax Threshold: Below the age of 65 R 16 921; Age 65 and over -R 30 050

The tax proposals for the 1997/98 fiscal year are aimed at bringing relief mostly to persons with taxable incomes of less than R60 000 per annum. However, the progressivity of the tax rate structure has the effect that any assistance granted to taxpayers in lower tax brackets trickles through to tax payers in the higher tax brackets. The extent to which the different categories of taxpayers will benefit from the reduction in tax, is shown in Table 2.8.

Table 2.8: Benefit from the Reduction in Tax, 1997/98 by income group

Income	Percentage of tax relief
0 - 30 000	15
30 001 - 60 000	44
60 000 - 90 000	21
90 001 - 120 000	12
120 001 and above	8

Source: Budget Review, 1997

2.7.2 General Sales Tax / Value Added Tax

General Sales Tax (GST) was introduced in South Africa in July 1978 following a recommendation of the Standing Committee on Tax Policy. GST was introduced to broaden and extend the tax base as a result of the increase in expenditure requirements. When GST was introduced, the intention was to keep the rate low. However, because of the increasing expenditure commitments and the use of GST in demand management, the rate was increased six times from 4% in 1978, to 13% in 1991.

In September 1991, the Value Added Tax (VAT) was introduced, replacing the GST. The government introduced VAT after modifying and then accepting the proposal made by the Commission of Inquiry into the Tax Structure of the RSA (the Margo Commission) in 1987. The VAT rate was set at 12% and a broad base inclusive of all regular consumer goods and services, but excluding exports and capital goods, was adopted. Certain education and health services, financial services and services of various non-governmental organisations remained exempt. Provision was also made for the zero rating of brown bread and maize meal only. In 1993, the VAT rate was increased to 14%. At present 19 basic foodstuffs are zero rated.

An analysis of the impact of VAT and zero rating has to take into account the different spending patterns of the different income groups. Lower income groups were found to spend a larger proportion of their incomes on basic goods and consumables such as food, drinks, tobacco, clothing and footwear, energy sources and furniture. Food represents the single

largest item for poor and low income households, taking up more than 30% of total income. For high income households this declines to less than 10% of total income.

The poor spend about 28.5% and the rich approximately 30% of their food budget on meat products. Meat products are not in the zero rated category. The poor spent 23% of their food budget on cereal products (flour, rice, bread, etc) compared to 11% spent by the rich. The poor spent more on vegetables, 12%, compared to the rich , 10% (Katz Commission Interim Report, 1996)

The estimated burden of VAT per household is presented in Table 2.9.

The proportion of income paid as VAT for poor households is higher than that paid by the high income groups, suggesting that VAT and zero rating does not benefit the poor. This suggests that VAT is a regressive tax.

Table 2.9: Estimated VAT Paid by Income Group, 1994/95

	Very Poor	Low Income	Middle Income	High Income	Very High Income
Total VAT paid per household, per annum	R731	R1 719	R4 607	R10 151	R16 068
% of Household Income	8.8%	7.0%	7.0%	6.6%	4.9%

Source: Interim Report of the Commission of Enquiry into Certain Aspects of the Tax Structure of South Africa, 1996.

The equity implications of using PIT, as opposed to VAT, is more complex. After accounting for exemptions and tax credits the PIT is less progressive than the rate structure appears. Since VAT is levied only on formal market transactions, the proportion of income paid may vary amongst the poor. In addition, there has been a dramatic shift in developing countries towards the use of VAT over direct taxes. The reasons for this are administrative (the ease and cost-effectiveness of collection), and that fewer distortions are introduced than from trade taxes. The counter to the regressivity argument is that spending should be more directly targeted to the poor, thus equity concerns are addressed through the expenditure side also.

This is the approach adopted in this document. There is a need, however, to recognise that in the context of a highly unequal distribution of income, there is a break-down of the benefit principle of taxation. In other words, those who pay the tax have less direct benefit from public spending. Whether there is a political necessity to limit the tax level or widen the tax base therefore becomes a crucial determinant of the ability to achieve the restructuring and targeting which is discussed below.

2.8 The Macro-Economic Strategy

In June 1996, the Department of Finance published the *Growth, Employment and Redistribution (GEAR)* document. The goals of macro-economic policy as enunciated in this document are the attainment of a growth rate of 6% per annum and job creation of 400 000 jobs per annum by the year 2000. The core elements of the GEAR strategy are:

- reduction of the fiscal deficit to 3% of GDP by the year 2000;
- budget reform to improve the redistributive aspect of the budget;
- gradual relaxation of exchange controls;

- maintenance of monetary policies consistent with inflation reduction and exchange rate management to stabilise the real effective exchange rate at a competitive level;
- consolidation of trade and industrial policy reforms, incorporating lowering of tariffs;
- an expansionary public infrastructure investment programme;
- introduction of tax incentives to stimulate investment; and
- labour market flexibility and enhanced productivity (DoF, 1996).

As the new macro-economic policy was only formulated just over a year ago and several elements of it are not yet in place, it will be somewhat premature to attempt an evaluation here. However given that the focus of this document is on health and education expenditure, there is little doubt that GEAR's emphasis on reducing government expenditure will have a major impact on the short term level of public expenditure in these two sectors.

In 1996, real GDP grew by about 3% which was below the GEAR target. This means that there will be a slower growth in revenue and fewer resources will be available for spending by the government. Given government's commitment to meeting the deficit target, and the fact that the debt servicing is the first call on revenue raised, it is clear that fewer resources will be available for social spending.

Raising revenue from taxes will also be constrained by the fact that there has been a decline in employment - in contrast to what the GEAR predicted. Private sector employment declined for the first three quarters of 1996. The fourth quarter had a modest increase of about 0.7%. Private sector employment decreased by 2.3% in the first quarter of 1997. Public sector employment decreased in the first and fourth quarters of 1996. The second quarter experienced an increase of 3.9% followed by a growth of 0.9% in the third quarter of 1996. The first quarter of 1997 saw a decrease by 3%. In total, employment decreased by 6.1% in 1996 and by 2.5% in the first quarter of 1997. The failure to create jobs in the formal sector could mean a decrease in the tax base and therefore less revenue to be shared amongst the government functions.

2.9 Expenditure Assignment and Revenue Means of the Provincial Governments

Unlike several developing countries, the new Constitution of South Africa fairly clearly stipulates the expenditure assignment by tier of government.

Expenditure responsibilities exclusively for the national government include defence, foreign affairs, tertiary education, justice and correctional services, water affairs and monetary policy.

Schedule 4 of the final Constitution lists the concurrent areas of competence for the national and provincial governments. Part A of Schedule 4 lists, inter alia, education, health, housing, agriculture, casinos and other gambling and public transport. Part B lists a range of local government expenditure responsibilities including air pollution, building regulations, child care facilities, fire fighting, municipal airports, municipal health and municipal public transport.

Schedule 5 lists expenditure responsibilities where provinces have exclusive competence. Part A includes such services as abattoirs, ambulances, and provincial libraries whereas Part B shows local government matters such as beaches, cemeteries, cleansing and local sports facilities.

Provinces thus have concurrent responsibility for major expenditure functions such as education, health and social welfare.

There is however, a serious mismatch in revenue means of the provinces and their expenditure needs. All the major taxes including personal and corporate income tax, value added tax and customs duties are located at the centre. Provinces currently derive their own revenues mainly from the following sources: user charges (for example at hospitals), motor vehicle licences, and horse racing and other gambling. Revenue from provincial own sources constitute only a tiny fraction of total revenue in each province with the range extending from a low of 2.1 per cent in the Eastern Cape to 5.7 per cent in Gauteng and the mean for all provinces at 4.4 per cent (FFC, 1997).

The revenue options for the provinces other than those listed above are the following: borrowing (which is currently severely constrained by the national government), the imposition of a flat rate surcharge on the personal income tax base (not yet implemented mainly because of the absence of necessary national regulatory legislation) and transfers from the pool of nationally collected revenue. The last option currently constitutes the main source of revenue (over 95 per cent) for the provinces.

The sharing of nationally collected revenue occurs through formula funded mechanisms which determine both the vertical (global shares of national governments and provinces) and horizontal (the nine provincial shares) divisions. The main advantages of a formula funded mechanism is that it ensures predictability of revenue for a set period (say 3 to 5 years) and it provides reduced opportunities for manipulation to serve political needs.

The horizontal division of resources is determined using a provincial grants formula comprising a package of conditional and unconditional grants. The formula which primarily addresses inter-provincial (or inter-jurisdictional) inequity rather than intra-provincial inequity uses as its main criteria population and a measure of poverty (Details of the formula are provided in Chapter 5).

2.10 Conclusion

This chapter outlined the trends in government expenditure and revenue as well as providing a brief description of personal income and value added taxes.

South Africa's public expenditures amounted to 32% of GDP in 1996 well above the average for middle income developing countries. Expenditures increased to this level from around 23% in 1980.

The composition of government spending has changed dramatically. A striking feature is the rise in the share of interest payments - from less than 2% of GDP in 1973 to 4% of GDP in 1995. Second, the share of transfers (to individuals) increased, particularly in the nineties. On the other hand, there was a gradual decline in the share of capital spending, which fell from 7% of GDP in 1973 to only 3% in 1995 and 2% in 1996.

Government revenue on the other hand increased to almost 27% of GDP in 1996 from less than 23% in 1980. This excludes own source revenues of local and provincial governments which for the 1996/1997 financial year was estimated to be in the region of R45 billion.

The major revenue sources in 1996 were personal income tax (39% of the total), VAT (24%), company tax (12%), excise duties (12%), fuel levy (7%) and customs duties (4%). The major shift in revenue source has been away from company taxation towards increased personal income and value-added taxes.

The personal income tax system is progressive and efforts have been made to promote equity (in taxation between the sexes) and to bring tax relief to those at the lower end of the income spectrum. On the other hand there is evidence from expenditure surveys suggesting that VAT is a regressive tax.

This chapter listed also the goals and core elements of the GEAR strategy. Finally, the vertical imbalance in expenditure assignment and revenue means of provincial governments was described.

CHAPTER 3

ANALYSIS OF BUDGET EXPENDITURE

3.1 Introduction

This chapter has three components. The first examines the structure of government expenditure for the period 1983-1995 by focusing particularly on the shifts in the functional and economic classification of expenditure. This section also analyses the growth of the budget deficit and government debt during the 1980s and 1990s and the sources of deficit financing. The second major component of this chapter is an analysis of public expenditure on education. In this section the trends in education expenditure as a proportion of total expenditure and of GDP as well as changes in nominal and real total education expenditure are analysed. Also, the changes in the ratio of current and capital expenditure and the composition of education expenditure by level of expenditure are described. The third and final component is an analysis of public expenditure on the health sector. Here the trends in total health care expenditure, as well as in recurrent and development expenditure are examined in detail. In addition, there is an analysis of health care expenditure by input and service categories and a brief description of the geographic and racial distribution of health care resources.

3.2 Structure of Government Expenditure

This section examines the trend in and composition of government expenditure between 1983 and 1995. Table 3.1 shows the functional classification of expenditure as a share of total government expenditure. A functional classification is useful because it focuses on expenditures among and within sectors. During the period under consideration the composition of public expenditures changed significantly. An important change was the increase in the share of social services from about 10% of GDP and 34% of the budget in 1983 to 15% of GDP and 39% of the budget in 1995. The components within social services which increased were education -from 5% to 7% of GDP- and social security and welfare payments -from 1.6% to 3.2% of GDP-. Spending on health remained around 3% of GDP (SARB, Various Years).

At the same time the proportion of the budget devoted to economic services declined from 18% of budgetary expenditures in 1983 to 15% of total expenditures in 1995. Agriculture, forestry and fishing, manufacturing and transport and communication all shared in this decline.

Table 3.1 indicates that the functions which increased their share of expenditure included General Public Services, Public Order & Safety, Education, Social Security & Welfare and Interest Payments.

The sectors experiencing a decline were Defence, Health, Housing, Agriculture, Mining, Manufacturing & Construction and Transport & Communication. Defence's share of expenditure was more than halved while the proportion allocated to health declined from 9.8% to 9.1%.

Table 3.1: Functional Classification of Expenditure as a Share of total Government Expenditure

Classification	1983	1985	1990	1995
General Public Services	8.3	8.5	9.2	10.9
Defence	14.2	12.6	12.8	6.7
Public Order and Safety	5.5	6.2	6.8	8.8
Education	17.7	17.4	17.7	20.4
Health	9.8	9.8	8.9	9.1
Social Security and Welfare	6.2	5.9	6.3	9.2
Housing and community amenity affairs and services	4.8	4.3	4.4	3.4
Recreation and culture	1.7	1.7	1.3	1.5
Fuel and Energy	0.2	0.2	0.2	4.5
Agriculture, forestry and fishing	3.4	4.4	2.4	1.9
Mining, manufacturing and construction	2.4	3.3	3	0.9
Transportation and communication	10.1	7.2	6	5.1
Other economic services	1.5	1.6	2.4	2.7
Interest	12.9	15.3	12.4	13.6
Other	1.5	1.5	6.2	1.3
Total¹	100	100	100	100

Source: South African Reserve Bank, Various Years

Notes:

1. The total may not add up to hundred due to rounding up of numbers

2. The percentage shares differ to those of the Department of Finance because they use fiscal years and the Reserve Bank use calendar years

The functional classification of government expenditure shows that for the period 1983-1995, Education (17.7% to 20.4%), Interest payments (12.9% to 13.6%) and General Public Services (8.3% to 10.9%) were the largest items of expenditure. Expenditure on Social Security and Welfare (from 6.2% to 9.2%) and Fuel and Energy (0.2% to 4.5%) increased significantly although in the latter case there was a substantial increase from 0.6% in 1994. Expenditure on health services fell from 9.8% of the total in 1983 to 9.1% in 1995.

Some of the more important determinants of the composition of general government expenditure since 1982 have been :

- (a) the drive to expand access to the quality of social services, particularly through increased provision of education and health to groups deprived during most of the apartheid era; (however, the significant increase in education and expenditure took place between 1976 and 1982)
- (b) the equalisation of social grants across all race groups;
- (c) agricultural and climatic conditions characterised by frequent and varying periods of drought necessitating government support for farmers;
- (d) the shift towards a more outward-oriented economic growth strategy requiring in some instances the provision of export incentives by government;
- (e) the changing external and internal security situation;
- (f) the growth of the public debt since the late 1980s, including stock issues in respect of formerly unfinanced liabilities;
- (g) the impact of higher interest rates on state debt costs; and
- (h) the efforts to make government pay structures more equitable by gender and race (Budget Review, 1995).

The relative economic size of the public sector in South Africa has been quite significant. This is due to the fact that in South Africa, government has been (and to a large extent still is) responsible for many of the functions including the maintenance of law and order, national defence, education at all levels, the major proportion of health care, the payment of social pensions, the postal and telecommunications network, the road networks, the railways, the harbours, the airways and the generation of power. In addition, the South African government is heavily involved in the industrial sector through the large public corporations and it produces iron and steel, chemicals, fertilisers, oil from coal and enriched uranium through this medium. Some of these state responsibilities however, are gradually being transferred to the private sector.

Throughout the observation period, the increase in government spending was due largely to increased consumption spending. Table 3.2 which reflects the economic classification of government spending between 1980 and 1996 shows that consumption expenditure (as reflected in the sum of expenditure on goods and services, interest, subsidies and other current transfers) dominated during this period.

Between 1980 and 1996 consumption expenditure as a proportion of total expenditure increased from 78% to 90%. As a consequence, capital expenditure as a proportion declined from 22% to 10%.

Table 3.2: Economic Classification of Government Expenditure

Year	Goods and services	Interest	Subsidies and other current transfers	Total current expenditure	Acquisition and purchase of fixed capital assets	Capital transfers and unclassified items	Total capital expenditure	Total expenditure
1980	55.7	8.9	13.8	78.4	16.5	5.2	21.7	100.0
1985	56.8	11.2	13.7	81.7	12.7	5.7	18.4	100.0
1990	61.3	14.0	13.2	88.5	9.6	1.9	11.5	100.0
1995	59.6	15.6	16.4	91.6	6.3	2.3	8.6	100.0
1996	59.4	17.0	13.9	90.3	6.6	3.1	9.7	100.0

Source: South African Reserve Bank, Various Years

The disturbing aspect of the increases in government consumption spending is that the increases were financed mainly through borrowing, which was facilitated by the unification of the revenue account and the loan account of the budget into a single state revenue account in 1976. Prior to the unification of the two accounts, current expenditure was financed out of current revenue, while loans were only used to finance capital expenditures. Consequently, interest payments on government debt became an important budget item.

Table 3.2 has the following important features:

- (a) Total current expenditure between 1980 and 1996 increased from 78% to 90%
- (b) As a consequence, total capital expenditure declined from 22% to 10%.
- (c) Interest payments during this period went up from 9% to 17% of total expenditure

3.3 Budget Deficit and Government Debt

It is evident from Table 3.3 that both the budget deficit and government debt as a proportion of GDP increased alarmingly during the 1980s and 1990s. The budget deficit as a proportion

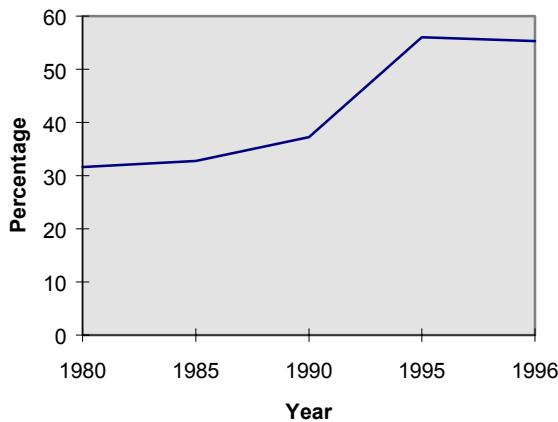
of GDP increased from 0.9% in 1980 to 10.1% in 1993 and then declined to 5.4% in 1996 (Budget Review, 1997). Similarly, government debt increased from 32% of GDP in 1980 to 56% in 1996. Figure 3.1 provides an illustration of the growth of government debt for the period 1981-1997 and Figure 3.2 shows the growth of the budget deficit.

Table 3.3: Budget deficit and government debt as a percentage of GDP

Year	Budget Deficit	Debt
1980	0.9	31.6
1985	3.3	32.8
1990	3.2	37.2
1995	5.7	56.0
1996	5.4	55.3

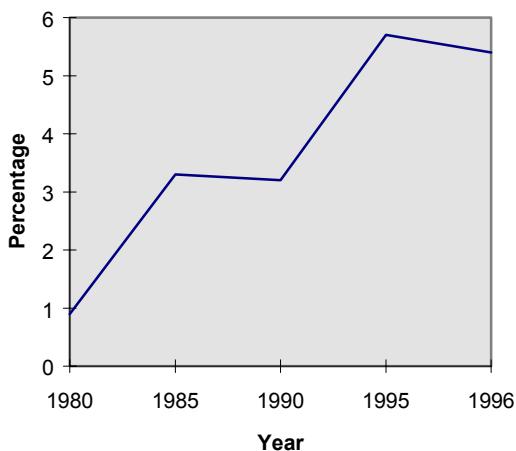
Source: Budget Review, 1997

Figure 3.3: Total Debt as a % of GDP



Source: Computed from Table 3.3

Figure 3.4 : Budget Deficit as a % of GDP



Source : Computed from Table 3.3

The source of deficits could be attributed mainly to the growth in expenditures. On average, government expenditures grew at an annual average rate of 3.2% during the 1980 - 1997 period. Over the same period, revenues grew at an annual average of 2.6%, implying that the deficits persisted not because of any stagnation in revenue growth but because of the surge in expenditure growth. Attempts to contain the expenditure growth were concentrated rather severely on the curtailment of capital spending which was cut from 21.7% of total government spending in 1980 to 9.7% in 1996, with adverse effects on the growth capacity of the economy. (Table 3.2)

The other factor that contributed to the increase in the budget deficit in the 1980s was the rise in the nominal interest rates. In an inflationary environment, variations in the ratio of conventional fiscal deficit to GDP might well be caused mainly by changes in the nominal interest payments on the stock of public debt with floating interest.

The government debt has remained above 30% of GDP since 1980 (Table 3.3). This upward movement in government debt is clearly unsustainable. The inclusion of the debt of the TBVC (Transkei, Bophuthatswana, Venda, Ciskei) countries and self-governing territories (SGTs) pushed the debt to GDP ratio to 56% in 1995. In 1996, the ratio declined slightly to 55.3% but is expected to increase to 56% by the end of 1997.

The ratio of domestic to foreign debt has been consistently high. In both 1980 and 1996 domestic debt comprised 96% of government debt. The lowest this figure declined to was 83% in 1989 and 1990.

The deficit has been financed mainly through domestic borrowing (Table 3.4). In 1980, R1.7 billion was borrowed on the domestic market to finance the deficit. In 1996 domestic borrowing had reached R29.3 billion from a peak of R40.5 billion in 1994.

Table 3.4: Sources of deficit financing (Rm)

Year	Domestic financing	Foreign Financing	Total Financing
1980	1 738	47	1 785
1985	4 912	215	5 127
1990	1 586	-96	1 490
1993	30 853	537	31 390
1994	40 508	-141	40 367
1995	25 060	2 604	27 664
1996	27 591	1 744	29 335

Source: South African Reserve Bank, Various Years

Foreign financing of the deficit was significantly low. During the 1986 - 1991 period, there was a net outflow of capital. This may have been a result of the sanctions and political isolation that the country went through during this particular period. In 1994 also there was a net outflow of capital. This may be attributed to the uncertainty caused by the 1994 elections, which led investors to reconsider their investments in South Africa. In 1995, foreign financing was quite high as it appeared that the uncertainties that were created in the period leading to the elections had subsided and the peaceful political transition increased the level of investor confidence. However, the level of foreign financing decreased in 1996.

Domestic long term loans were the major source for financing the gross borrowing requirement. The value of domestic short-term loans varied and were sometimes zero. In the early 1980s foreign loans were important in financing the gross borrowing requirement. In the late 1980s, they decreased significantly. As mentioned above, during this time the country was isolated by the international community because of the apartheid regime and the constant plea by the liberation movements to impose sanctions on South Africa. From 1994, foreign loans started flowing into the country again (SARB, Various Years).

Transfers from the International Monetary Fund (IMF) to finance the gross borrowing requirement were received only in 1980, and again during the 1985 - 1987 period. Between 1987 and 1996 there were no transfers from the IMF accounts at the South African Reserve Bank (SARB). In 1996 these transfers resumed and it is expected that they will increase in 1997 (SARB, Various Years).

The proceeds from the sale of state assets were zero until 1983. In 1984, these proceeds started coming in, increasing their share of financing the gross borrowing requirement from 3.7% in 1984 to 10.2% in 1986. Thereafter the share decreased and was zero again in 1994. In 1995, 2.8% of the financing of the gross borrowing requirement came from selling state assets. This share increased to 3.4% in 1996 and it is expected to grow in 1997 to 4.8% (SARB, Various Years).

3.4 Education Expenditure

Conventional wisdom has it that South Africa is spending, at best, as much as it should be spending, and at worst, more than it should be, on education in particular and on the social sectors in general. Levels of expenditure are analysed in terms of conventional indicators such as percentage of GDP and proportion of the total budget. In terms of these indicators South Africa is at or near the top of the league with respect to both similar middle-income and many industrialised countries.

It can be argued, however, that these criteria are inappropriate given the history of this country, the inequitable pattern of past expenditure and importantly the quantity and quality of education that should be provided for the youth of the country. While there are undoubtedly important questions relating to the efficiency of expenditure, total education expenditure has to be seen within the context of the enormous infrastructure backlogs in education, the current abysmal levels of funding in such areas as adult basic education and training and early childhood education and the need to provide adequate learning materials and increased access to technical education. In addition, there is the vexing question relating to more adequate funding of the rapidly expanding higher education sector.

Table 3.5 shows that public expenditure on education as a percentage of total government expenditure was in the range of 22-24% for the late 1980s and 1990s while expenditure as a percentage of GDP increased steadily during the late 1980s to reach a peak of 7.3% in 1992 and 1993 and then declined to around 7.0% in 1996. On both these indicators South Africa compares favourably with countries having a similar GNP per capita and with countries in the Southern African region.

Table 3.5: Public Expenditure on Education

YEAR	% OF TOTAL EXPENDITURE	% OF GDP
1987/88	22,9	5,8
1988/89	21,9	5,5
1989/90	22,0	5,7
1990/91	22,3	6,3
1991/92	23,9	6,5
1992/93	23,8	7,3
1993/94	24,4	7,3
1994/95	22,0	6,9
1995/96	22,1	6,9
1996/97	22,1	7,0
1997/98	21,3	6,5
AVERAGE	22,6	6,5

Source : Pillay, 1994; World Bank, 1996

As indicated earlier, the education sector was one of the main beneficiaries of the shifts in public expenditure during the 1980s and 1990s. Table 3.6 shows the magnitude of these changes in both nominal and real terms between 1983 and 1995. The annual average increase in nominal expenditure between 1983 and 1995 was 15.9% and for the period 1990-95, 15.5%. In real terms the corresponding figures were 4.6% and 5.6%.

Table 3.6: Total Education Expenditure, 1983-1995(R,m & % change)

Year	Nominal	% change	Real	% change
1983	4 348		11 503	
1984	4 977	12.6	11 794	2.5
1985	6 157	19.2	12 540	5.9
1986	7 601	19.0	13 060	4.0
1987	9 327	18.5	13 797	5.3
1988	10 886	14.3	14 286	3.4
1989	12 625	13.8	14 445	1.1
1990	15 408	18.1	15 408	6.3
1991	18 886	18.4	16 380	5.9
1992	22 505	16.1	17 140	4.4
1993	27 737	18.9	19 248	11.0
1994	29 756	6.8	18 953	-1.6
1995	34 878	14.7	20 456	7.3

Source : Computed from SARB, Various Years

Education expenditure as a proportion of total discretionary expenditure (i.e total expenditure less mandatory interest payments) has been increasing almost consistently between 1983 and 1995. Table 3.6 shows that this proportion increased from 19.9% in 1983 to 24.6% in 1995.

Table 3.6: Education Expenditure as a Proportion of Total Discretionary Expenditure

Year	%
1983	19.9
1984	19.7
1985	20.5
1986	20.8
1987	21.1
1988	21.3
1989	20.5
1990	21.4
1991	22.1
1992	23.4
1993	23.7
1994	21.4
1995	24.6

Source : Pillay, 1994; World Bank, 1996

A feature of education expenditure in South Africa has been and still is, the high proportion that is devoted to current expenditure, particularly salaries of educators and other personnel. Table 3.7 shows this division for the college-school (CS) sector. The ratio of current to capital expenditure was around 94-96% in 1987, 1991 and 1995 and declined slightly to 93% in 1996.

Table 3.7: Current & Capital Expenditure on CS-Education

Year	Current	% GDP	Capital	% GDP	Total	% GDP
1987	9 352 600	5.6	507 811	0.3	9 860 411	5.9
1991	20 402 534	6.6	754 682	0.2	21 157 216	6.8
1995	27 283 215	5.6	1 078 032	0.2	28 361 247	5.8
1996	32 885 480	6.0	2 490 205	0.5	35 375 685	6.5

Sources : Buckland & Fielden, 1994; Department of Education, 1997

Data from many developing countries indicate that public expenditures on education are favourably biased towards primary/basic education (on average primary education accounts for 40% of all education expenditures in developing countries and secondary school education accounts for about 30%).

It can be seen from Table 3.8 that the share of primary/secondary education in the budget increased between 1987/88 and 1991/92 and the share of university education declined. But these favourable trend seems to have been reversed in 1995/96 with a slight increase in the share of the tertiary sector.

Table 3.8: South Africa: Composition of Public Spending on Education

Level of Schooling	1987/88	1991/92	1995/96
Pre-primary	0.7	0.4	0.7
Primary	38.1	43.0	46.0
Secondary	30.4	31.0	33.0
Subtotal	69.2	74.4	79.7
Tertiary	15.5	12.4	13.0
- University	13.0	10.0	9.5
- Technikon	2.5	2.4	3.5
Other	10.6	13.1	7.3

Sources : Buckland & Fielden, 1994; Department of Education, 1996 & 1997; Provincial Education Budgets, 1995/96.

3.5 Health Expenditure

3.5.1 Historical Trends in Public Sector Health Care Expenditure

Data on trends in public sector health care expenditure were derived from a database which is maintained by the Health Economics Unit, University of Cape Town.

Table 3.9: Historical Trends in Recurrent Public Sector Health Care Expenditure in South Africa (1980/81 - 1997/98)

Year	Nominal expenditure (R,m)	Real expenditure in 1990 (R,m)	Real per capita expenditure (Rand)	% change in real per capita expenditure	Expenditure as % of GDP
1980/81	1 391	5 435	200.61	-	2.21
1981/82	1 736	5 963	215.56	7.5	2.36
1982/83	2 142	6 386	226.07	4.9	2.57
1983/84	2 626	6 824	236.58	4.6	2.75
1984/85	3 131	7 241	245.82	3.9	2.82
1985/86	3 549	7 360	244.71	-0.5	2.78
1986/87	4 558	8 128	264.63	8.1	3.09
1987/88	5 511	8 285	264.18	-0.2	3.19
1988/89	6 237	8 076	252.18	-4.5	3.01
1989/90	7 380	8 465	258.85	2.6	3.06
1990/91	8 608	8 607	257.77	-0.4	3.12
1991/92	9 726	8 502	249.34	-3.3	3.06
1992/93	12 074	9 154	262.88	5.4	3.43
1993/94	13 480	8 972	252.34	-4.0	3.41
1994/95	15 028	9 118	251.14	-0.5	3.38
1995/96	15 345	8 542	230.39	-8.3	3.07
1996/97	16 158	8 274	218.56	-5.1	2.94
1997/98	18 075	8 619	-	-	2.99

Source : Health Economics Unit (HEU, UCT)

Note: Population figures not available for 1997 - hence no per capita expenditure figures for 1997/98.

Recurrent public sector health care expenditure increased from R1.4 billion in 1980/81 to a budgeted level of R18.1 billion in 1997/98 (Table 3.9). In real terms, expenditure increased from R5.4 billion in 1980/81 to R8.6 billion in 1990/91. While real expenditure has fluctuated during the 1990s, the estimated real expenditure for 1997/98 was at the same level as in 1990/91. The average annual increase in real recurrent expenditure was approximately 2.75 percent between 1980/81 and 1997/98. However, real per capita recurrent expenditure only increased by an average of 0.6% percent per annum between 1980/81 and 1996/97. Real per capita expenditure increased from R200.61 in 1980/81 to R218.56 in 1996/97. Recurrent public sector health expenditure as a percentage of gross domestic product (GDP) increased from 2.21 percent in 1980/81 to 2.99 percent in 1997/98.

Table 3.10: Historical Trends in Development Public Sector Health Care Expenditure in South Africa (1980/81 - 1997/98)

Year	Nominal expenditure (R,m)	Real expenditure in 1990 (R,m)	Real per capita expenditure	% change in real per capita expenditure	Expenditure as % of GDP
1980/81	76	297	10.98		0.12
1981/82	94	324	11.73	6.8	0.13
1982/83	104	311	11.01	-6.1	0.13
1983/84	116	303	10.50	-4.6	0.12
1984/85	195	452	15.33	46.0	0.18
1985/86	248	514	17.10	15.5	0.19
1986/87	253	452	14.71	-14.0	0.17
1987/88	215	324	10.32	-29.8	0.12
1988/89	248	322	10.04	-2.7	0.12
1989/90	268	307	9.40	-6.4	0.11
1990/91	298	298	8.94	-4.9	0.11
1991/92	275	241	7.05	-21.1	0.09
1992/93	636	482	13.83	96.2	0.18
1993/94	698	465	13.07	-5.5	0.18
1994/95	778	472	13.01	-0.5	0.17
1995/96	987	549	14.82	13.9	0.20
1996/97	1 360	697	18.40	24.2	0.25
1997/98	1 608	767	-	-	0.27

Source : Health Economics Unit, UCT

Due to the incompleteness of development expenditure data as well as the inherent 'lumpiness' of expenditure on infrastructural development, trends in these data are not considered in detail. There was a noticeable increase in real public sector health care development expenditure after the 1994 elections (Table 3.10). Nominal development expenditure increased to nearly R636 million in the 1992/93 financial year (partly attributable to the pre-election clinic building programme), and has shown marked increases from the 1995/96 financial year to date. Real public sector health care development expenditure increased at an average rate of 5.73 percent per annum between 1980/81 and 1997/98. As a proportion of GDP, development expenditure has increased from 0.12 percent in 1980/81 to 0.27 percent in 1997/98.

With respect to the relationship between recurrent and development expenditure, it is of concern that real recurrent expenditure has effectively remained constant between 1990/91 and 1997/98, despite significant increases in development expenditure (nearly 260%) over this period. As will be highlighted in later chapters, most of the new health facility development relates to clinics. It is proposed that the recurrent expenditure requirements of these new facilities should be met through geographic and level-of-care resource redistribution. However, given that expenditure redistribution within the health sector requires the shifting of personnel (which is likely to meet with resistance and hence take considerable time to accomplish), it is likely that many of the newly constructed facilities will remain unoperational in the short- to medium-term.

Table 3.11: Historical Trends in Total Public Sector Health Care Expenditure in South Africa (1980/81 - 1997/98)

Year	Nominal expenditure	Real expenditure in 1990 (R,m)	Real per capita expenditure	% change in real per capita expenditure	Expenditure as % of GDP
1980/81	1 467	5 732	211.59		2.33
1981/82	1 831	6 288	227.29	7.4	2.49
1982/83	2 247	6 697	237.08	4.3	2.70
1983/84	2 742	7 127	247.08	4.2	2.87
1984/85	3 327	7 692	261.15	5.7	2.99
1985/86	3 797	7 875	261.81	0.3	2.97
1986/87	4 811	8 579	279.34	6.7	3.26
1987/88	5 726	8 609	274.50	-1.7	3.31
1988/89	6 485	8 398	262.22	-4.5	3.13
1989/90	7 648	8 772	268.25	2.3	3.17
1990/91	8 906	8 906	266.71	0.6	3.23
1991/92	10 002	8 742	256.39	-3.9	3.15
1992/93	12 709	9 635	276.72	7.9	3.61
1993/94	14 178	9 437	265.41	-4.1	3.58
1994/95	15 806	9 590	264.14	0.0	3.55
1995/96	16 332	9 091	245.20	-7.2	3.27
1996/97	17 518	8 971	236.96	3.4	3.18
1997/98	19 683	9 385	-	-	3.25

Source : Health Economics Unit, UCT

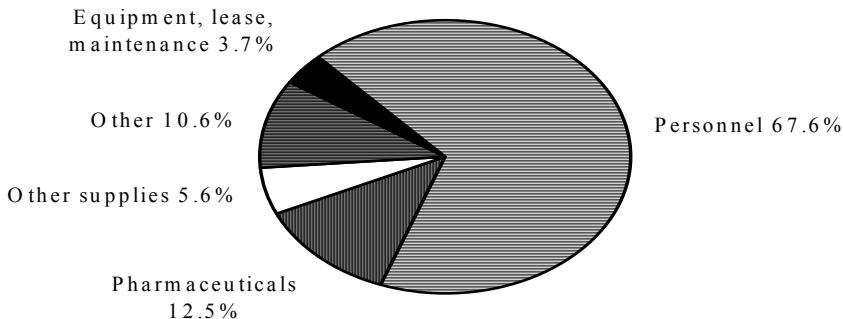
As development expenditure only represents 5 to 8 percent of total public sector health care expenditure, trends in total expenditure follow a similar pattern to that for recurrent expenditure (Table 3.11). Real health care expenditure increased by an average of 2.94 percent per annum during this period, while real per capita expenditure increased by only 1.3%. Total public sector health care expenditure as a percentage of GDP increased from 2.33% in 1980/81 to 3.25% in 1997/98.

In summary, while there have been increases in both nominal and real public sector health care expenditure since 1980/81, there has been a relatively slow rate of growth in real per capita expenditure during this period. The more noticeable increase in the share of GDP attributable to the public health sector was due to the combination of a real increase in health care expenditure and slow rates of real GDP growth over this period.

3.5.2 Distribution of Public Sector Health Care Expenditure by Input and Service Categories

The South African Health Expenditure Review (HER) contains the most recent estimates of the distribution of recurrent public sector health care expenditure according to input categories (McIntyre *et al*, 1995). Figure 3.5 indicates that the majority of public sector health care expenditure in 1992/93 was attributable to personnel costs (salaries and wages) (67.6%), while pharmaceutical supplies (12.5%) and other supplies (5.6%) accounted for the second largest component (*ibid*).

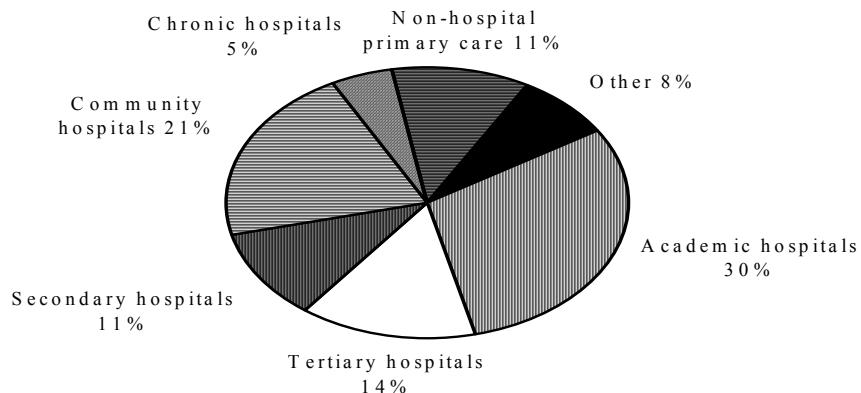
Figure 3.5: Distribution of Recurrent Public Sector Health Expenditure by Inputs (1992/93)



Source: McIntyre *et al* (1995)

The HER also analysed the distribution of recurrent public sector health care expenditure by category of service (McIntyre *et al*, 1995). Figure 3.6 highlights the bias towards curative, hospital-based health care in the South African health sector. Acute hospitals accounted for 76% of recurrent public sector expenditure in 1992/93, while non-hospital primary care services (i.e. clinics, community health centres, school and environmental health services) only accounted for 11% of expenditure. There is a particularly heavy concentration of resources in academic and other tertiary hospitals, with 44% of recurrent public sector health care expenditure being devoted to these facilities in 1992/93.

