CHAPTER THREE

LITERATURE REVIEW

3.1. Introduction

This chapter is a survey on the literature review and evidence on public expenditure policies on social services in Sudan. The evidence reviewed show that progress towards the MDGs has slowed over the period (1980-2009). Public expenditure has a much less powerful than what it was needed (demand side) factors. Policies and practices for making public programs more effective that have been recognized for some time remain unimplemented as it has been declared into the following sections: followed to introduction section (3.2) discuss Sudan macroeconomic policies during the period 1980- 2009. While in section (3.3) Sudan macroeconomic performance will discuss. In sections (3.4) poverty and inequality in Sudan will present. In section (3.5) the growth-poverty nexus will discuss in some details, while section (3.6) discuss public finance: revenue-expenditure nexus. Section (3.7) federal government budget will discuss. Section (3.8) provides empirical literature reviews on public expenditure on health and education in Sudan. Finally, section (3.9) summarizes the chapter.

3.2. Sudan Macroeconomic Policies during the period 1980 - 2009

Imperative reforming of macroeconomic management in Sudan dates back to the 1970s and 1980s, when the first wave of reforms was undertaken during the period 1978-1984. But it did not achieve macroeconomic and price stabilization and reforms were not fully implemented.

3.2.1. National Economic Salvation Program 1990/91-1992/93

A new wave of intensive reforms was initiated 1990s, culminating in the adjustment policies of the medium-term National Economic Salvation Programme (NESP) for 1990/91-1992/93, which was merged into the Comprehensive National Plan (CNP) of 1992-2002. To combat inflation, which escalated around the mid1990s, and to tackle the deterioration in the balance of payments, macroeconomic and price stabilization became the focus of a strengthened reform effort during the period1997-2001. It should be noted that although the reform measures were self-imposed (as the IMF has had no formal agreement with the Sudan since 1989), adjustment

measures under the NESP are commonly believed to be stronger than those that the IMF and the World Bank would have called for (Dagdeviren and Mahran, 2004).

3.2.1.1. Objective National Economic Salvation Program

The broad objective of NESP was the revitalization of the Sudanese economy through reallocation of resources with an emphasis on agriculture, encouragement of exports through scrapping of the export license system, liberalization of export prices, and provision of export subsidies if needed. The centerpiece of the programme was encouragement of the private sector participation through the creation of a more conducive environment (by removing all administrative, economic, or legal impediments).

The government reform efforts emphasized four aspects in particular these are:

1. Restoring macroeconomic stability and combating runaway inflation through tough fiscal and monetary policies.
2. Emphasizing market-oriented economic activity, liberalization, abolition of controls and deregulation.
3. Limiting the role of the state through privatizing public-sector enterprises and extending the role of the private sector to all activities including health, education and utilities.
4. Encouraging saving by reforming the banking sector and introducing new saving instruments.

The 1992 fiscal year witnessed the implementation of aggressive rapid structural adjustment policies (SAPs). In fact, that year marked the beginning of the most comprehensive liberalization programme ever in Sudan's case, with further liberalization continuing until the end of the decade. In the fiscal policy area, this self-imposed reform aimed at reducing the government budget deficit through curbing government expenditure and increasing revenue through broadening of revenue sources, especially taxes. Reduction of government spending was mainly directed to curb spending on social services; especially health and education, water and other critically needed goods and services. This has clear implications for poverty; due to budget cuts, most of these basic services were provided by the private sector at levels of prices that most people could not afford (World Bank, 2003).

As argued in Babiker, Bell and Medani (2004), with no compensating increases in the level of wages and salaries, the fixed-salary people, middle class and small-scale producers and most of the peasant farmers in the rain-fed and livestock sectors, as well as a large number of unskilled and seasonal laborers, have become net losers and their real incomes and consumption positions worsened, joining the masses of the poor Babiker, Bell and Medani (2000). Ultimately, such policies clearly reduce the entitlements of the poor rather significantly.

3.3. Sudan Macroeconomic Performance during the period 1980 - 2009

Since independence in 1956 the Sudan economy has been rely heavily on mono-cropping culture for export (cotton) this has been set on a turbulent course reflecting fluctuating pattern of growth which necessitated the introduction of economic measures to mitigate pitfalls.

3.3.1. Macroeconomic and Price Stabilization Program

Back in 1970, Sudan initiated the first wave of economic reforms to try and address economic deterioration. The measures were not fully implemented and a second wave of measures was initiated under the umbrella of the salvation programme, which was merged with the national Comprehensive Plan of 1992-2002. Also the programme was not successful and there was deterioration in balance of payments, escalating inflation rates and persistent macroeconomic imbalances. A third reform programme was introduced in 1997-2001 with great focus on macroeconomic and price stabilization. The programme encompassed four basic elements including:

1.Introduction of stabilization measures and macroeconomic environment that focuses on fighting escalating inflation by increasing collection of revenues, reduction of public expenditure and following balanced monetary policy.

2. Pursuance of market friendly measures and policies to abolish controls and provide incentives for domestic production and export.

3. Introduction of structural reforms to limit the role of government by privatizing public enterprises and improving opportunities of the private sector in areas such as health, education and other utilities.

4. Encouragement of savings by stabilizing the economy and introducing of reforms in the banking sector (Karrar, 2006). The WB (2003) compares the macroeconomic indicators of 1986-90 with year 2000-2004 highlighting the

results of some of the most recent reforms. These macroeconomic indicators that started off with low levels of growth rates during the period (1986-1990) after 1996 showed signs of improvement. In addition, inflation rates, which peaked during years 1991- 95, tapered off in late years and were accompanied by continued decline in government expenditure percentage of GDP (World Bank, 2003).

