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PUBLIC EXPENDITURE MANAGEMENT IN NAMIBIA HEALTH AND EDUCATION SECTORS - PRELIMINARY ANALYSIS

by

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ABSTRACT

This study assesses expenditure efficiency on education and health in Namibia. The votes and the type of expenditure on education and health during the period 1990/91 to 2000/01 is examined and compared to relevant performance indicators. The selection of the education and health sectors analysis in this study is not coincidental; it is done for two main reasons. First, the two sectors combined consume marginally below half of the total national budget. Secondly, these sectors are believed to have a greater multiplier effect on the economy in the long-term and eventually improve the social and economic conditions of the population.

The study concluded that Namibia's educational system appears to be very financially burdensome, accounting for over 10 per cent of GDP. Capital expenditure on education has been minimal and there are no prospects for the situation to change given resource constraints. Ten years after independence, half of Namibians have access to primary health care services. Social and health indicators for Namibia have improved during this period. This paper provides some recommendations to improve the efficiency in these sectors.

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SECTION I

1. INTRODUCTION

Unsustainable fiscal imbalances and inefficiencies in public expenditure management are some of the critical macroeconomic problems facing developing countries. These have serious implications on effective and efficient public service delivery necessary for meeting long-term development objectives. The efficiency with which these services are provided becomes important, not only in the debate on the appropriate size of government, but also in ensuring macroeconomic stability and sustained economic growth. The level and composition of public expenditure as well as its management should be carefully considered.

The identification of more and less productive government expenditure[2] is fundamental for the efficient functioning of the public sector. A high degree of public expenditure productivity implies that more or higher-quality public services can be provided with a given resource or within budgetary constraints. Evaluating the efficiency of the provision of public goods, such as education and health, involves difficult questions of defining and measuring output relative to inputs. Appropriate indicators must be identified that would help in improving efficiency and releasing resources for priority uses which ultimately are essential for achieving economic development.

Efficiency considerations should occupy a central position in decisions on public spending. From this perspective, the primary objective of this paper is to try to gain a preliminary insight into the expenditure efficiency on education and health in Namibia. The votes and the type of expenditure on education and health during the period 1990/91 to 2000/01 will be examined and compared to relevant performance indicators.

The selection of the education and health sectors is not coincidental; it is done for two main reasons. First, the two sectors combined consume marginally below half of the total national budget. Concern has been raised in public discourse as to whether the expenditure on these sectors is justifiable given the returns. Secondly, these sectors are believed to have a greater multiplier effect on the economy in the long-term and eventually improve the social and economic conditions of the population. From an economic perspective, the provision of adequate health care improves human capital and promotes productivity of a worker. In the same way, expenditure on education can be regarded as a form of investment in human capital required in the development process. Thus, considering market imperfections on the one hand, and positive externalities that are usually associated with public spending on education and health on the other, there is both economic and social justification for public intervention.

The paper is structured as follows. Section II provides literature review on contemporary public expenditure management and efficiency issues. Section III gives a brief overview of public expenditure and revenue in Namibia. Section IV makes a qualitative assessment of the efficiency of public spending on education and health sectors. Section V gives the policy recommendations and conclusions.

[2] Two types of inefficiencies can be identified. *Allocative inefficiency* refers to inappropriate assignment of activities to the public sector instead of public sector. *Productive inefficiency* refers o a situation where goods and services are not provided by the public sector at a minimum cost.

SECTION II

2. THEORETICAL AND CONCEPTUAL FRAMEWORK OF PUBLIC EXPENDITURE MANAGEMENT

2.1 Expenditure and Efficiency

Measuring and enhancing the efficiency of public expenditure continue to be a central issue in public sector reform programs in many countries. The productivity of government expenditure is typically evaluated in terms of its efficiency. From a technical point of view, the productive efficiency of an expenditure program can be evaluated by determining the extent to which a given output (goods and services) is produced at a minimum cost or by doing a cost-benefit analysis. However, since government intervention is normally designed to meet broader macroeconomic objectives, the scope for clear-cut efficiency judgements is relatively narrow.

A study by the International Monetary Fund in 1997 assessed the efficiency of government expenditure on education and health among thirty-eight African countries between 1984-95[3] . These countries were compared to each other and also with countries in Asia and the Western Hemisphere. The results suggested a general improvement in the productivity of government spending on education and health in Africa, although the average level of efficiency has declined compared to countries in Asia and the Western Hemisphere. The study attributed such observed inefficiencies in Africa to the share of government wages in total spending.

Gupta et al (1997) also found that the degree of inefficiency has been higher at higher levels of per capita spending. This means that increasing budgetary allocations to education and health is likely to be not the only or most effective way to raise educational and health output. Unless specific measures are implemented to correct the underlying efficiency in spending, increased budgetary allocations to these social sectors will not necessarily translate into improved social outcomes. This appears to be an area where developing countries such as Namibia should pay attention.

Other studies assessed inefficiency in public expenditure with the help of regression analysis (Gerdtham, et al, 1995) or the use of social indicators to assess government outputs (Isenman, 1980; Sen, 1981; Aturupane, et al, 1994). Gupta, et al (1997), argued that such studies have not explicitly examined the relationship between government spending and social indicators. They tried to look at both inputs and outputs so as to gauge whether more output could be obtained with the same level of input. Previous studies to this effect suggested some conclusions, amongst others:

- health systems which combine private provision with public financing have been associated with lower public health expenditures and higher efficiency compared to publicly managed and financed health care systems (Gerdtham, et al, 1995);

- higher public spending has not been found to significantly improve social welfare (Tanzi and Schuknecht, 1997);

- government spending on education and health has a positive impact on social indicators (Gupta, et al, 1997; Commader, et al, 1996), but there exist a diminishing return to scale in the production of education and health services in regions with relatively high per capita income and a limited private sector in the provision of education and health services (Gupta, et al, 1997);

- that as spending on education increases, it generates fewer added gains in the form of higher educational attainment (Gupta, et al, 1997); and

- there are also empirical support for increased spending on primary health care and primary and secondary education as opposed to tertiary levels in terms of efficient outcomes (World Bank, 1993; Sahn and Bernier, 1993).

[3] See Guputa et.al (1997). The study used data on public sector inputs and outputs in education and health. It also uitilised the Free Disposal Hull (FDH) Analysis - a technique developed to empirically assess the efficiency of production in a market environment, which distinguishes between efficient and inefficient producers.

SECTION III

3. OVERVIEW OF PUBLIC EXPENDITURE AND REVENUE IN NAMIBIA

3.1 Public Expenditure and GDP growth

Economic theory suggests that the relationship between public expenditure and economic performance is complex and important. The numerous econometric studies of the relationship have not been conclusive. Some results show a positive relationship between public spending, usually as a proportion of GDP, and the rate of growth of GDP, while others indicate a negative relationship.

A study by Ram (1986) found that the overall relationship between government size and growth is positive, and the relationship is probably stronger in lower-income countries than in higher-income countries. The results in this study also indicate that government expenditure seems to have had positive externalities and, more surprisingly, that the relative factor productivity in the government sector is higher than in the private sector. This was particularly the case during the 1960 s. These conclusions apply to the results from both time series and cross-country data.

Other investigators, however, have found rather clear-cut negative relationship between government outlays and economic performance. Landau, for example, in several papers (1983,1985,1986) concluded that the data he examined supported the view that government spending was associated with a reduction in a country s capacity to grow. Similarly, Easterly (1994) found that the ratio of government consumption expenditures to GDP was negatively associated with the growth of GDP per capita.