Figure 3.6: Distribution of Public Sector Health Care Expenditure by Level of Care (1992/93)



Source: McIntyre *et al* (1995)

3.5.3 Physical Inputs to Public Sector Health Services

The above analysis of the distribution of recurrent health care expenditure reflects the labour intensive nature of health services. It also highlights the hospital-centred approach to health service delivery in South Africa at the time of the 1994 elections. These expenditure patterns reflect the underlying distribution of physical health service inputs.

Table 3.12: International Comparison of Health Sector Input Indicators

Country	GNP per capita (US\$)	Hospital beds per 1,000 population*	Population per physician*	Population per nurse*
South Africa	2 560	4.0	1 661	237
Southern African countries				
Mozambique	80	0.9	50 000	4 000
Malawi	230	1.6	27 000	14 000
Zambia	360	--	7 000	2 000
Zimbabwe	650	2.1	6 000	1 000
Botswana	2 530	2.4	4 000	500
Selected middle-income countries				
Malaysia	2 520	2.4	2 700	380
Venezuela	2 730	2.9	630	330
Argentina	2 790	4.8	530	960
Uruguay	2 840	4.6	910	--
Brazil	2 940	3.5	2 030	4 140
Mexico	3 030	1.3	1 480	1 610

*The indicators reflect the most recent year for which data are available (usually between 1985 and 1992).

South African data are for 1992/93.

Sources: World Bank (1993): Tables 1, 28, and A.8; World Bank (1994): Tables A-11; South African data from McIntyre *et al* (1995)

In 1993, South Africa had 161 949 hospital beds, which is equivalent to 4.0 per 1 000 population (Chetty, 1995). The number of hospital beds in 1988 was 158 567 (i.e. a 2% increase between 1988 and 1993). There is a greater availability of hospital beds in South Africa than in any of the neighbouring Southern African countries (see Table 3.12). It is also higher than that in many other middle-income countries for which data are provided in Table 3.12. However, the bed to population ratio in South Africa is similar to the mean number of hospital beds per 1 000 population of 4.1 reported in a survey of 78 middle income countries (Barnum and Kutzin, 1993). However, it should be noted that only 120 021 hospital beds were located in the public sector (i.e. 74% of all beds). The other quarter of beds are located in the private sector.

In 1992/93, there were 3 141 fixed public sector clinics in South Africa (McIntyre *et al*, 1995). This translates into 12 955 people per clinic, which is above the World Health Organisation's (WHO) recommendation of one clinic for every 10 000 people. A recent World Bank (1994) publication estimates that there is an average of 8 046 people per health centre and health post in Sub-Saharan Africa. Thus, while South Africa has reasonably good hospital infrastructure by international standards, its clinic and health centre infrastructure requires improvement.

South Africa is reasonably well supplied with doctors with 1 661 people per doctor and 237 people per nurse (Table 3.12). However, these figures may be an over-estimate of the

availability of staff as they are based on the registers of the relevant statutory councils for health personnel, which include some personnel who are no longer in active practice in South Africa. In addition, only 41 percent of doctors and 79 percent of nurses worked in the public sector in 1990 (these proportions have declined since that time). Of those health personnel practising in the public sector, relatively few work in non-hospital primary care services. For example, only 10.1 percent of publicly employed general doctors and 17 percent of nurses worked in primary care services in 1992/93 (McIntyre *et al*, 1995).

In summary, while there is a relatively good availability of physical resources in the South African health sector, there are disparities in the distribution of these resources between the public and private sectors, as well as between different categories of health services (particularly in terms of hospitals versus health centres). It has been estimated that less than 23 percent of South Africans have regular access to private sector services (in terms of having some form of institutionalised health care cover). Yet, approximately 60 percent of total health care expenditure in 1992/93 (i.e. expenditure funded from public and private sources, which was equivalent to 8.5 percent of GDP) was devoted to private sector services, and the majority of the most highly trained health personnel work in the private sector. Thus, the availability of health sector resources (financial and physical) is more restricted for the population who are dependent on the public sector for services.

3.5.4 *Distribution of Health Care Resources (geographic and between 'race' groups)*

There are also disparities in the distribution of financial and physical sector health care resources between geographic areas and between 'race' groups. It was estimated that the African:White ratio of health care expenditure (including both the public and private sectors) was 1:4.3 in 1987 (McIntyre and Dorrington, 1990). Average per capita expenditure for the various 'race' groups in that year was estimated as follows: Africans : R137.84; Coloureds : R340.16; Indians : R356.24; and Whites : R597.11.

As the majority of Africans resided in the former 'homelands' areas, the resource differentials between these areas and the former provinces also provide insights into racial disparities. In 1986/87, per capita public sector health care expenditure ranged from R23 in Lebowa to R91 in Ciskei, while per capita expenditure in all of the former provinces was between R150 and R200 (McIntyre, 1990). There were also disparities in the distribution of facilities with the number of hospital beds per 1 000 population in 1991 ranging from 1.3 to 3.8 in former 'homeland' areas compared with the average of 6.4 in the former provinces (DNHPD, 1992). Similarly, there was an average of 1.2 doctors per 10 000 population in the former 'homelands' compared with an average of 7.1 in the former provinces in 1985 (DNHPD, 1989). The consistent under-resourcing of health services in the former 'homelands' areas under the apartheid government *partially* explains the disparities in the health status between Africans and Whites (Table 1.7). A range of factors, other than health care, have been shown to impact on health status. The inequalities in income distribution, differential access to housing, differences in educational status (particularly female education) and many other factors will also have contributed to health status differentials.

Table 3.13: Provincial Distribution of Public Sector Health Care Resources, Relative to the Population Dependent on Public Sector Services (1992/93)

Indicator*	Eastern Cape	Free State	Gauteng	KwaZulu-Natal	Mpuma-langa	Northern Cape	Northern Province	North-West	Western Cape	National average
Public sector health care facilities										
Acute hospital beds/1,000 pop	2.47	2.56	3.74	3.38	2.00	3.85	2.46	2.43	3.69	2.93
Population per clinic	10,573	9,394	9,845	20,127	12,022	5,136	13,013	9,461	5,434	10,756
Public sector health care personnel										
Doctors per 100,000 population	12.49	14.67	34.05	14.00	7.52	9.58	8.27	9.74	43.70	16.97
Nurses per 100,000 population	326.49	298.36	434.04	309.94	179.81	249.51	228.81	278.66	606.07	326.59
Public sector health care expenditure										
Per capita expenditure	245.08	307.19	577.05	274.17	158.25	265.26	181.92	203.59	700.38	316.31
Utilisation of public sector health services										
Acute inpatient days/1,000 pop	698.21	634.50	1,004.44	865.96	467.68	805.97	511.81	545.82	1,218.75	756.95
Outpatient visits per capita	1.34	0.97	3.81	2.74	1.25	1.03	1.35	2.15	3.42	2.17

* All indicators were calculated using the total population less members of medical schemes (based on the assumption that the majority of medical scheme members do not use public sector facilities)

Source: McIntyre *et al* (1995)

A similar relationship between health status indicators (Table 1.8) and public health sector resource indicators (Table 3.13) emerges when one considers differentials between the nine provinces in South Africa. Although a consistent pattern does not emerge, the data does indicate that the two provinces which are particularly well resourced have the best health status indicators (i.e., Gauteng and the Western Cape).

3.5.5 Private Sector Resources, Expenditure and Users Overview of private sector health care providers

South Africa has a substantial private health sector, both in terms of human and physical resources. There is a wide range of health personnel in the private sector (such as doctors, dentists, physiotherapists, psychologists, optometrists, pharmacists, and homeopaths) usually working either on their own or in group practice. A higher proportion of the most highly trained health workers work in the private sector, with the exception of nurses. For example 59 percent of doctors, 93 percent of dentists and 89 percent of pharmacists work in the private sector (Rispel and Behr, 1992). In addition there are between 350 000 and 500 000 traditional healers (McIntyre *et al*, 1995).

There is a range of hospitals within the private sector including for-profit facilities which provide care on a fee-for-service basis, non-profit hospitals run by charitable or welfare organisations, and industry-specific hospitals. Most private for-profit hospitals are located in metropolitan areas, where high income earners live (Valentine and McIntyre, 1994).

There has been a proliferation of health NGOs in recent years. These range from charitable and welfare organisations providing services such as first-aid training, drug counselling, and hospice care, to others which are largely involved in the development of community-based primary care programmes.

Private sector health care expenditure and financing

Private sources of finance accounted for 60.8 percent of total health care expenditure in 1992/93 (i.e. approximately R18.3 billion). Expenditure on 'basic health services' (BHS) in the private sector was estimated by defining BHS in terms of services provided by general

practitioners, dentists, medicines (including prescribed medicines and those purchased over-the-counter) and workplace primary care services. On this basis it is estimated that nearly R8 billion was spent on private sector BHS in 1992/93, which is equivalent to approximately 43 percent of total private sector health care expenditure in that year. This may be an overestimate as the 'prescribed medicines' category is not confined to primary care services. Nevertheless, a considerable proportion of private health care expenditure appears to be devoted to BHS.

Medical schemes are the principal financial intermediaries in the private sector, accounting for nearly two-thirds of total private sector health care funding. Medical schemes are non-profit associations funded primarily out of contributions from employers and employees. Generally, the size of contributions depends on the member's income and number of dependants.

Direct out-of-pocket payments by households are the second largest source of private health care finance, accounting for 23 percent of the total. Health insurance is a small (5.1 percent) but rapidly growing component of private health financing. It is offered by both life and short-term insurance companies. Most policies provide cover for major surgical and hospitalisation costs. Industry contributes 5.7 percent of total private sector health care resources for the funding of industry-specific health services and services funded through the Workmen's Compensation mechanism. Industry-specific services range from occupational health and limited workplace primary care services to comprehensive care at mining hospitals.

Users of private sector services

High income earners are the major users of the private sector. They tend to be members of medical aid schemes and/or holders of medical insurance policies. They utilise private sector services for all their health needs, except for highly specialised services such as dialysis and cancer treatment which are not available and/or affordable in the private sector, and for long-term treatment of chronic illnesses which are not fully covered by medical aid.

Low to middle income earners also use private health services. Some are members of medical benefit or exempted schemes which cover limited ambulatory care by private primary care providers. Some employees have access to health services provided by employers at their place of work. Others pay out-of-pocket to utilise private sector providers, but this tends to be restricted to general practitioner services and the purchase of drugs. The majority depend on public hospitals for inpatient treatment, except for those entitled to care in a company hospital.

Poor households make relatively little use of private health services. However, there is evidence that even the poorest families are prepared to pay for the services of traditional healers.

Approximately 17 percent of South Africans are beneficiaries of medical schemes. It has been estimated that almost 23 percent of South Africans have some degree of access to private sector health care on a regular basis (i.e. those who are medical scheme beneficiaries, have health insurance cover or have access to workplace health services). An unknown proportion of the population utilises private practitioners on a direct payment basis, but this access is variable and depends on the availability of financial resources when care is needed.

Table 3.14: Service Provider Used by Individuals who Reported being

ill in a two week recall period (percentage distribution)

	Poorest	Quintile 2	Quintile 3	Quintile 4	Richest	TOTAL
No treatment sought	24.9	19.4	12.6	16.4	14.6	17.7
Private doctor	23.4	31.3	41.0	52.6	72.8	43.6
Public clinic	17.9	17.4	16.4	9.3	2.3	12.9
Hospital	27.7	26.3	24.8	17.9	6.2	20.9
Traditional Healer	3.5	2.6	1.9	1.0	0.5	2.0
Other	2.5	2.9	2.4	2.3	3.7	2.7

Source: Reconstruction and Development Programme (1995)

There is a debate about the extent to which people who are not members of medical schemes utilise private sector health services on an ‘out-of-pocket’ payment basis. Table 3.14 presents data derived from the Saldru (1993) survey. It indicates the distribution of utilisation of alternative service providers by people who were ill in the preceding two weeks.

The above data indicate that nearly a quarter of the poorest respondents did not seek treatment, even though they reported being ill in the preceding two weeks. More than half of these respondents cited high costs of treatment and/or transport to health service providers as the reason for not seeking treatment. Nearly 46 percent of the poorest respondents used public clinics or hospitals, while a relatively high proportion (23 percent) reported using a private doctor.

Table 3.14 is misleading in terms of private sector utilisation by low income groups. Due to data limitations, Table 3.14 appears to contradict the earlier statement that lower income groups have extremely limited access to private sector providers. The survey did not document the medical scheme membership status of respondents and it is therefore possible that private sector users in quintile 1 are members of a low cost medical scheme. In addition, the survey did not distinguish between private doctors’ cash paying and district surgeons’ practices. This is because the vast majority of district surgeon work is provided from private doctors’ own surgeries, as opposed to being provided from a public clinic or hospital. The above results are thus They do, however, highlight the significantly greater utilisation of private sector services by higher income groups.

Given the lack of accurate household survey data at present, this report assumes that the majority of private sector health service users are medical scheme members. This assumption is supported by a recent national survey of general practitioners, which found that approximately 70 percent of their patients were medical scheme members (Blecher *et al*, 1996). It is also assumed that households that are willing *and able* to pay ‘out-of-pocket’ for private sector services are more likely to fall into the upper and middle income groups than the lowest income group.

CHAPTER 4

ANALYSIS OF SOCIAL EXPENDITURE

4.1 Introduction

This chapter provides a detailed analysis of expenditure on Basic Social Services (BSS) particularly basic education and health care. In the latter case, reference is made also to expenditure on water and sanitation and nutrition. (In this report expenditure on BSS refers to expenditure on pre-primary and primary education, basic health services, all water and sanitation programmes and nutrition programmes). In education a detailed analysis is provided of total expenditure on basic education in nominal and real terms for the period 1987-1996. In addition an assessment is provided of recurrent and development expenditure in basic education. This is followed by an analysis of the composition of current expenditure particularly through comparing salaried and non-salaried expenditure. In the health section there is first an attempt at quantifying the scope of Basic Health Services and public expenditure on this element of health services. The sub-section on water and sanitation attempts to quantify government expenditure in spite of the paucity of data available in this area. It also describes the important role of donor financing in the water sector as well as outlining some key principles relating to the financing of sanitation. Finally, the brief section on nutrition provides data on budget allocations between 1980 and 1996 as well as funding of the Primary School Nutrition Programme since 1994.

4.2 Education

Basic education in this document encompasses pre-primary and primary education.

Basic Education Expenditure

There was a concerted effort beginning in the late 1970s to increase spending on Black education. This trend is reflected in Table 4.1 which shows public expenditure on basic education in nominal and real terms for 1987 and 1991. Table 4.2 shows this breakdown for two years in the post-apartheid period, namely 1995 and 1996. In this latter table, expenditure is broken down by province because data by racial categories were no longer available after 1993.

Table 4.1 : Basic Education Expenditure by Race (R 000's), 1987, 1991

Race Group	1987 Nominal	1991 Nominal	% Average change p.a.	1987 Real	1991 Real	% Average change p.a.
African	1 793 871	4 658 469	39.9	2 653 655	4 040 303	13.1
Coloured	569 028	1 313 525	32.7	841 757	1 139 224	8.8
Indian	194 552	371 582	22.7	287 799	322 274	3.0
White	1 087 158	1 840 775	17.3	1 608 222	1 596 509	-0.7
TOTAL	3 644 609	8 184 351	31.1	5 397 433	7 098 310	7.9

Source : Buckland & Fielden, 1994

In both nominal and real terms, expenditure on basic education for the total population in general and for Africans, Coloureds and Indians in particular was substantial in the late 1980s and early 1990s. The annual average increase in nominal terms for the total population between 1987 and 1991 was 31%; for Africans it was almost 40%, for Coloureds 33%, for Indians 23% and for Whites, 17%. In real terms, the corresponding figure for the

total population was almost 8%; for Africans it was 13%, for Coloureds 9%, for Indians 3% and for Whites, minus 0.7%.

Basic education expenditure as a proportion of GDP increased steadily between 1987 and 1996. In 1987 this figure stood at 2.2%; in 1991, 2.6%; in 1995, 3.0%; and in 1996 at 3.2%.

Table 4.2 shows total basic expenditure in nominal and real terms for 1987, 1991, 1995 and 1996.

Table 4.2: Total Expenditure on Basic Education (R 000's) - 1987 - 1996

Year	Nominal	Average Annual % Change	Real 1990 Prices	Average Annual % Change
1987	3 644 609		5 391 433	
1991	8 184 351	31.1	7 098 310	7.9
1995	14 504 721	19.3	8 507 168	5.0
1996	17 604 631	21.3	9 593 804	12.8

Sources : Buckland & Fielden, 1994; Department of Education, 1997

As with education spending in general, the magnitude of the increase has been phenomenal. Between 1987 and 1991, the average annual percentage increase in nominal terms was 31% (in real terms 19%); between 1991 and 1995 it was 19% (5%) and between 1995 and 1996 21.3% (13%).

Table 4.3 provides a breakdown of basic education by pre-primary and primary levels for each province for the 1995/96 and 1996/97 financial years. This breakdown by level of basic education is not available for earlier years.

Table 4.3(a) : Expenditure on Pre-primary Education- 1995/96, 1996/97

<i>Pre-Primary</i>				
	1995/96		1996/97	
	R('000)	% of Total Education Exp.	R('000)	% of Total Education Exp.
Eastern Cape	35 831	0.75	7 245	0.12
Free State	8 758	0.45	10 912	0.44
Gauteng	44 590	0.93	47 156	0.82
Kwazulu-Natal	15 796	0.27	17 995	0.25
Mpumalanga	18 725	0.96	58 789	2.52
North West	17 219	0.78	18 935	0.66
Northern Cape	42 328	5.80	20 402	2.50
Northern Province*				
Western Cape	29 864	0.84	37 780	0.86
TOTAL	213 111	0.72	219 214	0.59

Source: Computed from Department of Education, 1997

* the budget for pre-primary education is included in that of primary education (see next table)

Table 4.3 (b): Expenditure on Primary Education - 1995/96, 1996/97

	Primary			
	1995/96	% of Total Education Exp.	1996/97	% of Total Education Exp.
	R ('000)		R('000)	
Eastern Cape	2 354 453	52.97	2 587 992	43.83
Free State	1 090 880	55.54	1 014 729	41.12
Gauteng	2 362 657	49.16	2 565 425	44.69
Kwazulu-Natal	2 756 099	46.65	3 545 379	49.83
Mpumalanga	1 040 027	53.27	1 383 782	59.35
North West	1 164 904	52.59	1 324 611	46.46
Northern Cape	220 714	30.25	503 706	61.83
Northern Province*	1 390 422	36.77	2 355 490	43.73
Western Cape	1 731 454	48.57	2 104 303	47.94
TOTAL	14 291 610	48.11	17 385 417	46.99

Source : Computed from Department of Education, 1997

* includes expenditure on pre-primary education

In pre-primary education with the exception of one province in 1995/96 (Northern Cape) and two provinces in 1996/97 (Northern Cape and Mpumalanga) all other provinces spent less than 1% of their total education budget at this level. The average for all provinces for 1995/96 was 0.52% and for 1996/97, 0.59%. Two of the poorest provinces, namely Eastern Cape and Kwazulu-Natal spent respectively only 0.12% and 0.25% on pre-primary education in 1996/97.

With respect to primary education (Table 4.3(b)), the proportion of the total budget spent on this sub-sector averaged 48% for 1995/96 and 47% for 1996/97. During 1995/96 all of Eastern Cape, Free State, Mpumalanga and the North West spent over half their education budgets at the primary level. The Northern Cape spent only 30% and the Northern Province 37%. However, for 1996/97, the Northern Cape has budgeted to double its 1995/96 level for primary education. The only other provinces which have budgeted for increased expenditure on primary education in 1996/97 are Kwazulu-Natal, Mpumalanga and the Northern Province.

Table 4.4 compares per capita education on all school education and on primary education for 1987 and 1991 (Table 4.4 (a)) and for basic education and all school education for 1995 and 1996 (Table 4.4 (b)).

Table 4.4 (a): Per Capita Expenditure by Race (Rand): 1987, 1991

Race	1987		1991	
	Primary	All Levels	Primary	All Levels
African	352	444	813	969
Coloured	900	1 255	2 091	2 416
Indian	1 379	1 763	2 477	3 142
White	1 954	2 323	3 248	3 961

Source : Buckland & Fielden, 1994

Table 4.4 (b): Per Capita Expenditure (Rand) on Basic Education and all School Education, 1995 and 1996

Level of Education	1995	1996
Pre-primary	819	816
Primary	1 787	2 154
All Levels	2 384	2 880

Source : Department of Education, 1997

The statistics of Table 4.4 (a) suggest that per capita expenditure on primary education increased more than proportionately to overall school expenditure for Africans, Coloureds and Indians. In 1987 for instance, per capita expenditure on African primary education constituted 79% of the per capita figure for all levels of African school education; by 1991 this figure had risen to 84%. Similarly, the corresponding ratios for Coloureds were 72% and 87% and for Indians 78% and 79%. In contrast, the ratio for Whites declined from 84% to 82%. Table 4.4 (b), on the other hand, which shows national figures only, indicates that for 1995 and 1996, per capita expenditure on primary education as a proportion of per capita for all school education was constant at 75%.

Recurrent versus Development Expenditure in Basic Education

As education is a labour intensive sector one expects the level of recurrent expenditure to be high. However during the period under review the share of personnel expenditure has increased steadily. It constituted 75% in 1991/92 and rose to 83% in 1995/96 (Buckland & Fielden, 1994). The growth of the share of personnel expenditure in the late 1980s has been due largely to the removal of discriminatory practices, i.e., race and gender disparities and in the last 3 years to higher-than-inflation salary increases for some classes of educators. In some departments and in particular those in the former homelands, the share was even higher, e.g., 90% in Kwandebele in 1991/92 (Buckland & Fielden, 1994).

An examination of education expenditure by primary and secondary school levels shows clearly the dominance of teacher salaries, 85% and 82% respectively in 1995/96. Together with the salaries of non-educators this percentage rose to 89% and 85% respectively in 1995/96. (See Table 4.7) This means that relatively few direct resources are left for expenditure on school textbooks, stationery and other quality enhancing instructional materials. This also implies that less is available for monitoring and supervision or upgrading of teacher skills.

While no detailed study has been done on exactly 'What Works' in education in South Africa, there is an understanding that text books, equipment and materials improve the productivity of a teacher. South Africa is attempting to move towards an outcomes based assessment system in schools. Such an assessment system is resource driven and is likely to

place a significant demand for greater supervision and management of teachers as well as text books, equipment and materials.

Capital or development expenditure has been historically underfunded especially in the Bantustans. Having basic infrastructure such as classrooms, toilets and potable water, are the minimum foundational requirements for education. The contractual obligations of paying salaries mean that this is a first call on any provincial education budget. Consequently, capital expenditure has been squeezed. Huge backlogs already exist in the provision of classrooms and as the growth in pupil numbers continues (due to in part to the numbers of out-of-school pupils decreasing) not addressing the problem now means that it will be insurmountable in the future.

In addition large-scale rehabilitation of existing infrastructure is also required. This is not restricted to the poor rural areas. For instance, Gauteng in 1996 had 11% of schools with two toilets and fewer, 9% of schools without water and 17% of schools without electricity.

Between 1994/95 and 1996/97, the RDP school building programme was used as a channel for allocating special amounts for capital expenditure. Business plans to the value of R1.14 billion were approved for the school building programme. This channel is no longer available. These funds will be provided through the normal budgetary processes i.e. provinces will now have to fund this programme as part of their education budgets. This may result in a further squeeze on capital expenditure unless a conditional grant is provided by the national government.

Table 4.5 shows the distribution of current and development expenditure in basic education for 1995 and 1996. These statistics indicate that an even higher proportion of expenditure is devoted to current expenditure than in school education in general. At the pre-primary level the ratio of current expenditure is at 98-99% for both years and for primary education slightly lower at 94-95%. The implications of these ratios for the development of the basic education sector are enormous. In effect, what it means is that unless some mechanism is found to reduce the proportion of funds being allocated to current expenditure, fewer resources will be available for the provision of buildings and equipment to increase access to better quality education to those that been historically deprived of such opportunities. Table 4.6 confirms the wide divergence between current and development expenditure by showing the relevant per capita figures.

Table 4.5: Recurrent and Development Expenditure on Basic Education, 1995, 1996

Level	Year	Recurrent		Development		Total
		Total (Rm)	%	Total (Rm)	%	
Pre-Primary	1995	211 338	99.2	1 773	0.8	213 111
	1996	216 450	98.7	2 764	1.3	219 214
Primary	1995	13 681 312	95.7	610 298	4.3	14 291 610
	1996	16 322 624	93.9	1 062 794	6.1	17 385 418

Source : Department of Education, 1997

Table 4.6: Recurrent & Development Expenditure Per Capita (Rand) 1995,1996

Recurrent	1995	1996
Pre-primary	812.59	806.00
Primary	1 711.06	2 022.01
All school education	1 984.13	2 352.76
Development		
Pre-primary	6,82	10.29
Primary	76.33	131.66
All school education	97.62	169.33
Total (Recurrent & Development) excluding private schools	2 081.75	2 522.09

Source : Department of Education, 1997

Composition of Current Expenditure on Basic Education

An analysis of current expenditure is critical to determining what proportion of the education budget is being devoted to salaries compared to other items such as books and other learning materials. First, Table 4.7 shows the distribution of total expenditure by item for 1995/96. Table 4.8 then indicates the composition of current expenditure in the college-school sector while Table 4.9 shows the composition of current expenditure in basic education.

Table 4.7: Education Expenditure by Category (R 000's) 1995/96

	Primary	% Share	Secondary	% Share
Educator salaries	12 091 315	84.6%	8 423 077	81.7%
Non educator salaries	672 506	4.7%	473 870	4.6%
School books	339 583	2.4%	383 659	3.7%
Stationery	136 731	1.0%	115 703	1.1%
Other*	441 178	1.0%	115 703	1.1%
Land	1 467	0.0%	820	0.0%
New Buildings	439 705	3.1%	375 984	3.6%
Maintenance	73 111	0.5%	73 846	0.7%
Equipment	69 017	0.5%	52 480	0.5%
Media collections	16 510	0.1%	47 673	0.5%
Other**	10 489	0.1%	896	0.0%
TOTAL	14 291 612		10 313 406	

Source : Department of Education, 1997

* includes transport costs, professional consulting services, bursaries and scholarships, marking of exams

** includes museum and art collections

Table 4.8: Composition of Current Expenditure on College-School(CS) Education

	Salary		Non-Salary		Total
	Exp. (Rm)	%	Exp (Rm)	%	
1995	24 695 757	90.5	2 587 458	9.5	27 283 215
1996	29 888 780	90.9	2 996 700	9.1	32 885 480

Source : Department of Education, 1997

Table 4.9: Composition of Current Expenditure on Basic Education

	Year	Salary		Non-Salary		Total
		Exp. (Rm)	%	Exp. (Rm)	%	
Pre-Primary	1995	1996 852	94.6	11 486	5.4	211 338
	1996	186 058	86.0	30 392	14.0	216 450
Primary	1995	12 763 820	93.4	917 492	6.7	13 681 312
	1996	15 250 717	93.4	1 071 907	6.6	16 322 624

Source : Department of Education, 1997

From Tables 4.7 - 4.9 it is evident that:

- a) in 1995/96 only 15% of the total education budget was available for capital expenditure and the provision of books and other learning materials;
- b) less than 10% of current expenditure in the college-school sector is spent on non-salary items;
- c) the pre-primary component of the basic education budget showed an encouraging decline in its salary component in 1996 although not much should be made of this given that data is available only for two years and the relatively small amounts involved;
- d) at the primary level, the salary component is extraordinarily high at more than 93% of current expenditure.

Incidence of Education Expenditure

Using benefit incidence analysis and data from the Saldru household survey of 1993, Castro-Leal (1996) has shown that public education expenditure is not pro-poor because the share going to the poor and the "ultra-poor" is substantially smaller than their share of the population. The poor in South Africa receive about 40% of education resources but they make up 53% of the population. The ultra-poor receive about 20% of education resources but they comprise about 29% of the population. In contrast, the richest household quintile receives almost twice its share of the population, 23.4% of public education resources for 12.5% of the population.

The poor and ultra-poor receive the highest allocation of public education resources from primary schools. Although a smaller share of public primary education spending than their share of the population goes to the poor, they receive almost 50% of all primary education resources. (Table 4.10) The spending share within quintiles indicates also that African students are the large majority of primary enrolments among the poor and the ultra-poor but receive less than their share of the population.

Table 4.10: Incidence of Public Expenditures in Education, 1993 (% shares of total expenditure)

	Primary	Secondary	Tertiary	All Levels
Poor (53% of population)	47.5	36.3	23.9	39.6
Richest (12% of population)	18.9	25.3	32.2	23.4

Source: Castro-Leal, 1996.

4.3 Health

4.3.1 Basic Health Services

Due to the historic fragmentation of health services in South Africa, health care budgetary and expenditure data were not presented in a consistent manner. Each health authority used a different system for classifying budgets and expenditure by category of service. For this reason, it is not feasible to present historical trends. However, data from the Health Expenditure Review (HER) are presented as a baseline (1992/93), and the 1995/96, 1996/97 and 1997/98 budgets are considered in some detail.

Scope of Basic Health Services (BHS) and Methodology for Quantifying Expenditure on BHS

The services included in the category of BHS can be summarised as follows:

- All services which have public good characteristics (such as environmental health services and health education);
- Preventive personal health services (such as immunisations, family planning, and maternal and child health services); and
- Non-hospital primary curative services (including services provided at clinics, community health centres, community nursing services, and by district surgeons).

The HER aggregated all of these services under the category of ‘non-hospital primary care’. For the 1995/96 financial year, the analysis of provincial and national health department budgets by Doherty and van den Heever (1997) was used. Their categories of “PHC: personal” and “PHC: non-personal” were assumed to be equivalent to BHS (based on the above definition and the description of what the researchers incorporated in these two categories). An estimate of local authorities’ ‘own contribution’ to primary care services (based on the average rate of increase in the preceding five years) was added to Doherty and van den Heever’s estimates. For the 1996/97 and 1997/98 financial years, the ‘White Book’ (Estimates of Revenue & Expenditure) estimates were used. For the provincial budgets, the categories of community health services, and RDP funding for the ‘free health care’, AIDS and nutrition programmes would fall within the definition of BHS. The two areas where there is likely to be an underestimate of BHS in these data are in the following:

- Health system planning and epidemiological data collection could not be disaggregated from administration and support budgets; and
- The category of “facilities development and maintenance” (which was introduced in the 1996/97 financial year) does not disaggregate between clinic and hospital related budgets.

BHS budgets within the national Department of Health estimates were based on the same categories as those used by Doherty and van den Heever (1997) in their estimates of personal and non-personal PHC. Once again, local authorities’ own contribution’ to primary care services was estimated and incorporated into the BHS estimates.

Unfortunately, a detailed breakdown of BHS (e.g. between family planning, nutrition, clinic and public health services) could not be derived from any of the data sources.

As recommended in the 20/20 Terms of Reference, district hospitals and other hospitals (including regional, academic and specialised hospitals) are documented separately. In addition, the category of emergency medical services (i.e. ambulance services) and facility

development and maintenance are detailed. Overheads include administration, support services and training activities.

There is considerable debate in South Africa as to whether district hospitals (or at the very least district hospital outpatient services) should be considered as part of BHS. Some even argue that 'level one' care within regional and academic hospitals should be included in BHS (Doherty and van den Heever 1997). The basis for this preference is that access to clinic and other community health services is so poor in many areas that hospitals play a vital role in providing BHS at present (even though it may be considered inappropriate in the ideal context). The approach adopted in this report is to remain within the 20/20 definition of BHS, to ensure comparability with other country studies.

Recent Trends in the Distribution of Public Sector Health Expenditure/Budgets between BHS and other Health Services

Table 4.11: Recent Trends in the Distribution of Public Sector Budgets/Expenditure between BHS and other Health Services

	Budget (97/98) R,m	Budget (96/97) R,m	Budget (95/96) R,m	% (97/98)	% (96/97)	% (95/96)	%* (92/93)
Overheads	1795	1 670	1 598	9	9	10	10
Basic health services	4 146	3 496	3 236	21	20	20	12
District hospitals	3 411	2 777	3 598	17	16	22	19
Other hospitals	9 005	8 365	7 424	46	48	45	57
Emergency medical services	611	565	476	3	3	3	2
Facility development and maintenance	715	644	--	4	4		
TOTAL	19 683	17 518	16 332	100	100	100	100

* These figures are slightly different to HER figures quoted elsewhere (which only include recurrent expenditure on health service provision and administration) - the HER data presented here include capital and training expenditure.

Table 4.11 presents an overview of the distribution of public sector health budgets between BHS and other health services between 1995/96 and 1997/98. In addition, the proportional allocation of expenditure in 1992/93, based on the HER estimates is reflected. The major area where the categorisation of the HER estimates may differ from the budget estimates relates to that of district hospitals. The HER used an algorithm to classify all hospitals on the basis of their facilities and staff profile, whereas the budgets reflect each province's decision on which hospitals should be classified as district hospitals.

While the addition of the "facility development and maintenance" category in 1996/97 slightly distorts the distribution pattern in the hospital sector, a clear and dramatic trend emerges in relation to BHS and hospitals other than district hospitals. While only 12% of total public sector expenditure was devoted to BHS in 1992/93, the budget for BHS had increased to 20% of the total health budget by 1995/96². It has maintained this budgetary share over the past three years. The increase in the allocation to BHS was achieved through a budgetary shift away from hospitals (particularly regional and academic hospitals).

² If the definition of BHS were extended to include level 1 outpatient services in hospitals, BHS's share of the budget would be more than 30 percent (Doherty and van den Heever 1997).

This reflects the explicit policy adopted by the national and provincial health departments to reprioritise their *budgets* in favour of primary care services. This has been aided by the National Department of Health's Medium-Term Expenditure Framework (MTEF), which recommends an annual real budgetary increase for primary care services of 9 percent, and annual real increases of 1.3, 2.1 and 3 percent for academic, provincial and district hospitals respectively (Makan *et al* 1996). These percentages are based on the *assumption* that the overall health budget will increase in real terms. As indicated in Table 3.9, the assumed real increases have not materialised. Despite this fact, the differential growth rate between different categories of health services in the MTEF has promoted a redistribution of budgetary resources towards primary care services.

It is important to note that although there has been a dramatic shift in budgets, it is impossible to determine the extent to which *expenditure* on primary care services has increased, as audited expenditure statements are not yet available. Expenditure shifts will only be achieved once staff are shifted to primary care facilities, as staff account for over two-thirds of total public health sector expenditure (*ibid*).

BHS accounted for 18.2 percent of the total health development budget in 1995/96. In 1996/97, BHS's share of the development budget was only 5.2 percent, while it was 6.2 percent in 1997/98. However, it should be noted that the latter two figures are likely to be an underestimate as the new category of "facility development and maintenance" (which was not disaggregated between BHS facilities and hospitals) was introduced into the health budgets in 1996/97 (see Table 4.11).

As the shift in budgets in favour of BHS has only occurred over the past few years, it is premature to attempt to assess the impact on health outcomes. In addition, data on trends in physical inputs (e.g. personnel and facilities) are not available for the period after 1992/93.

Recent budget information suggests that South Africa may be devoting as much as 20% to BHS (in terms of both recurrent and development expenditure). However, the extent to which this represents a real shift in personnel, and hence actual expenditure, has yet to be determined.

4.3.2 Water and Sanitation

4.3.2.1 Water

One of the major historical problems that existed in South Africa is the issue of equity in the water sector. According to the Department of Water Affairs and Forestry (1997), in South Africa the scale of deprivation is clearly visible in the lack of water services, with between 12 and 14 million people without access to safe water. This impacts most heavily on women and children in rural and peri-urban areas. Access to sufficient affordable clean water for hygiene purposes has to be seen as part of the primary health care service.

Funding for water is provided from general government expenditure and from the RDP fund to the Department of Water Affairs and Forestry. The aim of the RDP fund is to provide 20 to 30 litres per capita per day within 200 metres, by means of an integrated and sustainable, people-driven programme.

Government expenditure on water increased from R228.4 million in 1984/85 to R614.4 million in 1994/95 (Table 4.12). Total expenditure of the Department increased dramatically

between the 1991/92 and 1994/95 financial years. The actual spending of the Department (Table 4.12) in 1991/92 shows an increase of R32,7 million as compared with 1990/91 while that of 1994/95 shows an increase of R202,8 million as compared with 1993/94.

Table 4.12: Government Expenditure on Water (Rm)

Year	Total expenditure	Year	Total expenditure
1984/85	228.4	1990/91	353.3
1985/86	259.0	1991/92	386.0
1986/87	387.6	1992/93	399.2
1987/88	302.7	1993/94	411.6
1988/89	330.5	1994/95	614.4
1989/90	396.4		

Source: Department of Water Affairs, Annual Reports

The financial year 1994/95 heralded a period of change, transformation and delivery under the Reconstruction and Development Programme (RDP). During this financial year, a Community Water Supply and Sanitation Branch, headed by a Deputy Director-General was established. The broader community was now better represented and thus began to participate in the management of regional water supply schemes. Some progress was made in addressing the situation where one third of the population had no access to adequate water supplies. Table 4.13 shows the estimated budget for RDP water projects from 1994/95 to 1997/98. In principle, water for domestic or "primary" consumption always receive priority. Yet, despite the fact that water for human consumption is but a small proportion of the total available, many communities have totally inadequate access to drinking water; meanwhile farmers use large volumes of water for irrigation and stock farming even in the more arid areas of the country.