In their study, Elhag, et al (2006) argued that, the dramatic change in the performance of Sudan economy since 1996 could be attributed to a number of factors that include; economic reforms, favorable weather conditions and high investment in oil sectors and related services. While the stabilization measures and economic reforms have been carried out without external aid or technical assistance and achieved success in increasing growth rates, external debt and its accumulated arrears remained to be a problem facing future development of the country. In this respect, it has to be stressed that stabilization measures have been achieved at the expense of drastically cutting public expenditures except for security purposes with adverse impact on productive sectors, infrastructure, and human resources development. In addition, stabilization measures have been facilitated by rise in oil exports which dominate other type of exports during the past few years. Oil exports increased from zero level in 1998 to reach US $ 276 million in 1999 accounting for 35 % of overall export earnings. In year 2004 oil export reached US $ 3.097 billion accounting for 81 % of exports. With high inflow of foreign direct investments and oil revenues, Sudan economy witnessed a boom in real estate development in major towns, coupled with road construction, development in telecommunications, electrical power supply and investment in food processing industries. However, despite this development, most rural areas and national agricultural development has not directly benefited resulting in accentuating poverty and continued rural migration.

Suliman (2004) argues that, economic performance in Sudan has undergone several phases; he focuses on the periods before and after 1992. For him, the year 1992 represents a watershed or turning point from a policy point of view. The question to be addressed is "what is the nature of the macroeconomic performance during the various episodes and the policies associated with it in Sudan?" In an attempt to answer this question, he

examines various indicators of macroeconomic performance of the Sudanese economy over the past three decades. Applying his definition of instability to the case of Sudan over the period 1970-2001, five sub-periods of macro performance emerge. Three episodes of stability: (1970-78), (1982-89) and (1996-2001). Alternate with two sub-periods of instability: (1979-81) and (1990-95). These sub-periods differ in length, and witnessed various macroeconomic episodes and policy responses.

3.4. Poverty and Inequality in Sudan

Poverty can be defined as a failure to achieve certain minimal or basic capabilities, where "basic capabilities" are the ability to satisfy certain crucially important functioning up to certain minimally adequate levels (Sen,1993). While World Bank (2000) defined poverty as Lack of resources, bad social relations, insecurity and vulnerability, low self-confidence, and powerlessness, income poverty can be distinguished from health poverty, education poverty, and security poverty. Inequality takes different forms including economic, political and social which interact with one another to produce composite forms of inequality. Inequalities are a central feature of all contemporary societies and they are usually supported by an ideology which legitimize them, i.e. makes them appear in varying degrees as right and proper, as inevitable and even as beneficial to all in society (George, 1988).

The trend of poverty in Sudan during the nineties was most likely upwards, with considerable variation in the different parts of the country. Although no recent household-level data is available to measure consumption or income in money terms, it is widely believed that the incidence of poverty is very high and that there is considerable variation in poverty between states and within states. While it is not possible to reach an accurate estimation of the level of poverty in Sudan at the present time due to the lack of recent poverty specific data (the last nationally representative household income and expenditure survey was carried out in 1978), it could be argued that poverty rate in Sudan may perhaps be in the range of 50-60% in line with most of its neighbors. This level of poverty is also evident in a variety of human development indicators. In general, urban areas are better off than rural areas. However available data indicate that there is significant inequality in urban areas and that the extent of urban poverty has likely increased due to migration to urban centers. It is worthy of note that the rural and/or urban

parts of the Red Sea, Kassala, the Blue Nile, all of Kordofan, all of Darfur, Malakal and Wau have consistently appeared on the list of the most deprived areas in one or more of the three aspects of deprivation. However, this should not mask the fact that most of the urban poor are located in Khartoum State where a large proportion of the internally displaced have settled in camps. Wide spread poverty and the erosion of household coping capacities due to war make wide segment of the population vulnerable to food insecurity brought on by crisis such as a flooding, drought, conflict and displacement. Regional and urban/rural disparities in economic resources have clear implications for health and nutrition out come as well as services. In addition, inequalities are wide between states and regions, between urban and rural areas, between war affected and more peaceful areas; between uprooted population and residents and between men and women.

Detailed analysis of the relation between growth on the one hand and income poverty on the other is hampered in the case of Sudan by the great lacuna in reliable up-to-date and relevant data – particularly the household expenditure surveys. Related to this is the fact that there is no official poverty line for the Sudan (Ibrahim *et al.*, 2001). In order to address the question of the relation between growth and poverty, data on the changes in poverty and inequality indicators over time are needed. Unfortunately, no such data is available for Sudan beyond 1992. Using the Foster-Greer-Thornback type of poverty measures, (Ali, 1994) derived estimates for poverty in Sudan at four time points of critical significance to major economic policy changes in Sudan over the period 1968-93. Notwithstanding data and methodological issues, this work provides the only available estimates of several poverty measures for Sudan over such a fairly long period. Table 2.7 below reproduces some of his results. Measured by the head count index, poverty in Sudan showed an increasing trend at a varying rate of increase over 1978-93. For example, the head count index increased from 54.3 per cent to 77.8 per cent and 91.4 per cent in 1978, 1986 and 1993, respectively. Also, the number of poor households increased at the period end-points from 1.7 million to 2.7 and 3.4 million, respectively.

1. The rate of spread of poverty started high in the rural areas, and over time it was overtaken by the rate of expansion of urban poverty. For example, over 1968-78 the rate of spread of urban poverty was 2.6 per cent, which

increased to 12.6 per cent over 1978-86 before declining to 7.8 per cent over 1986-92. The corresponding rates for the spread of rural poverty were 0.23 per cent, 3.29 per cent and 1.6 per cent respectively.

2. The urban areas were hit worst by both the spread and the incidence of poverty especially over 1986-92. This perhaps reflects the high weight of the poor who joined the urban areas as a result of the displacement by the civil war and other conditions of decline in the rural areas.