A study on Namibia showed that expenditure on education, transport and communications, and defence was growth enhancing. Surprisingly, the study also revealed that expenditure on agriculture and health sector had a significant and a negative relationship with growth. Furthermore, the results of the study also showed that an increase in the level of total government expenditure-GDP ratio leads to increased growth (Kaakunga, 1997).

Thus, a widely held conventional wisdom on this relationship that rest on statistical evidence does not appear to exist. Equally important is the lack of any sort of clear theoretical underpinning that explains how the aggregate of government spending acts on the growth of total output. Similarly, empirical evidence on the relationship between the allocation of government spending in different sectors and growth is inconclusive.

3.2 Public Expenditure in Namibia

Government expenditure or activity in the Namibian economy has been regarded as quite substantial by regional and international terms. For example, in 2000/01 as a share of GDP, total public expenditure amounted to 35.0 per cent. This figure is quite high compared to the average for developing countries (26.4 per cent), low-income countries (20.8 per cent) and middle-income countries (27.5 per cent). It is generally argued that the high and ever increasing level and growth rate of total government expenditure has resulted in increasing levels of budget deficits. Against this background it is suggested that government should introduce direct measures aimed at reducing government expenditure, especially recurrent expenditure on the basis of its macroeconomic side effects. Alternatively, government should shift spending from recurrent expenditure to capital expenditure in order to create conditions that stimulate the productive base of the economy, particularly private sector growth.

However, reducing government expenditure on wages and salaries directly reduces the contribution of government services to value added and also reduces demand in the economy, which may lead to reduced output and imports. The same is also applicable to reducing government spending on goods and services since it can have negative multiplier effects on the output of suppliers to government.

The answer may also lie in increasing efforts at revenue mobilisation — which essentially would mean raising taxes or broadening the tax base and allowing total revenue to grow faster then total expenditure and ultimately lowering the budget deficit. Increasing tax levels tend to reduce supply and /or demand, though there are often complex feedback effects on the macroeconomy. Taxes on producers tend to reduce supply by lowering profits whilst personnel income tax reduces disposable income and consumption. However, if higher taxes enable government to retain higher expenditure, it is not clear what the net effect on the macroeconomy will be.

3.2.1 Total Expenditure

Since independence, Namibia has recorded a massive growth in total expenditure. As illustrated in Table 1, total public expenditure more than doubled from N$2 103.4 million in 1990/01 to N$4 556.8 million in 1995/96 and doubled further to N$8 650.9 million in 2000/01. Over this ten-year period, total expenditure recorded an annual average growth rate of 15.53 per cent. Taking into account an average inflation of 10 per cent, it implies a real growth rate of 5.53 per cent in total expenditure. As a share of GDP, total expenditure increased from 31.0 per cent in 1990/91 to 34.3 per cent in 1995/96 and further to 35.0 per cent in 2000/01.

Table 1 Expenditure by type in N$ million

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01[4]
Total current expenditure	1720.1	2401.5	2783.6	2924.5	3401.2	3925.3	4837.6	5262.3	6102.6	6883.2	7586.7
Total capital expenditure	383.3	461.0	595.9	514.7	455.5	631.5	729.3	866.7	833.0	1069.0	1064.2
Total current & capital expenditure	2103.4	2862.5	3379.5	3439.2	3856.7	4556.8	5566.9	6129.0	6935.6	7952.2	8650.9
GDP at market prices (N$ million)	6771	7745	8865	9864	11839	13283	15458	17318	19446	21960	24700

Source: Bank of Namibia Annual Reports various issues

Recurrent expenditure[5] more then doubled from N$1720.1 million in 1990/91 to N$3925.3 million in 1995/96 before rising gradually to N$7586.7 million in 2000/01. As a share of total expenditure, recurrent expenditure accounted for 81.7 per cent in 1990/91 and 87.6 per cent in 2000/01. Personnel costs, which mainly include salaries, remained a major component of recurrent expenditure. Personnel costs accounted for 53.6 per cent in 1990/91, 53.2 per cent in 1995/96 and 52.2 per cent in 2000/01[6]. Between 1990/91 and 2000/01, personnel costs recorded an annual average growth rate of 16.1 per cent. It reached a peak annual growth of 27.0 per cent in 1996/97, before declining to 6.8 per cent in 1997/98. This decline could be attributed mainly to the civil service rationalisation in terms of the

4 This is the budget outturn figure for 2000/01.

5 Recurrent expenditure includes remuneration, employer s contribution to GIPf, external and internal relations, property and rental charges and subsidies and other current transfers.

6 Over the same period, as a percentage of total expenditure, personnel cost accounted for 43.8 per cent, 45.8 per cent and 45.8 per cent respectively.

7 One of the recommendations was to reduce expenditure on personnel by 2 per cent a year and to eliminate all unfunded vacancies.

WASCOM recommendations[7]. Despite this reform, personnel costs again increased to about 14.5 per cent in 1999/00, due to the integration of some 9000 Ex-Plan combatants into the civil service. Expenditure on other goods and services[8] recorded an annual average growth rate of 11.59 per cent between 1990/91 to 2000/01, and accounted on average for 11.2 per cent of total recurrent expenditure, over the same period.

Interest payments rose sharply on average by 45.4 per cent between 1990/91 and 2000/01 annually. In nominal terms, it amounted to N$26.8 million in 1990/91, N$145.1 million in 1995/96, and N$512.1 million in 2000/01. This significant growth in interest payments makes it the fastest growing component of recurrent expenditure and also reflects the growth and the extent of total public domestic debt in Namibia since independence.

Capital expenditure doubled from N$383.3 in 1990/91 to N$631.5 million in 1995/96 and slowed slightly to N$1064.2 million in 2000/01. The Development budget has, since independence, been trying to reflect government s sectoral priorities. An effort has been made to strike a balance between spending on social sectors and infrastructure on the one hand, and spending on productive sectors, on the other. Government continues to concentrate a large share of its resources on the social sectors. This reflects not only the need to correct the injustices of the past, but also a conviction that an educated and healthy society is necessarily for the sustenance of growth and development.

For example, the 1996/97 budget allocated N$1225 million[9] for development expenditure, accounting for 9 per cent of GDP. The productive sector accounted for 29 per cent, 38 per cent for the social sector, 22 per cent for infrastructure, and 11 per cent for public sector administration. Productive sector projects included mainly irrigation, food and crop production, construction of the National Institute of Mining and Technology, and completion of the Trans-Caprivi and Kalahari high ways. Social sector projects included expansion of primary education facilities in rural areas, construction of education training colleges and clinics, low cost housing programmes and rural electrification. Public administration sector project was mainly the technical assistance provided by donor agencies to public sector employees.

3.2.2 Functional Classification of Expenditure

A functional classification of central government expenditure reveals that as a share of total expenditure, expenditure on general government and community services has been increasing sharply whilst expenditure on economic services[10] has been declining since 1990/91 (see Table 2).