During 1994/95 agreements were also entered into with a number of external donor agencies to provide assistance to the Community Water Supply programme. From 1994, the Department has enjoyed R617 million worth of foreign assistance, and continues to foster partnerships with countries from all around the world. The main sources of funding to date have been Britain, Denmark, the European Union, Finland and Japan. The Department's outlook has been to use aid essentially to accelerate delivery through service and capacity building required to implement and maintain huge number of projects running within the RDP and related programmes. With a grant of R100 million for the establishment, implementation, management and monitoring of water supply projects mainly in the Eastern Cape from 1996-1999, the European Union has by far been the biggest donor in the water sector. In 1996, the Japanese concessionary loan of R166 million for the Kwandebele-Moutse-Moreletele Augmentation Project became the highlight of the Department's international co-operation programme (Department of Water Affairs and Forestry, 1997).

Table 4.13: Estimated Budget for RDP Water Projects

Presidential Lead Projects (R,m)						
Project	94/95	95/96	96/97	97/98	Total	*Population served
Arabie	2,00	39,50			41,50	64 ,000
Khuthama	1,20	2,70	1,85		5,75	66,000
Nzhelele	0,40	1,70			2,10	20,000
Bushbuckridge	0,20	0,95			1,15	
Shemula	2,00	12,00	11,40		25,40	46,000
Vulindlela	0,30	17,70	38,00	15,80	71,80	250,000
Transkei	4,90	12,00			16,90	112,000
Winterveld	1,90	13,50	8,50		23,60	100,000
Moretele 1	3,70	40,60	13,40		57,70	130,000
North-West	4,00	19,02			23,02	100,000
Kutlwanaong	3,00	6,41			9,41	60,000
Wesselsbron/Monyakeng	0,75	3,25			4,00	30,000
Total	24,35	169,33	73,15	15,80	282,33	1 700,000

Source: Department of Water Affairs and Forestry, Annual Report, 1995/96

* Figures amended after population surveys and amendments to projects

The main instrument for government expenditures focusing on the provision of basic services in urban areas is the Municipal Infrastructure Investment Programme (MIP). The bulk of MIP funds is going into water and sanitation projects. Up to the end of December 1996, R1 179 million of RDP funds had been allocated to all sectors through the MIP, of which water accounted for 52% and sanitation 31%. The proportions are similar in the tally of projects implemented: the total was 488, of which water accounted for 58% and sanitation 24%.

4.3.2.2 Sanitation

Sanitation goes far beyond the issue of toilets. The improvement of sanitation encompasses an entire process aimed at the home and the individual, which must include health and hygiene education as well as improving the physical infrastructure of toilet facilities, water supply and disposal of domestic waste water.

During the 1995/96 fiscal year, R75 million was allocated for spending on rural domestic sanitation. This amount was increased to R90 million in 1996/97. However, an estimated 21 million South Africans do not have access to adequate sanitation facilities. The estimated number of people who do not have adequate sanitation in urban areas (metropolitan areas including "dense settlements") is 7.67 million (31%). Some 2 million people still rely on the bucket system which is generally not an acceptable system from a health perspective or in terms of community acceptance. In rural areas, it is estimated that 14.1 million people (85% of the rural population) do not have adequate sanitation services.

The major aim of national sanitation policy is to contribute to improving the health and quality of life of the whole population by providing guidelines on the provision of basic and adequate sanitation facilities. Experience from national and international water and sanitation programmes has shown how essential it is to link water supply and sanitation with health and hygiene education. Only when all these are in place will real and lasting

health benefits follow. The national sanitation policy also confirms government's commitment, at the highest level, to an appropriate, sustainable strategy for the improvement of health and quality of life through improved household sanitation and protection of the environment throughout the nation. Some key principles relating to the financing of the national sanitation policy are listed below:

- a) Sanitation should be self-financing at a local and regional level. The only exception is that, where poor communities are not able to afford even a basic level of service, government may subsidise the capital cost of basic minimum services.

The sanitation services must, therefore, be provided (financed and built), operated and maintained in a manner which is financially viable throughout the life of that service.

- b) Given the importance of sanitation at schools, government will provide a subsidy to existing schools, as a fixed amount per pupil enrolled, and the school must contribute the balance required. Provisionally, the subsidy is set at R25 per pupil (in 1995 terms). New schools must budget for and provide appropriate and adequate sanitation facilities.
- c) Government will set up appropriate financial mechanisms for facilitating sanitation provision to farm workers taking into account the problems associated with the tenancy status of farm workers.
- d) In the absence of a housing or general services subsidy for new or existing households, a capital subsidy designed to enable individual householders to improve their domestic sanitation, to achieve basic standards, will be introduced. This will be an interim arrangement until it can be integrated into future support programmes for rural households.
- e) An additional 1% of the national budget over seven years would meet the goal of providing universal basic water supply and sanitation services to all citizens.

4.3.3 Nutrition

Nutrition is a basic human right, and a prerequisite for the attainment of a person's physical and intellectual potential. Nutrition is an outcome of a developmental process in society, and not simply a service to be delivered. The Department of Health (1997) identified two major features of malnutrition in South Africa:

- The first feature is under-nutrition, which manifests itself in infants and young children, and pregnant and lactating women. South Africa has a high incidence of low birth weight babies (LBW) - about 16%. The 1994 survey conducted by the South African Vitamin A Consultative Group found that one in three children in South Africa had a marginal Vitamin A deficiency status; one in five had iron-deficiency anaemia; one in four was stunted and one in ten was underweight for age.
- The second feature comprises chronic diseases of lifestyle, which is manifested typically in adulthood as obesity-related diseases, ischemic heart disease, hypertension, diabetes and certain cancers.

One of the guiding principles of the Department of Health is that Nutrition programmes should be integrated , sustainable, environmentally sound, people and community-driven, and should be targeted at the most vulnerable groups, especially children and women.

Studies undertaken by Fincham (1985) showed that in terms of undernutrition (the failure of an individual to take sufficient calories and protein) the percentage of children aged one year or less at risk was found to be 8,5% for Africans, 12,9% for Coloureds, 4,6% for Indians and 2,0% for Whites.

Funding for Nutrition in South Africa is provided from the Department of Health and from the RDP. Table 4.14 illustrates amounts budgeted by the National Department of Health for Nutrition programmes. The amounts include programmes such as information collection and education on nutrition matters, financial assistance to local authorities for prevention and treatment of protein-energy malnutrition and the national nutrition and social development programme. Between 1992/93 and 1993/94 there was a dramatic increase in the nutrition budget with the introduction of the Nutrition and Social Development Programme.

Table 4.14: Budget Allocations on Nutrition

Year	Amount	Year	Amount
1980/81	664 000	1989/90	1 085 000
1981/82	823 900	1990/91	1 204 000
1982/83	1 028 200	1991/92	1 232 000
1983/84	1 200 950	1992/93	441 308 000
1984/85	1 473 000	1993/94	448 183 000
1985/86	1 000 000	1994/95	446 422 000
1986/87	1 138 000	1995/96	*46 487 000
1987/88	1 276 000	1996/97	*12 375 000
1988/89	1 043 000	1997/98	*7 205 000

Source: South Africa Budget White Books

Note: *Amounts for Primary School Nutrition Programme (PSNP) are not included

Funds from the RDP have benefited the health sector also by providing funding for a Primary School Nutrition Programme (PSNP). This programme was implemented on 1 September 1994 and was one of the Presidential Lead Projects intended to lead the nation into the RDP.

The purpose of the Primary School Nutrition Programme (PSNP) is to contribute to the improvement of education quality by enhancing primary school pupils' learning capacity (by alleviating hunger), school attendance and punctuality, and to contribute to general health development. The budget allocations of PSNP funds to the provinces were based on the aggregate poverty gap: the average amount by which poor household incomes differ from the poverty line, multiplied by the number of poor households. Population figures for children aged 6 to 15 years (or in some cases the enrolment figures for grade 1 to standard 7) were calculated, and based on this formula, funds were allocated to the provinces (Wigton *et al* 1997). Table 4.15 illustrates the budget allocations of PSNP funds to the provinces. This table includes funds used for PSNP administration and meals and nutrition-related education.

Table 4.15: Expenditure on the Primary School Nutrition Programme (PSNP)

National/Province	1994/95 Budgeted*	1994/95 Expenditure	1995/96 Budgeted	1995/96 Expenditure	1996/97 Budgeted**	1996/97 Expenditure
National Directorate: Nutrition	R14 680 000	R352 172	R4000 000	R0 296 000	R4 000 000	R5 253
Western Cape	R12 957 924	R338 534	R24 515 720	R5 001 000	R24 515 720	R24 500 000
Northern Cape	R5 361 908	R799 781	R8 598 077	R1 912 000	R8 598 077	R6 700 000
Eastern Cape	R134 287 574	R67 995 547	R112 276 719	R22 194 000	R112 276 719	R79 503 608
Kwazulu/Natal	R79 017 423	R28 081 158	R112 817 389	R53 157 000	R112 817 389	R20 208 375
Free State	R21 161 838	R4 778 659	R33 549 238	R6 249 000	R33 549 238	R30 809 540
Northern Province	R132 203 997	R4 856 629	R90 300 753	R68 522 000	R90 300 753	R90 300 000
Mpumalanga	R24 282 815	R2 864 096	R33 834 376	R1 768 000	R33 834 376	R11 530 875
Gauteng	R14 824 579	R2 647 127	R46 561 254	R13 522 000	R46 561 254	R28 522 779
North West	R34 061 942	R22 110 081	R33 546 474	R39 857 000	R33 546 474	R33 546 000
Total	R 472 840 000	R134 823 786	R500 000 000	R312 478 000	R496 000 000	R325 621 177

Source: Department of Health, 1997

Notes:

*Budget Allocation from 1 September 1994 to March 1995

**R4,0m for Professional Services not included in Provincial total

In reality, problems of administration and management have meant that the PSNP has mostly failed to provide effective feeding in many areas, and has not extended beyond the parameters of a vertical feeding programme. Other criticisms have arisen from the health sector with regard to inadequate evaluation measures, and the potential for fraud. As a result, the potential of the programme (as it currently operates) to have an impact on the nutritional status and learning of children has been called into question (Health Systems Trust, 1995).

The three nutrition programmes that have been implemented in South Africa, namely the National Nutrition and Social Development Programme (NNSDP), the Primary School Nutrition Programme(PSNP) and the Protein Energy Malnutrition Scheme (PEM) have produced few measureable improvements in nutrition status (McLachlan & Marshall, 1995; Child Health Unit, 1997). These programmes reflect an inadequate understanding of the causes of malnutrition, and have resulted in the emphasis being placed on the delivery of specific services (most prominently the handing out of food). Systematic targeting of geographic areas and priority age groups and the integration of services delivered by other departments (and programmes within the health department) have largely not occurred. The impact of sectoral initiatives on nutrition outcomes is not explored through the persistent use of a narrow definition of problems concerning nutrition (mostly equating nutrition with feeding schemes).

There has therefore been no systematic attempt to ensure the delivery of an integrated nutrition programme. Empirical cross-country evidence shows that the delivery of specific services, especially the use of a vertical school feeding scheme, is not best practice if the aim is to improve nutrition outcomes (UNICEF, 1993).

The establishment of an integrated nutrition programme is the central message emanating from a recently-released evaluation of the PSNP (Child Health Unit, 1997). This report argues that the PSNP is one approach in a range of policies and programmes designed to improve the health and well-being of children, and needs to be evaluated in this context. To have sustainable benefits, the PSNP must therefore be located within the context of broader

economic and social policies. According to its own policy imperatives, the PSNP does not only have nutrition goals, but is also intended to contribute to education, other health-related goals and to stimulate broader development initiatives. The Report therefore evaluates the PSNP in terms of its impact on education and social development, as well as on nutrition and health. Health, education and welfare policy are considered as relevant to the PSNP.

The PSNP is contextualised within the overall framework of South Africa's integrated nutrition strategy and social development policy. The following concerns are raised in the report:

- ◆ The task of managing a nation-wide feeding programme has consumed much of the limited human resources available in the nutrition units at provincial and national levels. At the regional and district level, the heavy administrative burden of current food-based programmes hampers progress towards implementing an integrated nutrition strategy because staff have little time and capacity to develop community-based nutrition programmes
- ◆ The needs of the priority target group of children under the age of three years are still largely unmet. Despite policy to target this priority group, the skewed allocation of resources between the PSNP and other components of the Integrated Nutrition Programme creates the situation of mismatch between stated policy and the actual focus of nutrition activities.

The report also focuses on provincial case studies and argues that the extent of coverage of school feeding has varied between provinces, within provinces and across time. In several parts of the country, coverage has been poor and inconsistent for long periods of time, and the picture varies from province to province, with Gauteng and the Western Cape being the most successful, whilst provinces like the Eastern Cape and Mpumalanga have been struggling.

Apart from the coverage and consistency of school feeding, provinces vary considerably in terms of policy, structure and operational plans, targeting strategy, staffing levels and availability of resources, extent of NGO involvement, degree of infra-structural development of roads and schools and the extent and types of other health-related priorities. The policy and implementation of a targeting strategy varied between the provinces, which used a mixture of geographic, school, age-group and individual targeting.

The recommendations of the report may be summarised as follows:

- ◆ Develop more stringent targeting criteria for school feeding
- ◆ Improve the management system for school feeding
- ◆ Optimise the quantity and quality of school meals
- ◆ Transform the PSNP into an Integrated Nutrition and School Health Programme
- ◆ Ensure adequate funding for the PSNP
- ◆ Develop a comprehensive human resource development strategy for all staff involved in nutrition programmes
- ◆ Incorporate micronutrient supplementation
- ◆ Incorporate nutrition education

4.4 Conclusion

This chapter provided an analysis of expenditures on BSS, specifically basic education, basic health, water and sanitation and nutrition. Table 4.16 provides a summary of the expenditure on BSS as a percentage of the total budget and GDP in the 1996/1997 financial year.

Table 4.16: Expenditure on Basic Social Services as a Percentage of Total Budget and GDP, 1996/97

Basic Social Services	Expenditure (R, m)	% of Total Budget	% of GDP
Basic Education	17604	10	3.2
Basic Health	3496	2	0.7
Total	21100	12	3.9
Water, Sanitation (1)	880	0.5	0.1
District Hospitals (2)	2777	1.5	0.5
Total	24757	14	4.5
Social Welfare (3)	14898	8.5	2.4
Total	39655	22.5	6.9

Notes:

- (1) An estimate of the component of water and sanitation expenditure dedicated to basic services.
- (2) District Hospitals.
- (3) Non contributory pension grants, other social security payments and social welfare services.

As indicated in Table 4.16, South Africa currently spends about 12% of its budget on basic education and basic health. When considering expenditure on basic social services in South Africa, the basic definition used in this report can be considered narrow. Although South Africa is a developing country, it does have certain peculiarities. These include an extensive non-contributory pension system and a district hospital system that delivers 'level one' health care. A proportion of the expenditure on water and sanitation can be considered expenditure on basic services. This is a relatively small amount.

Within health, there is considerable debate on what constitutes basic health care. Section 4.3.1 provides some alternative definitions and the costing of various services that can be considered basic health care. The inclusion of a part of the water and sanitation expenditure, and spending on the district hospital system increases the proportion of budget spent on BSS to 14%.

Inclusion of the social welfare budget increases expenditure on BSS to about 22.5% of total budget and 6.9% of GDP. The social welfare budget provides cash grants to a significant proportion of the elderly population, especially amongst the poor. Other social security grants such as disability grants and child maintenance grants are also targeted at the poor.

CHAPTER 5

SCOPE FOR ADDITIONAL RESOURCE ALLOCATION FOR BASIC SOCIAL SERVICES

5.1 Introduction

This chapter has two main aims. First, it examines the scope for re-allocating resources to basic education and health services from other parts of the government budget. In particular this section assesses the scope for redistributing from the security and economic sectors. It also briefly describes the scope for redistributing within the social services sector. Finally, it looks at the possible impact of government's new macro-economic policy on the potential for additional resources for basic social services.

The second aim of this chapter is to examine the scope for intra-sectoral restructuring within the education and health sectors. With respect to education, three critical issues are identified: the level of total expenditure on basic education, the type of education expenditure and the incidence of public education expenditure. Flowing from an assessment of these three issues, strategies are suggested to: a) increase resources for basic education; b) improve the efficiency of education expenditure; and c) improve the incidence of education expenditure through targeting of the poor.

Similarly, the health section considers the scope for increasing revenue for BHS from within the health sector. This section focuses on three key issues : a) Strategies to increase resources for the public health sector and hence for BHS; b) strategies to improve efficiency within the health sector, which could also increase the resources available for BHS; and c) strategies to improve the incidence of public expenditure on BHS.

5.2 Scope for Inter-Sectoral Restructuring

This section examines the scope for redirecting financial resources from functions such as defence towards the provision of basic social services (BSS) such as basic education and primary health care.

The analysis of government expenditure in Chapter 3 showed that an important feature of the trends during the 1980s and 1990s was the increase in the share of the social services. This share increased from about 10% of GDP and 34% of the budget in 1983 to 15% of GDP and 39% of the budget in 1995. The components within social services which benefited mainly were education and social welfare.

As the share of the social services has been increasing, the budget share of the defence function has been falling substantially. In 1983, defence's budgetary share was 14.2%; in 1996, it was 6.7%. As a percentage of GDP, defence's share fell from 7% in 1983 to 2% in 1996.

At the same time the proportion of the budget allocated to economic services (transport and communication, mining, manufacturing and construction, agriculture, forestry and fishing, fuel and energy) declined from 18% of total expenditures in 1983 to 15% in 1995.

It is necessary to determine to what extent it is possible to shift resources to education and health from other functions. The security function, and defence in particular, has long been seen as the favourite candidate for the redistribution of resources. This has been due largely

to the fact that defence has had extraordinarily high levels of expenditure particularly during the 1970s and 1980s. This has to be coupled to the fact that in the post-apartheid era there is a strong desire to see reduced military expenditure .

However, it is becoming increasingly clear that the scope for redistributing resources from the defence sector in particular and the security portfolio in general, is extremely limited.

5.2.1 The Scope for Redistributing Resources from the Security Sector

The security portfolio encompasses defence, safety and security (police), justice, correctional services (prisons) and intelligence.

The dramatic decline in the defence budget is illustrated in Table 5.1. This table shows the change in expenditure for all the elements of the security sector for the period 1990 to 1997. It shows a general decline in spending on the security sector and a particularly large decline in defence expenditure.

Table 5.1: Government Expenditure on Protection Services, 1990/91 - 1997/98

	R million							
	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
Defence	11 330.0	10 488.0	10 803.0	10 682.9	12 124.4	11 552.5	11 830.3	10 716.4
Police	4 632.0	6 222.0	7 356.6	8 853.1	9 430.4	9 285.0	11 417.3	13 058.8
Prisons	1 382.0	1 699.0	1 800.8	2 090.5	2 395.6	2 660.2	3 130.3	3 866.8
Courts of Law	740.0	820.0	1 204.5	1 449.3	1 434.6	1 600.4	1 747.0	1 978.6
Total	18 084.0	19 229.0	21 165.0	23 075.8	25 385.0	25 098.0	28 124.9	29 620.5
	Percentage Change							
Defence		-8.0	2.9	-1.1	12.0	-5.0	2.3	-10.0
Police		26.0	15.0	17.0	6.0	-2.0	19.0	13.0
Prisons		19.0	6.0	14.0	13.0	10.0	15.0	19.0
Courts of Law		10.0	32.0	17.0	-1.0	10.0	8.4	12.0
	As % of Total Budgeted Expenditure							
Defence	13.7	10.8	9.1	8.1	8.7	7.4	6.7	5.7
Police	5.6	6.4	6.2	6.7	6.7	5.9	6.4	6.9
Prisons	1.7	1.8	1.5	1.6	1.7	1.7	1.8	2
Courts of Law	0.9	0.8	1.0	1.1	1.0	1.0	1.0	1.0
Total	21.8	19.9	17.9	17.6	18.1	16.0	15.9	15.7
	As % of Gross Domestic Product							
Defence	4.0	3.3	3.1	2.7	2.7	2.3	2.1	1.7
Police	1.6	1.9	2.1	2.2	2.1	1.9	2.0	2.1
Prisons	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
Courts of Law	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
Total	6.4	6.0	6.1	5.8	5.7	5.0	5.0	4.8

Source: Budget Review 1997, 1996, 1995

Between 1990 and 1997, the defence budget declined from 4% to 1.7% of GDP while general security expenditure declined from 6.4% to 4.8% of GDP. The social services budget (including here education, health, social welfare and housing) on the other hand, increased from 12.6% to 14.2% of GDP during the same period. These figures indicate that while there was considerable redistribution of expenditure within the security sector, there were also significant shifts in expenditure to social services. Table 5.1 also shows that the shifts in expenditure in relation to GDP referred to above are also true in relation to the entire budget.

There are two main reasons for this shift of resources away from the security sector towards the social sector. South Africa's war in Namibia and Angola during the 1970s and 1980s and the serious security situation within the country exacted a heavy financial burden on

government expenditure. By the early 1990s this security situation began to ease thus freeing resources within the security sector. Secondly, a growing population, increased urbanisation and a demand for better social services compelled government to spend more of its resources on social services in general and basic social services in particular.

After the 1994 elections there was the need to integrate the South African Defence Force with the armed wings of the liberation movements and the homeland governments. The personnel costs of this exercise have proved to be enormous. According to the Minister of Defence, 48% of resources are absorbed by personnel expenditure, 37% by operating costs, and the remaining 15% is for main equipment renewal (Defence Budget Vote Speech, May 1997).

There are indications that the budgets for the police services, correctional services and justice will have to increase due to population growth, the high rate of crime in urban areas and the poor salaries of police, prisons and court personnel. Poor salaries in the criminal justice system has emerged as a key cause of inefficiency, corruption, low morale and a high staff turnover. To attract foreign investment and maintain a sustainable level of economic growth, South Africa will have to reduce its crime rate and ensure a safe environment for its citizens.

The defence budget, already at a low 1.7% of GDP, is under pressure from both social services and within the security sector. While the room to cut defence spending is decreasing, there is evidence that spending on other elements of the security sector still require more resources. This makes a shift of resources to social services in the near future both difficult and unlikely.

5.2.2 The Scope for Redistributing Resources from the Economic Sectors

Chapter 3 showed that the proportion of the budget devoted to economic services (fuel and energy, agriculture, forestry and fisheries, transport and communication, and mining, manufacturing and construction) declined from 18% of total public expenditures in 1983 to 15% in 1995.

Particularly from an employment creation perspective it is vital that the decline in the investment of public resources in the economic sectors is arrested. Given the high levels of unemployment described in Chapter 1 and the need to absorb increasing numbers of new entrants into the labour market particularly from the schooling and higher education systems, it is imperative that government investment in the economic sectors does not decline any further. In fact, a cogent economic argument can be made for increased government investment to enhance employment creation. For this reason the diversion of resources from economic services to basic social services should not be contemplated, however compelling the case is for additional resources for the latter.

5.2.3 The Scope for Redistributing Resources within the Social Services Sector

Social services is defined here broadly to include Education, Health, Social Security and Welfare and Housing. In each of these sectors the demand for financial resources is enormous as a consequence of, inter alia, population growth, the existence of huge backlogs and inequitable provision for the Black population during the apartheid era. Each of these sectors is able to make a forceful argument for increased resources.

However, it is unlikely that the trend of an increasing share being allocated to social services can be maintained in the short term given the projections of economic growth, the government's commitment to reducing expenditure and the inter-sectoral competition for resources particularly from the safety and security, prisons and economic services portfolios. Furthermore, a strong case cannot be made for intra-sectoral redistribution within the social services portfolio given the needs in each of Education, Health, Social Security and Welfare and Housing.

5.2.4 Macro-economic Policy and the Scope for Additional Resources for BSS

The government's macroeconomic policy as put forward in the *GEAR* document was described briefly in Chapter 2. It is evident from this document that macroeconomic policy is centred around the notion of fiscal discipline and reducing government expenditure in order to stimulate private sector investment, and promote economic growth and employment creation.

The impact on the provision of additional resources for BSS in the short term could be profound. The government's stated macroeconomic objective is to reduce the budget deficit to 3% of GDP by 2000, while keeping the tax burden constant. This means that the level of resources available for discretionary expenditure will be reduced.

A possible consequence of reduced levels of funding being made available for the spending agencies at the national and provincial levels is a squeezing of the education and health budgets as the provincial governments are forced to make the necessary adjustments in their overall budgets. Preliminary evidence from the provinces indicates that education expenditure for instance, in the post-*GEAR* period, will not be able to keep pace with population growth and that in the immediate term there will be substantially fewer resources for dealing with infrastructural backlogs and new educational development issues. Table 5.2 shows the real percentage change in budgeted provincial education expenditure between 1996/97 and 1997/98.

Table 5.2: Real Percentage Change in Provincial Education Expenditure: 1996/97-1997/98

Province	% Change
Western Cape	-3.9
Northern Cape	0.5
Eastern Cape	0.5
Kwazulu-Natal	-3.7
Free State	-3.6
North West	9.9
Gauteng	2.9
Mpumalanga	-24.0
Northern Province	-11.8

Source: Provincial Budgets, 1997

Table 5.3 shows that the squeeze on the educational budgets is being experienced most dramatically on the capital side. Because provinces have to meet their personnel salary commitments, the usual candidate for budget cuts is capital expenditure.

Table 5.3: Budgeted Allocations to Capital Expenditure (R, millions)

Province	1996/97	1997/98
Western Cape	44	5
Northern Cape	18	6
Eastern Cape	356	109
Kwazulu-Natal	561	128
Free State	52	0
North West	102	87
Gauteng	232	200
Mpumalanga	165	35
Northern Province	239	322
Total	1 769	892

Source: Provincial Budgets, 1997

The following comments need to be noted with respect to the macro-economic framework:

- a) Careful consideration of the sequencing of public sector policy actions. The specific issues that require attention here are:
 - whether the substantial decrease in deficit can occur simultaneously with a huge increase in the resources made available for conditions of service given the ceiling on the revenue resources;
 - how the revenue programme can be linked to the expenditure plan for the public sector prior to finalisation of the macro-economic framework; and
 - how to include a practical time frame within which to achieve the required institutional adjustments.
- b) The macro-economic framework needs to determine priorities for functional expenditure and also address the questions of minimum national standards and conditional capital grants.
- c) The implicit assumption in the macro-economic framework that human capital does not deliver returns as effectively as physical capital is a cause for concern. This assumption translates itself into the bias in the framework in favour of increased investment by the public sector in physical capital.
- d) The macro-economic framework needs to include a vision of the role of the state that brings together a macro-plan with a feasible expenditure plan. This process has been started with the introduction of Term Expenditure Framework (MTEF).

5.3 Intra-Sectoral Restructuring : Education

In terms of conventional measures of education expenditure, South Africa appears to be spending adequate levels of public resources. The fact that education expenditure has been at an average of 22% of total government expenditure and 6.5% of GDP for most of the 1980s and 1990s suggests that sufficient public resources are being made available for education particularly in comparison to countries at a similar level of development. Moreover, the growth of total education expenditure in both nominal and real terms during the past two decades has been quite phenomenal.

Compared to many developing countries, South Africa also spends a relatively high proportion of education expenditure on school education (80% in 1995/96). Basic education expenditure in 1995/96 comprised 46% of total expenditure, well above the average of around 40% for most developing countries. However, education expenditure at the pre-primary level appears to be inadequate. While growing, the current level of less than 1% of total education expenditure is insufficient to absorb the high social demand at this level.

There is sufficient evidence that in South Africa, as in many developing countries, an unacceptably high proportion of expenditure is recurrent expenditure particularly on teacher salaries. There is some evidence also that education expenditure in South Africa is not pro-poor. The poor in South Africa are estimated to receive about 40% of education resources although they make up about 53% of the population (Castro-Leal, 1996).

Three major issues are relevant in the debate about education expenditure in South Africa in general and basic education expenditure in particular. The first concerns the level of total basic education expenditure. The second relates to the type of expenditure as for instance between current (or recurrent) and capital (or development) expenditure. The third issue is about the incidence of public education expenditure. This section deals, in turn, with each of these issues.

Educational financing in developing countries frequently suffers from three inter-related shortcomings (Lockheed & Verspoor, 1991). First, the financial base of the education system is often narrow and highly dependent on the general revenues of the central government. This means that the education sector can be too heavily dependent on central government revenues.

Second, the incentive structure underlying the funding of public education is often weak, as is the link between funding and school performance. The fund raising initiatives of schools and local communities are “reactive rather than anticipatory, responding largely on an ad hoc basis to a serious shortfall in the resources promised by the national government.” (Lockheed & Verspoor, 1991: 172).

Third, in many countries a considerable proportion of educational subsidies goes not to the neediest but to middle- and upper-income families, especially at the secondary and tertiary levels.

Given these shortcomings, efforts to strengthen the financing of basic education usually pursue one or more of the following objectives: increasing funding for basic education; using existing resources more cost-effectively; and promoting more equitable financing.

Increasing funding involves increasing the central government's general budget for education, and giving basic education higher priority within that budget. In many developing countries, however, particularly those whose education expenditures are high relative to GDP, such as South Africa, reducing the over-dependence of post-primary education on general tax revenues can permit more resources to be earmarked for primary schools. In addition, diversifying the sources of funding is also vital.

Improving cost-effectiveness requires that educational policymakers select the most cost-effective inputs and restructuring the budget so that relatively more resources can be diverted to non-salaried expenditure.

Promoting more equitable cost-sharing is necessary to ensure that all segments of the population have access to education.

To achieve the objectives of increased funding, cost-effective use of resources and equitable financing, three sets of inter-related strategies are required in South Africa:

- a) Strategies to increase resources for basic education;
- b) Strategies to improve the efficiency of basic education expenditure; and
- c) Strategies to improve the incidence of public expenditure on basic education.

5.3.1 Strategies to Increase Resources for Basic Education

Although the economic argument supporting public expenditure applies to all levels of education, basic education has the strongest claim on public funds. The divergence of private and social benefits is the largest in basic education, and the social rate of return to primary education is generally much higher than that of post-primary education in many developing countries, although this could change over time. Moreover, the unit cost of primary education is a small fraction of the expenditure per student at the tertiary and secondary levels. Therefore, public resources invested in primary education would benefit more children and more poor families than resources in higher levels of education. (Lockheed & Verspoor, 1991).

As stated earlier, conventional measures of education expenditure all suggest adequate levels of government expenditure in South Africa. These measures however, do not take into account the need for additional financial resources to remedy the situation created by decades of inequitable provision to the Black population, particularly the need to finance improvements in the quality of Black education and the enormous infrastructural backlogs in classrooms and other physical facilities.

All indications are that more resources for education in general are unlikely to be forthcoming from the public purse because government firmly believes that adequate levels of resources are being provided for education and what is required are improvements in the efficiency of education expenditure.

With regard to basic education, unlike many developing countries, it is evident that in South Africa, public subsidies are high and growing faster than subsidies for education at higher levels. It is obvious then that basic education has been seen and continues to be seen as a priority in the education budget. A strong case thus cannot be made for allocating resources from other levels of education particularly in view of the high growth also at the secondary and tertiary levels and the need to improve quality of provision at these levels as well. Moreover, as a high proportion of students entering these levels come from poor families a strategy of higher fees that would be necessitated by a reduction in public resources would severely disadvantage them.

The burden of increased funding for basic education therefore will fall increasingly on private households especially those who have the ability to pay.

In this regard there have been several important developments in the South African school sector, particularly those encapsulated in the South African Schools Act. An important change relating to school funding is the legal constitution of school governing bodies which consist of elected parents and educators. The governing body is required to “take all

reasonable measures within its means to supplement the resources supplied by the state in order to improve the quality of education". It has the right to charge fees and enforce their payment by all parents except when it has granted exemptions. There are proposals also relating to the setting of minimum national standards for expenditure on pedagogic materials. Provincial governments would also be encouraged to shift capital spending and other spending towards the poorest areas and schools in their jurisdictions.

An important issue relating to the imposition of user fees is the possibility that they will increase inequity in educational spending. Schools in richer areas will be able to raise more resources and thus perpetuate inequalities between regions and communities. There are two ways in which such inequalities can be reduced. First, the mechanism for disbursing resources to provinces is now weighted in favour of poorer, more rural provinces - hence the problem of jurisdictional inequalities is addressed to some extent. Second, as this chapter argues later, there will have to be, of necessity, some attempts to promote greater equity in the incidence of education expenditure through greater targeting of poor households, thus reducing inter-personal inequalities. One such solution would be to levy taxes that are targeted to fund improvements in basic education.

Earmarking is most successful when taxes are closely linked with the beneficiaries of the programme - the projects for which the revenues are dedicated. In other words, earmarking measures are more successful when the targeted programme is driven by demand and good projects have been identified, often within the scope of a prepared investment programme. In contrast, failure is high when the link between revenue and benefits is weak or absent and the desire for project development is driven by the availability of earmarked funds. A national textbook fund and a community fund for basic education are examples of programmes that have good potential for earmarking. The mandate of a national textbook fund would be to purchase the minimum number of textbooks needed by all primary school children, while that of a community fund would be to provide locally mobilised resources (and matching grants, if any are given by the national government) to schools of the communities generating them

What are the chances of national government approving an earmarked tax for basic education? The current economic climate would suggest that they are not very good. The Department of Finance has received proposals for a payroll tax to fund the Social Health Insurance Scheme, from the Department of Health and one for training from the Department of Labour. Currently there is a payroll tax that yields revenue for some local governments. The Department of Education is also considering a graduate tax to finance higher education.

A further source of funding may be possible through mobilising the resources of local communities. Developing countries vary in the degree of their reliance on local finance and in their methods of mobilising local resources. Some countries rely heavily on financing primary education locally; others raise small amounts of local funds. Some use equitable and efficient methods while many do not.

There are, however, serious limitations to relying on local financing of basic education, and even policymakers who have called for the development of community resources recognise the need to fund basic education nationally and publicly. The fear is that greater reliance on local finance can worsen inequality in education and that primary schools in poor communities will be of substandard quality.

In South Africa, resources from local communities may be limited. Depending on the local economy, culture, and politics, some of these resources may only be available in kind, while others may be too irregular for the central government to depend on. More important, contributions often can only be raised on a voluntary basis, so compliance requires social pressure as well as local initiative and management. Also, in the South African context, the introduction of user fees in schools can be regarded as a form of local taxation.

However, the literature on local community financing shows that there can be some benefits. Dedicating local funds to schools in the community motivates individuals to increase their own contributions. School authorities have more access to and more control over community resources which they can spend to meet the changing needs of local schools. Also, the level of spending can reflect the community's demand for education and moreover, parental and community involvement enhances the accountability of schools and probably improves their cost-effectiveness.

But, mobilising local resources can often be problematic. Collective local contributions to neighbourhood schools are often hampered by the existing system of taxation and the structure of incentives, and some countries have adopted measures that are inefficient and inequitable. Furthermore, national governments are increasingly shifting the financial burden of providing other public services, like primary health care, to the community which makes raising local funds for education more difficult.

Benefit taxation however, can play an important role in financing education. The benefit can be modified to accommodate the special circumstances of the poor. Poll and property taxes are two examples of benefit-related tax measures that are potentially efficient and equitable ways of raising local funds for improving neighbourhood schools. A poll tax on households (other than poor households) and an education surcharge on the real property tax on houses and land could raise substantial amounts of money for basic and other education.

Mobilising local funds for basic education raises important questions relating to equity, particularly about the distribution of resources to poor communities. Policymakers are wary about mobilizing local resources for three reasons. First, poor communities in countries may already be contributing substantially to schools and other services (such as water and health care). Second, some policymakers fear that inequality in educational opportunities will worsen as the reliance on local funding increases. Third, some think that relying on the community to finance primary schools will produce substandard schools in poor areas.

There is evidence to suggest that governments in many countries, especially those that rely on local financing, can reduce the inequities in education by improving their distribution of national funds for education. The challenge is to design a system of allocating central government resources that would favour disadvantaged communities and would complement locally generated resources. The policy of mobilising more local resources could, in fact, significantly improve the funding of disadvantaged areas. For example, encouraging and enabling higher-income communities to raise additional revenue for their primary schools would give the central government more scope to target its resources to disadvantaged schools.

The redistribution of resources is currently occurring on two levels in South Africa. First, government is directing a greater proportion of resources to poorer regions (provinces) through a newly-developed inter-provincial grants formula (see section 5.3.3). Second, the recently legislated South African Schools Act provides for communities to raise additional revenue for their schools.

5.3.2 Improving the Efficiency of Education Expenditure

Most developing countries are faced with a choice of increasing the quantity of basic education or improving its quality. However, South Africa at the present time does not face this dilemma. As the enrolment rates in Chapter 1 indicate, a relatively high proportion of children of school-going age is at school. What is needed in the South African context rather are efforts to improve student achievement, through inter alia, lower repetition and drop-out rates.

In a constrained financial environment the basic education system has to maximise its output for a given budget. This means that schools must be managed efficiently, must add only inputs that contribute significantly to learning, and must choose inputs that are the least expensive relative to their educational contributions.

School authorities should carefully choose the inputs on which they spend additional funds, and the education system should be organised better to ensure greater efficiency in the use of those inputs. Failure to do so will mean that the marginal returns to basic education will be low and society may become reluctant to increase the funding of basic education significantly over time.

There are several aspects of inefficiency in South Africa's education system. This paper highlights the following:

- a) Poor success rates in school-leaving examinations;
- b) Flow of learners;
- c) Cost Ineffective Use of Existing Resources and Educator Costs;
- d) Inefficiency relating to Inadequate Education Facilities.

a) Poor success rates in school-leaving examinations

Table 5.4 below indicates that there is some evidence to suggest that performance in the Grade 12 examinations is linked to the level of funding that pupils receive, with some qualifications. For example, in 1990 the House of Delegates (HOD) results showed that with a per capita level of funding which was 85% that of the House of Assembly (HOA), the pass rates for both departments were similar and the House of Representatives (HOR), with 44% less funding on average than the HOA, had a pass rate of only 17% less.