3. Transcending the rural-urban divide, there are wide regional differences in income poverty (Ibrahim et al., 2001).

Because of lack of data, the discussion of the change of income poverty in Sudan is only possible up to 1993. Beyond that year, (Ali ,1994) used data on human poverty and human development; the Human Poverty Index (HPI) and the Human Development Index (HDI), for these indicators data are available for Northern and Southern Sudan separately for 1993 and 2000. The results are shown in Table (2.8).The data reveal a wide regional gap between the North and the South. For southern Sudan, the data also indicates some improvement both in human poverty and human development. The deprivation of survival index in the South fell from about 24 in 1993 to about 15 in 2000, an improvement by more than one third. There was a reduction by 40 per cent in the deprivation in knowledge index. The slightest improvement was the living standard dimension, as the low living standard index fell by just about 6 per cent between 1993 and 2000. As a result of these developments, the HPI for the South (with $\alpha = 3$) fell from about 47 in 1993, to about 40 in 2000. In Northern Sudan, the HPI (with $\alpha = 3$) fell more considerably, from about 41 in 1993 to about 25 in 2000. Most of the improvement was in connection with reduction in deprivation of knowledge component.

Table (3.1) Poverty Trends in Sudan Over 1968-1993

Poverty Indicators	**Poverty Trends(1968-78)**			**Poverty Trends (1978-86)**			**Poverty Trends(1986-93)**		
	1968	1978	Annual Per cent Change	1978	1986	Annual Per cent Change	1986	1993	Annual Per cent Change
Headcount%									
Rural	62.68	64.17	0.23	64.17	83.12	3.29	83.12	93.16	1.6
Urban	15.90	20.51	2.58	20.51	52.86	12.56	52.86	84.43	6.9
Sudan	51.59	54.26	0.50	54.26	77.8	4.61	77.8	91.41	2.2
Poverty Gap%									
Rural	28.11	30.56	0.84	30.56	51.67	6.79	51.67	62.61	2.8
Urban	4.56	8.58	6.53	8.58	24.38	13.94	24.38	47.78	10.09
Sudan	24.66	23.12	-0.64	23.12	45.43	8.81	45.43	59.35	3.89
No of poor Households(000)									
Rural	1181.0	1575.0	2.92	1575.0	2309.0	4.9	2309.0	2725.0	2.39
Urban	51.7	127.4	9.44	127.4	370.0	14.3	370.0	705.0	9.65
Sudan	1305.8	1669.0	2.48	1669.0	2706.0	6.23	2706.0	3430.0	3.45
Mean Income of the Poor									
Rural	75.0	104.0	18.43	104.0	2415.0	24.93	2415.0	85450.0	66.4
Urban	97.0	452.0	16.63	452.0	3440.0	28.88	3440.0	117200.0	65.5
Sudan	71.0	446.0	20.17	446.0	2656.0	24.99	2656.0	90200.0	65.5
Poverty Line (L.S)	136.0	777.0	19.04	777.0	6384.0	30.12	6384.0	270000.0	70.7
CPI (1987= 100)	2.4	10.2	15.60	10.2	82.9	29.94	82.9	3691.9	72.0

Source: Ali (1994), Tables (4-9), (4-15), and (5-4). **Notes:** Estimates for 1968 and 1978 are based on Income and Expenditure Surveys for 1967/68 and 1978/80 by CBS. Estimate for 1986 is based on the Migration and Labor Force Survey conducted by the Ministry of Labor in 1990 (relating to 1989). Estimate for 1993 is based on Survey conducted by the Takaful Fund in February 1993.

Table (3.2) Human Poverty in Northern and Southern States, in Sudan 1993- 2000

	Northern States		Southern States	
	1993(T)	2000(U)	1993(T)	2000(U)
Deprivation in Survival Index	17.30	11.73	23.73	14.91
Deprivation in Knowledge Index	47.55	17.73	45.39	27.01
Low Living Standard	46.21	33.91	58.89	55.52
Human poverty Index $P\alpha$ ($\alpha = 3$)	41.30	24.87	46.98	40.15

Source: From HDI –HPI Excel file provided by UNDP CO, Khartoum. Notes: T :
= Total, U = Urban.

The HDI for the South increased from 0.428 in 1993 to 0.584 in 2000. Most of the improvement was in the life expectancy index. For the North, the data indicate that the HDI rose from 0.492 in 1993 to 0.563 in 2000. The data also indicate the extent and development of regional inequality (between North and South) in Sudan. No less important than the development of poverty in Sudan over the period 1968-2000, is the development of various dimensions of inequality. We stress three such dimensions in Sudan's case: the

inequality between income groups (vertical inequality), inequality between rural and urban sectors (horizontal inequality), and inequality between North and South (regional inequality) (Ibrahim, *et al.*, 2001).

The latter dimension was discussed above, using indicators of human poverty and human development. Now we deal with the first two dimensions. Consider the data in Table 2.9, which contains estimates from two independent studies of the Gini coefficient for selected years spanning the period from the late 1960s to the mid-1990s. These are the time points where relevant surveys were conducted. Therefore, it is important to remember that the surveys of the 1970s are not exactly comparable with those of the 1990s; the former is an income and expenditure survey whereas the latter are migration and labor force surveys. There are issues related to differences of definition and coverage that have to be kept in mind in interpreting those numbers. For example due to the civil war, except perhaps for the 1978/80 survey, data relate only to the North and government-controlled areas in the South. Several conclusions may be reached based on the information in the table below:

Table (3.3) Income Inequality in Sudan, 1968-1996

	Gini Coefficients			
Area	1967/68	1978/80	1990	1996
Rural	0.34	0.51	0.69	0.65**
	(0.38)	(0.48)	(0.66)	
Urban	0.41	0.42	0.56	0.72
	(0.41)	(0.40)	(0.55)*	
Total	0.41	0.50	0.61	0.74
	(0.44)	(0.46)	(0.64)*	

Source: Ibrahim, et al., 2001, Table (1.5); Ali (1994), Tables (4-1), (4-5), (4-10), and (4-11). Notes: Figures in parentheses are from Ali (1994). (*) means estimates for 1986. (**) means value in Ibrahim et al., but most likely it is 0.75