Table 2 Functional classification of central government expenditure (as % of total expenditure)

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01
General Government Services (GGS)	25.2	27.4	28.5	26.9	26.4	28.9	32.3	27.7	29.3	29.9	32.3
Community and social services (CSS)	46.2	45.4	46.2	50.6	55.5	52.8	47.1	51.6	48.8	48.6	49.6
Economic services	16.4	19.8	24.1	19.6	14.5	15.5	16.9	17.0	15.4	15.2	11.7
Expenditure not classified	12.3	7.4	1.2	2.9	3.6	2.8	3.7	3.6	6.5	6.4	6.3

Source: Ministry of Finance and Bank of Namibia

As a share of total expenditure, expenditure on community and social services increased from 45.4 per cent in 1990/91 to 52.8 per cent to 1995/96 before receding to account for 49.6 per cent in 2000/01. During the same period, expenditure on general government services remained at 27 per cent over 1990/91-1995/96 before

8 Expenditure on goods and other services consists of procurement of material supplies, travel relaed wages, property rental and related charges and maintenance expenses.

9 Of the total amount, N$401 million was outside the budget from donors and N$824 million from Government portion to development expenditur accounted for 6 per cent of GDP.

10 Economic services sectors includes: Mines and Energy; Environment and Tourism; Trade and Industry; Africulture, Water and Rural Developments; Fisheries and Marine Resources; Lands, Resettlement and Rehabilitation.

increasing moderately to 32.3 per cent in 2000/01. On the other hand, expenditure on economic services shrank sharply from 19.8 per cent 1990/91 to 15.5 per cent in 1995/96 and further to 11.7 per cent in 2000/01. This decline in expenditure on economic services is largely attributable to commercialisation process.

3.3 Public Revenue in Namibia

The review of public expenditure trends in Namibia highlighted the need for enhanced revenue collection to strengthen the solvency of the government and avoid macroeconomic imbalances. Table 3 provides trends in public revenue since independence. Total revenue and grants grew on average by 15.3 per cent between 1990/91 and 2000/01.

Over the years, the major components of tax revenue have been taxes from the Southern African Customs Union (SACU) common revenue pool, general sales tax, income tax on individuals and mining tax. Tax revenue from SACU since 1990/91 on average accounted for 31.6 per cent of tax revenue and close to 28.3 per cent of total revenue and grants[11]. The second major contributor to tax revenue has been taxes from sales[12], accounting for an average of 21.9 per cent followed by individual income tax with an average of 19.7 per cent. Over the same period, tax from mining and non-mining companies accounted for an average of 8.2 per cent and 7.4 per cent, respectively.

In relation to GDP, tax revenue increased on average from 26.5 per cent between 1990/91-94/95 to 29.8 per cent over 1995/96-2000/01. This increase could mainly be attributed to the broadening of the tax base shortly after independence[13] and the improvements in tax revenue collections due to the establishment of regional Inland Revenue offices.

Table 3 Revenue by type in N$ Million

	Tax Revenue	Non Tax Revenue	Grants and Loans (G/L)	Total revenue and grants	Tax Revenue as % Total revenue and grants	Non Tax revenue as % of Total	G/L as % of Total revenue and grants
1990/91	1661.0	269.6	101.1	2031.7	81.75	13.3	4.98
1991/92	2230.8	374.9	67.8	2673.5	83.44	14.02	2.54
1992/93	2455.6	415.4	73.5	2944.5	83.39	14.11	2.49
1993/94	2776.1	275.1	54.9	3106.1	89.37	8.86	1.77
1994/95	3136.1	486.9	38.4	3661.4	85.65	13.29	1.05
1995/96	3610.3	425.5	44.9	4080.7	88.47	10.43	1.10
1996/97	4113.9	5116.6	50.3	4675.8	87.98	10.94	1.08
1997/98	5106.0	529.6	54.0	5689.6	89.74	9.31	0.95
1998/99	5501.4	647.6	37.4	6186.4	88.93	10.47	0.60
1999/00	6597.7	607.3	44.4	7249.4	91.01	8.39	0.61
2000/01	7568.4	667.9	56.9	8293.2	90.26	8.1	0.68

Source: Bank of Namibia annual Reports various issues

Namibia appears to possess diversified and balanced sources of revenue when one looks at the traditional classification of taxes. However, the country s pronounced dependence on SACU tariff revenue and the possible reduction in such revenue due to trade policy changes, makes Namibia vulnerable to possible revenue decline. Avenues for expanding

11 The higher then expected revenue from SACU and diamonds (windfalls) has had a major boast for the total revenue over the years.

12 This consists of sales tax and additional sale duty.

13 Shortly after independence, with the return of most Namibians from exile, the number of civil servants increased sharply.

the tax base should be seriously explored and appropriate fiscal policy reform measures introduced.

Non Tax revenue[14] grew annually on average by 13.3 per cent from 1990/91 to 2000/01 (sees Table 4). This moderate growth was recorded despite negative annual growth rates of 33.7 per cent and 13.3 per cent in 1993/94 and 1995/96, respectively.

Table 4 Non Tax Revenue in N$ Million

	Entrepreneurial and property income	Fines and forfeitures	Administrative fees and charges	Return on Capital	Non-tax Revenue
1990/91	129.8	5.8	109.4	24.6	269.6
1991/92	197.5	6.0	135.5	35.9	374.9
1992/93	228.8	4.9	166.1	15.6	415.4
1993/94	82.8	5.9	175.0	11.4	275.1
1994/95	239.1	9.4	226.2	12.2	486.9
1995/96	201.8	9.1	207.9	7.1	425.5
1996/97	303.5	10.8	183.3	14.0	511.6
1997/98	300.8	13.5	171.4	43.9	529.6
1998/99	378.8	9.4	205.1	54.3	647.6
1999/00	402.7	10.9	173.6	20.1	607.3
2000/01	429.0	12.3	205.7	20.9	667.9

Source: Bank of Namibia Annual Reports various issues

It was mainly reflected in the significant growth in entrepreneurial and property income and return on capital. Entrepreneurial and property income and return on capital, in nominal terms increased from N$ 29.8 in 1990/91 to N$ 201.8 in 1995/96 and further to N$ 429.0 million in 2000/01. As a share of total revenue and grants, non-tax revenue accounted for 13.3 per cent in 1990/91 declined to account for 10.4 percent in 1995/96 before it further declined to account for 8.1 per cent in 2000/01.

There is room for improvement in terms of revenue generated from non-tax revenue in the form of dividends from parastatals given the number of parastatals involved in commercial activities such as energy, tourism, transport, etc. For example, return on capital has decreased from N$24.6 million in 1990/91 to N$20.9 million in 2000/01. On the contrary, expenditure on subsidies and transfers has picked up from N$203.7 million in 1990/91 to N$1469.5 million in 2000/01. The problem is that government should be able to reap benefits from the investments it makes into parastatals or at least cover the cost of its budget allocations. This issue calls for a review of government and parastatal relationship.

3.4 Budget Deficit

Government committed itself through NDP1 to reduce the budget deficit to 3 per cent of GDP by 2000/01. This target has not been achieved. As a share of GDP, Namibia s budget deficit has grown by an annual average of 3.9 per cent since independence. Among the factors contributing to the high budget deficit was high and steadily rising public sector wage bill, increased transfers to public enterprises and statutory bodies, and an inefficient expenditure control system.

14 This consists of enctrepreneurial and property income, compensation for use of Rand as currency, Royalties on diamond exports, fines and forfeitures, administrative fees and charges and return on capital from lending and equity.

NEPRU (2000) argues that annual budget deficits have been carried mainly to cover the consumptive dimensions of an oversized bureaucratic apparatus. However, budget deficit level has always been lower than the capital expenditure allocation. This could imply that government did not borrow to finance recurrent expenditure (since the latter is fully covered from revenues and grants) but to finance capital investment aimed at yielding positive returns in the long run[15]. This point is supported further by the analysis of government savings gap (see table 5).