TABLE 5.4 : Standard Ten (Grade 12) Examination Results 1990

	Per Capita Secondary Expenditure 1989/90	Per capita expenditure as a % of HOA Expenditure	Standard 10 pass rate
House of Assembly (HOA)	3789	100	96
House of Delegates (HOD)	3125	85	95
House of Representatives (HOR)	2098	56	79
Average of DET, SGT & TBVCs	967	26	37

Source: Buckland and Fielden, 1994

While the Standard 10 pass rates of Africans have been increasing (Table 5.5), they are still significantly below that of Whites. In future years it may prove difficult to measure this trend as results are either not collected on a racial basis or they are not being published in that way. For 1995, one could infer that the reason why the Northern Province, Eastern Cape, Mpumalanga, Free State had a much lower Standard 10 pass rate than the average is that these provinces have a greater percentage of African students (Table 5.6).

TABLE 5.5 : Standard Ten (Grade 12) Examination Results 1994

Province	Candidates	Total Passes	% Total Passes	Matric Exemption	% Matric Exemption
Eastern Cape					
White	4 826	4 674	97%	1 898	39%
African	65 489	34 249	52%	8 005	12%
Mpumalanga					
White	3 865	3 794	98%	1 244	32%
African	36 003	15 008	42%	3 037	8%
Free State					
White	4 671	4 604	99%	2 002	43%
African	25 146	11 907	47%	2 483	10%
Gauteng					
White	24 316	23 589	97%	10 192	42%
African	46 813	18 811	40%	4 125	9%
Kwazulu Natal					
White	7 732	7 554	98%	3 845	50%
African	53 797	30 711	57%	8 976	17%
Northern Cape					
White	1 671	1 609	96%	567	34%
African	1 935	1 006	52%	246	13%
Northern Province					
White	1 952	1 921	98%	629	32%
African	127 917	55 734	44%	15 091	12%
North West					
White	3 569	3 511	98%	1 220	34%
African	30 793	20 680	67%	6 692	22%
Western Cape					
White	9 905	9 565	97%	4 460	45%
African	4 361	2 234	51%	584	13%
TOTAL					
White	58 938	57 310	97%	24 837	42%
African	361 461	169 660	47%	42 547	12%

Source: Edusource, 1995

**TABLE 5.6 : Standard Ten (Grade 12)
Examination Results 1995**

	% Std 10 passes
Eastern Cape	48%
Mpumalanga	42%
Free State	51%
Gauteng	64%
Kwazulu Natal	77%
Northern Cape	75%
Northern Province	39%
North West	67%
Western Cape	84%
AVERAGE	61%

Source: Edusource, 1996

Flow of Learners

Recent estimates suggest that only 1 in 3 learners obtains a matric pass (Department of Finance, 1997). However, the other two pupils stay in the system for a number of years. It is estimated that it takes approximately 35 pupil-years to "produce" one matric pass (DoF, 1997). Furthermore, over-enrolment in Grade 1 is around 67% - the estimated cost of this wasted expenditure is R1 billion.

The Research Institute for Educational Planning at the University of the Free State (RIEP) has constructed data on the flow rate of pupils through the education system according to race. For instance, the number of pupils enrolled in Grade 1 in 1983 are counted and then the number of pupils in Grades 10 and 12 are counted nine and eleven years later respectively. While this may not be an accurate cohort analysis, it does indicate that African and Coloured pupils have higher rates of repetition and drop-out than Whites and Indians (Table 5.7). For every 100 pupils who started Grade 1 in 1983, only 19 Africans and 22 Coloureds passed Grade 12 eleven years later in comparison with 73 Whites and 69 Indians. The very low completion rates for Africans may be influenced by the high over-enrolment for Grade 1. But, even if this is taken into account there would still be a substantial difference between the completion rates of Whites and Africans.

**TABLE 5.7 : FLOW OF PUPILS THROUGH THE SCHOOL SYSTEM
(1983 - 1994)**

	AFRICAN	WHITE	COLOURED	INDIAN
GRADE 1 (1983)	1 025 162	83 865	100 888	20 319
GRADE 10 (1992)	444 062	76 074	47 316	20 114
GRADE 12 (1994)	437 817	65 961	26 707	15 671
GRADE 12 PASSES (1994)	190 340	60 821	22 201	13 981
	AFRICAN	WHITE	COLOURED	INDIAN
GRADE 1 (1983)	100%	100%	100%	100%
GRADE 10 (1992)	43%	91%	47%	99%
GRADE 12 (1994)	43%	79%	26%	77%
GRADE 12 PASSES (1994)	19%	73%	22%	69%

Source: RIEP, 1995

The percentage of pupils of the “ideal age” in a particular standard also gives an indication of repetition, and of those who drop out and return later. The ideal age has been defined by the RIEP as a three year range with 11-13 years for Grade 7, 14-16 years for Grade 10 and 16-18 years for Grade 12. Table 5.8 indicates the percentages of those who are of the “ideal age” for Grades 7, 10 and 12. Although the percentage of ideal age pupils for Africans has been improving, it is still significantly below that of Whites. In 1992 there were 210 000 pupils older than 21 in the former African departments (Buckland and Fielden, 1994). This also highlights the difficulty that teachers in former African departments face, namely, having to teach pupils whose ages are so varied and with many being second and third time repeaters.

TABLE 5.8 : Percentage of Pupils of the "ideal age" in Grades 7, 10 and 12**

	1989			1992		
	Grade 7	Grade 10	Grade 12	Grade 7	Grade 10	Grade 12
House of Assembly	97	95	96	95	93	91
House of Delegates	93	85	88	79	75	83
House of Representatives	60	65	75	66	67	76
Average of DET, SGT & TBVQ	43	34	27	47	37	31

Source: Buckland and Fielden, 1994

* For Gr 7, 11-13; for Gr 10, 14-16; for Gr 12, 16-18

In short, while the philosophical debates about what constitutes an accurate measure of educational outcomes and the reliability of the data are problems that must be sorted out, if appropriate performance criteria are to be set up to measure the efficiency of the educational system, the following general comment can be made: African and Coloured pupils have much poorer educational outcomes as measured by Grade 12 pass rates, ideal ages for a particular standard, and completion rates, than do Indian and White pupils. This indicates that both additional resources and the better use of existing resources are required to address the inequities of the past.

Educator Costs and Cost-Ineffective Use of Existing Resources

Like many developing countries, South Africa spends an unacceptably high proportion of its education expenditure on recurrent costs particularly teacher salaries. The ratio of current to capital expenditure was around 95:5 between 1987 and 1995. A similar situation exists in basic education. At the pre-primary level 98-99% of total expenditure is current; at the primary level it is 94-96%. In 1995/96 only 15% of the total education budget was available for capital expenditure and the provision of books and other learning materials and less than 10% of current expenditure was on non-salary items.

Table 5.9 shows expenditure per pupil by expenditure category. In 1996/97 for instance, at the pre-primary level, expenditure per pupil on teacher salaries was R630, on school books it was R1 and on stationery R1. At the primary level, expenditure on teacher salaries was R1799, on school books R34 and on stationery R25.

Table 5.9: Current Expenditure Per Pupil : 1995, 1996 (Rand)

EDUCATION SECTOR	CURRENT EXPENDITURE									
	Remuneration of personnel				Supplies and Services					
	CS Educators		Other Personnel		School Books		Stationery		Other	
Expenditure Category	Salaries, wages and other remuneration	Salaries, wages and other remuneration	1995/96	1996/97	1995/96	1996/97	1995/96	1996/97	1995/96	1996/97
Public ordinary school education:	1995/96	1996/97	1995/96	1996/97	1995/96	1996/97	1995/96	1996/97	1995/96	1996/97
Pre-primary	724	630	45	62	1	1	2	7	41	106
Primary	1512	1799	84	90	42	34	17	25	55	74
Secondary	2298	2702	129	171	105	90	32	55	100	128
TOTAL	1737	2060	97	115	61	51	21	34	69	92
TOTAL (excluding private ordinary school education)	1816	2141	170	191	60	50	23	40	177	198

Source: Provincial Budgets, 1997; Department of Education, 1997

There is little doubt that more resources have to be shifted to capital expenditure and to the provision of learning materials if the issue of improving the quality of education is to be addressed seriously. There are two ways in which this problem could be tackled. First, any additional resources that might be made available for basic education through for instance donor or private household financing should be used exclusively for non-salary expenditure. Second, a strategy should be put in place to reduce over the medium term, the proportion of teacher salaries in education expenditure.

Teacher salaries

Between 1988 and 1992, the average teacher salary (basic) increased from R16 855 p.a. to R37 755 p.a., an increase of 124% in nominal terms and 30% in real terms. By contrast, the average real manufacturing wage grew by 3% in the same period, and real GNP per capita actually declined. By 1995 the basic teacher salary had increased to R49 855, an increase in nominal terms of 32% and in real terms of 1%.

Table 5.10: Average Remuneration* per Educator (R, '000)

Level	1995/96	1996/97
Public School	61	68
Teacher Training	87	95
Specialised Schools	95	110
Technical Colleges	84	93

Source: Provincial Budgets, 1997; Department of Education, 1997

* Basic salary plus benefits. These include pension contributions, housing subsidies, medical aid fund, unemployment insurance fund, leave gratuity payments, overtime, and car allowances.

In 1995 the average remuneration (salary plus benefits) of R60931 was about 5.31 times the GNP per capita (R11469) compared to approximately 5.06 times in 1992. A recent estimate reveals that educator costs are three times as high as the median family income (DoF, 1997).

Average teacher salaries have increased at a rate considerably faster than those in the public sector as a whole (Table 5.11).

**Table 5.11: Teacher Salaries Compared with Civil Service Salaries 1988 & 1992
(1988 prices)**

Average Basic Salary	1988	1992	%
Average Basic Salary (Teachers)	R16 855	R21 954	30,3%
Average Basic Salary (Other civil Servants)	R13 511	R14 056	4,0%
Average Basic Salary (All Civil Servants)	R14 157	R15 640	10,5%

Source: EDUPOL, 1993

The teacher salary bill has increased enormously during the 1990s as racial and gender disparities were eliminated and as a result of a “paper chase”³ by teachers. It is clear however, that the teacher salary component cannot continue to constitute such a high proportion of total education expenditure. If it continues to do so, it will mean that qualitative improvements in the provision of basic and other education will not be financially feasible. One solution is to gradually reduce teacher salaries in real terms over a 5-10 year period. Another is to change the profile of the educators in the medium term towards more “community based” teachers who have more enthusiasm and accountability than paper qualifications, but who receive ongoing inservice training so as to maintain and improve quality. This shift would be especially appropriate for the basic education component. A further solution is for teachers to live with a larger number of pupils per class. Obviously there is a limit to the size of class from a pedagogical point of view.

Strategies that should be considered include also the development of strategies to improve the productivity of teachers, the creation of mechanisms for evaluating teacher performance and instituting appropriate incentive structures.

Serious consideration should also be given to the introduction of provincial bargaining forums, within a national framework, for determining teacher salaries. Currently these are decided at the national level. The provincial education departments are thus in the invidious position where they have no discretion over 90% of their budget. On the one hand, the setting of remuneration for educators nation-wide has the advantage of protecting standards for all educators. It also prevents ruinous competition between departments and provinces for desirable personnel. On the other hand, it removes from the provinces the ability to plan personnel to suit the conditions of the province, e.g., to provide incentives (financial or otherwise) for personnel to relocate to the rural/needy areas. However, if the capacity for conducting collective bargaining at provincial level is lacking, then it is imperative that the provincial inputs to the national bargaining process be strengthened.

To achieve equity in the provision of services in education requires that teachers have to be physically relocated both between and within provinces. There is very little scope to move personnel geographically, be it between provinces or within a province itself. The regulations covering the conditions of employment of educators (and public servants in general) make the decision to accept a transfer exclusive to the employee. Thus even though financial resources are being shifted from relatively over-funded provinces to under-funded ones, personnel are not included.

A government agreement in 1996 placed a moratorium on employer initiated retrenchments and encouraged personnel who had been declared redundant (via the norm of a pupil-teacher ratio of 35:1 on average) in one location to either be redeployed to another under-resourced one or failing that, to accept the Voluntary Severance Package (VSP). However the VSP has proved to be an attractive option for more highly skilled key personnel who would easily find work in the private sector. The outcome therefore has been highly

³ Teacher pay is largely determined by the level of qualifications. It was thus possible to gain more pay by having more certificates/degrees even though they could be completely unrelated to the subjects taught.

unsatisfactory. Few redeployments have been effected and the education sector has lost some of its most skilled personnel while the under-resourced areas remain short of personnel.

There is thus a strong argument for the alignment of the collective bargaining mechanism with the new decentralised political framework provided for by the Constitution. There should be more consistent channels for consulting the provinces/departments on proposals for remuneration, fringe benefits, and other contractual arrangements with employees. The alternative would be to let provinces/departments set their own standards within a framework of minimum standards determined by the national bargaining chamber.

Inefficiency relating to Inadequate Education Facilities

The School Register of Needs Survey (Dept. of Education et al, 1997) portrays the level of deprivation in sections of the South African schooling system with respect to a number of facilities such as water and electricity provision, state of school buildings, toilet shortages and provision of learning materials.

At 24 percent of schools in the country, there is no water available within walking distance from the schools. The worst off provinces are the Northern Province (48% with no water), Eastern Cape (34%), Kwazulu-Natal (25%) and the Free State (22%). Less than half the schools (43%) in the country have power supply. The lack of power supply is most evident in the Northern Province (79%), the Eastern Cape (77%) and Kwazulu-Natal (61%).

Provinces facing the most serious problems with regard to facilities are the Northern Province where 41% of the existing buildings are in a “weak or very weak condition”, Kwazulu-Natal (23%), the Free State (16%) and Eastern Cape (15%).

In terms of a norm of one toilet for every twenty learners, provinces with the most severe shortages were Kwazulu-Natal (which has a shortage of 66 921 toilets), Northern Province (51 324) and the Eastern Cape (46 785).

With regard to the provision of learning resources, the two resources that were relatively well provided to schools were stationery (62% of schools were adequately provided) and textbooks (49%). The provision of media equipment, media collections, learning equipment and materials was almost non-existent. Eighty two per cent of all schools had no media equipment, 73% had no learning equipment and 69% had no materials.

The survey also showed a national classroom shortage of 57 499 in 1996. Three provinces where classroom shortages are extremely high are the Eastern Cape (15538), Kwazulu-Natal (14534) and the Northern Province (13670).

In the light of these findings it is not surprising that there is a serious problem relating to the quality of education provision and student achievement.

Inefficiency relating to inadequate administration capacity

The quality and quantity of management skills is also a significant factor in increasing the efficiency of expenditure. When a province lacks the capacity to do proper planning, monitoring, financial accountability and providing support, wastage results. The backlogs and disparities between the provinces are great with the administrative staff per teacher ratio ranging from 1:8 in Western Cape and 1:11 in Gauteng to 1:21 in Kwazulu/Natal and

1:31 in Northern Province. A failure to address this issue urgently will delay the desired outcomes of other policy proposals.

5.3.3 Improving the Incidence of Education Expenditure

It is clear from the limited data available on the incidence of education expenditure in South Africa that there is a need to strengthen the commitment to distributing education funds through a system that explicitly favours schools in disadvantaged communities. Many countries allocate national funds for primary schools equally on a per capita basis, without taking into account differences in community needs and resources. The systems in these countries demonstrate a serious bias. For example, in some countries the allocations per student are lower in rural areas, particularly in poor regions, than in urban areas. Even within cities some districts (such as slums) are grossly disadvantaged.

The South African system was characterised historically by racial disparities in education provision. However, government in the post-apartheid era has been addressing the problem through directing greater levels of resources to regions that were historically deprived. It is thus addressing the issue of jurisdictional inequality rather than personal inequality.

Intergovernmental Fiscal Relations and Inter-jurisdictional Targeting of Education Expenditure

At least two sets of strategies can be adopted to improve the incidence of education and other social service expenditure. The first is to attempt targeting of expenditure to reduce inter-jurisdictional or geographic inequality and poverty; the second is to target households or individuals - in other words to address inter-personal inequality and poverty.

The problem of inter-jurisdictional inequality and poverty is being addressed through the development of a provincial grants formula that allocates resources more favourably to jurisdictions (provinces) that are poorer, more populous, have a disproportionately larger rural population, have more children and more citizens that use the public health care system.

Financial resources are divided among the provinces by means of a **provincial grants formula** comprising the following major elements:

- a) a **minimum national standards grant (S)** to enable the provinces specifically to provide primary and secondary education and primary and district health-care to their residents;
- b) a **fiscal capacity equalisation grant (T)** to ensure that provincial functions are financed from an equitable provincial taxing capacity and to encourage accountability and democratic institutions associated with the establishment of provincial legislatures;
- c) a **basic grant (B)** to enable provinces to establish and maintain the institutions necessary for the fulfilment of their constitutional obligations according to their own priorities.

The **education** component of the national standards grant is determined by calculating the cost of providing an acceptable level of education to the residents of a province, between 5 and 17 years of age, using the norm of one teacher for every thirty-eight pupils.

The value of the **health-care** component of the national standards grant is determined by calculating the costs, firstly, of providing within ten years an average of 3.5 visits per year to a primary health-care clinic by people who do not have access to medical aid schemes, and 0.5 visits by those who do have access to such schemes; and secondly, of providing services by **district hospitals**.

A zero-sum system of **fiscal capacity equalization grants** (which can be either positive or negative, for a given province) has been proposed to compensate partially for horizontal fiscal disparities, as reflected in differences in the taxable capacity of the provinces. This grant is not, however, dependent on the provincial tax rate actually chosen (or on other grants it receives). Thus, by levying a tax at a higher or lower rate, a particular province can have a higher or lower level of public services.

The **basic grant** is determined on the basis of the weighted population figures for each province. A weight of 25 per cent is given to the number of rural people in each province, because “ruralness” is well-suited as a proxy for differences in wealth, is a good indicator of deprivation and presents relatively few data-related problems.

This FFC formula is being phased in over a period of five years, so as to ensure that those provinces which are projected to receive real cuts in their budgetary allocations, are given sufficient time to make the necessary adjustments, either to their expenditures or to their own revenues.

Table 5.12 shows that the shares of the total grants of the Western Cape, Eastern Cape, Northern Cape, Free State and Gauteng provinces decline during the period under consideration while those of the other four provinces increase.

TABLE 5.12: Total Formula Allocations per Province (Percentage)

PROVINCES	1996/97 BUDGET (BASE YR)	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03 TARGET
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Western Cape	11.13	10.58	10.03	9.48	8.92	8.31	7.69
Eastern Cape	18.46	18.38	18.30	18.22	18.15	18.16	18.18
Northern Cape	2.35	2.23	2.12	2.00	1.88	1.76	1.64
KwaZulu-Natal	19.34	19.67	20.00	20.33	20.66	21.04	21.42
Free State	6.90	6.86	6.82	6.78	6.74	6.71	6.68
North West	8.57	8.63	8.70	8.77	8.84	8.94	9.06
Gauteng	14.75	14.79	14.81	14.84	14.85	14.68	14.49
Mpumalanga	6.12	6.19	6.25	6.31	6.38	6.44	6.50
Northern Province	12.38	12.68	12.98	13.28	13.58	13.96	14.35
South Africa	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Financial and Fiscal Commission, 1996

Targeting Individuals/Households to Improve the Incidence of Education Expenditure

The limited data that is available on the distribution of public expenditure on education suggest that a case can be made for the development of a targeting mechanism to increase the incidence of expenditure on the poor.

The most commonly heard proposal for achieving a more pro-poor benefit distribution is “improved targeting”. Targeting is here defined as a deliberate attempt to shift the benefits of public expenditures to the poor by means that aim to screen them as the direct

beneficiaries. Without any attempt at targeting, a development path in which both participation in economic growth and access to basic social services are broad - including both poor and non-poor - can be an effective route to improving the living standards of the poor. However, experience in both high- and low-income countries shows that circumstances often require supplementary, more finely targeted, public action.

Policies that attempt to identify the poor and target benefits to them can serve important redistributive and safety net roles in a market economy. The risk is when targeted programmes are seen as the main instrument for poverty reduction. Although a well-designed scheme can provide an important *complement* to a longer-term poverty-reduction strategy founded on equitable growth and pro-poor broad targeting of public spending, it is an imperfect substitute. Decisions on targeted schemes must always be made contingent on the general economic and social sector policy environment. Moreover, in each specific case, the choice about whether and how finely to target should be decided on economic grounds, starting from the (political) value judgement that the economic value of targeting to the poor is what matters most. The key questions for policy become: "How much targeting is needed?" and, "What form should it take?"

In theory, targeting can lessen the social cost of reducing poverty. However, in practice, the ability of a policy to concentrate benefits on the poor and to reduce poverty, are not equivalent. The most perfectly targeted policy may not be the one with the greatest impact on poverty. Whether it is depends on how costly it is to identify the poor and target benefits to them, as well on the size of the disincentive effects and participation costs incurred as a result of targeting. The benefits from better targeting can be large, but they can never be achieved costlessly.

The costs of administering a programme can rise substantially when discrimination between beneficiaries is required. There is a widespread perception that the more finely a scheme attempts to target, the higher the administrative costs it will have, largely as a consequence of imperfect information.

The case for government spending as a redistributive instrument will depend at least partly on what other instruments are available for this purpose. Although developing countries tend to have quite limited opportunities for redistributive direct taxation, even when a country can implement an optimal nonlinear income tax, there can still be an important redistributive role for public spending.

Public spending is a potentially powerful instrument for fighting poverty. How well does it perform in this capacity? How can it have greater impact on poverty? The evidence that has emerged from studies of public spending incidence is convincing. Spending on basic services - notably primary and secondary education and basic health care - is found to reach the poor almost universally. The case for 'broad targeting' by expanding the share of public spending on these services is well substantiated. Yet even here, care is required in monitoring that marginal investments are not lavished on increased quality for the better-off. Certain food subsidy and distribution schemes, social cash transfers, public employment schemes, and other targeted transfer schemes have at times been quite pro-poor. However, many programmes whose stated rationale is to reduce poverty have instead been dismal and expensive failures. A popular reaction has been to clamour for reforms of public spending towards finer targeting of benefits to the poor.

Most public spending programmes are to some degree "targeted". The key question is, What degree of targeting is optimal? Other things being equal, the more ways one discriminates

between beneficiaries, the greater the impact of targeting on poverty. However, other things are not equal. Fine targeting sometimes comes at a cost to the poor. Administrative costs may escalate and political support may vanish. There is no simple answer to how much targeting is desirable, but there are some clear principles to guide choice and some suggestive empirical evidence from past experience.

The optimal mix of targeted and universal programmes in fighting poverty depends on a number of factors, including the characteristics of the poor (who the poor are, how many there are, where they are located and why they are poor) and country-specific circumstances (initial conditions, infrastructure development, and administrative capabilities). When poverty is widespread and administrative capacities are low, broad targeting is particularly desirable, and results from incidence of public spending studies should help to guide sectoral and intra-sectoral allocations. In general, what is needed is a combination of universalism in certain categories of spending and finer targeting in others, such as in providing safety nets. Such a two-pronged approach is a sound starting point for policy design. In implementing it, one should, however, never confuse the ends and the means of policy. Targeting should be seen as a potential instrument, never as an objective in its own right.

The Castro-Leal analysis of the 1993 Salduro household data produced, *inter alia*, three important findings which point to a case for targeting education expenditure. First, it showed that the direct costs of sending children to school are a critical factor determining the demand for education. Education expenses appear to be the most important reason discouraging attendance at school. The direct costs of attending school include school fees, uniforms, transport and meals, books and stationery and miscellaneous items, such as boarding fees, contributions to school buildings, extra costs for teachers and extra-mural activities.

A second critical finding was that the poor in South Africa receive a smaller share of public education spending at every educational level than their share of the population but the shares of spending are larger than their total household expenditure share. This means that public education spending is less inequitable than the distribution of total household expenditures. The share of all public education resources going to the poorest quintile is 14% compared with only a three percentage share of total household expenditures. By contrast, the richest quintile receives a 35% share of all public education spending but concentrates 64% of total household expenditures (Castro-Leal, 1996).

Public primary education spending going to the poorest quintile is 19% compared with 28% for the richest quintile. At the secondary level, the poorest quintile receives 11% and the richest quintile 39% of public education resources. The distribution of public spending in tertiary education is almost as inequitable as the distribution of total household expenditures. The poorest quintile receives only a six percentage share of public tertiary-level education resources compared with 47% going to the richest quintile.

Third, public education spending in South Africa is weakly pro-poor in comparison to countries like Chile, Colombia and Uruguay, which are strongly pro-poor in their distribution of public education resources. The cross-country comparison is particularly significant with Chile because the distribution of household expenditures, is as inequitable as in South Africa. However, Chile has embarked on education reform to progressively distribute public funds in education.

In contrast with other African countries, South Africa has about the most inequitable distribution of public education spending with the exception of Madagascar. South Africa

also has significant disparities across races for public education spending which are wide at the secondary level and widest at the tertiary level. (Castro-Leal, 1996)

Table 5.12: Incidence of Public Education Spending on the Poorest and Richest Quintiles, selected countries, percentage share

Education spending benefiting:			
Country	Year	the poorest 20% of the population (%)	the richest 20% of the population (%)
AFRICA			
Cote d'Ivoire	1993	14	35
Ghana	1992	16	21
Kenya	1992/3	17	21
Madagascar	1993	8	41
Malawi	1994/5	16	25
South Africa	1993	14	35
Tanzania	1993	13	23
LATIN AMERICA			
Chile	1986	25	17
Colombia	1992	23	14
Mexico	1992	14	27
Uruguay	1989	33	15

Source: Castro-Leal, 1996.

In summary, the Castro-Leal analysis suggests first that private costs are a substantial barrier to participation for children in low-income households. Second, it is evident that education expenditure in South Africa is weakly pro-poor. A strong case can thus be made for improving the distribution of public spending.

In the interests of promoting equity there is a convincing case for developing a targeting mechanism to increase the incidence of education expenditure on the poor. This will require the identification of poor households and/or communities. While there will undoubtedly be administrative costs attached to targeting, the costs of not targeting the poor will be perpetuation of inequality in education spending. It may be useful as a starting point to commence the targeting exercise on a pilot basis, in one or two provinces, preferably the richer ones such as Gauteng and Western Cape. It is suggested that these provinces are chosen both because of the greater capacity that is available to undertake this task and because of their relatively smaller proportions of poor people.

5.4 *Intra-Sectoral Restructuring : Health*

As indicated in earlier chapters, South Africa currently devotes significant economic resources to the health sector. However, South Africa has poor health status indicators. This is partially attributable to the fact that the majority of these resources are located in the private sector. In addition, the South African government inherited a curative, hospital-based health care system at the time of the first democratic elections. There are disparities in the distribution of health care resources between rural and urban areas, as well as between and within provinces. The apartheid era also produced large racial disparities in health status and access to health services.

There has been a small increase in real per capita public sector health care expenditure since 1980. Capital expenditure has increased noticeably since the 1994 elections. While a relatively low proportion of public health sector expenditure was devoted to basic health services (BHS) prior to the elections, the budget has been reprioritised in favour of these services in recent years. The lack of audited expenditure data precludes drawing conclusions on the extent to which resourcing of BHS has improved in reality. These trends suggest that there is scope for additional efforts to prioritise resource allocation to BHS, particularly in geographic areas which have historically been under-resourced.

This section considers the scope for increasing revenue for BHS from within the health sector, and particularly focuses on three key issues:

- a) Strategies to increase resources for the public health sector and hence for BHS;
- b) Strategies to improve efficiency within the health sector, which can also increase the resources available for BHS; and
- c) Strategies to improve the incidence of public expenditure on BHS.

5.4.1 Strategies to Increase Resources for Basic Health

There are three major possibilities for increasing BHS resources, currently under discussion in South Africa. These include:

- a) Reducing existing subsidies or tax expenditures on non-basic services;
- b) User fees; and
- c) Social Health Insurance.

These are considered in some detail in the following sections, while certain other options are discussed briefly thereafter.

Reducing government subsidies

Government subsidises health services in a number of ways, and it is essential that these subsidies are reviewed to assess whether funds for additional BHS could be found.

Government subsidises what the 1993 World Development Report terms ‘discretionary clinical services’ through tax concessions on medical scheme contributions. The revenue lost to government through these tax concessions can be considered as an expenditure item, namely a tax expenditure (Surrey and McDaniel, 1985). A recent study has estimated that the amount which is ‘spent’ through tax incentives on medical scheme contributions was between R1.5 and R2.6 billion in 1994 (Price *et al*, 1994). This was equivalent to between 10 percent and 17 percent of the 1994/95 health budget. The greatest beneficiaries of this

subsidy are high income earners who belong to the most expensive schemes and have the highest marginal tax rates.

Some have argued for an end to all tax concessions on medical scheme contributions. In particular, the World Bank recommends the removal of such subsidies (World Bank, 1993). However, it could be argued that the public sector benefits from the contributions made to medical schemes, because it does not need to provide care for scheme members. In addition, removing the subsidy on scheme contributions would have undesirable macro-economic effects. For instance, such a move would effectively decrease net salaries for employees and/or increase the cost of labour for employers.

Others, such as the Minister of Health's Committee of Inquiry, have argued that these subsidies, or forms of tax expenditure, should be restructured (South Africa, 1995). For example, the subsidy could be restricted to the costs of purchasing cover for essential health care, while 'luxury' health services would not receive government subsidies.

The Department of Health recently indicated that it supports the retention of tax incentives on medical schemes that have community rated contributions (i.e. where there is risk sharing) (Department of Health, 1997). However, it strongly opposed the extension of such tax benefits to health insurance, where contributions are risk rated.

Other ways of reducing subsidies on 'discretionary clinical services' are being considered. The Hospital Strategy Project (1996) considered ways in which user fee revenue generation could be improved at public sector hospitals. This is discussed in more detail in the next section.

Another mechanism for reducing government subsidies is through reforms in health personnel training. A recent study estimated that the average cost of training a university medical graduate was R66 500 in 1992 and that the net government subsidy was R40 200 (Bunting, 1994). Not all costs could be quantified, and this is thus a conservative estimate. In addition, this refers only to the Department of Education's subsidy to universities, and does not include the substantial indirect medical training costs which are borne by the academic hospitals and the satellite facilities used for training. The training of all other health personnel is subsidised, although not at the same cost. The majority of the most highly skilled health workers leave to work in the private sector shortly after completing their training.

A Department of Health policy document recommends that all medical doctors should spend at least two years working in public sector non-tertiary institutions prior to being allowed to register for private practice (Department of Health, 1995c). The Interim Medical and Dental Council (IMDC) has supported this recommendation. There has been resistance to this measure from students and final policy proposals are still to be finalised. The most recent proposal is that one year of community service will be required as from 1998. This policy is regarded primarily as a mechanism for recouping some of the public sector investment in training.

There are also concerns about the number of students who receive government bursaries for their medical training who default on their service commitment. Tighter enforcement of service requirements, or alternatively bursary repayments, is urgently required.

Although no explicit policy has been adopted on the training of medical specialists, the cuts in academic hospital budgets has effectively reduced the number of registrar posts (i.e.,

specialist training posts) in South Africa. In addition, the training of a range of primary care health personnel (particularly primary health care nurses) has been prioritised.

While there is still extensive debate about the best approach to dealing with the various forms of government subsidies for 'non-basic' health services, there is growing consensus in South Africa that these subsidies should be restructured and reduced. This could ensure that the amount of government resources targeted to BHS is increased. A useful change in this regard would be to monitor the size and incidence of the tax expenditures on an annual basis. Estimated tax expenditures could be published as an annexure, or as a complement to the annual budget.

User fees for public sector health services

At present, user fees generate relatively little revenue at public sector health facilities. A recent national sample survey of public sector health facilities indicated that fee revenue comprised 9 percent of these facilities' recurrent expenditure (McIntyre and Khosa, 1996). Another study found that revenue averaged 9.2 percent at public sector *hospitals* in 1992/93 (McIntyre *et al*, 1995). These figures reflect fee revenue as a proportion of recurrent expenditure at *facilities*. When non-facility administration and other health care expenditure is included, fee revenue comprises only 6 percent of total recurrent expenditure.

The proportion of recurrent expenditure recouped through fees varies between facilities at different levels of care. Secondary hospitals generate the greatest fee revenue, relative to their recurrent expenditure (13.3%), while chronic and academic hospitals generated the least revenue (4.4% and 6.1% respectively) (McIntyre *et al*, 1995). At primary care facilities, fee revenue (prior to the implementation of 'free care' at these facilities) was approximately 8 percent of recurrent expenditure (McIntyre and Khosa, 1996). However, relative to the revenue generated at hospitals, primary care facilities make a relatively insignificant contribution. For example, only 1.8% of total fee revenue was attributable to primary care facilities (*ibid*).

The vast majority of user fee revenue at public sector hospitals is derived from private patients, and in particular medical scheme patients. An analysis of data from former Cape Provincial Administration facilities indicated that 72.3 percent of fee revenue at academic hospitals, and 86.6 percent at other hospitals, was derived from private patients (McIntyre and Khosa, 1996).

In contrast, relatively little revenue is generated at public sector facilities from state patients (i.e. income related patient categories H1, H2 and H3). An analysis of health facilities in the former Cape Province indicated that an average of 7.9 percent of total user fee revenue came from the H1 category of patients (i.e. the lowest income category of state patients), and that 11.3 percent of revenue is attributable to H2 and H3 patients.

The above data reflect gross revenue from user fees, and it is thus useful to evaluate *net* fee revenue generation levels. A recent study at Groote Schuur hospital and its satellite facilities indicated that while R21.1 million was generated in patient fee revenue during 1994/95, the fee collection costs exceeded R6.2 million (i.e. 29.4% of revenue) during this period (Dangschat and McIntyre, 1996).

It is useful to distinguish between the net fee revenue for private and for state or 'hospital' patients. The collection costs associated with private patients were less than 5 percent of fee revenue for inpatient services, and 32 percent of revenue for outpatient care (*ibid*). However, approximately 55 percent of the fee revenue per H1 patient was spent on the costs of

collecting these fees in the case of inpatients. The fee collection costs exceeded revenue generated by 150 percent in the case of H1 outpatients (*ibid*).

While the costs of fee collection should be quantified at a wider range of public sector health care facilities, this study indicates that it is financially beneficial to charge private patients user fees at public sector hospitals. In addition, it suggests that private patients, particularly those with health insurance, should be the focus for the purposes of revenue generation within public sector facilities. Given the high costs of hospital-based care, it is unlikely that many South Africans would be able to afford significantly higher user fees in the absence of insurance cover.

A recent study modelled the potential for generating additional revenue from user fees (McIntyre, 1997a). It indicated that it was unlikely that significant additional resources would be generated through user fees at *existing* levels of health insurance coverage (only 14 percent of South Africans are currently members of a medical aid scheme). Fee revenue increases would require substantial increases in admissions of private patients to public sector hospitals.

Public hospitals are likely to have to open amenity wards to attract substantial numbers of private patients. An undesirable consequence of this is that it would formalise the demarcation between public and private patients, which could be politically sensitive and considered another form of discrimination. Measures would have to be taken to ensure that all patients had a similar quality of *clinical care*. In addition, there are costs associated with improving 'hotel' services within hospitals. These costs may in fact outweigh the additional revenue that could be generated, this has given momentum to policies for 'outsourcing' these activities (see later discussion).

Given the existence of a growing number of private hospitals, many of which have relatively low occupancy levels and which thus vigorously compete for medical scheme patients, the apparent preference of many medical aid scheme members for private hospitals (suggested by declining admissions of scheme members to public hospitals in recent years), and the likely political opposition to opening amenity wards in public sector hospitals, the prospects for significantly increasing user fee revenue generation from the currently insured population must be regarded as negligible.

Another option for increasing the number of medical aid scheme patients in public sector hospitals is to negotiate directly with medical schemes, rather than competing for individual private patients. Competitive prices could be offered, in return for being registered as the scheme's 'preferred provider'. There have been suggestions that medical schemes that primarily serve civil servants should be prioritised in this regard. Civil servants and their dependants accounted for 25 percent of total medical scheme membership in 1992 (excluding Transnet employees as this enterprise was recently 'commercialised'). The government spent nearly R1.8 billion of general tax revenue on contributions to medical schemes on behalf of civil servants in 1992/93. It could thus be argued that efforts should be made to recoup some of this tax-funded expenditure through the public hospital user fee mechanism. This should be pursued by means of negotiations with the relevant medical schemes, rather than as a blanket regulation requiring civil servants to use public sector hospitals exclusively, which is likely to fall foul of labour relations legislation.

The alternative that is likely to be the most successful, from a revenue generating perspective, is that of increasing insurance coverage within the formal sector. A recent study found that if insurance coverage was extended (e.g., through the introduction of a Social

Health Insurance which covers the cost of public hospital care), significant additional revenue could potentially be generated (McIntyre, 1997a).

There are several factors that contribute to the currently low level of user fee revenue generation in South Africa. One of the most important factors is that fees are not retained at facility level, and in fact do not benefit the health sector as they are effectively returned to the provincial treasuries. There is thus little motivation for implementing rigorous fee collection procedures at facility level. The future revenue generating potential of user fees is thus heavily dependent on whether revenue retention is permitted (see later discussion).

In summary, while gross user fee revenue currently accounts for about 6 percent of total recurrent public sector health care expenditure, additional revenue could be generated at public sector hospitals through charging insured patients higher user fees. However, this is only feasible if the extent of health insurance coverage in South Africa is increased and if fee revenue retention within the health sector is permitted.

The introduction of Social Health Insurance (SHI)

An option that is receiving serious consideration by the Ministry of Health is the introduction of Social Health Insurance to cover the costs of public sector hospital services for formal sector employees and their dependants. This would provide a mechanism for those who use public sector hospital services, and are currently unable to pay much for these services out-of-pocket, to cover the costs of providing such services (or at least a higher proportion of the costs than presently). As indicated previously, a Social Health Insurance has the potential to generate substantial user fee revenue in public sector hospitals.

McIntyre (1997a) found that if a Social Health Insurance (SHI), covering all formal sector employees and their dependants for at least the costs of public sector hospital care, is implemented, fee revenue generating potential could increase dramatically (by as much as 600 percent over user fee revenue in 1992/93, or 40 percent of total public sector recurrent health care expenditure in this year) (*ibid*).