First, it seems that generally speaking, inequality has been on the rise in the Sudan throughout the period. The overall value of the Gini coefficient increased steadily from 0.41 in 1967/68 to 0.74 in 1996. The increase appears to have accelerated in the 1990s; almost 40 per cent of the absolute increase in overall inequality took place between 1990 and 1996. Thus, over the 30-year period 1967-1996, income distribution in Sudan appears to have experienced a dramatic change; it shifted from moderately unequal to extremely unequal. It is remarkable that in the first six years of the 1990s,

the ratio of the income share of the top 20 per cent to that of the boom 50 per cent has more than doubled. By all counts, this is an alarming development, pointing to a case of severe inequality. It is reported in a recent study by (Ibrahim *et al.*,2001); on poverty and employment in Sudan that during the 1970s, the income share accruing to the bottom 50 per cent of the population dropped from 21.9 per cent to 18.4 per cent, whereas the income share of the top 20 per cent increased from 48.1 per cent to 53.3 per cent. During the much shorter period of the 1990s (till 1996), the share of the poorest half of the population dropped from 14 per cent to 7 per cent, while the share of the richest fifth shot up from 65 per cent to 76 per cent. Second, inequality in rural areas seems to have increased much faster (compared to urban areas) during the 1970s and 1980s, while inequality in urban areas seems to have increased much faster compared to rural areas during the 1990s.

3.5. The Growth-Poverty Nexus

It is clear from the discussion in sections above that Sudan experienced disparate growth-poverty patterns of association over the period since the early 1970s: (i) Fast growth during the 1970s was associated with a slight increase in poverty. (ii) Negative growth over the period from the early 1980s to the mid-1990s was associated with a significant increase in poverty. (iii) Very fast growth during the 1990s appears to have been associated with a moderate increase in poverty. Thus it is curious to note that both negative growth and very fast growth were associated with increase in poverty. The interesting question from a policy standpoint is: why did growth of the Sudanese economy associate with increased poverty? We shall attempt to answer this question: was economic growth in Sudan, especially in the post-1992 period, pro-poor or pro-rich or neutral? But before doing that we first define the concept of pro-poor growth. It may be said that growth is pro-poor "when it is labor-absorbing and accompanied by policies and programmes that mitigate inequalities and facilitate income and employment generation for the poor, particularly women and other traditionally excluded groups." As demonstrated in the (World Bank, 1990), the pattern of growth for poverty matters.

To ensure poverty reduction through growth, policies should be adopted to provide opportunities to the poor and enable them to participate in growth: (i) economy-wide and sectoral policies should encourage rural development and urban employment. (ii) Specific measures are needed to increase the

access of the poor to land, credit, public infrastructure and services; (iii) In resource-poor areas, poverty and environmental degradation are interrelated, which calls for public investment and government subsidies to meet basic needs, maintain or increase yields and preserve natural resources (World Bank, 1990).

In light of the above, a pro-poor growth strategy may be characterized as one that combines the adoption of direct pro-poor policies with the removal of institutional and policy-induced biases against the poor (such as discrimination on the basis of gender, ethnicity and religion). Needless to say, removal of various anti-poor institutional barriers and policy-induced biases may actually enhance efficiency in addition to increasing equity. Also, implementation of social policies focusing on education, health and other basic services will simultaneously promote equity and raise productivity and overall efficiency in the economy (Kakwani and Pernia, 2000).

For the question that why has poverty spread in Sudan? The studies and literature available in this respect provided many explanations; however, there are a number of explanations for the expansion of poverty in Sudan in the 1970s, 1980s and 1990s. Ali (1994) attributed it mainly to the adoption of structural adjustment in the 1978-1986 period. Other scholars mention the bad performance of the economy, further aggravated by unfavorable climatic conditions, drought and desertification, which severely affected agricultural production in the 1980s (Mahran, 2006).

(Khan, 2005) argued that, agriculture in Sudan is currently suffering from low productivity, low yield and institutional problems. Also, the deterioration of Sudanese export competitiveness and terms of trade has hit the rural poor hard in terms of income and employment. The most important factors have been summarized by (Ahmed et al., 2004); fluctuating weather; deteriorating health services and conditions; market inaccessibility or distortions; fluctuating prices and volumes with regard to what the poor produce or own; lack of investment in critical infrastructural services in rural areas; national economic, monetary and fiscal policies that discriminate against the poor on the basis of gender, religion, race or ethnicity; political instability and civil strife; corruption of politicians and a rent-seeking bureaucracy that wastes scarce resources; a rapidly growing population with

an increasing dependency ratio; external shocks relating to bad terms of trade; falling export values and a rising import bill; and severely mounting external indebtedness and debt burden indicators.

While Ali (1994), summarized by Suliman (2005), carried out a study to measure poverty in Sudan using the Head Count Index for the period 1968-1992. Ali gave figures for rural and urban areas as well as for the whole country. Rural figures amounted to 62.9%, 64.2%, 83.1% and 93.2% for the years 1968, 1978, 1986 and 1992, respectively. Figures for urban areas were much lower: 15.9%, 20.5%, 52.9% and 84.4% for the same years. Figures for the whole country showed an increasing trend in the same period, that poverty was spreading and becoming a serious problem, with ratios of 51.6%, 54.3%, 77.8% and 91.4% for the years 1968, 1978, 1986 and 1992. Ali also showed that poverty in Sudan was accentuated by the rising trend of inflationary rates in the same period, and argued that poverty was highly sensitive to real per capita consumption. He calculated the elasticity of the headcount ratio with respect to per capita consumption in the period 1968-1999 and for the 1990s. Elasticity for the 1990s was -1.2%, indicating a direct relation between growth in consumption per capita generated by an increase in real income or net gains in real consumption through a reduction in the cost of consumption and a reduction in the headcount ratio.