Table 5 Deficit level and capital expenditure (in N$ Million) and both as ratio s of GDP

	Deficit	Deficit/GDP	Capital Expenditure	CE/GDP	Government [16]Savings Gap
1990/91	N$ 71.7	1.1	N$383.3	5.7	N$210.5
1991/92	N$189.0	2.4	N$461.0	6.0	N$204.2
1992/93	N$435.0	4.9	N$595.9	6.7	N$87.4
1993/94	N$333.1	3.4	N$514.7	5.2	N$126.7
1994/95	N$195.3	1.6	N$455.5	3.8	N$221.8
1995/96	N$476.1	3.6	N$631.5	4.8	N$110.5
1996/97	N$891.1	5.8	N$729.3	4.7	(N$212.1)
1997/98	N$439.4	2.5	N$866.7	5.0	N$373.3
1998/99	N$749.2	3.9	N$8333.0	4.3	N$46.4
1999/00	N$702.8	3.2	N$1069.0	4.9	N$321.8
2000/01	N$ 357.7	1.4	N$ 1064.2	4.3	N$ 649.6

Source: Bank of Namibia Annual Reports various issues

Government savings gap, which measures the difference between total revenue and recurrent expenditure since 1990/91, reveals that government has been saving since independence. Only in fiscal year, 1996/97 did government record a dissaving of N$212 million compared to annual average savings of N$195 million between 1990/91 and 2000/01. On the other hand, if the growth rate of the budget deficit continues to outpace that of capital expenditure as it currently does, then eventually borrowing will be for financing recurrent expenditure and may not be sustainable.

15 This is an indication of the fiscal sustainability of the budget deficit. the IMF also refers to this as the golden rule.

16 Government savings gap is measured by the difference between total revenue excluding grants and recurrent expenditure.

SECTION IV

4. EFFICIENCY OF EXPENDITURE ON EDUCATION AND HEALTH SECTORS

There is no question that governments all over the worlds have played a vital role in bringing about the great advances in education and health over the past two decades. Education and Health expenditure is highly correlated with both economic and social conditions of the population. From an economic standpoint, adequate education and health services improves human capital by strengthening an individual s capacity to work productively. To maintain a high level of education and health standards, Namibia will have to ensure that the existing programs are effectively tailored to education and health needs. The overriding concern should be with the efficient and equitable delivery of education and health services.

4.1 EDUCATION SECTOR

4.1.1 Background

At independence, Namibia inherited an education system characterised by major disparities in terms of the distribution of educational opportunities and facilities among the different sections of the Namibian community. The provision of education and training was very skewed in racial and regional terms, and was largely a privilege of the few. After independence, educational reform particularly basic education became one of Namibia s priorities. In 1990, Namibia s Education Ministry set itself five goals:

- Improved and equitable access to education
- Improved quality in the education system
- Enhancement of democratic participation in the education system
- Improved efficiency in the education system
- Promotion of life-long learning

To this effect, the allocation to the two[17] Ministries of education increased from 18.2 per cent of total expenditure in 1990/91 to account for 24.4 per cent in 1999/00. This is quite a sizeable amount bearing in mind that most low middle income countries spend only on average 12.8 per cent of their national budgets on education[18]. However, despite these massive budgetary injections into the sector, the output of the education system remains quite low. This inefficiency of the education system is manifested in the high rates of dropout; repetition in schools, net enrolment rates relative to other low middle income countries such as Zimbabwe, Mauritius, South Africa and Botswana. For example, the rate of grade repetition in Namibia is as high as 25 per cent compared to the average of 5 per cent in Botswana, Jamaica and Mauritius[19] (World Bank, 1993). One study (Chuard et al 1995) has emphasised the high costs of the system as compared to other countries, while there were still major disparities in the quality of education and resource allocation.

17 Since March 1995, the Education sector was divided into two Ministries, namely Basic Education Sport and Culture and Higher Education Training and Employment Creation.

18 Chile, Jamaica, Mauritius spent only 11.9%, 12.9%, 11.8% of their national budgets on education according to the 1993 World Development Report respectively.

19 One qualification is probably the fact that Namibia had shortly after independence a different education system that was not based on automatic progression. In other words, a student had to pass a certain grade before proceeding to the next Budget estimates for fiscal year 2000/01.

Breakdown of the total education budget into types of expenditure reveals interesting trends. The personnel costs of the primary education budget accounts for close to 86.7 per cent of the total primary education budget whilst personnel costs for secondary school accounts for 71.4 per cent of the total secondary education budget during 2000/01. As a result very little is left for capital expenditure such as upgrading of schools and hostels, building of new schools, textbooks etc.

4.1.2 Budgetary Allocation to the Education Vote

In absolute terms, expenditure on education grew from N$503 million in 1990/91 to N$1068.7 million in 1995/96 and further to N$2061 million in 2000/01. As a share of gross domestic product, it accounted for 7.9 per cent in 1990/91, 9.1 per cent in 1995/96 and 9.9 per cent in 2000/01. However, its annual growth rate declined persistently from 33.2 per cent in 1991/92 to 8.9 per cent in 2000/01.

Table 6 Government budgetary support in N$ Million

	Budget Allocation	Share of Total Expenditure	Annual Growth Rate	As percentage of GDP
1990/91	503.5	23.1		7.9
1991/92	670.6	23.1	33.2	9.4
1992/93	821.8	24.3	22.5	9.8
1993/94	860.2	25.3	4.7	9.6
1994/95	966.9	26.2	12.4	9.1
1995/96	1068.7	24.6	10.5	9.1
1996/97	1199.3	24.4	12.2	8.9
1997/98	1523.5	27.5	27.0	10.1
1998/99	1715.9	25.0	12.6	10.3
1999/00	1891.0	24.4	10.2	9.9
2000/01[20]	2061.0	24.2	8.9	9.8

Source: Various publications of the Estimates of Revenue and Expenditure from the Ministry of Finance

As a share of total expenditure, expenditure on education remained at around 24.0 per cent and has been the highest recipient of the national budget since independence. The fall in the share of education in relation to the total budget since 1998/99 may be attributed to the steep rise in defence expenditure. The 2000/01-revised budget has seen extra defence spending growing substantially to N$187 million compared to N$131 million on basic education.

Analysis of expenditure on education by type reveals, that on average 92.3 per cent of total expenditure was spent on current expenditure. A substantial part of this current expenditure relates to personnel costs such as managerial staff and teachers salaries. Personnel costs on education accounted on average for 66.6 per cent of total expenditure on education from 1990/91-2000/01(see table 8)[18]. The residual of 7.7 per cent was for capital expenditure. This is relatively inadequate to substantially meet the need for additional school buildings, libraries, laboratories, etc.

[20] Budget outurns figure for fiscal year 2000/01.

[21] In addition to teacher s salaries, personnel costs also include salaries of hostel and related administrative staff. Due to lack of data the precise amount for teachers wage bill could not be determined. However, rough calculations indicate that 90 per cent of personnel cost accounts for the wage bill of teaching staff.