It is worth noting that the costs of service provision may not increase, as this modelling assumes that public sector hospitals will not have to compete for new patients, but that formal sector employees and their dependants who currently use public sector hospitals will continue to do so, but will be able to pay more than they currently do for these services. The demand for services would not increase, unless quality improved and private health services are substituted by public health services. The opposite may be a more likely alternative. If 'hotel services' in public hospitals do not improve and if private hospitals engage in price competition with the public sector, a high proportion of the insured population may choose to use private facilities.

In addition, revenue generation may be lower than these estimates. The major reason is that the SHI proposals will allow formal sector employees the option of joining either the SHI fund or an approved medical scheme. This means that some of those who do not have insurance coverage at present may elect to join a scheme that will provide cover for private hospital care, thereby reducing demand for public hospital services.

The preferred mechanism for funding the SHI policy is a payroll deduction of between 2% and 4%. A 2% payroll deduction is expected to cover 50% of the costs of providing the services, while a 4% payroll deduction will cover all costs. A 2% payroll tax is estimated to collect R2.1 billion and a 4% tax R4.3 billion (Department of Health, 1997).

Other revenue generating options

Many public sector hospitals currently have low occupancy levels. One suggested revenue generating mechanism is to lease spare beds to the private sector. However, the implications of this alternative require detailed evaluation. One consequence is that it would increase the 'private hospital' capacity which may work in opposition to efforts to increase the admission of insured patients to public sector hospitals (see the sections on user fees and SHI). The relative costs and benefits of admitting more fee paying patients to public sector hospitals compared with leasing spare public sector beds to the private sector should be determined. Probably of greater concern is the potential for an increase in the 'brain drain' to the private sector. The leasing of some beds within an operating public sector hospital may increase the drainage of skilled personnel to the private sector.

Another potential mechanism for generating additional revenue for the health sector is that of dedicated excise duties on tobacco (and possibly alcohol) products. Internationally, there is increasing awareness of the adverse health effects of tobacco consumption. South Africa has high smoking rates relative to developed countries, and currently has a low tax incidence on cigarettes. International evidence indicates that increasing the price of tobacco products is the single most effective mechanism for reducing tobacco consumption. Thus, on public health grounds, there are strong arguments in favour of increasing taxes on tobacco products, and for dedicating this tax revenue to the health sector (given the health care costs of tobacco-related illness).

However, there are two concerns about such tax increases. Firstly, a substitution effect frequently accompanies cigarette price increases, i.e. smokers switch to cheaper cigarette or pipe tobacco from which cigarettes can be rolled. The adverse health effects of increased consumption of non-filter cigarettes must be taken into account and a well co-ordinated tax policy should be adopted. Secondly, the pro-tobacco lobby frequently highlights the regressivity of excise on tobacco products, as consumption of these products is higher among lower socio-economic groups. It should be noted, however, that there tends to be a higher price elasticity for lower social classes than for higher social classes. The poor are thus likely to reduce consumption more rapidly as prices increase, which will minimise the distributive effects of increased taxes. Consideration could be given to using some of the additional tax revenue for the provision of free 'quit smoking' programmes in lower socio-economic communities.

Feasibility of revenue retention within the health sector and of redistribution to BHS

This section considers whether new revenue may be collected by the health sector, the implication being that with increased revenue, additional funds may be made available for BHS. There are two aspects to this. Firstly, it is not certain whether health will be able to retain this revenue. Treasuries have the discretion to decrease budgets to hospitals which raise additional revenue. The additional funds could then be utilised for other functions. If this is applied, then the incentive for health institutions to raise revenue is weak. The use of a conditional grant for the funding of central hospitals will confuse these incentives further, since it is possible that the national department of health may want to make adjustments to conditional allocations after considering the revenue collected by the hospital. There should be an incentive to generate revenue, namely retention of the revenue (or a portion thereof). Effective financial management and responsibility is a prerequisite to revenue retention. This requires the implementation of the ideas contained in the Hospital Strategy Project (1996).

The second aspect is whether revenue retention would actually result in increased spending on BHS. Even if the additional money raised is transferable within the health vote, it raises

the aforementioned question of the incentives for revenue collection. Thus, there should be some revenue retention at facility level, but this should be less than 100%. The proportion of revenue retained at each facility could be determined according to a sliding scale, which should take into account issues such as the magnitude of revenue generation and the degree to which facilities are regarded as being currently under- or over-resourced, while at the same time not removing the revenue collection incentive. The remainder of the revenue should be reallocated to currently under-resourced facilities, particularly those providing BHS. The problem with this mechanism is that some provinces have a greater capacity for collecting revenue. Tax capacity equalisation could be applied through the budget process as part of the revenue sharing formula.

The question of revenue retention raises the broader problem of the absence of a sound and effective budgeting and financial management system (not merely for health, but for government as a whole). This issue is discussed in the next section.

5.4.2 Improved Efficiency of Health Expenditure

Efficiency gains within the health sector will result in improved outcomes and may not require a great deal of additional resources. However, efficiency improvements may require some additional resources in the short term (i.e. there are costs associated with significant health sector restructuring), and it often requires time to implement and achieve the gains. While the previous section considered alternative potential sources of additional resources, this section focuses on how existing health sector resources could be redistributed towards BHS.

As highlighted in Chapter 1, much of the burden of ill-health and premature death in South Africa is attributable to potentially preventable diseases. International evidence indicates that an increasing emphasis on BHS can significantly alleviate this excess suffering (World Bank, 1993; World Bank, 1994).

One of the main policy objectives of the Department of Health is to reduce disparities and inequities in health service delivery and increase access to improved and integrated services based on primary health care principles (Department of Health, 1995c). A key policy goal is that of achieving universal access to an "...essential package of primary health care interventions" (Department of Health, 1995c: 3). In addition, the department's policy document specifically highlights the need to focus "...on the rural, peri-urban and urban poor" (Department of Health 1995c: 4). Thus, the official policy of the health department would support an increasing emphasis on BHS, with a particular concern to improve access to BHS for previously disadvantaged and vulnerable groups.

In the context of increasingly constrained public sector finances in developing countries, there is broad agreement in the international literature that governments should ensure that their scarce resources are *primarily* directed towards providing essential health services for those who are unable to pay for the health services they require, and to services with significant externalities and public good characteristics. There is a clear political commitment by government to addressing the health needs of the most disadvantaged members of society, particularly at the primary care level.

Allocative efficiency

A range of interventions has been aimed at improving the allocative efficiency of publicly funded health services (by shifting the balance between levels of care). Measures aimed at improving resourcing of and access to BHS include the following:

- In early 1995, the Minister of Health appointed a Committee of Inquiry to make recommendations on how to achieve universal access to primary care services (South Africa, 1995). The Committee decided not to develop an explicit public health and essential clinical service package, as recommended in the World Development Report (World Bank, 1993). Instead it was argued that the population should have access to a comprehensive package of primary care services, and that the package should be defined in terms of access to specified service providers (e.g. access to a community health centre which will be staffed by primary care nurses, midwives, a doctor, a pharmacy assistant, etc.). The exact staffing levels would be determined by financial resource availability (although the committee did make certain recommendations on staff profiles). The skills and scope of practice of these staff would then define the publicly-financed package of services to which patients would have access (*ibid*). The Committee's report has provided a blueprint for the development of BHS in South Africa.
- There has also been an increasing allocation of financial resources to BHS, through the recent budget 'reprioritisation' process, guided by the Medium Term Expenditure Framework (see Chapter 4). However, the reallocation of the health budget towards BHS and with a view to reducing historical inequities between geographic areas and groups in society, will only result in increased expenditure on these historically under-resourced services, groups and areas if there is a relative redistribution of physical resources (particularly facilities and personnel).
- Steps have been taken to develop infrastructure at the primary care level, and to improve the distribution of facilities. Of particular note is the Clinic Upgrading and Building Programme (CUBP), which is a 'Presidential Lead Project'. In the initial phases of the CUBP, 295 new clinics are to be constructed, and 104 existing clinics are to be upgraded. A recent analysis of the CUBP found that the two provinces that had particularly poor population to clinic ratios prior to the 1994 elections (namely Kwazulu-Natal and the Northern Province) have been the major beneficiaries of CUBP funds (Govender and McIntyre, 1997). This analysis also indicated that, on completion, the CUBP will result in the greatest improvement in the population per clinic ratio in relatively poor rural areas. However, actual construction and upgrading of clinics has progressed more rapidly in relatively well resourced areas, i.e. under-resourced areas appear to be experiencing greater implementation difficulties (such as delays in the tendering procedure and delays during construction). Thus, while the CUBP can *potentially* contribute to addressing the hospital-centred urban bias of South African health services, it may be necessary to provide additional *implementation* support to areas in greatest need.
- Changes have also been occurring in relation to hospitals. Shortly after the 1994 elections, the national Department of Health commissioned a detailed evaluation of the condition of all public sector health facilities. This has provided a basis for identifying the hospitals in greatest need of repairs, many of which are located in the rural areas. In addition, it has been recognised that additional hospital services are required in certain rural areas. This is being addressed by expanding hospital capacity and improving the staffing of hospitals (including increasing the number of specialists) in these areas. The relative redistribution of hospital beds between urban and rural areas is also being

promoted by the closure of some hospital beds in large metropolitan areas, particularly in academic and other tertiary hospitals (i.e. geographic and level of care resource redistribution are occurring in tandem).

- There have also been efforts to improve staffing at the primary care level (e.g. training more primary health care nurses and recruiting foreign doctors). There are also initiatives to change the curricula of all health personnel to ensure that they are appropriately trained to address the health needs of South Africans (with an emphasis on improving skills for BHS provision). An important constraint in this regard is the persistent inability to ensure that resources are equitably redistributed to where they are most needed (see later discussion).
- A range of programmes that fall within the parameters of public health interventions and essential clinical services have been implemented or enhanced. For example, there have been vigorous efforts to improve immunisation coverage (such as through mass polio and measles immunisation campaigns) and to expand the EPI programme (such as the inclusion of Hepatitis B vaccinations on the list of routinely administered immunisations for children) (Solarsh and Xaba, 1996; Wigton *et al*, 1996).

The Minister of Health has energetically pursued various initiatives to reduce tobacco consumption (such as regulations requiring health warnings on cigarette boxes and all tobacco advertisements).

As tuberculosis accounts for 80 percent of notifiable diseases in South Africa, and given its association with HIV/AIDS, a National Tuberculosis Control Programme (TBCP) has been developed. The TBCP aims to improve facilities for the early diagnosis of tuberculosis, to standardise treatment regimens, and to implement Directly Observed Treatment (DOT) on a national basis. While the National HIV/AIDS Programme was awarded high priority and is a 'Presidential Lead Project', concerns have been raised about the effectiveness of the programme. This has been partially attributable to denial at the political, community and individual levels, as well as to controversy around some of the AIDS interventions. Maternal, child and women's health (MCWH) has received specific consideration within BHS improvements. In addition, pregnant women and children were prioritised for improved access to BHS. President Mandela announced the introduction of 'free health care' (FHC) for pregnant women and children under six in one of his first public addresses after the 1994 elections.

- One of the most important BHS initiatives was the introduction of 'free care' at the primary care level. This improves the financial accessibility of primary care services, which may encourage patients to first seek care at a primary care facility, rather than going directly to a hospital (where an outpatient fee will be levied).

In summary, the Department of Health's policy clearly supports an increasing emphasis on BHS. A wide range of strategies have been adopted to translate this policy into practice. However, it is too early and there is insufficient data to assess whether these efforts have been successful. This suggests the need for more ongoing evaluation of programmes.

In addition to the above efforts to improve BHS, there are also initiatives to achieve a greater integration of BHS and other functions whose services impact on health outcomes. Some of these functions are preventative in nature (and cost effective, such as nutrition and water and sanitation services) while others provide important social security or services to

enhance people's capacity to function effectively. Four functions, namely family planning, nutrition, welfare, and water and sanitation are of particular importance in this regard.

Family Planning

During the apartheid era, the focus of the population development programme was on fertility reduction (particularly in the African population) through family planning. However, the current government's population policy considers the issue of family planning within the context of gender equality and human rights. This policy was developed by the Ministry of Welfare and Population Development, in consultation with a wide range of individuals and organisations (Klugman, 1996).

The population policy is based on an analysis of the underlying causes of three demographic variables, namely fertility, mortality and migration. "Programmes to address the identified problems will include promotion of sexual and reproductive rights and health, as well as other equally critical programmes such as promotion of education, employment and gender equity" (Klugman, 1996: 8).

Family planning services were initially delivered as a vertical programme. There were single purpose family planning clinics and dedicated family planning nurses were trained. In 1988, family planning services were incorporated into the Primary Health Care Directorate of the national Department of Health. However, at the time of the 1994 elections, nearly half of family planning services were still provided through single purpose clinics. There have been vigorous attempts to further integrate family planning with other primary care services, with all primary care nurses now receiving family planning training and family planning nurses being retrained to provide more comprehensive primary care services.

The provision of family planning services by NGOs is small relative to other African countries. The Planned Parenthood Association of South Africa (PPASA) is the largest NGO working exclusively in the field of reproductive health. It primarily focuses on youth clinics, social marketing campaigns, community-based distribution programmes and male motivation programmes.

Local efforts have been enhanced by the opening of an UNFPA Country Office in late 1994. A US\$4.2 million interim programme of assistance was initiated for the 1994-1996 period, to allow for the planning of a more extensive assistance programme.

As a result of all of these efforts, contraceptive prevalence is relatively high in South Africa. In 1994 it was estimated to be 66 percent for Africans, 74 percent for Coloureds, 77 percent for Indians and 80 percent for whites.

Nutrition

As indicated in Chapter 1, inadequate nutrition is a major cause of ill-health in South Africa, particularly among children. Until recently, there was relatively little public sector expenditure on nutrition programmes. NGOs were the primary providers of nutrition services during the apartheid era (e.g. Operation Hunger). After the 1994 election, a Primary School Nutrition Programme (PSNP) was announced as a 'Presidential Lead Project'. Although the PSNP was originally intended to address a range of education, health and nutrition goals, its implementation has largely been restricted to a vertical school *feeding* programme (Child Health Unit, 1997).

A recent review of the PSNP has highlighted a number of problems with the programme. For example, parasite control measures, micronutrient supplementation and nutrition education interventions, which are relatively cost effective and easy to implement, have not been included in the PSNP (*ibid*). In addition, the food provided in the programme is sometimes of sub-standard quality and quantity. Another concern raised is that the nutritional needs of pre-school children remain largely unmet.

As a comprehensive nutrition programme, the PSNP has been a failure. The PSNP was not, however, originally conceived as a nutrition programme, but rather as a way of getting more children into school and affording those children a meal which would improve their concentration and general school performance. One option for improving the efficiency of the PSNP is that it should be applied as an education programme (if there is evidence there it has had success in this regard). The incidence and effectiveness of the programme would be enhanced by targeting schools in areas with the highest levels of poverty amongst its pupils and by offering a more integrated service; for example, through the inclusion of a school based parasite control strategy (Child Health Unit, 1997).

An alternative option is that the PSNP be urgently restructured into a more comprehensive *nutrition* programme, which targets pre-school as well as school children. An integrated nutrition programme should be developed (UNICEF, 1995), such a programme has been shown to offer very high social returns (the benefits are great for the cost of the programme).

A preferable alternative is to combine these options and continue to deliver the PSNP as an education programme with improved targeting, while developing an integrated nutrition programme through the department of health, which combines and expands upon the other two programmes currently being delivered by the Department of Health.

These two programmes are the National Nutrition and Social Development Programme (NNSDP) and the Protein Energy Malnutrition (PEM) scheme. The NNSDP has focused primarily on food distribution, although it has supported certain community development projects such as vegetable garden and income generating projects. Community participation in these projects is reported to be minimal (*ibid*). In addition, there was no explicit geographic targeting of NNSDP resources and distribution has been largely demand-driven, with the result that urban areas have received a disproportionate share.

The PEM scheme is a facility-based programme designed to provide enriched milk to malnourished children between the ages of 1 and 6 years. Once again, there was no explicit geographic targeting of resources. It has also been suggested that the scheme may have undermined breast feeding.

In 1995/96, R298 million was allocated to the NNSDP, R34 million to the PEM and R496 million to the PSNP. There are concerns that the budgetary allocations for nutrition programmes are unlikely to increase (*ibid*). In fact, the allocation to the PSNP, which accounts for the major share of government funded nutrition programmes, has declined over the last three years.

Welfare

There is an increased awareness for the need to integrate welfare services and to co-ordinate social security policies to complement the programmes of other departments. Thus the child benefit which is to be introduced in 1998 attempts to dovetail with the free health care and the primary school nutrition programme so that a continuous safety net is established

(Appendix I). The support is aimed at children below 7 years who will receive food from the PSNP once enrolled in school (some of the poorest children are unable to enrol at school at the age of 7 - co-operation between departments to find a cost effective solution to this problem is required). In addition, this approach requires that the targeting of these programmes be centrally co-ordinated.

The flagship programme is a pilot programme which targets single women with young children who are not receiving social security benefits and are residents in poor areas. The programme attempts to develop sustainable economic activities in these areas, with an emphasis on integrated services. Resources have been limited (initially about R400 000 per province) and not adequately targeted (equal amounts to richer and poorer provinces). Given the recent nature of the programme, it is premature to evaluate its long term success.

Water and sanitation

The presence of potable, clean water and sanitation impacts on health status. Delivery of water and sanitation is therefore a prime environmental component of preventative health care. The health care costs are both direct, if individuals require treatment for illness, and indirect - productivity losses through the impact in the ability to work. About 80% of all households have access to piped water and about 70% have access to sanitation facilities (SALDRU 1993). Achieving the correct balance of health and water and sanitation services (as well as the nutrition programme) is therefore critical to ensure allocative efficiency.

Technical efficiency

Allocative efficiency efforts have been strengthened by initiatives to improve technical efficiency within the health sector. A particular focus has been that of pharmaceutical products. Medicines for public sector health services are obtained through a national tendering system at prices well below those in the private retail sector. However, an investigation undertaken by an international consultant, on behalf of the Minister of Health's Committee of Inquiry, indicated that the state tender prices of 137 essential medicines used in the primary care setting were on average 23 percent higher than international prices (Bannenberg, 1995). The state tender price was more than five times higher than international prices in some instances, with one medicine being 33 times higher than international prices. There is thus potential to reduce further the unit costs of certain medicines in the public sector, either through negotiation with local pharmaceutical suppliers or by medicine importation from international suppliers. Whereas local suppliers have effectively resisted the introduction of parallel importation in the past, a Department of Health policy document states that: "The Government must reserve the right to source products on international tender. This could result in the gradual introduction of parallel importation, starting with high volume essential drugs" (Department of Health, 1995c: 59). In addition, the recently released National Drug Policy indicated that a Pricing Committee would be established to monitor and regulate the prices of pharmaceutical products in South Africa (Department of Health, 1996).

Potential efficiency gains can also be achieved through the increased use of generic medicines, and by restricting the number of pharmaceutical products available in the public sector. The Minister of Health established a committee, shortly after the democratic elections, to develop an Essential Drugs List (EDL) and to prepare treatment guidelines for health personnel. The EDL and associated Standard Treatment Guidelines for *primary care facilities* were published in late March 1996 (Summers and Suleman, 1996). These measures will serve to promote more rational and cost-effective use of medicines in public sector health care facilities. While the potential savings from the introduction of an EDL have yet to be

quantified, it is known that the number of categories of medicines procured would drop dramatically. Approximately 2,386 pharmaceutical items are purchased via the South African state tender system, compared with the WHO norm for an EDL of 260 items (South Africa, 1993). Reducing the number of pharmaceutical items on state tender would maximise the financial benefits of bulk purchasing. Improved procurement practices would also result in savings if the quantity of medicines expiring before use can be reduced.

In addition to the above improvements in pharmaceutical procurement and utilisation, improved control of medical supplies would also result in efficiency gains. The Steinmetz Committee⁴ estimated that over R500 million was wasted on 'shrinkage' (i.e. theft) of pharmaceutical and other medical supplies annually (South Africa, 1993). This is equivalent to more than 25 percent of total public sector expenditure on these supplies in 1992/93. The Steinmetz Committee further estimated that the net saving, after accounting for the additional costs of improved stock control, could be as much as R250 million (South Africa, 1993).

One of the key challenges which the National Drug Programme (NDP) has to address is to improve the procurement and distribution of medicines. This is a critical issue, as a lack of availability of essential medicines at health facilities will negate the successes of initiatives to improve geographic and financial access to health services. Proposals were formulated to restructure the state procurement and distribution organisation (COMED) in September 1995, but had not been implemented by late 1996 (Summers and Suleman, 1996). Three provinces which have experienced particularly severe problems in ensuring adequate medicine supplies to rural health facilities, namely Northern Province, Eastern Cape and Mpumalanga, have contracted out their medicine procurement and distribution to private organisations (*ibid*).

In addition to the pharmaceutical policy, which will promote technical efficiency in this input category throughout the public health sector, there have been specific initiatives targeted at both the primary care and hospital levels. In relation to primary care services, there are proposals to achieve a more appropriate and efficient skills mix. In particular, the Committee of Inquiry (see earlier sections) recommended that all people using publicly funded services would first be seen by a primary health care nurse (PHCN), and only referred to a doctor when necessary (South Africa, 1995). On this basis, the training of PHCNs has been prioritised.

In relation to human resources within hospitals, there is considerable scope for efficiency improvements. There were an average of 0.75 nurses per hospital bed (acute and chronic) in South Africa in 1992/93. This exceeded the nurse to bed ratio in nearly two-thirds of the OECD countries for which data were available (OECD 1993). A recent study estimated that potential efficiency gains within hospitals could be as high as R1 billion in 1992/93 terms (equivalent to 11 percent of expenditure on public sector hospitals) (McIntyre, 1997a). These estimates are based on the relatively high average nurse to bed ratio in public sector hospitals, and the higher average patient day costs in hospitals which have low occupancy rates.

The distribution of expenditure between input categories should be carefully monitored over the next few years. As indicated in Chapter 3, personnel accounted for two-thirds of public sector expenditure before the 1994 elections, while pharmaceuticals accounted for 12.5%. With the implementation of the NDP, it is likely that the relative expenditure on

⁴ The Steinmetz Committee was established to explore mechanisms for rationalising health services in South Africa., it contains the only published estimate of the extent of pharmaceutical 'shrinkage' in South Africa.

pharmaceuticals will decline. Recent increases in health personnel salaries will also contribute to a change in the relative distribution of expenditure between input categories. In 1996, doctors received increases of between 28 and 122 percent, while nurses received increases of between 7.5 and 42 percent (Mametja and Reid, 1996). There is likely to be pressure for additional increases, particularly in nurses salaries. This relates to the fact that doctors were prioritised in the first round of salary increases, and it was agreed that nurses would receive priority in 1997. However, there was in fact an across the board increase of 7.5 percent for health personnel in 1997. Thus urgently-required conditions of service improvements for nurses, who are regarded as the front-line health workers at the primary care level, have not materialised.

It is necessary to evaluate whether health personnel salaries are satisfactory relative to other professionals in the civil service. It is particularly important to evaluate the salary differentials between nurses and doctors, relative to international experience. While additional salary increases may be required for nurses, and possibly certain other categories of health personnel, it will be essential to ensure that these increases do not detract from other aspects of recurrent expenditure requirements, especially the availability of essential medicines.

In addition to changes within the public sector, changes in the public/private mix are being explored as mechanisms for improving technical efficiency. For example, the Committee of Inquiry proposed a purchaser-provider split at the primary care level. It was recommended that budgets should be provided to district health authorities who could then purchase primary care services from public sector providers (e.g. community health centres) and/or accredited private providers (South Africa, 1995). This *could* promote competition between public and private sector providers and thus enhance efficiency and improve quality of care (the efficiency of a purchaser-provider split has not been evaluated). This proposal would undoubtedly be an important mechanism for utilising human resources currently located in the private sector to enhance primary care service provision.

Options for ‘contracting out’ services (also termed ‘outsourcing’) to the private sector, are increasingly being considered. Certain services, such as the distribution of pharmaceuticals in three provinces (see above) have already been contracted out to the private sector. A number of provinces are seriously considering contracting out other non-clinical services, particularly laundry and catering services. While the efficiency of contracting out non-clinical services has not been evaluated, it does focus managerial capacity on clinical service provision.

Inefficiencies due to inadequate management and financial capacity

There is a growing acknowledgement of the weakness in managerial and financial capacity in the public health system. This includes insufficient and unskilled staff, a lack of systems and structures for efficient operation and planning, inappropriate incentives and a lack of responsibility and accountability from facilities and departments. In the absence of improved managerial and financial efficiency, the ability to actualise and implement the measures described above are in doubt.

Decentralisation of Hospital Management and improved accountability

Given that hospitals account for a large proportion of total public sector health care expenditure (81 percent in 1992/3), it is critical that efficiency improvements be largely directed at hospitals. In an effort to improve efficiency and financial management within public sector hospitals, the Hospital Strategy Project (HSP) was commissioned by the national Department of Health in 1995. It focused primarily on improving hospital management systems, but also made recommendations for promoting accountability to the

community and responsiveness to the needs of patients. The report is a comprehensive guideline for improving hospital management. A central conclusion of the project was the need to ensure that capable staff and financial systems are put in place, that management is decentralised and accountability enhanced.

Implementation of the HSP has proceeded slowly since the publication of the report. Ensuring the rapid implementation of the recommendations will improve the financial management of the hospitals. This may lead to increased funds available for BHS through efficiency gains as well as better information concerning trends in expenditure on other public health services delivered by the hospitals.

The development of the District Health System

The development of a District Health System (DHS) represents a core strand of health sector decentralisation in South Africa, and is seen as a critical foundation for the effective development of primary health care within the country (Department of Health, 1995c). It is particularly recognised that a decentralised management approach is required to ensure effective planning to meet the health needs of the population, as well as to enhance effective community participation in health service management.

While there has been some progress in establishing a DHS, a number of obstacles remain. National guidelines on the creation of health districts suggested that their boundaries should preferably be coterminous with that of local governments, and the administrative boundaries of other sectors (Gilson *et al*, 1996). The latter condition is essential if there is to be effective inter-sectoral collaboration, and if social services are to be provided in an integrated and holistic way. While district boundaries have been delineated in some provinces (Mjekwu, 1996), the slow progress in finalising local government boundaries has delayed the process in other provinces (Gilson *et al*, 1996).

Where district boundaries have been determined, there are two major remaining obstacles to DHS implementation. Firstly, there have been delays in obtaining Public Service approval of posts for the district management team (Mjekwu, 1996). Secondly, there is still significant debate over governance options (particularly whether districts should be accountable to local government structures or to provincial administrations). This debate arose due to the lack of a clear delineation of health care responsibilities in the constitution. Governance is regarded as the most important obstacle to the successful implementation of the DHS, and thus to the successful integration of primary care services. The significant disparities in salary scales and other service benefits between local government and provincial health departments, are also creating difficulties in integrating primary care services within a DHS (Makan *et al*, 1995).

The decentralisation process has also been retarded by the lack of regulatory frameworks that establish a legal foundation for the transfer of powers (Gilson *et al*, 1996). The revision of the Public Service Act and the Tender Board Act have been identified as priorities to support the decentralisation process (e.g. any purchases above R7500 must go to the *Provincial* Tender Board) (*ibid*). There is also a need to develop organisational processes and systems to support DHS development (*ibid*). In particular, relative responsibilities must be defined in relation to finance, funds transfer, ownership of assets, provision of pharmaceuticals and personnel issues.

There are potential dangers associated with decentralisation. International experience has demonstrated that decentralisation can be accompanied by increasing geographic inequities (Gilson *et al*, 1996). It is thus essential that provincial health departments retain certain

decision-making powers in relation to inter-district resource allocation. This is particularly important in provinces which currently have significant intra-provincial resource disparities (such as the Eastern Cape and Northern Province). The Northern Province has decided not to fully decentralise until resource redistribution within the province has been achieved. The preferred governance option in the Eastern Cape (namely provincial control) has been influenced by inter-district resource disparities. The potential for entrenching inequities by decentralising to local governments, because of the different revenue generating capacities, was recognised as a danger in this province (*ibid*).

While there has been slow (yet quite significant) progress in developing a DHS in South Africa, it is regarded by the national and provincial health departments as a priority issue. Capacity development in all respects (e.g. managerial finance and planning skills, appropriate legislative and regulatory frameworks, information systems) is urgently required and is receiving attention. However, the issue of governance is likely to remain a key obstacle to the successful implementation of an *integrated DHS*.

Inefficiencies created due to the budgeting system

Following the political transition in 1994, the budget process has changed continuously, the approach to budgeting has changed twice and new provinces, local governments and districts have been established. In addition, a draft Budget Process White Paper was produced and rejected, the shift to a new accounting system has subsequently been delayed, responsibilities have shifted to new accounting officers and the governmental prioritisation process has shifted from the RDP office to the Department of Finance and Cabinet.

The fluidity of the budget environment, together with the inexperience of many of the responsible officers and the extensive overhaul of policies and programmes being driven through White Papers and Green Papers has resulted in a number of inefficiencies. Three areas are described below:

- a) The relationship between planning and budgeting;
- b) The incentives and expertise for effective budgeting; and
- c) The relationship between capital and recurrent expenditure.

Inefficiencies caused by policies, planning and budgeting not being effectively linked

Planning, in its simplest form is considered as organised, rational thought that is essential for a determination of the national objectives, the instruments to be used, and needed inputs. In more diversified forms, planning is considered as a projected course of action, as a means of reaching an end, as a special process for reaching a rational decision, as full utilisation of all the materials of the community, as an art, and as a process of preparing a set of decisions for action in the future directed at achieving goals by optimal means. Budgets and plans are, therefore, facets of the same process. Budgeting without planning ceases to be a plan of action, and plans that do not have a realistic recognition of the budgetary constraints have little functional value. Each disciplines the other, and the end products should ideally bear the imprint of both. Budgets are usually made for one year but they leave a legacy for the future. The plan can also be annual but it views with greater clarity the implications of today's actions for the future, as well as the requirements for the future. In planning, the economic aspects dominate, while in budgeting more attention is paid to financial aspects.

The Department of Finance's MTEF process has improved the potential efficiency of budgeting by shifting to a tri-annual process. The first attempt at the MTEF has shown that

many constraints exist to efficient budgeting, including data, control systems and accountability.

In addition, the last three years have seen the generation of significant new policies. Few of the policies have been accompanied by a clear statement of their financial implications. Thus a wedge has been introduced between policy, planning and budgeting. For example, the free health care policy announced by the Department of Health was not accompanied by an adequate assessment of its financial implications - this has significant implications for the efficient delivery of services. Moreover, inadequate assessments from one department may spillover to other departments as the real financial implications become apparent. The unintended consequence may be decreased resources for BSS. Some departments, such as the Department of Welfare are addressing this shortcoming. They are developing a model which 'costs' alternative policy choices.

Subsequently, policies are not linked to real resource plans which are therefore not reflected in the budgets. This has resulted in a lack of effective delivery and implementation of priority projects.

The need for incentives and expertise to support effective budgeting

Palmer et al (1997) reviewed the impact of changes to the budget process and the capability of a provincial health department to manage there financial resources. This research found that changes to budget procedures have caused substantial fluctuations in the budgets for departments as well as for programmes, including BHS.

The technical ability and incentives to prepare realistic budgets (which reflect real plans) and to have expenditure properly reflected in budgets have been questioned.

The study noted a number of issues which needed to be addressed, including:

- Insufficient training of staff working on budgets;
- Improvements in data entry control to improve data;
- The need to standardise budget categories and activity definitions;
- The need to reflect all health expenditures in the health budget;
- The need for fully programmed budgets;
- Assessment of local authority spending;
- Proper communication of budget changes to reduce uncertainty in policy formulation;
- A breakdown of accountability and little incentive for improved efficiency due to managers inability to affect the costs of major expenditure items (especially personnel);
- The marginal changes of actual expenditure do not reflect national health policy priorities.

In the absence of properly trained personnel, data controls and accountability - the budget allocation process is not respected, appropriate or effective. Without budgets which report spending properly, budgets are neither a tool for change nor a good report of fiscal activity. Consequently, while the health budget has shown a shift towards BHS, it is impossible to verify whether this has indeed occurred. Similarly, it is impossible to know if there have been any intra-provincial changes.

The relationship between capital and recurrent expenditure

There are concerns about the relationship between development and recurrent expenditure. Recent experience has seen the building of clinics without proper budgeting for the recurrent implications thereof. Given the relatively low increase in real per capita recurrent expenditure, the increased recurrent expenditure requirements relating to the CUBP will have to be funded largely out of budgetary reallocations between provinces and between hospitals and clinics. Similarly, increased hospital capacity in rural areas will have to be funded primarily through a geographic redistribution of resources. As indicated previously, the MTEF has provided a framework for the redistribution of budgets between different levels of care. In addition, health budgets were actively redistributed between provinces in the first few years after the 1994 elections. However, there are concerns that the more recent practice of allocating global budgets to the provinces will reduce the pace of reallocation of *health* budgets between provinces. Of even greater concern is the fact that, although *budgets* may shift, expenditure will not be more equitably and efficiently distributed between BHS and other health services, or between geographic areas, unless the distribution of personnel changes (given that personnel account for two-thirds of public sector health care expenditure). The budget process has made it difficult to budget efficiently for recurrent expenditure. The shift from single year budgeting to a MTEF is useful for ensuring more effective budgeting.

The need to ensure a tight link between budgets and physical resource planning

Similar to capital budgets not reflecting recurrent expenditure, real resource planning is not reflected in the budgets. This highlights one of the major challenges facing the public health sector at the time of the 1994 elections, namely redressing the maldistribution of health personnel. While South Africa has favourable health personnel to population ratios by international standards, the majority of these personnel work in the private sector. Thus the ratio of public sector personnel to the population dependent on public sector services is not as favourable. In addition, these personnel are maldistributed between provinces, and there are staff inadequacies at the primary care level. The challenge for the public health sector is thus to retain health sector staff, but to redistribute them between geographic areas and levels of care.

One initiative to retain personnel within the public sector was the substantial increase in salaries in 1996 (see above). However, the offer of voluntary severance packages (VSPs) has resulted in a loss of human resources to the public health sector. As health services are very labour intensive, provinces facing large budgetary cuts have been forced to reduce the number of staff. Anyone who accepts a VSP may not work for the public sector again. Thus, instead of staff being moved from over-resourced to under-resourced provinces and facilities, many staff are merely moving out of the public sector (either to the private sector, international markets or into early retirement). There are concerns that the VSP offer, and the indiscriminate freezing and abolition of posts, are not being carried out within a strategic planning framework and will have serious short- and long-term implications for health services (Health Systems Trust, 1996).

As indicated previously, doctors will be required to undertake a year of community service after graduation as from 1998. While this is partly an effort to recoup some of the public sector investment in medical training, it is also seen as a mechanism for addressing the lack of personnel in rural areas. Another initiative to improve staffing in currently underserved

areas is the recruitment of foreign doctors (e.g. 206 Cuban doctors as well as doctors from the United Kingdom and Germany) (Mametja and Reid, 1996).

Some measures have been taken to increase the number of clinical nurse practitioners, who will be the front line primary care workers (Health Systems Trust, 1996). However, there are serious concerns about the future of another category of primary care staff, namely community health workers (CHWs). In many under-served, poor rural and peri-urban communities, CHWs are the main primary care providers (Makan and McMurchy, 1996). Many of these workers are employed by non-governmental organisations, who face severe financial constraints as international donor funding is increasingly being directed to the government. Neither the national nor the provincial health departments have adopted a clear position on the future role and funding of CHW programmes (*ibid*). The demise of these programmes is likely to have an adverse effect on the health of the impoverished communities they currently serve. It will also contribute to unemployment in these areas, particularly among women (the majority of CHWs are women).

Thus, while there have been a number of initiatives to redistribute staff, there are concerns about the appropriateness of certain policies (particularly the VSP and the lack of a clear policy on the role and future of CHWs). At present, data are not available to evaluate whether there have been significant changes in the distribution of health personnel between geographic areas and between BHS and other health services.

5.4.3 Improving the Incidence of Health Expenditure

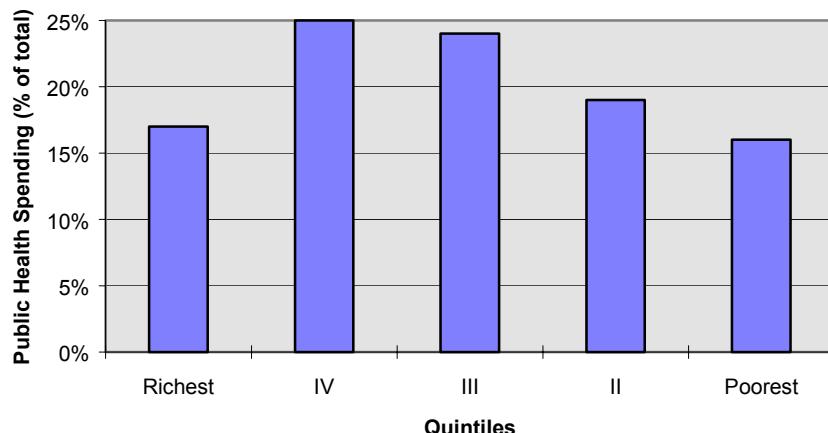
Data presented in earlier chapters highlighted the significant disparities in the allocation of health care resources. There are three components to this:

- a) The need to improve the incidence of expenditure within health by shifting resources towards BHS;
- b) The urgent need to improve the equity of the geographic (both inter-provincial and intra-provincial) distribution of resources; and
- c) Mechanisms for targeting resources to the poorest and least well resourced communities should be explored.

Incidence of Health Expenditure

Castro-Leal (1996a) using a benefit incidence analysis with data from the Salduro (1993) survey, has shown that total public health spending is not sufficiently pro poor. 66% of public health resources benefit the richer three quintiles, while the lower two quintiles receive less than their proportional share.

Figure 5.1 Distribution of public health spending by quintile, 1993 (% of total)



Source: Castro-Leal (1996a)

Figure 5.1 understates the per capita expenditure differential, since private sector expenditure, which is primarily servicing the top two quintiles, has not been included. In addition, the poorer quintiles include more people as the average household size is larger than in the richer quintiles. Thus, while the share of resources to the poor and the rich are similar in South Africa, a larger share of public health resources are received by higher income groups.