3.6. Public Finance: Revenue-Expenditure Nexus

In 1992 Sudan adopted the federal system, thereby creating three main levels of governance: the federal government, the states, and localities. Below the central government, the structure of the federal system in Sudan currently consists of 26 states (16 in the northern part and 10 in the south), and some 500 local communities, (World Bank, 2003: 63-64). The 1998 Constitution spells out the division of responsibilities among the three tiers of government.

1. For the localities: preschool and primary education, supply and management of primary health care, and environmental sanitation (garbage collection and sewerage management).

2. For the state governments: responsibilities include providing secondary education and purchase and distribution of school textbooks to all pupils;

health care at hospitals and dental care units; construction, operation and maintenance of small water schemes; and agricultural development.

3. For the federal government: in addition to traditional functions at the national level such as defense, foreign relations, monetary, fiscal and exchange rate policies, responsibilities include transport and communication, energy and mining; higher education, planning and education policy, monitoring education quality and providing transfers to the poorer states to finance schooling; education and posting of high-level of medical personnel; water policy and large-scale federally owned irrigation projects.

3.7. Federal Government Budget

As already mentioned, 1992 is a watershed, separating two policy regimes. To examine the nature of fiscal balance and the change in the fiscal-policy stance, we examine the development of the federal budget over the period 1980-2002, which straddles 1992. Within the overall guidance of the SAPs adopted and implemented in the 1990s, the 1992 fiscal year served as a base for the NCS (1992-2002).

Three-Year Economic Salvation Programmes (ESPs) were consecutively adopted during the NCS: The first ESP covered 1990/91-1992/93, the second spanned 1996-1998, and the third was implemented during 1999-2001. The NCS aimed initially at achieving a balanced budget but further making a surplus to finance productive projects and activities. As we see from Table 4.1the budget deficit continued for the entire period of the NCS, although it was drastically cut from 8.4 per cent of GDP in 1991 to 3.6 per cent in 1992, and was actually below 2 per cent for most of the decade 1993-2002. The objective of turning the budget deficit into a surplus proved too difficult to be fully achieved. According to the data presented in table (2.10), government revenue for the period 1980-1991 averaged 11.6 per cent of the GDP and dropped to 8.9 per cent of the GDP for the period 1992-2002. Overall, government revenue amounted to an average of 10.2 per cent for the whole period 1980-2002. By contrast, government expenditure as a ratio to GDP scored an average of 19.4 per cent for the period 1980-1991 and dropped sharply to an average of 11 per cent of GDP during the period 1992-2002. Government expenditure was thus slashed by almost one half after 1992, thanks to the implementation of self-imposed SAPs. It is no

exaggeration to say that the post 1992 fiscal stance involves very draconian measures. The fact that such a drastic cut in government expenditure was brought about mainly by reducing government spending on social sectors, as well as on new productive projects, is highly significant from a growth-poverty perspective. But at the same time, as a result of this retrenchment there was a significant reduction in the fiscal deficit, which has definitely contributed to bringing down the rate of inflation, reduction in the rate of inflation is beneficial to the poor. This may have been the positive side of the fiscal retrenchment coin. But at the same time, detailed examination of the changes in the composition of government revenue and expenditure over the period is necessary for ascertaining the true nature of the impact of this fiscal stance on the poor. For this purpose, we deal with the composition of government revenue and expenditure over the period 1980- 2002 and the nature of the changes that took place around 1992

Table (3.4) Federal Government Budget and Decomposed Revenue (% of GDP) 1980-2002

ITEM/ YEAR	Expenditure (% of GDP)	Revenue (% of GDP)	Budget Deficit(% of GDP)	Tax Revenue (% of GDP)	Non-Tax Revenue(% of GDP)	Direct Tax (% of GDP)	Indirect Tax(% of GDP)
1980	21.7	15.9	5.80	10.8	5.00	2.4	8.2
1981	25.8	15.3	10.5	11.5	3.70	2.2	9.4
1983	24.7	16.3	8.40	12.9	3.40	2.9	10.1
1984	27.9	13.7	14.3	11.8	2.10	2.6	9.2
1985	17.5	14.3	8.80	6.80	0.90	1.5	5.3
1986	18.4	9.2	9.20	5.60	2.40	1.5	4.1
1987	19.7	9.9	9.70	5.60	2.30	1.4	4.2
1988	18.9	8.5	10.4	6.20	1.30	1.5	5.5
1989	13.8	8.5	5.20	7.90	0.90	1.7	5.9
1990	9.5	8.6	0.90	5.50	3.60	1.3	3.7
1991	15.9	7.6	8.40	5.30	2.30	1.1	4.2
1992	13.3	9.7	3.60	6.00	2.50	2.3	3.9
1993	10.1	7.5	2.60	5.90	1.60	2.3	3.5
1994	13.6	12.0	1.60	8.80	3.20	3.5	5.2
1995	9.1	4.9	4.20	4.00	0.90	1.6	2.5
1996	8.9	6.8	2.10	5.90	1.70	2.3	3.5
1997	8.0	6.8	1.20	5.20	1.60	1.4	3.8
1998	8.8	7.9	0.90	5.80	2.20	1.6	4.3
1999	9.3	8.3	1.00	6.30	2.10	1.5	4.8
2000	11.9	11.2	0.70	5.40	5.80	1.3	4.1
2001	12.4	10.8	1.60	5.50	5.20	1.2	4.4
2002	25.9	12.3	3.60	5.60	6.70	1.1	4.5

Source: Babiker, Bell and Medani (2004).