Table 7 Education vote - current and capital expenditure

	Current Expenditure	As % of Total Expenditure	Capital Expenditure	As % of Total Expenditure
1990/91	461.74	90.51	48.39	9.49
1991/92	551.86	89.40	65.42	10.60
1992/93	668.71	92.13	57.13	7.87
1993/94	765.86	94.62	43.51	5.38
1994/95	894.12	93.89	58.17	6.11
1995/96	979.70	93.31	70.30	6.69
1996/97	1073.2	91.24	103.0	8.76
1997/98	1417.55	93.04	106.0	6.96
1998/99	1375.76	93.7	91.76	6.25
1999/00	1524.55	93.95	98.9	6.09
2000/01	1851.83	93.98	118.6	6.02

Source: Various publications of the Estimates of Revenue and Expenditure from the Ministry of Finance

Government of Namibia has also put emphasis on the provision of primary education. As a result, primary education accounted on average for 54.3 per cent of total education s vote since independence. Over the same period, secondary and tertiary education accounted for 32.0 per cent and 13.7 per cent of total expenditure on education respectively (see table 9). However, expenditure per student reveals that students in tertiary education receive the largest subsidy equivalent to N$23,080 (1993/94). Secondary students in turn received a subsidy of N$2830 whilst primary pupils only receive N$1370 (World Bank, 1995). Given the high private return to tertiary education in the current labour market, there is a need to increase cost recovery at this level. Currently cost recovery on tertiary level is mainly in the form of tuition- and hostel fees which is estimated to be only 8 per cent.

Table 8 Personnel cost on primary, secondary and tertiary education as a % of total expenditure on education

	Primary Education	Secondary Education	Tertiary Education	Total[22]
1990/91	35.5	17.3	1.3	54.1
1991/92	37.4	19.6	1.2	58.2
1992/93	52.5	22.7	1.4	76.6
1993/94	48.6	21.1	1.3	71.0
1994/95	45.9	20.7	1.3	67.9
1995/96	40.2	19.6	1.4	61.2
1996/97	56.6	24.5	1.5	82.6
1997/98	43.3	17.8	1.5	62.6
1998/99	45.3	18.2	1.6	65.1
1999/00	43.5	17.7	2.1	63.3
2000/01	39.4	15.7	2.1	57.2

Source: Various publications of the Estimates of Revenue from the Ministry of Finance

[22] Total personnel costs on education as a percentage of total expenditure on education.

Table 9 Primary (P), Secondary (S) School and Tertiary (T) Education s budget share

	Primary School	P/School as % Education s Budget	Secondary Education	S/School as % Eduction s Budget	Tertiary Education	T/Education as % Education s Budget
1990/91	226.5	44.4	156.2	30.6	51.2	10.03
1991/92	232.3	37.6	192.5	31.2	66.2	10.7
1992/93	359.7	49.6	218.0	30.0	59.1	8.1
1993/94	435.0	53.7	255.7	31.6	71.5	8.8
1994/95	449.5	47.2	276.1	28.9	97.7	10.3
1995/96	487.1	46.4	295.9	28.2	128.1	12.2
1996/97	534.5	45.4	301.9	25.7	176.0	14.9
1997/98	742.8	48.8	370.8	24.3	210.7	13.8
1998/99	892.7	52.02	416.9	24.3	254.0	14.8
1999/00	903.5	47.78	434.1	22.9	277.4	14.7
2000/01	936.9	45.5	454.8	22.1	251.4	12.2

Source: Various publications of the Estimates of Revenue and Expenditure from the Ministry of Finance

4.1.3 Relative comparison of efficiency indicators

In order to asses Namibia s relative position in terms of efficiency of expenditure on education, a comparative evaluation is done by taking examples of some English speaking countries and some other countries at the same level of development[23]. The main indicators used in this analysis are gross enrolment rates, level of spending on education, repetition rates and pupil/teacher ratio. Unit cost and average annual salaries are expressed in terms of per capita GNP so as to smooth over national wealth differences.

TABLE 10 Unit cost expressed in GNP

	Botswana	Mauritius	Namibia	South Africa	Swaziland	Zimbabwe
UC Prim GNP/cap	0.09	0.10	0.26	0.35	0.08	0.21
UC Sec GNP/cap	0.51	0.18	0.48	0.81	0.28	0.40
UC Tert GNP/cap	2.84	1.17	3.00	1.91	2.62	4.00
Pupil/Teacher Ratio	32	21	29	24	33	36
Teacher salary GNP/cap	2.9	2.1	7.5	8.4	2.6	7.6
Repet.Rate(%)	5	5	25	-	15	-
% Cohort final grade[24]	90	99	70	75	87	79
Effic[25] Coeff.(%)	84	91	51	-	71	99

Source: UNESCO, World Education Report, 1994

23 This type of efficiency is called internal efficiency. It refers to efficiency within the education system based on the input-output analysis. External efficiency means the compatibility of the education system in producing graduates who could easily find employment. External efficiency is not discussed in this paper.

24 The number of children completing primary school education by age cohort

25 Efficient coefficient is the amount of school time devoted to producing a primary school completer

As can be seen from the tables, Namibia s share of education expenditure in GNP is twice the average, and ranks second after Zimbabwe. As said before, as share of the budget, expenditure on education amounted to 23.7 per cent, among the highest in the world by any comparison[26] . Another input side indicator that reveals interesting results is the unit cost at the primary school level. Namibia (0.26) ranks second after South Africa (0.36). The reason for the high unit cost could be attributed to the high levels of personnel salaries and the low pupil/teacher ratio. Teachers salaries amounted to 7.5 percent of GNP whilst pupil/teacher ratio was amongst the lowest. At secondary and tertiary levels, Namibia still recorded a very high unit cost compared to the other countries ranking third and second, respectively.

If one looks at the output side of the equation namely the gross enrolment ratio (a rough measure of the output of the educational system), other countries perform as well as Namibia with less monetary injections. For example, in 1996 Mauritius invested only 17.4 per cent of its budget on education but achieved a gross secondary enrolment ratio of 64 per cent compared to Namibia s 61 per cent which invested 24.4 per cent of it's budget on education. In terms of repetition rates, Namibia recorded 25 per cent whilst the second highest country namely Swaziland scored 15 per cent and other countries only 5 per cent. Over one quarter of primary learners in Namibia are repeaters and about 36 per cent of children normally repeat their first year of primary school (World Bank 1995). As a consequence many learners are much older than is appropriate for their grades. In addition, the percentage of pupils reaching the final grade at the primary level in Namibia is also the lowest (see % cohort final grade in table10). Such a proportion of repetition is burdensome on the operating cost of education and further reduces the efficiency of the education system.

TABLE 11 Unit cost expressed in GNP

	Gross enrolment Primary	Gross enrolment Secondary	Pupil/teacher Secondary	Gross enrolment tertiary
Botswana	108	65	18	5.8
Mauritius	106	64	20	6.1
Namibia	131	61	20	8.1
South Africa	133	95	29	17.2
Swaziland	117	54	19	6.0
Zimbabwe	113	49	27	9.4

Source: UNESCO, World Education Report 1994

Looking at the gross enrolment rates for primary education (see table11), Namibia scores a high ratio of 131 per cent compared to other African countries, mainly due to the high rate of repetition in the schools. According to gross secondary enrolment, Namibia recorded 61 per cent compared to Botswana and South Africa recording 65 per cent and 95 per cent, respectively. This is a significant increase from the 41 per cent recorded in 1994 (UNESCO World Education Report 1994).