Castro-Leal (1996a) contrasts the South African situation against a number of Latin American countries with highly unequal income and expenditure of households. These countries have a strongly pro-poor distribution of public health resources. It follows that there is a need to shift expenditure towards poorer households and therefore towards BHS from the rest of the health budget.

Improving the Spatial Allocation of BHS

The delivery of BHS continues to reflect the divisions of the past, including an emphasis on urban areas, areas where whites predominantly reside, and excluding the former homelands and TBVC states. In addition, there were few functional decentralised structures below the provincial or homeland tier of government. Since the restructuring of the political boundaries, these inherited problems now reside in the new provinces yet are somewhat obscured by the aggregated nature of these jurisdictions.

Ensuring spatial equity requires that not only inter-provincial allocations, but (perhaps more importantly) intra-provincial allocations must be accessible on a more equitable basis.

Inter-provincial resource allocation issues

In order to consider inter-provincial resource distribution issues, it is necessary to first gain insights into the intergovernmental resource allocation process.

The intergovernmental resource allocation process

Achieving an effective mechanism for the allocation of health care resources is vital to the efficacy of the system of intergovernmental financial flows. In the absence of such a mechanism, the fiscal viability of provinces will be constrained, as will the ability of government to deliver BHS to the public. Two sets of decisions must be taken in terms of intergovernmental resource allocation. Firstly, the division of fiscal resources between the national, provincial and local government level must be determined. Thereafter, formula-based mechanisms are used for the equitable allocation of resources amongst the nine provinces (similarly for local government). The financing and administration of the health sector, poses a particular challenge to the fledgling intergovernmental system and therefore requires careful attention. A number of specific intergovernmental fiscal concerns affect the public health sector in South Africa. These include:

- Significant responsibility for health care delivery resides in all three spheres of government.
- There is no simple manner in which national and provincial responsibilities can be separated or measured.
- Training for service professionals and the costs of research are not clearly defined as a national responsibility.
- Expensive tertiary care is presently being delivered to the entire country by a small number of hospitals concentrated in four provinces.
- Unlike education, where most children attend a single school over the course of a year (or longer), people will make use of health care facilities in provinces other than where they reside. This movement has been termed cross-boundary flows and will result in formula based funding being transferred to a province where the person resides, rather than where the service is delivered. These cross-boundary flows create an administrative, financing and planning challenge of great importance in south Africa, where there are a large number of migrant workers.
- The health information system, the financial management system (and other governmental accounting systems) and the will of politicians have placed limits on the viability of a billing mechanism to support a purchaser-provider model of health care delivery.
- There is a difficulty measuring health resulting in limitations to health data.
- Past inequities have led to a spatially distorted structure and delivery of health care. Primary care is underdeveloped and focused in urban areas while expensive tertiary care beds are oversupplied, and concentrated in a few urban areas, resulting in restricted access for people in remote areas.
- A large private health care sector resides alongside the public sector - which creates both opportunities and difficulties for intergovernmental finance.

The last two difficulties mentioned here, are primarily addressed through an unconditional grant for health. A formula for determining an equitable allocation, with an adjustment for individual's use of the private sector, is presented. The difficulties concerning training, cross-border usage of services and tertiary care are incorporated into a conditional grant.

The unconditional grant to ensure equitable access to BHS

The inter-provincial revenue sharing formula includes a health component, which aims to support provincial budgeting for the delivery of health on an equitable basis. This formula aims to determine the relative *proportions* of fiscal allocations to the provinces, rather than attempting to determine actual amounts. Actual amounts are determined in the MTEF process and are subject to national guidelines.

A needs-based, or weighted capitation, formula is used. This means that the provincial population is the basis of the needs driven formula. Thereafter, the variation in utilisation due to age and sex differences in the provinces is accounted for. The weighting involves three steps:

- Allocations are weighted according to relative provincial population share: The CSS 1996 Census is used as the basis for the health component of the formula.
- Population figures are adjusted for private sector utilisation: The proportion of people from each province with access to private medical aid (October Household Survey, 1995) are removed from the base population. In all provinces, individuals with the ability to afford their own health care should be subtracted from the population to create a more accurate reflection of the use of public sector health services.
- The public sector population is adjusted for utilisation differences due to age and sex: The 1995 OHS survey is used to adjust the Census figures to construct age and sex differentials. The population is then weighted for the expected higher utilisation rates of women of childbearing age (ages 15-44), children (0-4) and the elderly (over 65 years).

This weighting for the health component is intended to be simple. Once additional research has been undertaken and as data availability improves, the formula can be improved and made more complex over time. For example, van den Heever and Doherty (1997) have argued for a more complex formula with different health services being treated in distinct ways. In their example, the unclear relationship between non-personal PHC services and the age and sex distribution of the use of these services requires a different weighting.

The conditional grant for spillovers and functions which are national in scope

While there remains a lack of clarity over the roles and responsibilities of the national and provincial health departments, a conditional grant is being introduced to overcome some of the other difficulties noted above. These include: funding for training and the additional costs attributable to research; the cross boundary usage of facilities; and the need to have a national oversight and plan for a defined set of services. In addition, the need to stabilise funding for tertiary health care has been recognised by the national department as a priority.

It is very difficult to measure these services and ensure that these various objectives are met. Further research and planning are required to support the conditional grant mechanism in achieving the objectives of the grant. If the conditional grant is wrongly calculated, or management and accountability are compromised, there is a possibility that BHS could lose funding.

Intra-provincial resource allocation issues

While the inter-provincial resource allocation process is being developed, the need for intra-provincial resource allocation should not be overlooked. Equity objectives will not be achieved merely through striving for a more equitable inter-provincial allocation of resources. Two issues require consideration. Firstly, some provinces may not regard BHS as a priority for marginal spending. Secondly, the allocation within the province may not be equitable. Both require careful monitoring and continuous evaluation by the national department of health. In order to fulfil this monitoring role, budget information and some basic components of an information system must be established.

A national task team, including representatives from the provincial health departments, has been established to consider these issues. A needs-based formula, for the distribution of provincial health resources between regions and/or districts, is currently under discussion. The task team is also considering financial management capacity at district level. Such capacity is vital to facilitate the effective process of intra-provincial resource allocation.

Other initiatives to improve equity in access to BHS - Free health care policies

The policy that has probably made the most significant impact on improving access to BHS for the poor is the introduction of free care for certain health services and certain categories of patients. There have been two phases to the free care policy. The first phase was the introduction of free care for pregnant women and children under the age of six years, on 1 June 1994. The high priority awarded to this policy is evidenced by the fact that it was announced by President Mandela in his first major address after the elections (May 24, 1994). The second phase of this policy was the introduction of free primary care services for all patients on 1 April 1996.

An evaluation of the 'free health care (FHC) for pregnant women and children under six' policy was commissioned in the second part of 1995 (McCoy, 1996). The findings were generally positive. Health service utilisation, particularly by the rural poor, increased substantially (Health Systems Trust, 1996). This suggests that user fees had previously deterred use of health services (McCoy, 1996). Other successful aspects of the FHC policy was that pregnant women started attending antenatal clinics at an earlier stage, there was a decline in the proportion of unbooked deliveries, and family planning attendances increased.

Overall, the FHC policy was positively received. Health service users felt that it had improved access to services, while the majority of health care providers believed that the FHC policy helped to prevent serious illness and death among pregnant women and children under six (*ibid*). While there was overwhelming support for the policy, there were serious concerns about the way in which it was implemented. Health personnel expressed a strong view that greater consultation and planning with health care providers should precede the implementation of such extensive changes (McCoy, 1996). There were particular concerns that the FHC policy had exacerbated poor working conditions, particularly overcrowding and staff shortages at health facilities.

In April 1996, the Minister of Health announced that primary care services would be free to all South Africans with immediate effect. While the impact of this policy is yet to be evaluated, it is likely to have improved *financial* access to primary care services, particularly for the poor. As such, it will support the Department of Health's policy objective of achieving universal access to primary care services.

Some concerns have been expressed, particularly by the international community, that the FHC policy will result in 'leakage' of benefits to the non-poor. However, the opportunity costs of utilising public sector primary care services (particularly the lengthy waiting period at these facilities) are not inconsiderable. These costs will result in 'self-selection' of those with the least ability to incur health care costs, and leakage is thus likely to be minimal.

In summary, the FHC policies are among the most important health department initiatives to improve access to BHS, particularly for vulnerable groups. However, it is critical that *geographic* and other aspects of access to primary care services, and the *quality of care* at primary care facilities, are improved. This requires explicit targeting of resources to currently under-served, poor communities.

5.4.4 Targeting

As with education, targeting can be an effective mechanism for addressing inequities in the delivery of health services. In countries where there are substantial differences in health status, and in access to health services, efforts should be made to prioritise the use of scarce health sector resources for those in greatest need (Mooney, 1996). What this means is that society gives preference to health gains in those groups which have the worst health status, and hence the greatest capacity to benefit from health services (if effective health care interventions exist to address the major diseases facing these groups). Priority should also be given to those with the least ability to pay for health services. This approach requires that governments should prioritise the health needs of the poor and those who have suffered as a result of inequality within the country. Prioritising health services for the poor is likely to maximise health gains for a given budget, i.e. improvements in health status will be greater for every rand spent on the poor than per rand spent on higher socio-economic groups (based on the extent and nature of ill-health among the poor).

If one is to prioritise improvements in service delivery for those with the greatest capacity to benefit, it is important to find a mechanism for *explicitly identifying* such individuals/groups in order to *target resources* to them. Such a mechanism must thus be useful for detailed health sector planning and monitoring purposes.

It is likely to be prohibitively expensive to undertake means-testing for the entire population, in order to identify *individuals* in lower socio-economic groups with poor health status. The South African Health Expenditure Review (McIntyre *et al*, 1995) used an innovative approach to identify under-served poor communities, namely by using magisterial districts as the unit of analysis. In this way, health service delivery and health status information for micro-geographic areas can be linked to socio-economic data obtained through the census.

This analysis indicated that the population which has the lowest socio-economic status, has a relatively greater capacity to benefit from health care, and is the most heavily reliant on public sector health services, has the least access to public sector health care resources (facilities, personnel and financial resources). For example, residents of poorer magisterial districts have less access to public sector clinic services and have a lower health service utilisation rate (2.5 times lower), than residents of the richest magisterial districts. In addition, the public sector in the richest magisterial districts employs 4.6 times more general doctors, 2.4 times more registered nurses, 10.8 times more pharmacists, and 6.1 times more health inspectors than in the poorest districts. Average public expenditure per person on health services in the richest districts is 3.6 times more than in the poorest districts (McIntyre *et al*, 1995).

The advantage of this type of analysis is that it enables the government to target health care resources to *areas* identified as having low income levels and being relatively under-served, rather than attempting to target *individuals*. Micro-geographic area health resource targeting is being undertaken in a number of other countries (e.g. Mexico and Zambia). This form of targeting means that one is able to address financial as well as geographic barriers in access to health care. In particular, it provides a mechanism for prioritising areas that face historical service delivery 'backlogs'.

5.4.5 Summary

There is some scope for generating additional revenue from within the health sector. Additional revenue may come from a number of sources, including the development of a social health insurance system, user fee revenue retention at facilities and reducing current government subsidies on non-discretionary services and personnel training. Presently, there is no direct mechanism for translating this revenue into increased funding for BHS. Clarity is required concerning the ability to retain revenue within the health sector, and whether this revenue can be used for BHS.

A number of policies are being pursued to improve the efficiency of the health system and ensure improvements in BHS. However, many of these changes will take considerable time to effect, and their success is critically dependent on improved management capacity at all levels of the health system. One step towards improved management is the decentralisation of control to hospitals and health districts. Priority should be given to translating policies into workable and affordable plans. There may be additional costs associated with transforming the public health sector into becoming more efficient and effective. The co-ordination of health care with water and sanitation, welfare services, nutrition and family planning will result in improved health outcomes. Those services which are preventative in nature (such as water and an integrated nutrition programme) have benefits which far outweigh their costs and should consequently be expanded.

The present budgeting procedures are very fluid and have contributed to the uncertainty within planning. Skills in financial management are scarce and systems are not working efficiently. The result is a breakdown of accountability and the undermining of budgets. Budgets do not reflect actual spending, nor are they co-ordinated with plans or national policy priorities. As a result, real resource availability and capital projects are not determined in conjunction with the recurrent implications of those projects.

Given that health personnel account for two-thirds of recurrent public sector health care expenditure, it is also important to reorient existing health care workers to ensure a relative redistribution of resources to BHS, and to ensure that primary care personnel are prioritised in future training programmes. There is little scope for wage restraint in the health sector. There may be some wage pressure for improved pay. An evaluation of pay rates within the health sector is required.

Improving the incidence of health spending requires an additional shift from other parts of the public health budget towards BHS. Spatial planning has largely taken the form of equitable resource allocation to provinces through the use of conditional and unconditional population driven grants. Intra-provincial restructuring to improve access and service in rural areas requires monitoring, as well as budgetary, real resource and fiscal support. One approach for improving the impact of BHS spending is to target pockets of poverty as key priority areas, and ensure that BHS is effectively delivered in those areas.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this report is to provide a measure of public expenditure on basic social services (here defined as basic education - pre-primary and primary education- and primary health care) by focusing on the equity and efficiency of such expenditure. The study has several objectives: a) to determine how much of the national budget is being spent on basic social services (BSS); b) to estimate the level of such expenditure on the poor; c) to establish the scope for inter-sectoral and intra-sectoral budget re-structuring in favour of BSS and the poor; and d) to identify areas where the cost-efficiency of the delivery system of BSS can be improved.

6.1 Conclusions

Table 6.1: Expenditure on Basic Social Services as a Percentage of Total Budget and GDP, 1996/97

Basic Social Services	Expenditure (R, m)	% of Total Budget	% of GDP
Basic Education	17604	10	3.2
Basic Health	3496	2	0.7
Total	21100	12	3.9
Water, Sanitation (1)	880	0.5	0.1
District Hospitals (2)	2777	1.5	0.5
Total	24757	14	4.5
Social Welfare (3)	14898	8.5	2.4
Total	39655	22.5	6.9

Notes:

- (1) An estimate of the component of water and sanitation expenditure dedicated to basic services.
- (2) District Hospitals.
- (3) Non contributory pension grants, other social security payments and social welfare services.

South Africa spends approximately 14% of budget on BSS as defined by UNICEF and UNDP and as calculated with the available data. This suggests the need for additional expenditure on BSS. A more comprehensive definition of BSS which includes social welfare increases the percentage to 22.5% and thus exceeds the 20% target for BSS. However, it is unclear whether the 20% target should then be raised to accommodate the wider definition.

In Chapter 1, the wide divergence between South Africa's GNP per capita and HDI compared to countries with similar levels of GNP per capita was described. This divergence reflects both the high income inequality and the lack of access to basic services by many of the poor and is therefore a central theme around which the document is focused. The divergence is reflected in the indicators relating to both education and health.

The South African education system was characterised during the 1980s and 1990s by relatively high and growing levels of public expenditure on education. At the same time enrolment rates compare favourably with countries in the region and to other upper middle income countries. However, the system is also characterised by high rates of repetition and drop-out at all levels, poor learning outcomes for those who do reach the secondary and tertiary levels and unacceptably high adult illiteracy levels.

Health indicators show that while infant and childhood mortality rates appear to have declined, racial disparities have widened. There are higher mortality rates, lower life expectancies and higher incidence of illnesses in the poorer provinces. Serious problems include the high incidence of tuberculosis, the significant proportion of children not fully immunised, the poor nutritional status of children and the increasing significance of the HIV/AIDS epidemic.

Chapter 1 also reviewed the macro-economic trends for the period 1980-1996. This analysis shows that the South African economy during the 1980s and up to the mid-1990s was characterised by low rates of economic growth, falling GDP per capita, stagnating employment in the formal sector and chronically high levels of unemployment. At the same time there have been declining levels of savings and investment. The racial pattern of income distribution has improved but by 1993 the overall pattern of income inequality remained high, with inequality within race groups contributing to overall inequality. The limited available data on poverty suggest that more than half the population can be categorised as "poor" with over two-thirds of the poor living in the Eastern Cape, Kwazulu-Natal and the Northern Province.

The general overview of public finance in Chapter 2, shows *inter alia*, that real government expenditure increased on average by 5.2% per annum between 1980-1989 and by 1.5% between 1990-1996. As a proportion of GDP, government expenditure increased from 23% in 1980 to 32% in 1996. Government revenue on the other hand, increased on average, by 3.9% per annum between 1980-1989 and by 1.2% between 1990-1996. As a proportion of GDP, government revenue increased from 22% in 1980 to 27% in 1996.

The major revenue sources in 1996 were personal income tax (39% of the total), VAT (24%), company tax (12%), the fuel levy (7%) and customs duties (4%). The major shift in revenue has been away from company taxation towards increased personal income tax and value-added tax.

The personal income tax system is progressive with efforts being made to promote gender equity in taxation and to bring additional tax relief to those at the lower end of the income spectrum. On the other hand, there is evidence from expenditure surveys suggesting that VAT is a regressive tax.

Chapter 3 analyses the trends in and composition of government expenditure. An important change in spending noted here is the increase in the share of the social services from about 10% of GDP and 34% of the budget in 1983 to 15% of GDP and 39% of the budget in 1995. Defence is the major victim of budget cuts with its share of the budget being more than halved. The share of economic services also fell during this period. Other features of government expenditure included the increase of current expenditure from 78% to 90% between 1980 and 1996 and the share of interest payments increasing from 9% to 17% of total expenditure. The budget deficit and government debt as a proportion of GDP increased sharply during the 1980s and 1990s. The former increased from 0.9% of GDP in 1980 to 5.4% in 1996 while the latter increased from 32% of GDP to 55% during the same period.

Public expenditure on education comprised 22-24% of total government expenditure for the late 1980s and 1990s and around 7% of GDP in 1996. On both these indicators South Africa compares favourably with countries having a similar GNP per capita and with countries in the Southern African region. The annual average increase in nominal expenditure between 1983 and 1995 was 15.9% and for the period 1990-1995, 15.5%. In real terms the corresponding figures were 4.6% and 5.6%.

A feature of education expenditure is the high proportion of current expenditure devoted mainly to salaries. Current expenditure comprised over 93% of total education expenditure for the period 1987-1996.

The share of basic education in the budget (approximately 47% in 1995) compares favourably with many developing countries. This figure increased from about 39% in 1987.

Real health care expenditure increased by an average of 2.9 per cent between 1980 and 1997 while real per capita expenditure increased by only 1.3%. Total public sector health care expenditure as a percentage of GDP increased from 2.3% in 1980 to 3.3% in 1997. With respect to the relationship between recurrent and development expenditure, a concern is that real recurrent expenditure has remained constant during the period under review despite significant increases in development expenditure (nearly 260%) over this period. As most of this new health facility development relates to clinics and given the difficulties associated with effecting a geographic redistribution of health personnel, it is likely that many new facilities will remain unoperational in the short to medium-term.

The majority of health care expenditure is attributable to personnel costs (68%), while pharmaceutical supplies (13%) and other supplies (6%) accounted for the second largest component. The distribution of health care expenditure by level of care highlights the bias towards curative hospital-based health care. Acute hospitals accounted for 76% of recurrent public sector expenditure while non-hospital primary care services (i.e. clinics, community health centres, school and environmental health services) only accounted for 11% of expenditure. Academic and other tertiary hospitals accounted for 44% of recurrent public sector health care expenditure.

South Africa has a greater availability of hospital beds relative to neighbouring countries and many other middle income countries. However, while the country has reasonably good hospital infrastructure its clinic, health centre and health post infrastructure needs improvement. Moreover, while there is a relatively good availability of physical and human resources, there are disparities in the distribution of these resources between the public and private sectors as well as between different categories of health services (hospitals versus health centres).

South Africa has a substantial private health sector, both in terms of human and physical resources. 59% of doctors, 93% of dentists and 89% of pharmacists work in the private sector (Rispel and Behr, 1992). In addition there are between 350,000 and 500,000 traditional healers (McIntyre *et al*, 1995). There is a range of hospitals within the private sector and there has been a proliferation of NGOs in recent years

Private sources of finance accounted for 60.8% of total health care expenditure in 1992/93 (i.e., approximately R18.3 billion). Expenditure on 'basic health services' (BHS) in the private sector was at R8 billion in 1992/93, which is equivalent to approximately 43% of total private sector health care expenditure in that year.

Medical schemes are the principal financial intermediaries in the private sector, accounting for nearly two-thirds of total private sector health care funding. Direct out-of-pocket payments account for 23% of the total. Health insurance is a small (5.1%) but rapidly growing component of private health financing in South Africa.

High income earners are the major users of the private sector. They tend to be members of medical aid schemes and/or holders of medical insurance policies. Low to middle income

earners also use private health services. The majority depend on public hospitals for inpatient treatment, except for those entitled to care in a company hospital. Poor households make relatively little use of private health services.

Chapter 4 provides a detailed analysis of expenditure on basic education and health care. In both nominal and real terms, expenditure on basic education for the total population in general and for Africans, Coloureds and Indians in particular, grew substantially in the late 1980s and early 1990s. The annual average increase in nominal terms for the total population between 1987 and 1991 was 31%; for Africans it was almost 40%, for Coloureds 33%, for Indians 23% and for Whites, 17%. In real terms, the corresponding figure for the total population was almost 8%; for Africans it was 13%, for Coloureds 9%, for Indians 3% and for Whites, minus 0.7%. Basic education expenditure as a proportion of GDP increased steadily between 1987 and 1996 from 2.2% to 3.2%. With respect to total expenditure on basic education similarly large increases occurred in both nominal and real terms between 1987 and 1991.

However, expenditure on pre-primary education is low, constituting less than 1% in 1995/96 and 1996/97. Primary education expenditure on the other hand, averaged 48% in 1995/96 and 47% in 1996/97. The distribution of current and development expenditure in basic education shows that an even higher proportion of expenditure is devoted to current expenditure than in school education in general. At the primary level, current expenditure is around 94-95% of the total budget. The implications of these ratios for the development of the basic education sector are enormous. In effect what it means is that unless some mechanism is found to reduce the proportion of funds being allocated to current expenditure, fewer resources will be available for the provision of buildings and equipment to increase access to better quality education to those that have been historically deprived of such opportunities.

This chapter also shows that public education expenditure is not pro-poor because the share going to the poor and the "ultra-poor" is substantially smaller than their share of the population. The poor in South Africa receive about 40% of education resources but they make up 53% of the population. The ultra-poor receive about 20% of education resources but they comprise about 29% of the population. In contrast, the richest household quintile receives almost twice its share of the population, 23.4% of public education resources for 12.5% of the population.

In the health section an attempt is made to quantify expenditure on Basic Health Services (BHS). This a rather difficult exercise particularly with respect to determining whether particular institutions, e.g. district and other hospitals, should be considered. It is estimated that while only 12% of total public sector expenditure was devoted to BHS in 1992/93, the budget for BHS had increased to 20% of the total health budget by 1995/96. The increase in the allocation to BHS was achieved through a budgetary shift away from hospitals. Although there has been a dramatic shift in budgets, it is impossible to determine the extent to which actual expenditure on primary care services has increased because of the slow movement of personnel to primary health care facilities.

With regard to the provision of water, official estimates suggest that between 12 and 14 million people do not have access to safe water; on the sanitation side, it is estimated that 21 million South Africans do not have access to adequate sanitation facilities. Government expenditure on water provision has, however, risen from R228 million in 1984 to R614 million in 1994. Funding via the RDP and financial donors facilitated the successful development of the Community Water Supply programme enabling water provision to a

large number of households in rural areas. In urban areas a large quantity of funding for water and sanitation is being made available through the Municipal Infrastructure Investment Programme.

This chapter also notes that inequity in South Africa is reflected also in two different consequences of nutrition occurring simultaneously, namely, under-nutrition and chronic diseases of lifestyle as reflected in obesity, heart disease and diabetes. The national government's budget on nutrition increased sharply, particularly during the 1990s, from R664 000 in 1980/81 to R449 million in 1994/95. In addition, funds were allocated to the Primary School Nutrition Programme (PSNP) from 1994/95 through the RDP. However, the PSNP has been plagued by problems relating to administration and management. Although the amounts of R473 million, R500 million and R496 million were budgeted for in 1994/95, 1995/96 and 1996/97 respectively, actual expenditure for these three fiscal years were respectively R135 million, R312 million and R326 million.

Chapter 5 examined the scope for inter-sectoral and intra-sectoral restructuring to enable additional resources to be directed to Basic Social Services (BSS). With respect to inter-sectoral restructuring, several issues are analysed: the scope for redistributing from the security sector, from the economic sector and within the social services sector and the impact of the government's new macro-economic policy. The following conclusions are drawn:

- a) Given the substantial decline in the defence budget during the 1990s and the need for additional resources in the safety and security and correctional services portfolios, the scope for further redistribution of resources towards BSS from the security sector is extremely limited, if not totally absent.
- b) With regard to the economic sectors, given the current high levels of unemployment and the need to absorb increasing numbers of new entrants into the labour market it is vital that government investment in this sector does not decline further. It is recommended that the diversion of resources from economic services to BSS should not be contemplated, however compelling the case is for additional resources for the latter.
- c) A strong case cannot be made for intra-sectoral redistribution within the social services portfolio given the needs in each of Education, Health, Social Security and Housing.
- d) Government's macro-economic policy is likely to reduce the level of resources available for discretionary expenditure in the short term as well as reducing the amounts in real terms that are available for education and health spending in the provinces. The impact is likely to be felt most obviously on capital (development) expenditure.

Basic Education

Basic education expenditure at approximately 46% of total education expenditure is well above the average for most developing countries. However, education expenditure at the pre-primary level appears to be inadequate. While growing, the current level of less than 1% of total education expenditure is insufficient to absorb the high social demand at this level.

A feature of education expenditure is the high proportion of recurrent expenditure especially on teacher salaries. There is some evidence also that education expenditure is not pro-poor.

Three major issues were identified as relevant in the debate about basic education expenditure: total basic education expenditure, the distribution of recurrent and capital expenditure, and the incidence of education expenditure.

To strengthen the financing of basic education and to promote equity and efficiency in funding, three sets of inter-related strategies were proposed, namely strategies to a) increase resources for basic education; b) improve the efficiency of basic education expenditure; and c) improve the incidence of public expenditure on basic education.

(a) Strategies to increase resources for basic education

All indications are that more resources for education in general are unlikely to be forthcoming from the public purse because government firmly believes that adequate levels of resources are being provided for education and what is required are improvements in the efficiency of education expenditure.

With regard to basic education, unlike many developing countries, it is evident that in South Africa public subsidies are high and growing faster than subsidies for education at higher levels. This means that basic education has been seen and continues to be seen as a priority in the education budget. A strong case thus cannot be made for allocating resources from other levels of education particularly in view of the high growth also at the secondary and tertiary levels and the need to improve quality of provision at these levels as well. Moreover, as a high proportion of students entering these levels come from poor families a strategy of higher fees that would be necessitated by a reduction in public resources would severely disadvantage them.

The burden of increased funding for basic education therefore will fall increasingly on private households especially those who have the ability to pay. However, user fees will have to be imposed in a way that does not increase inequity in educational spending. There are two ways in which such inequalities can be reduced. First, the mechanism for disbursing resources to provinces is now weighted in favour of poorer, more rural provinces - hence the problem of jurisdictional inequalities is addressed to some extent. Second, there will have to be some attempts to promote greater equity in the incidence of education expenditure through greater targeting of poor households, thus reducing inter-personal inequalities.

Beyond implementing user charges it is almost certainly necessary for the education sector to seek alternative sources of funding. One option is the raising of an earmarked national tax for education or some specific aspect of education such as a national textbook fund or a community fund for basic education.

Benefit taxation could also play an important role in financing basic education. Poll and property taxes are two examples of benefit-related tax measures that are potentially efficient and equitable ways of raising local funds for improving neighbourhood schools. A poll tax on households (other than poor households) and an education surcharge on the real property tax on houses and land could raise substantial amounts of money for basic and other education.

(b) Strategies to improve the efficiency of education expenditure

The most important task in basic education is to improve quality of provision. Amongst the factors impeding the improvement of student achievement are a) the inadequate provision of facilities ; and b) the distribution of expenditure between the current and capital

components. This chapter portrayed the level of deprivation in sections of the South African schooling system with respect to a number of facilities.

There is little doubt that more resources have to be shifted to capital expenditure and to the provision of learning materials if the issue of improving the quality of education is to be addressed seriously. There are two ways in which this problem could be tackled. First, any additional resources that might be made available for basic education through for instance, donor or private household financing should be used exclusively for non-salary expenditure. Second, a strategy should be developed to reduce over the medium term, the proportion of teacher salaries in education expenditure.

The teacher salary component cannot continue to constitute such a high proportion of total education expenditure. If it continues to do so, it will mean that qualitative improvements in the provision of basic and other education will not be financially feasible. Possible solutions to this serious problem include developing a strategy to effectively reduce teacher salaries in real terms over a 5-10 year period and/or implementing productivity-enhancing measures.

Serious consideration should be given also to the introduction of provincial bargaining forums, within a national framework, for determining teacher salaries. Currently these are decided at the national level. The provincial education departments are thus in the invidious position where they have no discretion over 90% of their budget. However if the capacity for conducting collective bargaining at provincial level is lacking, then it is imperative that the provincial inputs to the national bargaining process be strengthened.

(c) Strategies to improve the incidence of public expenditure on basic education

It is clear from the limited data available on the incidence of education expenditure in South Africa that there is a need to strengthen the commitment to distributing education funds through a system that explicitly favours schools in disadvantaged communities.

The South African system was characterised historically by racial disparities in education provision. However, government in the post-apartheid era has been addressing the problem through directing greater levels of resources to regions that were historically deprived. This means that provinces such as the Northern Province, Eastern Cape and KwaZulu-Natal are now favoured in the formula that determines the bulk of provincial revenue. The government is thus addressing the issue of jurisdictional inequality rather than personal inequality.

In the interests of promoting equity there is a convincing case for developing a targeting mechanism to increase the incidence of education expenditure on the poor. This will require the identification of poor households and/or communities. While there will undoubtedly be administrative costs attached to targeting, the costs of not targeting the poor will be perpetuation of inequality in education spending. It may be useful as a starting point to commence the targeting exercise on a pilot basis in two of the richer provinces such as Gauteng and the Western Cape.

Basic Health Services

While a relatively low proportion of public health sector expenditure was devoted to basic health services (BHS) prior to 1994, the budget has been reprioritised in favour of these services in recent years. The lack of audited expenditure data, however, precludes drawing conclusions on the extent to which resourcing of BHS has improved in reality. These trends suggest that there is scope for additional efforts to prioritise resource allocation to BHS, particularly in geographic areas which have historically been under-resourced.

(a) Strategies to increase resources for basic health

There is some scope for generating additional revenue from within the health sector. Additional revenue may come from a number of sources, including the development of a social health insurance system, user fee revenue retention at facilities and reducing current government subsidies on non-discretionary services and personnel training. Presently, there is no direct mechanism for translating this revenue into increased funding for BHS. Clarity is required concerning the ability to retain revenue within the health sector, and whether this revenue can be used for BHS.

(b) Strategies to improve the efficiency of health expenditure

A number of policies are being pursued to improve the efficiency of the health system and ensure improvements in BHS. However, many of these changes will take considerable time to effect, and their success is critically dependent on improved management capacity at all levels of the health system. One step towards improved management is the decentralisation of control to hospitals and health districts. Priority should be given to translating policies into workable and affordable plans. There may be additional costs associated with transforming the public health sector into becoming more efficient and effective. The co-ordination of health care with water and sanitation, welfare services, nutrition and family planning will result in improved health outcomes. Those services which are preventative in nature (such as water and an integrated nutrition programme) have benefits which far outweigh their costs and should consequently be expanded.

The present budgeting procedures are very fluid and have contributed to the uncertainty within planning. Skills in financial management are scarce and systems are not working efficiently. The result is a breakdown of accountability and the undermining of budgets. Budgets do not reflect actual spending, nor are they co-ordinated with plans or national policy priorities. As a result, real resource availability and capital projects are not determined in conjunction with the recurrent implications of those projects.

Given that health personnel account for two-thirds of recurrent public sector health care expenditure, it is also important to reorient existing health care workers to ensure a relative redistribution of resources to BHS, and to ensure that primary care personnel are prioritised in future training programmes. There is little scope for wage restraint in the health sector. There may be some pressure for improved pay. An evaluation of pay rates within the health sector is required.

(c) Strategies to improve the incidence of health expenditure

Improving the incidence of health spending requires an additional shift from other parts of the public health budget towards BHS. Spatial planning has largely taken the form of equitable resource allocation to provinces through the use of conditional and unconditional

population driven grants. Intra-provincial restructuring to improve access and service in rural areas requires monitoring, as well as budgetary, real resource and fiscal support. One approach for improving the impact of BHS spending is to target pockets of poverty as key priority areas, and ensure that BHS is effectively delivered in those areas.

In conclusion, there is scope for improving resourcing for BHS in South Africa, both in relation to intra-sectoral redistribution and through efficiency improvements within the public health sector. However, these changes will take considerable time to effect, and their success is critically dependent on improved management capacity at all levels of the health system.

6.2 Recommendations

- Comparing the expenditure on BSS against the 20% normative level defined by UNICEF and UNDP suggests that there is some need to shift spending towards a greater emphasis on BSS. There is more scope for increased spending on BSS in health than in education. Additional spending on water and sanitation, as well as on an integrated, pre-school nutrition programme is required.
- The narrow definition of BSS ignores spending on social welfare and on public works programmes. Extending the definition to include these functions suggests that over 20% of the budget is being spent on BSS. Extending the definition may require a revisiting of the 20% target.
- The wider definition of BSS requires clarity over the relationship between cash and in-kind benefits. It is recommended that both are essential components of an adequate BSS programme, but the levels of each and co-ordination thereof, is required.
- There is little scope for raising additional revenue for BSS from other parts of the budget. The degree to which funds can be transferred for BSS is reliant on a clear statement of government priorities in this regard. The MTEF process, once operational, will allow politicians to pursue such a priority. In the absence of such a mechanism, institutional rigidities (such as the inability to move personnel to areas where they are required, the lack of financial management) will continue to limit the shift.
- There is scope for raising additional private funds if government can improve the quality of service provision. An alternative is that a greater degree of the middle class shift to the private sector for BSS (this is already apparent in health), thereby lowering the burden of the state.
- The sequencing and speed of the macro economic programme (not the targets) should be revisited. Under the present sequencing of the macro economic programme, an adverse effect on capital spending and delivery of BSS is apparent. In addition, in order to achieve the efficiency gains noted above, and to support the efficiency requirements of the macro programme, may require some additional spending in the short to medium term. This spending must be aimed at training, additional posts and systems for developing greater financial and management capacity. The need to link the macro-programme to planning must be further refined through the MTEF.

- The greatest scope for improved outcomes from BSS spending is not through increased spending. Significant scope exists for efficiency improvements in all aspects of BSS expenditure.
- The incidence and cost effectiveness of spending should be improved. This must be achieved through spatial reorganisation, the use of targeting and greater emphasis on preventative and integrated programmes.
- In order to achieve these efficiency improvements and to target effectively, a number of constraints have to be overcome.
 - Management and financial capacity is urgently required. The development of systems and training is needed as well as a more narrow focus on what can realistically be achieved.
 - Management, geographic and socio-economic information systems are needed. Emphasis should be given to a single agency to meet the general information requirements. Avoiding duplication would be cost-effective and provide a basis for comparison.
 - Institutional constraints, such as the inability to move personnel to areas where they are required, the need to train personnel and develop expenditure controls must be resolved.
 - In order to address the need for increased capital spending, changes to budgeting are required and the links between planning and budgeting must be established.
- Cost cutting through retrenchments of personnel and through the use of targeting is not a panacea. Without proper management and the ability to ensure efficiency gains, retrenchment will merely result in lower levels of service delivery.

The Role of Government

Post 1994, the government has undertaken an extensive transformation of the public sector. Policies have been revised and new government structures put in place. The aim of the exercise is to ensure more efficient, equitable and effective government services. Service delivery must be reorganised and extended to all South African's, especially the poor. There is a commitment by government to ensure that this process occurs within reasonable macroeconomic constraints. What is becoming increasingly apparent however, is the difficulty of achieving these laudable goals in the absence of sufficient accountability, management, financial control, information and monitoring. In order to ensure that BSS levels are improved, there is an urgent need to address these problems.

First, government has to recommit itself to BSS, not only through the MTEF process (prioritising expenditure) since the level of expenditure is not the greatest constraint, but through the commitment to develop the capacity to deliver the services more efficiently, especially to the poor.

Second, this requires a recognition that the ability to achieve these goals is not reliant on simple panaceas (such as macro targets or retrenchments), but on restructuring which is difficult to achieve and which requires realistic time frames. Additional funds may be needed in the short to medium-term to ensure the development of management capacity, and sufficient control and information systems.

Third, some specific actions can be identified:

- The need for enhanced preventative services, specifically to extend water and sanitation provision, and to develop an integrated nutrition programme.
- Procedures for the development of new policies have to extend beyond paper policies. It is the responsibility of the departments developing new policies to test policies against managerial capability. All new policies should in future have to be piloted, management responsibilities and systems determined, training provided and financial management organised prior to the commencement of a programme. All sub-national agencies must be aware of what is required and have adequately budgeted for such programmes. Such a procedure should become a norm or standard for all departments.
- There is an urgent need for policies and incentives to re-deploy personnel geographically - to where they are most required.
- The need for more management and finance posts, as well as resources for system development.
- Greater emphasis on information and monitoring, through rationalising the current data functions of government, creating additional posts, funding for information systems and the further development of the decentralised offices of the CSS. Greater links between the CSS and departmental information systems are urgently required. It must be noted that manual information systems can be improved significantly in the absence of computer based data systems.

The Role of Donors

The “second 20%” of the 20/20 refers to the spending of donor funds. The report shows that there is relatively little donor funding for South Africa. However, donor funding has not been well monitored. This should be rectified through the creation of a central register.