Table (3.4) also includes information on tax and non-tax revenue, as well as direct and indirect taxes, as per cent ratios of GDP. It is remarkable to note that tax revenue proved inelastic with respect to economic growth in the Sudan; the ratio of tax revenue to GDP has been consistently falling since the mid-1980s. For example, tax revenue as a ratio of GDP averaged 8.2 per cent during the sub- period 1980-1991 and dropped to 5.8 per cent average for the period 1992-2002. According to stylized facts, these ratios are much lower compared to those of the LDCs (18 per cent of GDP), not to speak of the industrialized countries' ratio of (38 per cent of GDP). It is important to mention that, until the advent of oil, taxes have continued to be the main sources of federal government revenue; with an average of 76%.
On the other hand, the non-tax revenue as ratio of federal government revenue amounted to 21.5 per cent and 28 per cent for the periods 1981-1991 (before 1992) and 1992-2002 (after 1992) respectively. In fact, non-tax revenue became the dominant source of federal government revenue during 2000-2002. The advent of oil explains the rise in the share of non-tax revenue in total federal government revenue in the latter part of the post-1992 period.

But as Babiker, Bell and Medani (2004) reported that, tax revenue has also been falling as a proportion of total revenue, particularly during 2000-2002. For those years, the ratio of non-tax revenue surpassed the ratio of tax revenue in total federal revenue, thanks to oil revenue, which appeared as an important factor in the fiscal equation of the Sudan. They argued that, the tax effort is considerably below potential; a sizable part of tax capacity in Sudan is being increasingly wasted.. There is an opportunity for a more pro-active role by having the government spend more in proportion to GDP, without fearing the prospects of rising and unsustainable fiscal deficit. In their reported Babiker, Bell and Medani (2004) remarked another feature from a poverty reduction standpoint over the period 1980-2002. Indirect taxes were a major source of generating tax revenue in the Sudan for the entire period 1980-2002. In relation to total government revenue, indirect taxes remained the dominant source until the advent of oil in 2000. For example, the share of indirect taxes in total government revenue reached on average 58% and 41.5% for the periods before and after 1992 respectively. For the period before 1992 the share of indirect taxes in total revenue was higher than the period 1992-2002 indicating that more sources of revenue

were added in the 1990s, as well as the fact that the federal government started to rely more on direct taxes. The share of direct taxes in the total government revenue was 16.7% and 22.5% for the periods 1981-1991 and 1992-2002, respectively. On the other hand, indirect taxes averaged 6.3 per cent of GDP during 1980-1991 and dropped to 4 per cent during the period 1992 2002, whereas the ratio of the direct taxes to GDP was much lower, averaging 1.8 per cent for the whole period 1980-2002.

3.7.1. Government Expenditure

The data on government expenditure presented in the table above indicates clearly that there is a general decline of total expenditure as ratio of the GDP starting from fiscal year 1980/81. This has been influenced by the implementation of stabilization and adjustment programmes, which focused on reducing government spending. In order to examine the impact of fiscal policy on the poor through the expenditure instrument, decomposition of total government expenditure by functional classification is needed. But such classification is not consistently available for the entire period 1990-2002, since the beginning of the 1990s the functional classification of expenditure in the federal budget has been discontinued and aggregate allocations of spending are grouped in four chapters as follows:

Chapter I**:** This aggregate expenditure category consists of wages and salaries for all federal employees. Also included the central government contributions to the pension fund and central government contributions to the social security fund. Allocations to this category indicate the extent of involvement of the federal government in the provision of jobs in the economy. It is worth noting that during the decades of the 1970s and 1980s wages and salaries offered to government employees were high enough to protect them from falling under the poverty line. However, in the 1990s, those wages and salaries fell steadily in real terms as a result of runaway inflation – a situation that forced most of the employees to seek part time jobs to escape poverty. Primary and secondary education teachers, medical staff for all health units, except specialized hospitals, and water supply employees are not paid under this chapter of the federal budget. Since they are considered states responsibilities, they are included under Chapter I of state spending. It should be noted that wages and salaries for armed forces do

not appear in Chapter I. As already mentioned before, they are actually an off-budget item.

Chapter II**:** This expenditure category consists of goods and services purchased for governmental units. In addition, it includes social subsidies that directly benefit the poor, which are mainly directed to subsidizing electricity, free medication in emergencies, free medicines for kidney dialysis and heart disease, and support to poor students in higher education. Also included here are centralized obligations, which include internal debt, external debt, travel abroad, subscription in international organization, custom duties for government units, pipeline fees, training, replacement of equipment and emergency reserves.

Chapter III**:** This expenditure category consists of current and development transfers to states, as well as agriculture tax compensation for states through the Federal Rule Chamber (FRC). These transfers are called Central Grant-in-Aid to the States. At the time the states prepare their budgets (including revenue and expenditure estimates), the federal government finances their deficits through these transfers. They are strictly unconditional transfers, and the states are not required by law to report details of their spending to the federal Ministry of Finance and National Economy. It is important to mention that these transfers are a significant means by which the government redistributes resources and income in favor of poor people and regions. Benefits accruing from these transfers in terms of enhancing social, human and economic development are much higher compared to their negative effect on resource allocation between private and public sectors.

Chapter IV**:** This expenditure category consists of national development expenditure, transfers of development funds to states, capital contributions in government projects financed by foreign loans and financing of agriculture. Allocations in this chapter for development are directed to maintain and sustain the functioning of existing projects. Contributions in capital in late 1990s became significant as the government started to undertake some serious investments in oil sector projects.

3.7.2. Structure of Federal Expenditure, 1981/82-1991/92

According to the data presented in Babiker, Bell and Medani (2004) (Table 4), total debt service topped all expenditure items averaging 17.8% of GDP for the period 1978-1988, followed by military and defense spending averaging 15.2%. Expenditure on social services claimed a meager 4.0% of

total expenditure, out of which spending on education and health was the lowest, with ratios averaging 1.2% and 1.9% respectively. As already mentioned before, this puts Sudan far behind comparable nations in the developing world, and even behind SSA countries for spending on education and health, which is generally thought to directly benefit the poor and to generate benefits for society and the economy at large. This indicates how inappropriate this pattern of government expenditure is for social and human development in Sudan. By all accounts, pro-poor spending has been very limited and small since the beginning of the 1980s and upwards. Even more disconcerting, allocations for social expenditure have been treated as balancing items. Despite the big increase in total government expenditure in 1984/85-1985/86, the share of expenditure on education, health and other social services fell drastically during those two years. For example, the share of expenditure on health dropped from 1.9 per cent in 1983/84 to 0.5 per cent and 0.3 per cent in 1984/85 and 1985/86 respectively. The share of expenditure on education fell from 1.3 per cent to 0.8 per cent and 0.5 per cent between the same years. (Babiker, Bell and Medani (2004), Table 4).