26 It increased further to 25.6 per cent in 1996, ranking amongst the highest in the world according to the World Education Report 2000 (see page 164)

4.2 HEALTH SECTOR

4.2.1 Background

Like education, at independence health was chosen as one of the four priority sectors in Namibia. The first challenge was to reform the institutional framework of the sector by unifying the previous fragmented ethnic-tier structures under the central control of the Ministry of Health and Social Services. Prior to independence, the health care system and expenditure focused on high quality curative care mostly available only to a small minority of the white population. On attaining independence, Namibia adopted primary health care as a guiding policy for restructuring health services. Nevertheless, the importance of curative services continued to be recognised.

The Primary Health Care (PHC) approach encompasses improvements in nutrition, safe water supplies, sanitation, adequate housing, maternal and child-care services, immunisation, prevention of epidemics, health education, and curative services. The Primary Health Care approach is the logical choice of the Government because it guarantees equity, empowerment, self-reliance and participation at all levels. The health care and the social system in Namibia are being developed along four principles of: equity; accessibility; affordability; and community involvement.

4.2.2 Overview of Health Expenditure

Following the importance attached to health services in Namibia the size of the budget allocated to the Ministry concerned has been relatively large since independence. Health Affairs Services averaged between 10.5 per cent and 10.9 per cent of total government expenditure since 1991. As a percentage of GDP this sector has increased from 3.3 per cent in 1993/94 to 4.3 per cent in 1999/2000.

Table 12 Health Expenditure shares and trends

Category	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01
Health Ex (N$ Million)	302	364	346	410	508	524	611	721	837	925
Total Ex (N$ Million)	2862	3379	3439	3856	4556	5566	6129	6863	7751	8446
Health Exp. As % of Total Exp.	10.5%	10.7%	10%	10.6%	11.1%	9.4%	9.9%	10.5%	10.8%	10.9%
GDP at Market Price (N$)	8024	8751	10376	11738	13411	14916	15263	17380	19037	
Health Exp. As % of GDP	3.7%	4.1%	3.3%	3.4%	3.7%	3.5%	4%	4.1%	4.3%	
Annual Growth rate (%)	20.5%	-4.9%	18.5%	23.9%	3.1%	16.6%	18%	16%	10.5%	

Source: Human Development Report 1998

Table 13 shows the components of actual expenditures on health across the main categories for the period 1991/92 - 1999/2000. The allocation for 2000/2001 budget is also included.

Table 13 Composition of health affairs services - the main division

(N$ 000)	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00	00/01
Health Policy & Admin	24,4	19,7	20,1	30,6	30,8	24,4	28,2	40,9	35,9	43,7
As % of Health Affairs	8%	5.4%	5.8%	7.4%	6%	4.6%	4.6%	5.6%	4.2%	4.7%
Specialized Affairs	120,2	150,0	130,5	171,3	193,7	195,4	215,3	261,6	291,0	334,0
As % of Health Affairs	39.8%	41.2%	37.7%	41.7%	38.1%	37.2%	35.2%	36.2%	34.7%	36.1%
Clinics & Publ Health Services	146,1	181,9	182,5	194,6	269,1	288,6	347,2	387,2	478.3	522.4
As % of Health Affairs	48.3%	49.9%	52%	47.4%	52.9%	55%	56.7%	53.6%	57.1%	56.4
Medicaments, Equip	1,2	2,4	1,5	2,7	2,1	2,7	3,3	11,5	4,1	6,1
As % of Health Affairs	0.4%	0.6%	0.4%	0.6%	0.4%	0.5%	0.5%	1.6%	4.9%	0.6%
Applied Research & Lab	9,9	11,0	9,3	10,6	12,2	12,9	17,3	20,1	28,0	18,6
As % of Health Affairs	3.2%	3%	2.6%	2.5%	2.4%	2.4%	2.8%	2.7%	3.3%	2.0%

Source: Ministry of Health and Social Services, 2000

Table 14 indicates that the share of Health Policy Formulation and General administration sub-divisions as percentage of the actual expenditure on the overall Health Affairs Services has declined from 8.1 per cent in 1991/92 to 6 per cent in 1995/96. It declined further to 4.2 per cent in the 1999/00 budget. It is held that the elimination of the segmentation of health provision by race (which had entailed separate ethnic administrations) and the creation of a unified national health system, have reduced the administrative costs of health care provision.

Table 14 Health Policy and General Administration Division

Expenditure	1993/94 %	1995/96 %	1999/00 %
Personnel Expenditure	42.5	32.2	44.5
Goods and other services	54.8	48.8	49.4
Subsidies and Others	2.7	1.4	4.1
Total Current Expenditure	**100.0**	**82.5**	**97.5**
Capital expenditures	-	17.5	2.5
Grant total	**100.0**	**100.0**	**100.0**

Source: Ministry of Health and Social Services, 2000

Personnel costs in this division have also shown a declining trend as can be seen from the figures for 1993/94 (42.5%) and 1995/96 (32.2 %) which are actual budget figures.

As foreseen, actual expenditure on General Medical Clinics & and Public Health (as percentage of Health Affair Services) rose from 48.3 per cent in 1993/94 to 52.9 per cent in 1995/96 (see table 13). It increased further in

1999/2000 fiscal year, reaching 57.1 per cent. This indicates the fact that the provision of primary health care is increasingly becoming the driving engine of the entire health affairs services.

Table 15 General medical clinics and community health services division (selected years: 1993, 1995 and 1999)

Expenditure	1993/94 %	1995/96 %	1999/00 %
Personnel Expenditure	51.3	53.7	65.6
Goods and other services	28.5	25.2	10.9
Subsidies and Others	20.1	12.9	13.3
Total Current Expenditure	**100.0**	**91.8**	**89.9**
Capital expenditures	-	7.4	11.0
Grant total	**100.0**	**100.0**	**100.0**

Source: Ministry of Health and Social Services, 2000

The share of personnel cost in the community health services has risen from 51.3% in 1993/94 to 53.7% in 1995/96 and increased further, reaching 65.5% in 1999/2000 budget (see table 15). The share of other current expenditure (or Goods and other Services) in this division declined from 28.5% in 1993/94 to 25.2% in 1995/96, and further down to 10.9% in 1999/00.

A large item in the community health budget is subsidies and transfers, which amounted to N$ 34.8 million in 1995/96, and has been declining (recording 22.1% of the General Medical Clinics & Community Health Services in 1993/94, which dropped further to 12.9% in 1995/96) (see table 15). These subsidies and transfers are mainly destined for mission clinics, which played the major role in the provision of Primary Health Care in rural areas (IMF, 1996). Capital expenditure (or equipment budget) for this division has risen marginally to 11.0 per cent in 1999/00 from 7.4 per cent in 1995/96.

The share of expenditure on Specialised Hospital Affairs and Services as a percentage of the overall Health Affairs Services has declined from 41.2 per cent in 1992/93 to 38.1 per cent in 1995/96 (see table 13). It dropped further to 34.7 per cent in 1999/00. The share of expenditure on personnel costs (as percentage of Specialized Hospital Affairs Services) declined from 74.0 per cent in 1993/94 to 66.1 per cent in 1995/96 (see table 16). The share of Goods and other Services) also declined from 25.3 per cent in 1993/94 to 23.0 per cent in 1995/96. It dropped further down to 10.3 per cent in 1999/00.