This report argues that donors should consider support for training and system development as an urgent priority. The implication of this is that spending should not concentrate on meeting the 20% goal per se as system development is difficult to classify as BSS. There is a temptation for donors to support capital projects, since capital spending has fallen over the last year. The problem is that the ability to manage these projects and ensure efficient utilisation of facilities is in doubt. The sustainable and long term benefits to such expenditure should be questioned. The emphasis should therefore be on support to government to improve the efficiency of expenditure.

APPENDIX I

SOCIAL WELFARE EXPENDITURE

The definition of basic services in this report is consistent with the methodology outlined by UNICEF and the UNDP. This is important to ensure that some degree of comparison amongst countries is possible. In practice each country delivers a different set of services - some of which are consistent with a wider definition of basic services. An important omission in the South African case is the existence of a widespread programme of social welfare services and non-contributory cash payments. This appendix quantifies the magnitude and policy direction of the welfare vote. If welfare does constitute part of a broader definition of BSS, then increased spending in welfare would increase the overall spending in BSS (and vice versa). A question raised in the main report is the extent to which the public sector wishes to provide basic goods, thereby making the choice of expenditure for the household, rather than providing more cash and vouchers in an effort to allow the individuals to choose on how the money is spent. This is of particular importance in welfare, given the concentration of cash payments.

The National and Provincial Departments of Welfare are responsible for the delivery of a range of welfare services including the provision of social work services, psychological services, treatment for substance abuse, and care of the aged and orphans through state institutions or via voluntary institutions which receive subsidies from the state. In addition, income poverty is addressed primarily through the delivery of means-tested, cash-based, grants⁵. There are three main categories of grants; those aimed at addressing disabilities, to support the elderly and child and family support.

The recent Welfare White Paper (1997) acknowledges the need for an integrated approach to addressing poverty and welfare services in general. Thus, a large portion of cross cutting services are delivered by other departments (especially police, justice and health) and hence difficult to quantify in a welfare vote.

Table I-1 The Consolidated Welfare Vote

	Nominal (R,m)	Real (R,m)	Real Annual change	Percentage Total Budget	Percentage GDP
1990/91	5 759	5 759		6.9%	2.1%
1991/92	7 431	6 445	11.9%	7.7%	2.4%
1992/93	10 031	7 640	18.5%	8.5%	2.9%
1993/94	10 794	7 491	-2.0%	8.2%	2.8%
1994/95	13 015	8 290	10.7%	9.3%	3.0%
1995/96	15 163	8 893	7.3%	9.7%	3.1%
1996/97	16 426	8 951	0.7%	9.3%	3.0%
1997/98	18 433	9 301	3.9%	9.8%	3.0%
Period			7.3%	8.7%	2.8%

Source: Budget Review 1997

⁵ These grants form the core of social security delivered by the public sector (there are other social security payments not delivered by Welfare, including the workmen's compensation and unemployment insurance and extensive private long and short term cover, primarily for the richest 30%).

The consolidated welfare vote is described in table I-1. The budget increased 62% in real terms from 1990-1997 which is an annual real growth of 7.3%. This increase was due to the equalisation of the level of the grants for all races. Racial parity was achieved in the budget by 1994 (for details see table I-4). While the level of the grant has been equalised, access to grants still retains strong racial disparities. This is prominent in the State Maintenance Grant (SMG) and the disability grant. At present, welfare represents approximately 10% of the budget and 3% of GDP.

Table I-2: Welfare 1997/98

	1997/8 Budget (R,000s)	% all Welfare	% Provincial Budgets	% of GDP
Social Security	12 718 597	85.4%	16.1%	2.0%
- Child and Family Care	1 476 090	9.9%	1.9%	0.2%
- Pensions and Vets	7 931 629	53.2%	10.1%	1.3%
- Disabled	3 275 828	22.0%	4.2%	0.5%
- Other	35 050	0.2%	0.0%	0.0%
Social Assistance	803 443	5.4%	1.0%	0.1%
Social Welfare Services	474 615	3.2%	0.6%	0.1%
Social Development	150 777	1.0%	0.2%	0.0%
Administration	750 820	5.0%	1.0%	0.1%
Total	14 898 252	100.0%	18.9%	2.4%

Source: Budget White Books (1997/98)

Table I-2 separates the welfare vote into 2 main budget components, social security and all other welfare services (including all welfare administration). Social security, is dominant in the overall welfare budget, in 1997/8, this constituted about 85.4% of the total, excluding the cost of administering the transfers. The social security budget comprises, in order of magnitude, pensions (53.2% of all welfare, 62.4% of social security), disability grants (22%, 25.8%), and state maintenance grants (for child and family care - 9.9%, 11.6%). Social security payments represent about 16.1% of the provincial budget and a little over 2% of GDP. Table I-2 differs from table I-1 as aspects of the consolidated welfare vote (I-1) are reported in other votes (e.g. defence) and therefore do not appear in welfare's vote in the Budget Whitebook.

Social Security

State social security is delivered as a non-contributory grant to eligible individuals. The eligibility criteria, means testing and size of grants are specified in the welfare regulations (No. R. 373 of 1996) which fall under the Social Assistance Act (Act No. 59 of 1992).

TABLE I-3: Norms for Social Security

Type of grant	Amount 1995/6	Amount 1996/7	Amount 1997/8	Eligibility criteria (all means tested)
Old age pension	410	430	470	male 65+, female 60+ (possible shift of both to 63+)
Disability grant	410	430	470	18+
Foster care grant	288	305	340	children under 18, unless full-time student
War veterans grant	428	448	488	male 65+, female 60+
Parent grant	410	430*	430*	children under 18, single parent
Child grant	127	135*	135*	under 18, maximum 2 children
Care dependency grant	410	430	470	under 18, profound mental and physical impairment
Special care grant	66	70	80	extremely disabled under 18

Note: Amounts are monthly rates in Rand.

*Frozen and to be phased pending the implementation of the new child support benefit

The relevant nationally set maximum norms for social security for 1995/96 - 1997/98 are shown in Table I-3. The means test is also specified in the regulations and will be discussed later in this appendix (for a detailed discussion of the means test, see Van Der Berg, 1996).

Table I-4 The Real Value of the Grants Per Month (1990 Rand)

Fiscal Year	White		African	
	Max Real value	Real % change yr on yr	Real value	Real % change yr on yr
1980	435	n/a	132	n/a
1985	373	-6.7%	164	4.6%
1988	291	-11.4%	156	-11.3%
1989	291	0.2%	174	11.5%
1990	280	-3.8%	178	2.0%
1991	277	-1.3%	207	16.6%
1992	267	-3.5%	227	9.5%
1993	261	-2.3%	261	15.1%
1994	251	-3.7%	251	-3.7%
1995	243	-3.3%	243	-3.3%
1996	234	-3.6%	234	-3.6%
1997	237	1.2%	237	1.2%

Source: Van Der Berg (1996)

These maximum values, determine the overall size of the welfare vote. Historically, the amount has been set by the Minister of Finance in consultation with the Minister of Welfare. The fiscal decision has enjoyed primacy over welfare policy concerning the level of the grant. The level of the grants were different for the four racial groups, but were equalised in 1994. Table I-4 shows the real decrease in the value of the maximum rate for Whites and the growth in the value of the maximum rate for Africans from 1989-93. This resulted in significant real growth of the social security budget and hence of the welfare vote. The maximum real value of the pension for a White recipient has decreased from R430 in 1980 to R234 in 1996, while an African recipient received a real increase from R132 to R234. The Minister of Finance expressly secured a real increase in 1997 for the first time since 1993.

Table I-5 Number of Grants per thousand of the Provincial Population (1997)

	Old Age	Disability	Child and family	Poverty Proxy
Western Cape	31.3	22.4	36.1	14.3
Eastern Cape	62.2	29.2	16.1	64.9
Northern Cape	47.9	45.4	60.4	26.7
Free State	44.3	18.5	9.0	46.5
Kwazulu -Natal	48.3	22.4	8.7	63
North-West	43.6	17.7	2.3	72.4
Gauteng	30.1	11.5	4.5	5.62
Mpumalanga	44.9	12.9	3.4	67.5
Northern Province	64.3	16.8	2.4	91.2
National Average	46.0	19.9	11.5	51.2
Range	34.2	33.9	58.1	85.6
Range / Average	74%	170%	505%	167%
Corr.Co-eff	0.8	-0.2	-0.5	1.00

Source: Department of Welfare - SOCOPEN data for July 1997

Access to the grants has differed due to race and geographic area. A simplistic measure to view the differential access is through the number of grants paid per 1000 people in each province (Table I-5).

The target population for the old age pension is defined in the regulations as males over 65 and females over 60 and is intended to be means tested. It is therefore expected that provinces with more elderly and lower income should have a higher rate per capita. This does occur. The average number of old age pensions for the population as a whole is 46.02. The wealthier provinces of Gauteng (30.14) and the Western Cape (31.28) have a low rate (younger people and more private pensions and higher income) while the poorer provinces have higher rates - Northern Province (64.31) and the Eastern Cape (62.2). Correlating the number of grants against a proxy for poverty⁶ shows a positive relationship (0.8) for the old age pensions. The correlation is intended as a measure of the relationship, not the causality. The range of 34.2 is 74% of the national average which is reasonable given the large income differences amongst the provinces.

Since all the grants are primarily aimed at poverty relief, a similar pattern should follow for the other grants. Disabilities, follow a very different trend. The Northern Cape has a far higher proportion of disabilities per thousand of the population (45.4), followed by the

⁶ The proxy is the proportion of the non-urban population. The discussion about this choice of proxy is contained in FFC (1996).

Eastern Cape (29.2), Western Cape (22.4) and Kwazulu-Natal (22.4). While Gauteng is low as expected (11.5), Mpumalanga (12.9) and Northern Province (16.8) are also low. The correlation (-0.2) shows a slightly negative relationship between poverty and the delivery of the disability grant. This is reinforced by the much wider range as a proportion of the national average (170%). This reflects the differential control over access to disability grants, as well as the lack of access by poor and rural Africans especially from the former TBVC states and self-governing territories.

The child and family care column includes the SMG, foster care and care dependent grants. Each of these has a similar pattern and they are therefore aggregated. In this instance the Northern Cape has the highest number of grants per thousand (60.4) followed by the Western Cape (36.1) and the Eastern Cape (16.1). All the other provinces have very few child and family grants. The correlation co-efficient is negative (-0.5) with respect to a poverty indicator. Similarly, the range is very extreme and is over 500% of the national average. The reason for this is due to the racial bias in the delivery of these grants.

The implication of the above is that the grants with the exception of the old age pensions are neither targeted by income, nor geographically, but rather by race.

Table I-6 : The Social Security Budget 1995/96-1997/98 (1990 Rand)

PROVINCES	BUDGET			% SHARE		% CHANGE PER ANNUM
	1995/96	1996/97	1997/98	1995/96	1997/98	
Western Cape	962 599	922 819	981 986	14.1	14.0	1.0
Eastern Cape	1 293 360	1 201 980	1 259 300	18.9	18.0	-1.3
Northern Cape	190 320	189 051	242 067	2.8	3.5	13.6
Free State	427 970	411 348	452 534	6.3	6.5	2.9
Kwazulu Natal	1 549 409	1 539 117	1 587 816	22.7	22.7	1.2
North West	475 779	472 517	496 153	7.0	7.1	2.1
Gauteng	842 676	743 992	970 124	12.3	13.9	7.6
Mpumalanga	348 573	350 647	323 875	5.1	4.6	-3.5
Northern Province	744 914	712 118	683 283	10.9	9.8	-4.1
TOTAL	6 835 600	6 543 590	6 997 137	100.0	100.0	1.2

Source: Budget White Books (1997/98)

Addressing these inequities requires additional spending in the Northern Province, Mpumalanga, North West and Gauteng. Table I-6 shows that the budgets for 1995/96-1997/98 do not reflect this shift (in real 1990 Rand). The Northern Province has presented a declining budget, as has Mpumalanga, while the Northern Cape continues to grow. There appears to be a continued widening of inequity rather than a convergence towards equity.

This conclusion may not offer an accurate picture of actual events, since there seems to be a significant difference between actual and budgeted expenditure, specially in the Eastern Cape and the Northern Province. This problem reflects the need for financial management support and intervention, in this regard the recent establishment of a single national payments data base has been critical. A once-off adjustment to ensure that budgets and actual expenditure coincide is necessary to stabilise the budgets and to ensure accountability.

The size of the grant on its own, does not determine the overall social security budget, other considerations include:

- the eligibility criteria, i.e. who qualifies, including the targeting of the grant,
- the application of the means test,
- the take up rate which is the number of people accessing the grant as a proportion of the total eligible population, and is reliant on the administrative effectiveness of welfare, and
- policy decisions.

The old age pension, the state maintenance grant (child and family grants) and the disability grants are each discussed briefly.

Old Age Pensions (OAPs)

The OAP is available to men over 65 and women over 60 years. While a means test is applicable, it has only been strictly applied to the White population. There has been a call to make the grant universal, the additional cost to achieve this is about R2 billion (Van der Berg 1996). This would increase over time as the population ages.

Table I-7: The Distribution of Old Age Pensions by Households (HH) 1993

	Total	African	Coloured	Indian	White
% HH	100	71.4	7.7	2.7	18.2
% OAP HH*	100	89.2	5.3	1.5	4.0
% HH of group with OAP		23.7	13.6	10.8	4.5
% OAP's rural	66.4	73.9	5.5	0.0	10.3
% OAP's urban	19.1	15.5	57.4	56.8	32.4
% OAP's metro	14.6	10.6	37.1	43.2	57.4
Take up** rate: men/women	62/69	77/80	61/66	64/67	5/14

*Of all household receiving the OAP, the proportion received by different population groups

**The take-up rate is the percentage of people eligible for a benefit who actually receive the benefit.

Source: F. Lund, Women's Budget, 1996

About 1.742 million people receive the OAP in 1997. Perceptions about the level of uptake have been developed largely on the findings of household surveys⁷. Table I-7 above shows that African households constitute 71.4% of all South African households, 89.2% of households which receive the OAP are African and that 23.7% of African households receive an OAP. The table also shows that roughly two-thirds of the pensions go to households in rural areas. Household survey data indicate that the incidence of the OAP is strongly pro-poor (Lund and Ardington, 1995). The RDP office analysis of the Living Standards Survey (SALDRU, 1994) showed that the social pension contributed 29% of income to the ultra poor (poorest 20%) while the non-poor (richest 60%) received only 5% of their income from social pensions (RDP, 1995). In addition a substantial proportion of Black households are 3 generational and include children. The OAP thus also has a positive impact on the welfare of these children.

⁷In general, statistics are unreliable, it is not possible to reconcile expenditure and the number of registered beneficiaries in most cases. More targeted action to get illegal beneficiaries out of the systems is required. It has been found that an average of 10-12% of beneficiaries were inactive in the payment systems, resulting in large scale over budgeting. Beneficiaries are not being actively reviewed.

The OAP benefits not only a large proportion of the elderly but the other members of their households as well. The extent to which this non-contributory system can be maintained will depend upon policy and budget considerations. Mechanisms for increasing private sector pensions to many workers, who are currently not covered, are being reviewed in the retirement consultative forum. This may result in a decreased burden on the state, if a contributory scheme is introduced.

Since the OAP is almost universal, the targeting objective differs from other anti-poverty programmes. The extent of targeting (or the extent to which contributions are drawn from a greater proportion of the population) and the size of the grant have not been reviewed as part of an integrated anti-poverty programme. As the debate concerning an integrated programme emerges, these two questions will have to be resolved. The relative share of the OAP and the child grant will also have to be reviewed.

Grants for People with Disabilities

Disability grants (DGs) are payable to people at age 18. The applicant is assessed for the extent of the disability and means tested for income and assets. There are presently about 754 830 DGs recorded as being paid. As was shown in Table I-5, the access to DGs differs greatly. The Northern Cape has about 45.4 DGs per thousand of the population which is double that of other provinces. This reflects the inability of the province to control the use of the DGs and apply the regulations as they are intended. As to the overall number of DGs, this depends on the outcome of a review of existing rules and improved administration.

Child and Family Benefits

Single parents, or those whose spouses are in specific institutions such as jails or psychiatric hospitals and who are unable to support themselves and their children have been able to apply for State Maintenance Grants (SMGs). The SMG is means tested and consists of 2 parts: the Parent Grant (R430 per month) and a Child Grant (R135 per month) for a maximum of two children under 16 years.

Table I-5 shows the inequitable access to the SMG by Province. Also reservations about the objectives and eligibility of the grants had been expressed. The Lund Committee on Child and Family Support was appointed by the Department of Social Welfare to provide an approach for reform of the SMG (Lund, 1996).

The Committee recommended that the grant should be delinked from the family structure by tracking the child specifically, not the type of family. It recommended that a flat rate child support benefit should be introduced and paid via the primary care giver to all children who qualify in terms of a means test.

The Committee favoured the use of a universal benefit (i.e. available to all children) coupled to a simple mechanism to exclude (or claim back) from the rich. It recognised, however, that the support has to be financially sustainable and hence accepted the notion of targeting the poor. In addition the committee recommended that the size of the support should be set at a level linked to the household subsistence level - this was determined to be about R75 per month in 1996 Rand.

Following the report of the Lund Committee, the Cabinet decided to implement a programme to reach about 3 million children. These children must be in the 0-6 years age

group to be eligible for the support. This age group has the benefit of potentially providing a closer linkage to the free child health care and the primary school nutrition scheme. The size of the grant would be set at R100 per month to be paid quarterly. The existing SMG will be phased out over 3 years.

The grant will be targeted towards the poor (intended to reach almost 50% of all children) and will cost an additional R2.7 billion in 1997 rand. Since take-up will not be immediate, the full extent of the programme will only be reflected in the budget in the medium term. The new grant will be highly pro-poor, but the ability to efficiently administer a targeted grant of this nature is in question.

The Need for a Social Safety Net

The great inequalities, high unemployment rates and widespread income poverty in South Africa have necessitated the need for a safety net. The equitable provision of grants is being implemented to ensure a non-racial net aimed primarily to support poor children, the disabled and the aged. The developmental approach outlined in the White paper for Social Welfare (Ministry for Welfare and Population Development, 1995), offers a more integrated and growth enhancing view of the future of welfare in South Africa. However, the success of the approach will be determined by how the economy performs, how many jobs are created and whether these jobs reach the poor.

This requires a co-ordinated approach to social security in general (including health, labour, the Unemployment Insurance Fund, and workman's compensation) and a co-ordinated set of policies to tackle poverty on a holistic basis. Policies of this nature will lead to changes in the nature of social security grants, the role of the state and NGO's, and the need for greatly improved monitoring of the impact of programmes.

In the absence of substantial economic growth, the efficiency of Welfare spending can be increased by:

- rebuilding the payments system as recommended by the Committee for Restructuring Social Security (CRSS, 1997) - which will reduce corruption and theft in the system,
- creating accountable structures through resolving the roles and responsibilities of national and provincial government pertaining to social security,
- reviewing the targeting of the OAP (and its size in conjunction with a wider retirement and poverty discussion),
- review the relationship between welfare services and the district health system,
- employ and train staff for improved financial management and planning of services.

A major anticipated pressure on future welfare budgets will be the care of children and families affected by HIV/AIDS. The more effective the health and education aspects of the HIV/AIDS programme, the less the future burden on the welfare system.

Social Welfare Services

An explicit policy priority has been the expansion of welfare services through an increase in social work personnel. Table I-8 shows that there has been some real growth, averaging at 5.68% per annum for the past 2 years. This masks dramatic differences in the provinces, with some budgets expanding rapidly (Eastern Cape 30.7%, Gauteng 16% and Kwazulu-Natal 10.9%) and others showing significant decline (Free State -14.6%, Mpumalanga -

19.3%). In addition, vast differences in the per capita expenditure remain, with the Northern Cape spending R12.50 per person (1990 rand) and Mpumalanga only R3.70.

Table I-8 : The Social Services Budget 1995/96-1997/98 (1990 Rand, thousand)

Province	Budget			% Change	Per Capita
	1995/96	1996/97	1997/98	1995-1997	1997/98
Western Cape	23 277	21 289	23 948	1.4	5.8
Eastern Cape	24 518	31 942	39 583	30.7	6.8
Northern Cape	7 943	11 500	9 326	8.7	12.5
Free State	19 039	16 229	13 483	-14.6	5.5
Kwazulu Natal	16 270	19 646	19 807	10.9	2.6
North West	7 050	6 956	7 291	1.7	2.4
Gauteng	29 089	32 959	38 391	16.0	5.4
Mpumalanga	15 962	7 416	9 798	-19.3	3.7
Northern Province	18 170	19 984	18 003	-0.5	4.4
TOTAL	161 317	167 921	179 631	5.7	5.4

Source: Budget White Books (1997/98)

The policy priority towards increased social services is therefore not being implemented. A critical concern is the need to support the provinces to plan effectively and budget for the priority programmes.

Implications and Considerations concerning Basic Social Services

The impact on basic social services is therefore dependent on the manner in which the government organises the delivery of BSS. Social welfare is presently delivering a significant non-contributory set of cash grants and welfare services. The present racial and spatially biased targeting is being addressed through the restructuring of the grants and requires greater emphasis on management, control and delivery. The targeting of the different grants varies, leading to confusion as to the ultimate objective of welfare as a whole. It is, however, recognised that the present system must be stabilised, that integrity and control is introduced into social security and that administration and accountability are bolstered. Spending on welfare will increase in line with the growth in the new child support.

Including welfare into the definition of BSS would increase the proportion of government spending on BSS significantly. Integrating welfare into a broader definition of BSS also raises the crucial question of the mix of cash and in-kind support which the state should deliver. If in-kind services are seen as the priority, then funds for other parts of the BSS budgets could be expanded, while the greater use of cash grants would decrease the remaining funds for BSS. Central to this concern is the role of markets (including the NGO sector) in the delivery of BSS. The extensive international debate over the use of poverty grants or vouchers as a mechanism for achieving efficient delivery and allowing individual choice has not, as yet, occurred in South Africa.

APPENDIX II

THE NATIONAL PUBLIC WORKS PROGRAMME

The National Public Works Programme (NPWP) has two main strategies, namely the orientation of government spending on infrastructure and the Community Based Public Works Programme (CBPWP). Almost 80% of all the NPWP projects are for community facilities, followed by access roads, water provision, environment and sanitation. About 25% of these projects were identified by means of mass meetings. The CBPWP is a short-term programme aimed at poverty alleviation, skills training, delivery of needed assets, and capacity building.

The specific objectives of the CBPWP are to:

- create jobs and income for the unemployed and disadvantaged people;
- provide infrastructure;
- develop human resources; and
- empower historically disadvantaged communities.

Funding for the projects is being provided by the Department of Public Works with money from the former RDP office and the Department of Labour, to provincial line function departments. This makes it possible for the departments to require NPWP principles to be adopted and maintained as a condition of funding. Job creation targets have been set for the pilot projects.

The Department of Labour made available R45 million in 1996 for construction projects in Northern Province, Mpumalanga, Eastern Cape and KwaZulu Natal. These projects include roads, schools, a teachers training college, water supplies and community buildings. From the RDP office, R100 million was spent on both construction and professional services for projects in the Western Cape, Mpumalanga, Northern Cape, Gauteng, Free State, KwaZulu Natal and the North West. These projects include roads, urban streets, student accommodation, clinics, schools, water supplies and community buildings. Furthermore, R4 million was given to the Transkei community school building programme to build a school in Northern Transkei.

In co-operation with business and non-governmental organisations, the Department of Public Works has entered into a partnership with the South African Breweries and "Keep South Africa Beautiful" with the aim of re-orientating local authorities towards community based waste disposal methods. One local authority has been chosen in each of the nine provinces as part of the pilot programme. The project is called "the clean and green campaign". The Department of Public Works is contributing R10 million to this project.

The CBPWP is funded from R250 million from the RDP fund of which R150 million has been allocated to provinces and R70 million has been used in a partnership between public works and the Independent Development Trust (IDT). An amount of R12 million has been given to the South African Sugar Association and the remainder for youth supported projects.

A recent evaluation (1997) of the Independent Development Trust Community Employment Programme found that 61% of its programmes were in the three poorest provinces, namely, Eastern Cape, KwaZulu Natal and Northern Province, and 88% of its workers from rural areas.

Through the CBPWP, the Department of Public Works has created 148 000 jobs through a total of 947 projects.

APPENDIX III

PART A : DONOR FINANCE IN EDUCATION (STATUS AS AT SEPTEMBER, 1997)

South Africa via the national Department of Education has contracts with 12 foreign donors. These funds are generally disbursed over a period of time and do not represent financing received for any particular year. A summary of the agreements is listed below.

1. Bilateral Agreements between the national Department of Education and the Australian Agency for International Development (AUSAID)

- A\$ 2.3 million for technical assistance provided by Australian consultants to the Department - Transformation of the Department, National Qualifications Framework, Higher Education Assistance (National Committee on Higher Education Study Tour)
- A\$ 5 million for technical assistance provided by Australian consultants for the Institutional Linkages Programme to increase capacity at selected South African Higher Education Institutions

2. Bilateral Agreements between the national Department of Education and the Canada

- C\$ 7 million for the South African Education Management Programme
- C\$ 3.2 million for assistance to set up the South African Qualification Authority (SAQA)
- C\$ 4 million for needy and academically deserving students via the Tertiary Education Fund of South Africa (TEFSA)

3. Bilateral Agreements between the national Department of Education and Denmark

- R 14.375 million for the National Access Consortium Western Cape (NACWC)
- R 9.232 million for Education Management Development
- R 7.727 million for the Environment Project
- R 1.517 million for the President's Education Initiative

4. Bilateral Agreements between the national Department of Education and the European Union (EU)

- R 55 million for Library Books
- 17.2 million ECU for the Technical Support Programme
- R 150 million for the Sector Support Programme

5. Bilateral Agreements between the national Department of Education and France

- 17 million French Francs for the President's Education Initiative

6. Bilateral Agreements between the national Department of Education and Germany

- R 305 000 for the Science Education Centre (Soweto)

7. Bilateral Agreements between the national Department of Education and the Netherlands

- Culture of Learning, Teaching and Service Campaign (COLTS) agreement still being negotiated
- R 4 million for Co-operation in Education between the Netherlands and South Africa (CENESA)

8. Bilateral Agreements between the national Department of Education and the Republic of China

- R 25 million - not yet spent

9. Bilateral Agreements between the national Department of Education and Sweden

- R 10.114 million for the Schools Register of Needs
- R 3.200 million for the Education Management Development Task Team
- R 4.100 million for the Education Management Information System
- R 549 000 for the Gender Equity Task Team
- R 790 000 for the Special Needs Commission and Committee
- 30 million SEK for the National Student Financial Aid Scheme

10. Bilateral Agreements between the national Department of Education and Switzerland

- R 6.796 million for the Emergency Student Loan Fund
- R 10 million for the Regional Education Programme

11. Bilateral Agreements between the national Department of Education and the United Kingdom (UK)

- £ 1.45 million for Primary English Teaching in Rural Areas
- £ 1.1 million for Adult Basic Education (Northern Cape)
- £ 4.8 million for the Tertiary Education Fund of South Africa
- £ 600 000 for the Programme of Maths, Science and Technology (North West)
- £ 2.5 million for the Mpumalanga Primary Schools Initiative
- £ 945 000 for Adult Basic Education (UNISA)
- £ 750 000 for the South African Books Aid Project
- £ 430 000 for the Independent Development Trust (IDT)Schools Books Project
- £ 2.01 million for the Gauteng Institute of Life Long Learning and Development
- £ 1.254 million for the Primary Maths Project
- £ 2 million for In Service Teacher Training in Maths, Science & Technology (Northern Province)
- £ 7.589 million for the Eastern Cape Primary Schools Improvement Project
- £ 271 000 for the Department of Education Call Down Fund
- £ 513 000 for the Ulwazi Educational Radio Project for Adults

12. Bilateral Agreements between the national Department of Education and the United States Agency for International Development (USAID)

- \$ 31 million for the South Africa Basic Education Reconstruction Project (SABER) - Media in Education Trust for the printing and distributing Curriculum 2005, newspaper supplements on Outcomes Based Education, Training of Grade One teachers for the new curriculum, the President's Education Initiative, Performance and Evaluation contracts.
- \$ 8 million for Adult Basic Education and Training (ABET) - Technical Assistance for the national Policy Framework for ABET, Needs Assessment in Northern Province and Eastern Cape
- \$ 9 million for Youth Development Programme - Support to Tertiary Education Project (STEP), support to Further Education, Needs Analysis.
- \$ 15.6 million for the Tertiary Education Linkages Project (TELP) - support for the National Commission on Higher Education, strengthening of Historically Disadvantaged Institutions through grants.

Using the exchange rates (1\$=R4.69, 1£=R7.66 & 1ECU=R4.00) total donor financing amounts to just over R1 billion. The summary above suggests that some portion is devoted to the support of basic education (school book projects, improving the quality of teachers (especially Maths, Science and Technology) and specific Primary School Projects in selected provinces). However, the major portion of donor finance goes to supporting the role of the national Education department i.e. the setting up of systems (financial, management, information), assessing needs, building capacity (management and otherwise), and support for Tertiary Education (both to students and to the institutions themselves). Obviously some of these activities also benefit basic education delivery by improving the qualitative aspects of education.

Non Governmental Organisations (NGOs) do have access to donor funding either directly from the foreign countries or they access these funds as the implementers of some of the projects above. For example, the National Access Consortium Western Cape, the Tertiary Education Fund of South Africa and the Independent Development Trust are all such bodies.

PART B : DONOR FINANCE IN HEALTH

South Africa via the national Department of Health has contracts with a number of foreign donors (specific countries as well as international aid agencies). These funds are generally disbursed over a period of time and do not represent financing received for any particular year. A summary of some of the projects that have been funded is listed below.

Donor	Project	Type of Aid	Amount R000
Japan	Improvement of medical equipment for hospitals in SA.		49 100
Cuba	Recruitment of doctors programme	Doctors Lecturers	
Flanders	Provision and maintenance of assistive devices for the disabled Developing a community based rehabilitation strategy		3 205
Luxembourg	Support to the health sector in the Eastern Cape	Grant aid	19 000
Belgium	National sexually transmitted disease reference centre Improving the vaccine cold chain National TB control programme Health management training	Grant aid	7 062 1 500 3 200 6 895
USAID	Equity	Grant Aid	50 000
Australia	Quality Assurance Telemedicine Health financing Drug policy and regulatory framework Health promotion Flying doctor's programme Hospital rehabilitation	Technical Assistance	
Germany	Doctors programme	Doctors	
Greece	Establishment of a paediatric clinic in Gauteng	Grant Aid	490
WHO	Health legislation Occupational health and safety Environmental health / community water supply and sanitation Primary health care Human resource development Healthy behaviour and mental health		1 485* 3 690* 1 710* 2 385* 1 080* 315*
Switzerland (FAO)	Development of a national nutrition training programme		1 265
UNDP	Support to the health sector in rural areas		9 432*
BDDSA	Implementation of a national drugs action plan Human resource development Technical assistance to the department of health		27 000** 14 500** 1 673**

	STD/ HIV/ AIDS prevention		
EU	District health systems support programme Technical support programme for national health sector restructuring National HIV/AIDS programme		26 787 11 962 52 717
TOTAL FUNDING			277796

Source: Department of Health

* converted from dollar rate at 1 dollar = R4.5

**converted from pound rate at 1 pound = R 7.5

As in education, donor funding in health does provide directly for basic heath services, but most of the funds are used for support functions i.e. the setting up of systems (financial, management, information), assessing needs, and building capacity (management and otherwise). NGO's working in the health field also access donor finance independently.

PART C : HOW COULD THE TARGET (20% OF DONOR FINANCE TO BE SPENT ON BASIC EDUCATION AND BASIC HEALTH SERVICES) BE ACHIEVED?

The provision of both basic education and basic health is a provincial competency and hence donor funding for this purpose should ideally be channelled through the provinces since they are in a better position to identify areas of need. However, bilateral agreements are only signed between the national Education/national Health department and the country/agency concerned or between the Department of Finance and the country/agency concerned. Provinces are encouraged to access donor financing either through the national department of education/health or the national department of Finance. Likewise, NGOs will also be encouraged to apply for funds through an overarching NGO body like the National Development Agency.

To ensure that 20% of donor financing is assigned to basic social services (assuming all projects channel funds to the neediest areas/individuals in any particular province and that the government need not be the sole deliverer of the actual service), the following options could be considered:

- The national department sets up particular projects in consultation with provincial education/health departments that supports the provision of basic education/basic health and then negotiates with donors for funding. This is then channelled through the provinces who disburse it on a project by project basis.
- The national department ensures that this target is met by directing 20% of all donor funding it receives for the provision of basic education/basic health. Funding is then channelled through the provinces who disburse it on a project by project basis.
- The national department suggests to each donor that they are required to earmark 20% of their aid for the provision of basic education/basic health. Funding is then channelled through the provinces who disburse it on a project by project basis.

While the above suggestions will encourage an increased flow of funds for basic social services, one must keep in mind that donor funding is not a sustainable source of income as donors tend to give support to capital projects. Basic social services are essentially people driven, i.e. the major costs are recurrent, and hence it may prove disastrous if these recurrent costs cannot be met.

In this light, donor finance that supports the development of systems for financial management, human resource management, monitoring and capacity building both within

the health and education sectors as well as within communities, may prove to be as important, if not more important, in improving the level and quality of basic social services than would the building of clinics and classrooms.

Investment in support systems will assist in improving efficiency and effectiveness in education and health. A major obstacle to the transformation of the public service is the lack of managerial capacity. This capacity is lacking in terms of planning, budgeting, the management of human resources, and the monitoring of government policy. Donor finance and assistance to develop these systems will improve the long term capacity of the public service to deliver better basic social services that are cost effective.

It is extremely difficult to monitor or evaluate the total extent of donor funding in South Africa. While government has no intention of dictating to donor agencies on how they should spend their money, it is essential that government is able to monitor this spending. Hence it is necessary that a central register of all donor finance be kept.

APPENDIX IV

IMPROVED INCIDENCE THROUGH TARGETING

The argument is made that significant scope remains for improving the incidence of expenditure, through the inter-provincial resource allocation mechanism, the use of targeting and improvements in intra-provincial resource allocation. Recent evaluation of targeted programmes in developing countries has suggested the need for caution in thinking of targeting as a simple and easily implemented solution (see Grosh, 1994; and van der Walle and Nead, 1995).

Targeting involves shifting the benefits of specific public spending programs towards a group of individuals, usually, the poor. Targeting can serve as an important redistributive tool and aims to decrease the costs associated with achieving a given anti-poverty objective. Within a limited budget, targeting is used to enhance the cost-effectiveness of expenditure. In this regard, targeting has recently come to be seen as a major mechanism of cost containment. Recent analysis, however, cautions against attempts to reduce expenditure through targeting. The reason is that the costs of targeting may be sufficiently large to undo the financial savings.

Targeting creates a basic dilemma - irrespective of the specific policies a government chooses to adopt. Equity and efficiency criteria require a trade-off between those to be excluded and those who should be included. In terms of the efficiency of targeting, there are two potential problems:

- The extent of failing to reach the target population, this is described as a Type 1 error.
- Another inefficiency occurs when the intervention reaches the non-target population, this is described as a Type 2 error.
- Weisbrod (1970) defined the terms vertical and horizontal efficiency for targeting. The accuracy of the program assisting only the target group is vertical efficiency, while the comprehensiveness of the programme in assisting all of that group is horizontal efficiency. The awarding of benefits or services free of charge to those not eligible (Type 2 error) reduces the vertical efficiency of the programme, while the exclusion of eligible families (Type 1 error) lead to horizontal inefficiency in that the programme becomes less effective in covering the poor.

Policy makers have a number of options for targeting beneficiaries of public expenditure (Grosh, 1992):

1. **Individual Assessment** mechanisms focus on individual applications and an assessment is made by the program manager on which individuals should be included and which excluded. Examples of individual assessment are means tests and nutritional status.
2. **Group or Geographic Targeting** mechanisms grant eligibility to groups of candidates who share an easily identifiable characteristic. A school feeding scheme is an example of group targeting.
3. **Self-Targeting** mechanisms rely on the decision of a potential candidate whether to participate or not. The program is usually available to all, but is designed in such a way as to discourage those who are not being targeted. A labour intensive public works programme, which pays a low daily wage, will attract individuals who are unemployed or earning less than the daily rate.

4. **Differential usage of public services** which are available universally. In practice, quality differences and queuing (since price may not be a discriminator for publicly provided services) result in the rich making use of private facilities and the poor being self-targeted to the public services. Health care is an example which is often cited in this regard.

It is important to note that different sectors may have different service goals, and therefore may require different approaches to targeting. For example, education may want to ensure that type 2 errors are minimised through a mechanism for ensuring that those who can pay user fees do. Health may use a combination of targeting devices, including differential quality and by targeting pockets of poverty, in an aim to enhance services to the ultra poor.

The fiscal pressure for targeting is typically based on the assumption of a fixed total budget for benefits. The constraints on policy choice may however be more complex; since the capacity of a government to target benefits depends on:

1. **Information constraints:** Information on the welfare status of individuals is usually highly imperfect. The fact that information on the incomes of all individuals within a population is seldom available limits the scope for means-tested benefits. The lack of information results in an agency problem since, individuals and households understand their own needs, but the administrative agency does not. Though the problems of incomplete information and limited administrative capability do cloud the prospects for effective targeting, various methods for trying to cope with these drawbacks have been devised (Burgess and Stern, 1991).
2. **Administrative or managerial constraints:** Imperfect targeting may arise on account of errors in administration. The conditions for receipt of a transfer or service may be perfectly aligned with social objectives, but the existence of a programme may not be known to all those potentially eligible, or people may make false claims which are not detected. Imperfect targeting may also arise because the conditions of benefit are only imperfectly correlated with the objectives. In general, the more precisely a target is specified, the greater the administrative costs.