3.7.3. Structure of Federal Expenditure, 1992/93-2001/02

Unfortunately, expenditure data available for this period are classified by chapter, not functionally, as already mentioned. According to data in table (2.10) below**,** Chapter I on average accounted for 26.4%; Chapter II, 52.4%; Chapter III, 10.3%; and Chapter IV 10.9% of total central government expenditure for he period 1992-2002. It is clear from these figures that direct transfers to the states (Chapter III) claimed the smallest share of total government spending. Fewer resources have actually been transferred to support states to cope with their rising obligations to provide essential social services (education, health, water and sanitation). As an integral part of its effort to eradicate poverty in the country, the government should allocate more resources to the states.

Table (3.5): Allocation of Federal Expenditure by Chapters, 1992-2002

Year	Chapter I	Chapter II	Chapter II	Chapter IV	Total
1992/93	2.6	66.3	25.7	5.4	100
1993/94	8.6	73.9	15.2	2.3	100
1994/95	14.6	72.0	11.6	1.8	100
1996	31.8	45.6	14.0	8.6	100
1997	36.0	52.0	4.0	8.0	100
1998	37.7	46.4	5.6	10.3	100
1999	38.8	42.6	5.6	13.0	100
2000	31.2	45.6	8.4	14.8	100
2001	31.0	45.0	6.0	18.0	100
2002	31.8	34.6	6.4	27.2	100
Average	**26.4**	**52.4**	**10.3**	**10.9**	**100**

Source: Babiker, Bell and Medani (2004), Table 2.5

Table **(**3.5**)** shows that allocations for development expenditure and contributions to the capital of productive projects were rather modest about 10.9% of total federal expenditure for the 1990s. In relative terms, development expenditure sustained a decline during the 1990s; according to available evidence, it did not exceed 1.9% of GDP for most of the 1990s, whereas during the 1980s it averaged 3.8% (Babiker, Bell and Medani (2004), Table 2.6).

From a developmental poverty-reduction perspective, the small share of Chapter IV in total spending highlights the strong need to allocate more funding for broadening the productive base in the economy. Of particular importance is the need for investment in a large number of labour-intensive projects in the productive sectors of the economy, which provides critically needed jobs for the poor. The creation of employment opportunities will reduce the number of the poor, strengthen aggregate demand and induce investment, and thereby enhance the rate of growth of GDP. In Sudan, development expenditure has too often been treated as budget-balancer or as a residual item – reduced or eliminated in order to balance the budget on an annual basis (Babiker, Bell and Medani (2004)). It is generally agreed that infrastructure investments (airports, roads, water and power, and other core infrastructure services) are important ingredients to a modern productive economy. It was demonstrated that infrastructure was a major constraint of the growth of the two main productive sectors in the Sudanese economy – namely agriculture and industry. In addition, public infrastructure investments increase output by providing services that are a direct input into

the production process and which create an enabling environment, making other private resources (labor and capital) more productive. Finally, infrastructure investments that provide a high-level of service may attract labor and private capital from other places (Bell and McGuire, 1997). Development expenditure has intrinsic value and should not be treated as a budget-balancing category. For Sudan, public investment in this critical area crowds in private investment, not the reverse. Babiker, Bell and Medani (2004) continued to claim the biggest share of total government expenditure which accounted 52.4% for the 1990s on average – reaching 66.3%, 73.9% and 72% for the fiscal years 1992/93, 1993/94 and 1994/95 respectively. This reflects the significance that the federal government attaches to spending on centralized and steering items. Its relative share, however, has declined since 1996, as the relative shares of expenditure increased.

The classification of expenditure by chapters indicated clearly that Chapter II accounts for the largest share of government spending. As mentioned earlier, categorizing expenditure by chapter does not provide sufficient information to determine the impact of government spending on poverty alleviation. One effort to move toward a functional classification of spending is provided by the World Bank (2003, Vol. II). In table A.6.7 of Appendix 6, the World Bank provides economic classification of federal expenditure as a per cent of total expenditure for four years 1998-2001. The data in that table indicate that the government wage bill accounted for about one third of total federal expenditure for 1998- 2001.

On the other hand, operation and maintenance accounted for the highest ratio of total spending, averaging 35.1% of total for 1998-2001. Development expenditure accounted for 7.8%, 12.1%, 16.7% and 16.8% for the same years, with an overall average of 13.4% for the period 1998-2001, ranking third in importance. In addition, debt service payments, ranked fourth in importance, with ratios of 8.6%, 8.9%, 9.9%, and 7.9% for the years 1998, 1999, 2000 and 2001 respectively, with an overall average of 8.8% for the same period. Furthermore, transfers to states (Sobahi (2004)) ranked fifth in significance with ratios of 5.3%, 5.6%, 5.7%.and 8.2% for the same years, with an overall average of 6.2%. Finally, social subsidies (Suliman (2004)) accounted for 5.2%, 3.5%, 2.5% and 3.9% of total government expenditure for the years 1998, 1999, 2000, and 2001 respectively, with an average of