Table 16 Specialized health care services - division (Selected years: 1993/94,1995/96 and 1999/00)

Expenditure	1993/94 %	1995/96 %	1999/00 %
Personnel Expenditure	74.0	66.1	80.5
Goods and other services	25.3	23.0	10.3
Subsidies and Others	0.7	0.5	0.0
Total Current Expenditure	**100.0**	**89.5**	**90.8**
Capital expenditures	-	8.0	8.6
Grant total	**100.0**	**100.0**	**100.0**

Source: Ministry of Health and Social Services, 2000

Expenditure on Medicaments, Medical Equipment & Appliances Administration as a percentage of the overall Health Affairs Services stood at a mere 0.4 per cent in 1993/94, but rose to 4.9 per cent in 1999/00 (see table 13). The share of expenditure on personnel costs (as percentage of the overall division) increased from 64.1 per cent in 1993/94 to 78 per cent in 1995/96 (see table 17). It rose further, reaching 81.3 per cent in 1999/00.

Table 17 Medicaments, Medical equipment and appliances administration division (selected years: 1993,1995 and 1999)

Expenditure	1993/94 %	1995/96 %	1999/00 %
Personnel Expenditure	64.1	78.0	81.3
Goods and other services	35.9	18.4	18.5
Subsidies and Others	0.0	0.0	0.0
Total Current Expenditure	**100.0**	**96.5**	**99.8**
Capital expenditures	-	3.5	0.2
Grant total	**100.0**	**100.0**	**100.0**

Source: Ministry of Health and Social Services, 2000

The share of expenditure on the Applied Research & Diagnostic Medical Laboratory Services, as percentage of the overall of Health Affairs Services has been constant over the years at about 2.6 per cent in 1993/94 and at 2.4 per cent in 1995/96. It, however rose to 3.3 per cent in 1999/00 (see table 13). The share of expenditure on personnel costs (as percentage of the overall division) remained constant at about 61.6% in 1993/94 and at 61.9% in 1993/94. It, however, declined to 56.5 % in 1999/00 (see table 18)

Table 18 Applied research and diagnostic medical laboratory services (selected years: 1993,1995 and 1999)

Expenditure	1993/94 %	1995/96 %	1999/00 %
Personnel Expenditure	61.6	62.0	56.6
Goods and other services	38.4	34.4	27.4
Subsidies and Others	0.0	0.0	14.3
Total Current Expenditure	**100.0**	**96.4**	**98.3**
Capital expenditures	-	3.6	1.7
Grant total	**100.0**	**100.0**	**100.0**

Source: Ministry of Health and Social Services, 2000

4.2.3 Efficiency of the Health Care System

Unlike other services such as education, transport, etc., it is generally, very difficult to measure efficiency in the health care sector. In the context of Namibia, this task would be more difficult due to the absence of a well-designed

health management information system (as has also been highlighted in other studies [27]). However, available data on public spending and social indicators within health sector (as per Table 13-18) would still fairy enable an efficiency analysis in this sector. The spending would proxy input, whereas the social indicators would proxy the output. The analysis should eventually also relate to the achievements and/or failure of the Primary Health Care[28] and related programs (usually captured in social indicators [29]).

From an intra-sectoral expenditure perspective, it transpired that a sizeable share of expenditure on Health Affair Services is allocated to General Medical Clinics & and Public Health division. It averaged 52 per cent of the total Health Affairs Services since 1991/92. This is not surprising since primary health care, which has been adopted as the foundation of health care delivery system in Namibia, falls under this division. The largest share of expenditure goes to personnel costs. This is to be understood given that the operation of this division is heavily labour-intensive. The decline in the share of Goods and Other Services in this division is largely attributed to the adoption of the basic drug policy, and the reduction in costs associated with the rationalisation of the hospital system (World Bank, 1995).

The second largest share of expenditure on Health Affairs Services is allocated to Specialized Health Care Services - division, averaging 37.8 per cent of the total Health Affairs Services since 1991/92. The largest share (which amount to 80% in 1999/2000 fiscal year) goes to the personnel costs. This is generally understood in the sense that health personnel, particularly more experienced and specialised staff deserves high salaries. The bias towards salaries in this division could also be seen as a means to attract and retain skilled individuals.

More concerns revolve around the expenditure composition of Medicaments, Medical Equipment & Appliances Administration - division. The overall share of expenditure on this division is the smallest, averaging only 1.1 per cent of the total Health Affairs Services since 1991/92). However, its personnel costs amounted to 74 per cent and 80 per cent of the total expenditure carried out in this division in 1995/96 and 1999/00 respectively. The share towards capital expenditure amounted to a mere 3.5 per cent (of the total spending in this division) in 1995/96 and 0.2 per cent in 1999/00. It is normally expected that the largest share of this division should be allocated to equipment and appliances, acquiring pharmaceuticals, etc. If this argument holds, this would imply serious resource misallocation.

Further analysis on input efficiency of the health system is limited by the absence of an adequate health management information system in the Ministry of Health and Social Services[30]. This is needed to capture issues related to the quality of health care provided. It is also necessary to know how the consumption of services differs among groups within countries. It was also revealed that the ministry operates a system of health information reporting which is not integrated with the accounting for health expenditures, nor with the records of the deployment of personnel and equipment.

In the absence of data for other countries to carry out a comparative efficiency analysis, it would be appropriate to look at the available social indicators. The resultant output dimension coupled with the input dimension (as already covered above) may at least serve as an indication of the state of efficiency of health expenditure in Namibia.

Socio-economic indicators

Compared to other countries in Sub-Saharan Africa, Namibia has made dramatic strides in important economic and social indicators. Table 19 provides a vivid picture of these changes and contrasts. There is a relationship between GNP per capita and health expenditure as a percentage of GDP such that an increase in the GNP per capita leads to a rise in health expenditure as a percentage of GDP.

27 The lack of a well-designed health management information system was also highlighted in the World Bank s study on health affair services in Namibia, July 1994

28 The input to and output of Primary Health Care would be the main pointer to efficiency of expenditure on health sector in the sense that it (i.e. Primary Health Care) has been adopted as the foundation of helath care delivery system in Namibia.

29 In many studies, the socio-economic indicators served as the common yardstick for efficiency analysis

30 However, some projects on determinations of cost-effectiveness are (according to the ministry) currently in final stages of completion.

Higher per capita income in Namibia and South Africa, for instance, has enabled the governments to allocate more resources to the health sector. Malawi, the poorest country in the sample, has made slow progress since 1990 according to the indicators shown in table 19. Both per capita income and progress in the health sector in Malawi have been relatively stagnant. Age- specific mortality data such as infant and child mortality rates, along with life expectancy at birth, are probably the best general indicators of community s current health status and are often cited as overall measures of population s welfare or quality of life. These indicators are closely related to GNP as can be seen clearly from table 19. As income increases, social indicators such as the infant mortality and life expectancy also improve.

From this table, Namibia fares relatively well in most popular indicators such as infant mortality rates and maternal mortality. Generally, these partially represent the outcome of the health system, particularly effective primary health care delivery. A sanitary environment, as reflected by increased access to sanitation and safe water, leads to improved health status. Access to safe water for example, is found to have significant effect on infant and child mortality (Kim and Moody, 1992; Hojman, 1996).