Administration is difficult as the success of a programme depends on both the decisions of beneficiaries (which requires communication and an understanding of the costs and constraints to access) and the need for verification by government. Verification involves the ability to monitor and audit the targeting system. This is further complicated by the fact that many of the intended recipients are mobile groups of people (a particular problem emerges in South Africa due to the large scale of migrant labour).

3. **Adverse incentives:** Account has to be taken of changes in the behaviour of recipients, and the limits to targeting may arise from the adverse incentives created.
4. **Political considerations:** Targeting may affect the degree of political support for the programme and hence the funds which are available. In many developing economies, the middle classes and not the poor, are currently the primary beneficiaries of public social spending. The rich usually have alternatives - namely the private sector at home or abroad. Redirecting or “targeting” spending toward the poor will adversely effect the middle classes who, in the worst-case scenario, may no longer be able to afford the services. The richest 40% are a vocal and politically important constituency and will strongly resist any attempts at preferential treatment for the poor.

A number of criteria should be met in order for a targeting mechanism to be practical. These include the following:

- Information is available or can be constructed relatively easily, without disagreement;
- Information must be updated regularly;
- The mechanism must be politically and constitutionally feasible;
- The costs of administration must be minimised;
- Errors of omission and commission should be properly understood in terms of the objectives;
- Administration must be simple, including monitoring and updating the system;
- Adverse incentives must be analysed before any targeting mechanism is chosen.

A compelling case can be made for beginning with a simple approach to targeting, and refining the mechanism as data improves. For example, proxy means testing is preferable to strict income assessment as is group targeting rather than administratively cumbersome individual assessment.

The incentive for data to be collected improves once targeting is introduced, since interest groups require improved data to assess the effectiveness of the programme. As information requirements expand, and if agencies attempt to determine targeting objectives in a similar manner (to improve co-ordination) then it may be beneficial for increased information responsibilities to lie with a single information collection agency (the CSS). The information produced would have to be timely and responsive to the needs of the departments.

The implication of this discussion is that a clear plan and management process have to be created in order to develop an efficient and effective targeting mechanism. Targeting also requires a reorganisation of resources in favour of poorer areas and an ability to monitor intra-provincial resource allocations.

This poses a serious dilemma since one of the common constraints for delivering BSS is the need for improved managerial, financial and planning capacity and information, especially in some of the poorest regions of the country. It has also been noted that there are great difficulties in attracting skilled personnel to these areas.

APPENDIX V

TERMS OF REFERENCE A 20/20 EXERCISE ON PUBLIC EXPENDITURE IN SOUTH AFRICA

Outline

1. Background
2. Objectives of Exercise
3. Output
4. Researchers for the Exercise
5. Budget
6. Possible Structure of the Report
7. Content and Methodology of the Exercise

List of Tables

1. Background

The World Summit for Social Development (Copenhagen, March 1995) adopted the 20/20 initiative. Apart from the reaffirmation of the official development assistance (ODE) goal of 0.7% of GNP, the 20/20 target is the only new quantitative target set by the Summit.

The 20/20 initiative proposes that on average 20% of budgetary expenditure and 20% of aid flows should be allocated to basic social services (BSS). It is based on the conviction that the delivery of BSS is one of the most effective and cost-efficient ways of combating the worst manifestations of poverty. Indeed, household-level data confirms that the level of education of the mother determines to a large extent the level of other social indicators such as infant mortality, child malnutrition, fertility and school enrolment, and hence poverty.

Available data indicate that, on average, 13% of national budgets and 10% of the international aid flows are presently being allocated in support of the delivery of basic social services, not social services in general. It is estimated that the full implementation of 20/20 by the year 2000 would make an additional \$63 billion available globally for basic social service delivery in the 126 low and lower-middle income countries. By and large, this would be sufficient to meet the global goals for children and social development by the end of the decade.

However, the financial burden of achieving the goals would be primarily shouldered by developing countries (90%). Budget restructuring of this magnitude over a relatively short period of time may not be feasible without additional international support. Therefore, the eradication of the worst aspects of poverty will require progress towards the 0.7% target as well. If both developing and developed countries were to move half way towards the 20/20 and 0.7% targets by the year 2000, it would generate \$60 billion in additional resources for basic social services, which would be equivalent to the full implementation of the 20/20 proposal.

Hence, the eradication of absolute poverty lies within the financial reach of the world community, in spite of chronic fiscal austerity in both developed and developing countries. Without restructuring national budgets and increasing international aid flows, the deadline for development set by the international community will not be met. Children of poor and vulnerable households will continue to be the first victims of hunger and disease and ignorance, perpetuating the cycle of poverty.

International support for 20/20 is part of its advocacy to shift the focus of the debate on adjustment and development from the global and macro levels to the country and meso levels. The meso level comprises the policy instruments that govern the allocation and distribution of resources within a given macro-economic policy framework. The principal instruments of meso policy include public expenditure allocation, aid utilisation, credit allocation, income and pricing policy, taxation, etc. The restructuring of public expenditure and aid flows have received most attention in recent years.

2. Objectives

The study will have four major objectives:

1. Determine how much of the national budget and international aid flows is being spent on BSS and estimate the financial implications for BSS of the attainment of the 20/20 target by the year 2000
2. In the likely event that more than 20 per cent of public expenditure on BSS is already occurring the focus of the project will shift to estimating the level of public expenditure on the poor.
3. Establish the scope for inter-sectoral and intra-sectoral budget restructuring in favour of BSS and/or the poor.
4. Identify areas where the cost-efficiency of the delivery system of BSS can be improved.

Countries mobilize resources for basic social services through three main channels: (i) taxation, (ii) user charges, and (iii) community contributions. In addition to public expenditures, this study will focus on the first of these elements without completely excluding discussion of the second and third.

However, several conceptual and data problems arise when estimating the share of basic social services in national budgets and aid flows. Double counting is one of them. Aid in support of basic social services usually takes the form of capital investment. Normally, investment projects are part of the recipient's public investment programme (PIP). Hence, those projects are sometimes counted a second time as part of the government's earmarking to basic social services. Double counting is most likely to bias the actual 20/20 ratio in aid-dependent countries, particularly in sub-Saharan Africa where donors often fund 80% or more of the PIP. Second, the composition of BSS varies from country to country. In principle, they include basic education, primary health care and family planning services, low-cost water and sanitation, and nutrition programmes.¹ However, the manner in which public finance data are presented will often force changes in the definition in BSS at the country level. Third, the 20/20 compact requires detailed information on actual expenditure, not on budgeted allocations. This information may only be available at the aggregate level. Fourth, the aid reporting system of national governments, the OECD, the World Bank and UNDP seldom provide a reliable breakdown on the end-use of ODA flows.

The data base for advocacy on budget re-structuring in most countries is relatively weak. National and international advocacy for the '20/20 initiative' will be considerably strengthened with a stronger data base. At the end of this exercise, many development partners will be able to use the information as an important instrument in national policy debates. Moreover, at present the BSS budget and aid ratios are not known for the vast majority of countries, partly because government budgets are not sufficiently transparent. In the South African case this study will help fill this gap. In addition, they will provide

¹ Parker, D. & Jespersen, E. : 20/20 : Mobilizing resources for children in the 1990s, Unicef Staff Working Paper No. 12, New York, 1994. Booklet entitled: The 20/20 initiative : Achieving universal access to basic social services for sustainable human development, issues jointly by UNDP, UNESCO, UNFPA, UNICEF & WHO. Unicef, New York, 1994.

suggestions for restructuring expenditures and improving the cost-effectiveness of existing resource allocations.

It is clear since the World Summit for Children in 1990 that public expenditure issues per se will have to be addressed in detail in each country by governments if the national programmes of action (NPAs) are to be operationalised. In the NPAs, several governments have committed themselves to budget restructuring in order to achieve global goals by the year 2000. An important objective of these reports is to provide an input into the NPA processes.

3. The Output

The period of review will be from 1980 up to the most recent year for which (preliminary) data are available. For the period 1980-1994, aggregated data will be provided. For the post-1994 period a more detailed analysis of data will be given. The output will generate detailed information on expenditures on basic social services. Moreover, the studies should be useful not only for advocacy, but will also provide the government a menu of options on budget and aid restructuring and on improving efficiencies.

4. Researchers for the Study

The study will be conducted by a team of researchers at the Financial and Fiscal Commission. They will work closely together with the researchers of the Poverty and Inequality Report, the Department of Finance and social sector departments as well as UN Agencies including the World Bank.

5. Budget

The study is expected to be funded by the sponsors of the PIR. The cost of the study are expected to be low; international consultants should not be hired - except for a limited period, preferably from the SADC region, and preferably only to fill gaps in locally available expertise. Technical advice from international development partners such as UNDP, UNICEF UNESCO as well as the World Bank would be expected.

6. Possible Structure of the Report

(All page numbers are for single-spaced text, excluding tables and graphs)

Length of report - 75-100 typed pages-single-spaced, without tables and graphs

Executive summary (5-7 pages)

Introduction

- Objectives of the study
- Chapter outline and its logic

Chapter 1: Brief review of major economic trends and social trends since 1980 (7 pages)

Chapter 2: General overview of public finance (8 pages)

- Aggregate analysis of public expenditure (in real terms and share of GDP)
- Government revenue in real terms and share of GDP
 - Tax revenue: direct and indirect (sales tax, customs and excise)
 - Non-tax revenue
 - Progressivity of tax system

- Budget deficit (share of GDP)
 - before grants - overall and primary deficit
 - after grant
 - sources of financing

Chapter 3: Analysis of budget expenditure (10 pages)

A. Recurrent expenditure

- debt servicing (real and per cent of GDP), domestic vs. External, concessional vs. Commercial
- discretionary expenditure
 - economic classification (salaries and wages, goods and services, other)
 - functional classification)general administration, defense and internal security, economic services, social sectors, other)

B. Development expenditure (real and per cent of GDP)

- functional classification

C. Combined recurrent and development expenditure

Chapter 4: Analysis of social expenditure (10 pages)

- Health (including water and sanitation, nutrition and food subsidies and family planning)
- Education
 - Basic and non-basic services (by sector and in aggregate, real terms, per capita, per cent of GDP); methodology adopted for estimation; date sources
 - Salaries and goods and services within basic and other social services
 - Recurrent vs. Development expenditure
 - Selected variables eg. Essential drugs per capita (real per capita terms or nominal; schoolbooks per pupil) to demonstrate inefficiencies and inequities

Chapter 5: Scope for additional resource mobilisation for BSS and improving cost-efficiency (60 pages)

- Inter-sectoral restructuring
- Intra-sectoral restructuring
- Cost-efficiency improvements of basic social sector expenditure (by sector)

Chapter 6: Conclusions (5 pages)

APPENDIX A: Social Welfare Expenditure

APPENDIX B: Impact of Public Works Programme

APPENDIX VI

GLOSSARY

Balance of payments: all the credit and debit transactions of a country with foreign countries and international institutions. The **current account** is made up of visible trade (merchandise exports and imports) and invisible trade (income and expenditure for services such as banking ,shipping etc.). The **capital account** is the inward and outward flow of money for investment, international grants and loans.

Basic Health Services (BHS): services provided by general practitioners, dentists, and includes medicines (prescribed and those purchased over-the-counter) as well as workplace primary care services.

Budget/fiscal deficit: the shortfall of current revenue below current expenditure

Capital expenditure/ development expenditure: money used for the purchase of land, buildings, and capital equipment .

Capital-intensive: the production of a commodity in which a higher proportion of capital is used in the mix of inputs compared with other factor inputs, like labour.

Excess capacity: the difference between the amount of goods and services that could be produced at maximum efficiency and the amount actually produced by the economy.

Exchange controls: measures established by the state through the banking system on the purchases of dealings in gold and foreign currencies by residents

General Sales Tax (GST): an indirect tax applied only at the final stage of exchange of goods or services

Gini Coefficient: a coefficient showing the degree of inequality in income distribution. It takes on values between zero (when income is distributed equally) and one (when one individual has all the income)

Gross Domestic Investment (GDI): total investment expenditure in the economy for a fixed time period inclusive of the replacement of worn out or obsolete equipment i.e. inclusive of depreciation

Gross Domestic Product (GDP): a measure of the total flow of goods and services produced within the borders of a country over a specified time period.

Gross National Product (GNP): a measure of the total flow of goods and services produced by citizens of a specific country (i.e. income accruing to domestic residents from abroad is added while income earned by foreigners in the domestic market is subtracted from GDP)

Human Development Index: a socio-economic indicator which measures the average achievements in a country in 3 basic dimensions of human development - life expectancy, educational attainment and real GDP per capita

Income distribution: a frequency distribution showing numbers of persons or households classified by levels of annual income.

Infant Mortality Rate (IMR): the number of infants per 1000 live births who die before the age of 1

Inflation: a persistent rise in the average level of all prices that is sustained over a period of time

Interest rate: the proportion of a sum of money that is paid over a specified period of time for the loan of that money

Marginal tax rate: the amount of tax that the taxpayer would pay on an additional unit of income

Maternal Mortality Rate (MMR): the number of women per 1000 live births who die during and after giving birth

Medium Term Expenditure Framework (MTEF): an expenditure planning tool which can be used to effectively plan the utilisation of a country's resources. It consists of a top-down resource envelope, a bottom-up estimation of the current and medium term costs of existing policy, and ultimately the matching of these costs with the available resources.

Potential Years of Life Lost (PYLL): calculated from age specific death rates, by subtracting age at death from 65. For example the death of a 5 year old is counted as 60 PYLLs.

Primary Health Care (PHC): the promotive, preventative, and curative care that is available through the outpatients' department in a hospital, clinic or a general practitioner's office. This would include family planning, immunisation, antenatal care, health education, community mental health and substance abuse services, community geriatric services and care for the elderly.

Primary School Nutrition Programme (PSNP): a Presidential Lead Project programme originally set to provide each primary school child with one substantial meal per day, thereby contributing to enhanced educational outcomes

Productive capacity/potential output: the actual amount of goods and services that could be produced by the economy if it was operating at maximum efficiency

Progressivity of the tax system: a tax system whereby the ratio of taxes to income increases as income increases

Real value: a nominal value adjusted for inflation (changes in prices). For example, personal income may grow by 10% over the period of a year, but if the inflation rate is 8%, the real value of the increase is only 2%

Reconstruction and Development Programme (RDP): a policy that sets out how the new democratic government intends to rebuild the economy and the public sector so that it serves the needs of the majority

Recurrent expenditure: money used for operating expenditure which consists of salaries, transfers, subsidies and purchases of non-capital goods and services. Also includes maintenance expenditure on capital goods

South African Labour and Development Research Unit (SALDRU): a research institute based at the University of Cape Town responsible for the 1993 survey called the Project for Statistics on Living Standards and Development

Subsidies: government transfers to suppliers of goods and services intended to either keep prices down, to maintain incomes of producers or to maintain a service or employment

Terms of trade: the ratio of the average price of a country's imports to the average price of its exports

Transfers: payments made by government to a private person or institution that does not arise from productive activity e.g. old age pensions

Ultra poor/ poor: using the World Bank interpretation, the poor are defined as the poorest 40% of households while the bottom 20% are defined as the “ultra-poor”. In terms of expenditure levels, the cut off point for the poor can be considered to be R300 per month (in 1993 terms) per “adult equivalent” below which people are considered poor. For the “ultra-poor” the cut-off point was set at approximately at R171 per month (in 1993 terms). (World Bank, 1995)

Value Added Tax (VAT): an indirect tax applied at each point of exchange of goods or services from primary production to final consumption.

A note for non- South African readers

Race: social categories used by the apartheid government to justify White minority rule. In this paper 4 groups are used - White, African, Coloured, Indian. Black is a generic term and refers to African, Coloured and Indian persons.

Homelands/Bantustans: areas set aside by the former apartheid regime for occupation by Africans. These areas were economically non-viable and existed entirely on grants from the South African government. The former apartheid government created 6 “self governing territories” (SGT’s):Gazankulu, Kangwane, Kwandabele, Qwaqwa, Lebowa, Kwazulu and 4 “independent states” (TBVC’s):Transkei, Bophuthatswana, Venda, Ciskei .

A note on Population Statistics

For the first time since 1970 the population of South Africa as a whole was counted in 1996. The preliminary results from the 1996 Census indicates approximately 4-6 million fewer people than expected. A number of explanations have been given for this finding. The two most significant being: a) fertility in SA has declined more rapidly than expected; and b) the previous Census results were adjusted in order to fit a demographic model, and not the other way round.

Since SA’s population data has been speculative over the last few years, the Financial and Fiscal Commission organised a Population Data Workshop in July 1996. The outcome of this

workshop was that a group of demographers agreed on a consensus population size and population growth rate to be used in the interim, until the Census results became available.

The projected SA population as used in this document to compute per capita expenditure is therefore the preliminary 1996 Census results (roughly 37 million), projected backwards using the consensus growth rate of 0.027 as referred to above. These figures are thus crude estimates in the absence of more detailed census data for the period 1970 -1996.

APPENDIX VII

LIST OF ACRONYMS AND ABBREVIATIONS

AIDs	- Acquired Immune Deficiency Syndrome
AUSAID	- Australian Agency for International Development
ABET	- Adult Basic Education and Training
BHS	- Basic Health Services
BSS	- Basic Social Services
CBPWP	- Community Based Public Works Programme
CENESA	- Co-operation in Education between the Netherlands and South Africa
CHW	- Community Health Workers
COLTS	- Culture of Learning, Teaching and Service Campaign
CRSS	- Committee for Restructuring Social Security
CSS	- Central Statistical Services
CUBP	- Clinic Upgrading and Building Programme
DG	- Disability Grant
DHA	- District Health Authorities
DHS	- District Health System
DNHPD	- Department of Natural Health and Population Development
DoF	- Department of Finance
DOT	- Directly Observed Treatment
ECU	- European Currency Unit
EDL	- Essential Drug List
EPI	- Expanded Programme on Immunisation
EU	- European Union
FFC	- Financial and Fiscal Commission
FHC	- Free Health Care
GDI	- Gross Domestic Investment
GDP	- Gross Domestic Product
GEAR	- Growth, Employment and Redistribution
GGP	- Gross Geographic Product
GNP	- Gross National Product
GST	- General Sales Tax
HDI	- Human Development Index
HER	- Health Expenditure Review
HH	- Household
HIV	- Human Immune Deficiency Virus
HOA	- House of Assembly
HOD	- House of Delegates
HOR	- House of Representatives
HSP	- Hospital Strategy Project
IDT	- Independent Development Trust

IMDC	- Interim Medical and Dental Council
IMF	- International Monetary Fund
IMR	- Infant Mortality Rate
LBW	- Low Birth Weight
MCWH	- Maternal, Child and Women's Health
MIP	- Municipal Infrastructure Investment Programme
MMR	- Maternal Mortality Rate
MTEF	- Medium Term Expenditure Programme
NACWC	- National Access Consortium Western Cape
NDP	- National Drugs Programme
NGO	- Non-governmental Institute
NNSDP	- National Nutrition and Social Development Programme
NPWP	- National Public Works Programme
OAP	- Old Age Pension
PEM	- Protein Energy Malnutrition
PHC	- Primary Health Care
PHCN	- Primary Health Care Nurse
PIT	- Personal Income Tax
PPASA	- Planned Parenthood Association of South Africa
PSLSD	- Project for Statistics on Living Standards and Development
PSNP	- Primary School Nutrition Programme
PYLL	- Potential Years of Life Lost
RDP	- Reconstruction and Development Programme
RIEP	- Research Institute for Educational Planning
RSC	- Regional Services Council
SALDRU	- Southern African Labour and Development Research Unit
SAQA	- South African Qualification Authority
SARB	- South African Reserve Bank
SHI	- Social Health Insurance
SMG	- State Maintenance Grant
STD	- Sexually Transmitted Diseases
STEP	- Support to Tertiary Education Projects
STGS	- Standard Treatment Guidelines
TB	- Tuberculosis
TBCP	- Tuberculosis Control Programme
TBVC	- Transkei, Boputswana Venda and Ciskei
TELP	- Tertiary Education Linkages Project
TEFSA	- Tertiary Education Fund of South Africa
UNDP	- United Nations Development Programme
UNFPA	- United Nations Family Planning Association
UNISA	- University of South Africa
USAID	- United States Agency for International Development
VAT	- Value Added Tax
VSP	- Voluntary Severance Package

WHO - World Health Organisation

APPENDIX VIII

BIBLIOGRAPHY

- Ardington E and Lund F, (1995). "Pensions and Development: Social security as complementary to programmes of reconstruction and development", Development Southern Africa, 12(4)
- Auditor-General (1970/71-1992/93). *Reports of the Auditor-General for the Republic of South Africa (and for the respective homelands)*. Pretoria: Government Printer.
- Bannenberg W, (1995). *Consultant's Second Report on a Mission to South Africa*, in: South Africa (1995) *op. cit.*
- Barnum H & Kutzin J, (1993). *Public Hospitals in Developing Countries: resource use, cost, financing*. Baltimore: The Johns Hopkins University Press for the World Bank.
- Blecher M, Jacobs T & McIntyre D, (1996). *General Practitioners and National Health Insurance: Results of a National Survey*. Health Economics Unit Working Paper No. 24. Cape Town: Health Economics Unit, University of Cape Town.
- Bourne D, (1994). *Analysis of mortality data for 1990*. Unpublished report prepared for the Health Expenditure Review. Quoted in: McIntyre et al (1995) *op. cit.*
- Bradshaw D, Laubscher R & Schneider M, (1995). *Estimated cause of death profiles for the nine new provinces based on 1990 data*. Cape Town: Medical Research Council.
- Bradshaw D & Buthelezi G (1996). Health Status. In: Health Systems Trust (1996) *op. cit.*
- Buckland P & Fielden J, (1994). *Public Expenditure on Education in South Africa, 1987/8 to 1991/2, An Analysis of the Data*, Centre for Education Policy Development and the World Bank, Johannesburg.
- Bunting I, (1994). *Public expenditure on the education and training of medical personnel*. National Health Expenditure Review Technical Paper No. 7. Durban: Health Systems Trust.
- Burgess R & Stern N, (1991). *Social Security in Developing Countries : What, Why, Who, and How?* In Ahmad E, et al, *Social Security in Developing Countries : Studies in Development Economics*. Oxford, Clarendon Press.
- Castro-Leal F., (1996). *Poverty and Inequality in the Distribution of Public Education Spending in South Africa* PSP Discussion Paper Series 102, The World Bank, Washington, D.C.
- Castro-Leal F, (1996). *The Impact of Public Health Spending on Poverty and Inequality in South Africa*, PSP Discussion Paper Series, The World Bank, Washington, D.C.
- Central Statistical Service (CSS), (1970-1993). *Local government statistics; Divisional Council/Regional Services Council statistics; Bantu Administration Boards/ Administration Boards/Development Board statistics*. Pretoria: Government Printer.
- Central Statistical Service (1994 & 1995). *October Household Survey*. Pretoria:
- Chetty K (1995). An integrated analysis of health facilities in the nine provinces of South Africa. *South African Medical Journal*. 85(4): 245-250.
- Chikane Committee, (1996). "Report of the Committee for Restructuring Social Security", Report to the Minister of Welfare, unpublished.

- Child Health Unit, (1997). *An evaluation of the Primary School Nutrition Programme*. University of Cape Town.
- Commission of Enquiry into Certain Aspects of the Tax Structure of South Africa (Katz Commission), (1996). *Interim Report*. Pretoria.
- Constituent Assembly of South Africa, (1996). *The Constitution of the Republic of South Africa, 1996*. Cape Town.
- Dangschat J & McIntyre D, (1996). *Patient fee collection: Is it worth it? A case study of Groote Schuur Hospital*. Health Economics Unit Working Paper No. 22. Cape Town: Health Economics Unit, University of Cape Town.
- Deloitte and Touche, (1994). *Donor funding in health care in South Africa*. National Health Expenditure Review Technical Paper No. 4. Durban: Health Systems Trust.
- Department of Education, (1996). *Provincial Education Budgets, 1995/96*, Pretoria.
- Department of Education (1997) *Education Expenditure Data for 1995 and 1996*, Pretoria.
- Department of Education, Human Sciences Research Council (HSRC) & The Education Foundation, (1997). *School Register of Needs*. Pretoria.
- Department of Education (Directorate: International Relations), (1997) *Status of Bilaterals in Education*, September 1997, Pretoria.
- Department of Finance, (1980-1997). *Estimates of Revenue and Expenditure*, ("white Books"), Pretoria.
- Department of Finance, (1995; 1996; 1997). *Budget Review* Republic of South Africa, Pretoria.
- Department of Finance, (1996). *Growth, Employment and Redistribution: A Macro-Economic Strategy*, Pretoria.
- Department of Finance, (1997). *Education MTEF*, Pretoria.
- Department of Health, (1994). *Health Trends in South Africa, 1993*. Pretoria:
- Department of Health, (1995a). *Health Trends in South Africa, 1994*. Pretoria:
- Department of Health, (1995b). *Epidemiological Comments*. 22(10), Pretoria.
- Department of Health, (1995c). *Towards a National Health System*. Pretoria:
- Department of Health, (1996). *National Drug Policy for South Africa*. Pretoria:
- Department of Health, (1997): *A Social health insurance scheme for South Africa*, Pretoria.
- Department of Health, (1997) *White Paper for the Transformation of the Health System in South Africa*.
- Department of Health, (1997a). *Submission to the Sixth Interim Report of the Katz Commission of Enquiry into Certain Aspects of the Tax Structure for South Africa*, Pretoria.
- Department of National Health and Population Development (DNHPD), (1989). *Health Trends in South Africa*. Pretoria:

Department of National Health and Population Development (DNHPD), (1992). *Health Trends in South Africa, 1992*. Pretoria:.

Department of Public Works, (1996). *Public Works Towards the 21st Century*, Green Paper, Pretoria.

Department of Water Affairs and Forestry, (1985-1995), *Annual Reports*, Pretoria.

Department of Water Affairs and Forestry (1997) *White Paper on a National Water Policy for South Africa*

Department of Welfare and Population Development (1997). *White Paper for Social Welfare*. Government Press.

Department of Welfare and Population Development, (1996). Report of the Lund Committee on Child and Family Support. Pretoria.

Department of Welfare and Population Development, (1997a). *Socpen Data*, Pretoria.

Doherty J & van den Heever A, (1997) *A resource allocation formula in support of equity and primary health care*. Johannesburg: Centre for Health Policy, University of the Witwatersrand.

Education Foundation, 1994. *The Education Atlas of South Africa*. Durban.

EDUPOL (1993) *Teacher Salaries in South Africa, A Policy Perspective*

Edusource, (1995 & 1996). *Edusource Data News*, nos. 8 &12, Johannesburg.

Fawcus S, Moodley J, Bradshaw D, Theron GB & Abdool Karim SS, (1996). *Measuring maternal mortality in South Africa*. *South African Medical Journal*, 86(4): 403-406.

Financial and Fiscal Commission, (1997) *Local Government in a System of Intergovernmental Fiscal Relations in South Africa*, Midrand.

Financial and Fiscal Commission, (1996). *Financial and Fiscal Commission's Recom- mendation for the Allocation of Financial Resources to the National and Provincial Governments for the 1997/98 financial year*. Midrand.

Fincham R, Harrison D, Khosa M, Le Roux I (1993). *Nutrition and health in South Africa: The state of nutrition and the development of nutrition policy*. Cape Town: Southern Africa Labour and Development Research Unit, University of Cape Town.

Fincham RJ (1985) *Food and Nutrition in South Africa* Southern Africa Labour and Development Research Unit, Cape Town.

Gauteng Department of Education, (1997). *Progress Report 1995 - 1997.*, Johannesburg,

Gilson L, Morar R, Pillay Y, Rispel L, Shaw V, Tollman S, and Woodward C, (1996). *Decentralisation and health system change in South Africa: National report*. Johannesburg: Health Policy Coordinating Unit.

Govender V & McIntyre D (1997). *An evaluation of the Reconstruction and Development Programme Clinic Upgrading and Building Programme*. Health Economics Unit, University of Cape Town.

Grosh ME, (1994). *Administering Social Programs in Latin America*. World Bank Regional and Sectoral studies. Washington DC. World Bank.

Grosh E, (1992) *Towards Quantifying the Trade-off : Administrative Cost of Targeting Accuracy.* World Bank Conference on Public Expenditures and the Poor : Incidence and Targeting. Washington, D.C.

Harber, Richard P., (1995) *South Africa's Growth Dilemmas* USAID, Pretoria.

Health Systems Trust, (1996). *South African Health Review, 1996.* : Health Systems Trust and the Henry J. Kaiser Family Foundation., Durban.

Health Systems Trust & Henry J. Kaiser Family Foundation(1995) *African Health Review*, Durban.

Hirschowitz R & Orkin M (1995). *A national household survey of health inequalities in South Africa.* Johannesburg: Community Agency for Social Enquiry for the Henry J. Kaiser Family Foundation.

Hospital Strategy Project (1996). *Final report of the Hospital Strategy Project.* Monitor Company, Health Partners International, Centre for Health Policy and National Labour and Economics Development Institute, Johannesburg.

International Monetary Fund (IMF), (1997). *International Financial Statistics*, Washington, D.C.

International Monetary Fund (1995) *Government Finance Statistics Yearbook.* Washington, D.C.

Klasen S, (1996). *Poverty and Inequality in South Africa*, unpublished (forthcoming in Social Indicator Research)

Klugman B, (1996). *Demographics and population policy.* in: Health Systems Trust (1996) *op. cit.*

Kroeger A (1983). *Health interview surveys in developing countries: A review of the methods and results.* *International Journal of Epidemiology*, 12: 465-481.

Lockheed, Marlaine E. & Verspoor A M., (1991) *Improving Primary Education in Developing Countries* World Bank, Washington D.C.

Lund F, (1996) *Welfare in Women's Budget* ed Debbie Budlender IDASA, Cape Town.

Makan B, Bachmann M & McMurchy D (1995). *From fragmentation to the integration of health services: Health care human resources compensation and distribution in perspective - Implications of salary equalisation.* Health Economics Unit Working Paper No. 12. Health Economics Unit, University of Cape Town.

Makan B & McMurchy D (1996). *An economic evaluation of Community Health Worker Programmes: Western Cape Province case studies.* Health Economics Unit Working Paper No. 26. Health Economics Unit, University of Cape Town.

Makan B, McIntyre D & Gwala P, (1996). Financing and expenditure. in: Health Systems Trust (1996) *op. cit.*

Margo Commission into the Tax Structure of the Republic of South Africa, (1987), Final Report, Pretoria.

Mametja D & Reid S, (1996). *Human resources.* in: Health Systems Trust (1996) *op. cit.*

McCoy D, (1996). *Free health care for pregnant women and children under six in South Africa: An impact assessment.* Child Health Unit, University of Cape Town & Health Systems Trust, Durban.

McIntyre D, (1990). *Public sector health care expenditure in South Africa: 1970-1990.* Health Economics Unit Working Paper No. 1. Cape Town: Health Economics Unit, University of Cape Town.

- McIntyre D (1997a). *Health care financing and expenditure in South Africa: Towards equity and efficiency in policy making*. PhD Dissertation submitted to the University of Cape Town.
- McIntyre D, (1997b). *Input paper on health for the South African Poverty and Inequality Report*. Cape Town: Health Economics Unit, University of Cape Town.
- McIntyre DE & Dorrington RE, (1990). *Trends in the distribution of South African health care expenditure*. *South African Medical Journal*. 78: 125-129.
- McIntyre D & Khosa S (1996). *User fees for public sector health services: International experience and options for South Africa*. Health Economics Unit Working Paper No. 23. University of Cape Town.
- McIntyre D, Bloom G, Doherty J & Brijlal P (1995). *Health expenditure and finance in South Africa*. Health Systems Trust, Durban and The World Bank.
- McLachlan, M & Marshall C, (1995). *Nutrition in South Africa: A Proposal for Transformation*, Development Bank of Southern Africa and Department of Community Health, University of the Witwatersrand, Johannesburg.
- Mechanic D, (1989). Medical Sociology: *Some tensions among theory, method and substance*. *Journal of Health and Social Behaviour*. 30: 147-160.
- Minister of Defence, RSA (1997). *Defence Budget Vote Speech*. May. Parliament Cape Town
- Mjekevu T, (1996). District Systems Development. in: Health Systems Trust (1996) *op. cit.*
- Mooney, G, (1996). *And Now for Vertical Equity? Some Concerns Arising from Aboriginal Health in Australia*. *Health Economics*, 5:99-103.
- National Sanitation Task Team, (1995) *National Sanitation Policy, Draft White Paper*
- Organisation for Economic Co-operation and Development (OECD), (1993). *OECD Health Systems*. Vol. 1: Facts and Trends 1960-1991, Paris.
- Palmer N, Seritsane M, Ntutela P & Mthethwa N, (1997) *An Assessment of the Planning and Monitoring of Provincial Health Expenditure*, unpublished, Health Systems Trust, Durban.
- Pillay P, (1994). *Education and Training: Development Initiatives and Funding Priorities*, Paper presented at the International Donor Conference on Human Resource Development in the Reconstruction and Development Programme, Cape Town.
- Pillay P, (1996) *The South African economy: Issues and Options* in Comparing Brazil and South Africa, eds. Steven Friedman and Riaan de Villiers, Centre for Policy Studies, Johannesburg.
- Pillay P. (1996a) *An Overview of Poverty in South Africa*, in South Africa: Wealth, Poverty and Reconstruction, eds. Lual A. Deng and Elling N. Tjonneland, Chr Michelsen Institute, Norway / Centre for Southern African Studies, University of the Western Cape.
- Power D & Robbins D (1996). *Organisation and Management: Public Sector*. in Health Systems Trust (1996) *op. cit.*
- Price M, Khunoane B & van den Heever A, (1994). *Should tax concessions on medical aid contributions be removed? A political-economic analysis*. Centre for Health Policy, University of the Witwatersrand, Johannesburg.

Provincial Auditor, (1970/71-1992/93). *Reports of the Provincial Auditor for the four Provinces*. Pretoria: Government Printer.

Reconstruction and Development Programme (1995). *Key indicators of Poverty in South Africa*. Pretoria: Reconstruction and Development Programme Office.

Research Institute for Educational Planning (RIEP), (1995). *Educational Statistics, 1995*, University of the Free State.

Rispel L & Behr G, (1992). *Health indicators: policy implications*. Centre for Health Policy Paper No. 27. Centre for Health Policy, University of the Witwatersrand, Johannesburg.

Solarsh G & Xaba M, (1996). *Maternal, child and women's health*. in: Health Systems Trust (1996) *op. cit.*

South Africa (Republic), (1986). *Commission of enquiry into health services: Interim report on health services provided by local authorities*. Fourth interim Report. (Chairperson: GWG Browne), Government Printer, Pretoria.

South Africa (Republic), (1993). *Report of the National Committee to investigate the rationalisation of health services in the Republic of South Africa and the Self-governing Territories*. (Chairperson: Dr Steinmetz), Department of National Health and Population Development, Pretoria.

South Africa (Republic) (1995). *Restructuring the national health system for universal primary health care: Report of the Committee of Inquiry into a national health insurance system..* (Chairpersons: Dr J. Bloomberg and Dr O. Shisana). Department of Health, Pretoria.

South Africa (Republic), (1997). *The Government's Mid-Term Report to the Nation*. Pretoria.

South African Reserve Bank (SARB) *Quarterly Bulletin*, Various Issues.

South African Reserve Bank *Quarterly Bulletin* September 1996.

Southern Africa Labour and Development and Research Unit (SALDRU) (1993) *South Africans Rich and Poor: Baseline Household Statistics*, Project for Statistics on Living Standards and Development, University of Cape Town.

Summers R & Suleman F, (1996). *Drug policy and pharmaceuticals*. in Health Systems Trust (1996) *op. cit.*

Surrey SS & MacDaniel PR (1985). *Tax Expenditures*, Harvard University Press, Cambridge, Massachusetts.

United Nations Children's Fund (UNICEF), (1993). *Nutrition and the Convention on the Rights for the Child*, New York.

United Nations Children's Fund (UNICEF), (1995). *The State of the World's Children*. Oxford University Press, New York.

United Nations Development Programme (UNDP), (1996 & 1997). *Human Development Report, 1996 & 1997*. Oxford University Press., New York.

Valentine N & McIntyre D, (1994). *A review of private sector health care expenditure in South Africa. National Health Expenditure Review Technical Paper No. 9*. Health Systems Trust, Durban.

Van der Berg S, (1996) "The means test for Social Assistance Grants: Its application, fiscal risk and some recommendations", paper prepared for the Department of Welfare, unpublished.

Van der Berg S, (1996). "Issues in South African Social Security", paper prepared for the World Bank, unpublished.

Van der Walle D & Nead K, (1995) eds. *Public spending and the Poor*. World Bank, Johns Hopkins University Press, Baltimore.

Weisbrod BA, (1970) *Collective Action and the Distribution of Income : A Conceptual Approach*. In Haverman RH and Margolis J, eds., *Public Expenditure and Policy Analysis*. Markham, Chicago.

Wigton A, Hussey G, Fransman D, Kirigia J & Makan B, (1996). *The winter 1996 mass immunisation campaign - Is it the best strategy for South Africa at this time?* *South African Medical Journal*. 86(7).

Wigton A., McCoy D & Makan B, (1997). *Children's Budget: Health and Nutrition Report* Child Health Unit, University of Cape Town.

World Bank, (1992, 1996, 1997). *World Development Report, 1992, 1996 & 1997*. Oxford University Press, New York.

World Bank, (1993). *World Development Report 1993: Investing in Health*. Oxford University Press, New York.

World Bank, (1994). *Better Health in Africa: Experience and Lessons Learned*. Washington, D.C.: The World Bank.

World Bank, (1995) *Key Indicators of poverty in South Africa*, Mimeo, Washington D.C.

World Bank, Human Resources Division, Southern Africa Department, (1995) South Africa, Education Sector, Strategic Issues and Policy Options (Draft Document). Washington, D.C.

World Health Organisation (WHO), (1995). *The World Health Report, 1995: Bridging the gaps*. Geneva: World Health Organisation.

Yach D & Edwards B (1992). *The macro-economic context of the health sector: Establishing a link between development and health*. Unpublished report. Quoted in: Fincham et al (1993) *op. cit.*