Table 19 Social Indicators, Selected African Countries, Selected Years

Country	Year	Infant mortality (per 1000)	Access to safe water (% pop)	Life exp. at birth Total years	Maternal mortality rate per 100,000 live births	Acces to health care within 1 hour	Health exp. % of GDP (1990-95)	GNP per capita (US$/yr)
Namibia	1985	69.00		55.90	479.00		-	1230
	1990	64.00	47.00%	55.90	370.00		3.7	1900
	1992	62.40		55.74		59%	4.1	2090
	1994	60.80		55.58			3.4	2120
	1996	58.80	76.9%	55.82	220.0	55%	3.5	2250
	1997	57.60		56.14	103		4.0	2220
South Africa	1980	58.00		60.40	550.00			2100
	1990	53.00		62.90	230.00			2860
	1992	51.00		63.82				3210
	1994	49.00		64.74			7.9%	3430
	1996	47.00		65.64	230.00			3510
	1997	46.00		66.08				3400
Nigeria	1985	92.00	45.00	48.30	1500.00			370
	1990	84.00	42.00	50.40	1000.00			270
	1992	81.20		51.20	800.00	67.00		280
	1994	78.40	40.00	52.00			1.4%	230
	1996	75.60		52.80	1000.00			260
	1997	74.20		53.20				260
Kenya	1985	75.00		55.70				300
	1990	71.00	47.00	54.10	650.00			380
	1992	68.60		54.26	510.00			330
	1994	66.20		54.42			2.5%	260
	1996	63.40		55.08	650.00			320
	1997	61.80		55.66				330
Malawi	1985	154.00	55.00	44.90	54.00			160
	1990	148.00	51.00	42.00				200
	1992	145.60		41.48				210
	1994	143.20		40.96				160
	1996	139.60	54.00	41.04	35.00			180
	1997	137.20		41.42				220

Source: African Development Bank- Selected Statistics on African countries, 1999

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Immunization coverage is one of the major programs in primary health care delivery. There is evidence that an increased vaccination coverage among children has a positive impact on their health status (Hojman, 1996). In 1992, Namibia had reached a high coverage rate of about 70 per cent compared to other immunization period. The recent data, however, shows a steady decline in immunization coverage indicating the need for effective community information, education and mobilization, as well as the deployment of effective strategies to reduce the high rate of dropouts and missed opportunities for immunization. Lack of transport to render primary health care services especially outreach services and the shortage of some vaccines experienced for longer periods (DPT, BCG), were cited as some possible reasons contributing to the declining coverage (HIS, 1997).

Table 20 Health indicators Namibia - selected years

Year	Immuni-zation rate (DPT3)	Immuni-zation rate (measles)	Pop. (in million)	Pop./ per hosp. bed	Pop/ doctor	Pop Nurse	Adequate sanitation	HIV-test positive
1990								543
1992	70%	71%	1.4	197	4,308	313	40%	2,050
1993			1.49	218	4,585	333		2,517
1994			1.54	239	4,738	344		4,126
1995	74%	68%	1.59	242	4,892	355		7,757
1996	70%	61%	1.64	256	4,373	366	51%	10,576
1997	66%	51%	1.69	270	4,194	376		11,608
1998			1.75	280	3,968	389		12,701
1999			1.8	267	3,782	400		

Source: African Development Bank- Selected Statistics on African countries, 1999

HIV/AIDS is having a negative impact on life expectancy in Namibia, which has already fallen from 58 to 55 years. If Namibia follows the same path, as its neighbor's -Botswana and Zimbabwe - life expectancy will drop drastically by more than 10 years over the next 12 to 17 years. Namibia is in the unenviable position of having the third highest HIV prevalence per capita in the world; Botswana and Zimbabwe are the two most affected countries (UNDP, 1998). The 2000/1-revised budget indicated that the impact of HIV/AIDS has forced an extra N$75 million to be allocated for civil servants medical aid scheme.

Table 21 Average length of stay in hospital - number of days: Namibia

Departments	1995	1996	1997	1998	1999	2000 Jan - May
Adult/General Ward	9.5	8.8	9.2	9.3	9.3	9.3
Pediatrics Ward	7.1	6.7	6.4	6.8	6.6	5.7
Maternity Ward	3.4	3.3	3.1	3.2	3.5	2.9

Source: Ministry of Health and Social Services

Average length of stay in hospitals is cited also as an indicator of the efficiency of resource use. Longer stays may reflect a waste of resources if patients are kept in hospitals beyond the time medically required, inflating demand for hospital beds and increasing hospital costs. Although cross-country variations in average length of stay may result from differences in the role of hospitals, many developing countries do not have separate extended facilities, so hospitals become the source of long-term as well as acute care.

Data on the average length of stay in hospital is recorded according to different departments. It ranges from 9.5 days in the adult/general departments, 7.1 days in the paediatrics wards and to 3.4 days in maternity wards. These compare well with other countries. According to the World Development Indicators, Germany average length of stay was 14 days between 1990 and 1997, while the Netherlands was recorded to be 33 days.

SECTION V

5. POLICY IMPLICATIONS AND CONCLUSIONS

5.1 Policy Implications

- Capital expenditure on education has been very minimal and there are no prospects for the situation to change given resource constraints. Private sector participation in education should be encouraged. The public can also make substantial private investments in education such as building of schools as Kenyans did through the Harambee movement during the 1970 s. Harambee movement was an attempt to increase rural infrastructure (such as schools and clinics) through investment by local communities[31].

- The study concludes, among other, that immunisation has declined as a result of lack of transport to reach remote areas as well as the shortage of vaccines. Therefore, the authority i.e. Ministry of Health should consider the aspect of decentralisation of health services, to reduce problems associated with logistics.

- As a matter of necessity, the ministry must reprioritise its expenditure patterns, in particular, between personnel costs and essential medication. The ministry must also explore means of getting medication at a lower cost, even if it means to look into the feasibility of botanical gardens establishment.

- Overall, the ministries / public sector should set up broad efficiency guidelines for themselves. These guidelines should comprise of several major efficiency indicators on different issues and /or operations e.g. on expenditure efficiency indicators, on primary health care operations, etc. These should be measurable. Allocation to current expenditure should be justifiable from a broader efficiency perspective.

5.2 Conclusions

Namibia s educational system appears to be very financially burdensome, accounting for over 10 per cent of GDP. Such a system is very far from being internally efficient. This is true in light of the low percentage of pupils completing primary education and the high repetition rates relative to other African countries. There is room to both improve school enrolment rates within the actual budget and also to reduce costs. It appears that the reason for the high unit cost for primary and secondary education is mainly due to high personnel costs, particularly remuneration costs. This accounts for almost 7.5 percent of GNP or 85 per cent of total expenditure on education. Therefore, it will not be easy to reduce the high unit cost in primary and secondary education without a reduction in personnel-related costs.

At independence Namibia s health care system provided curative care for a small fraction of the population. Ten years later, half of Namibians have access to primary health care services. Social and health indicators for Namibia have improved during this period. Specialised health services share of health affairs services actual expenditure

[31] Once communities made initial investments in a certain project, the government would sometimes help to develop or maintain the project. During the 1970 s, approximately 30 per cent of capital formation in rural areas was financed by *harambe* contributions.

has declined, whilst community health services share has risen. Part of the explanation for the increase in expenditure on community health services could be related to a number of priority programs, such as preventative health care programs, including immunisations and aids control, health awareness, nutrition and family planning.

Although a lot of resources have been put in the establishment of primary health care services, more efforts to reach the major as well as supportive goals of the approach are needed. There is a decline in the routine immunisation coverage of children less than one year for all antigens from 1995 to 1997. This immunisation coverage rate is quite low and it is far from reaching the target level as explained in the study.

Among reasons cited for the decline in immunisation coverage was the shortage of some vaccines. Considering the budget allocation within the Medicaments, Medical Equipment and Appliances Administration, it is evident that less resources are left for acquiring the necessary medicaments, given the fact that 78 per cent in 1995/1996 of the budget was allocated to personnel costs within this division.

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