3.8% The above figures demonstrate that the federal government in Sudan has been systematically following a pattern of spending that is not beneficial to the poor. Spending on administration and debt service payments claimed the lion's share of government expenditure, whereas social subsidies that directly benefit the poor, for example, received a very modest share (3.8%) of total spending during 1998-2001. Additional insights into the composition of central government spending by function can be taken from data prepared by the Ministry of Finance and National Economy. They provided three years of data on actual expenditure in Chapters 1, 2 and 4 by functional classification. As clearly explained in Babiker, Bell and Medani (2004), such data corroborate our conclusion that the central government has been systematically allocating only limited shares of its budget to social services such as education and health. For example, during the three most recent years for which actual spending data are available (2001-2003), the central government allocated an average of 6.3 per cent of total expenditure for social services (education 4.4 per cent, health 1.6 per cent, and water 0.3 per cent). Transfers to states accounted for an average of 8.8 per cent of government spending during this period, and state administration accounted for an average of 5.4 per cent. On the other hand, defense and security activities accounted for an average of 23.8 per cent of government spending during this period, while external and internal debt service accounted for 9 per cent. Infrastructure expenditure averaged 9.9 per cent, as shown in table (3.11):

Table (3.6): Federal Expenditure by Functional Classification, 2001-2003

Year/Item	**2001**	**2002**	**2003**
Wages and salaries	24.80%	26.00%	22.30%
Goods and services	11.40%	10.00%	8.50%
Social Subsidies	3.90%	4.10%	2.80%
Development	15.00%	22.40%	22.50%
Total	**55.10**%	**62.50**%	**56.10**%
Miscellaneous	**44.70**%	**37.30**%	**43.50**%

Source: Ministry of Finance and National Economy.

Miscellaneous expenditure accounts for an unusually high proportion of total expenditure, averaging more than 40%. It includes several items, the most important being a vague category called central obligations. In addition, miscellaneous also includes transfers to states, external debt, reserves for wages and salaries, internal debt, and pensions and social security. Aside

from miscellaneous expenditure, about one quarter of federal government expenditure was allocated to wages and salaries, close to one tenth to goods and services and only a modest 3 per cent to social subsidies.

Table (3.7) Structure of Federal Expenditure, 2003- 2009 in millions SDG:

Year	Chapter I	Chapter II	Chapter II	Chapter IV	Total
2003	1911	3128	489	1852.6	100%
2004	2733	4360	842	3103	100%
2005	3015	3785	4072	2977	100%
2006	3957	4206	3540	6550	100%
2007	4901	4555	3749	6621	100%
Average					**100%**

Source: Central Bureau of Statistic –Sudan- Khartoum.

Table (3.8) the Economic Structure of Sudan 2004 - 2009

	Values in Million SDDGs					
Item/Year	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Total Population in Million	34.4	35.3	36.2	37.1	39.15	40.02
Real GDP Growth Rate (%)	5.1%	5.6%	9.9%	8.1%	7.8%	6.1%
Sector Share (%)						
Agriculture	30.4%	29.3%	28.9%	31.6%	33.2%	34.0%
Industry	28.8%	29.2%	29.2%	23.7%	22.0%	21.4%
Services	40.9%	41.5%	41.9%	44.7%	44.8%	44.6%
General Price Inflation (%)	8.7%	8.3%	7.3%	8.1%	14.9%	11.2%
GDP current prices	68721.4	85707.1	98718.8	114017.5	127746.9	148137.0
Total Consumption	57789.5	77912.2	89086.8	95415.6	102883.7	127302.2
Government Consumption	5862.3	7916.9	9606.5	9635.2	10810.8	12845.5
Private Consumption	53190.2	6999.5	79180.3	85780.5	92073.0	114456.7
Gross Domestic Saving	5591.6	478.1	170.6	10855.4	7977.2	5644.2
National Saving	8492.6	4000.4	2901.3	11626.0	8782.4	9087.6
Total investment	13069.6	16756.3	20793.5	23543.7	24496.6	26957.9
Government Investment	2217.0	2707.1	3050.9	3435.5	4128.2	4215.6
Private Investment	10852.6	14049.3	17742.6	20108.2	20368.4	22742.3

Source: Central Bureau of Statistics, 2009.

The Structure of the Sudanese Economy has shifted over time, from predominantly reliant on agriculture for growth and exports, to its current reliance on the oil sector. There has not been much real structural change in the Sudanese economy as the recent increase in the share of the industrial sector (from about 9 percent during the late 1990s to 27.7 percent during 2004 to 2007). The shift has been to a greater extent attributed to the advent

of the oil sector (12% of GDP alone) since 2000. The emergence of the oil sector adds directly to GDP through increased share of industry compared to the pre-oil period (pre-1999 period). This has also induced growth in the service component of GDP as reflected in fast growth in the construction services which grew by about 10 percent per annum since 1999. The Service Sector has been the fastest growing sector in recent years, surpassing even the growth in the oil sector. Trade, hotels and restaurants have also flourished, mainly in the country's capital (Khartoum) and generated about one-fifth of the GDP during 1996-2006. Notwithstanding these structural shifts, agriculture still remains the main driver of employment especially outside of the country's top urban areas (World Bank DTIS, December 2008). After successful stabilization in the mid-1990s, Sudan has built a strong track record for macroeconomic management best exemplified by high real GDP growth rate of about 8 percent on average, low and stable inflation rate (on average single digit inflation), a steady exchange rate, a sustainable external balance, and moderation of its business cycle. This has been the major achievement by the Government (World Bank Country Economic Memorandum, 2009).

However, the increasing dominance of oil as export commodity presents new challenges to macroeconomic stability. Symptoms of "Dutch Disease" have been evident with the Sudanese Pound appreciating and traditionally strong agricultural export commodities, such as cotton and gum Arabic going into decline. This has been aggravated by the volatility of oil prices which affected fiscal capacity of the Government through reduction in oil revenues particularly following the aftermath of the financial and economic crisis. Sudan has been also impacted by the financial and economic crisis and its aftermath. Sudan's net FDI registered a sharp drop by some USD 500 million by June 2008, partly due to the completion of several major infrastructure projects, as well as net private transfers (mainly remittances) falling by close to USD 800 million compared with 2006. The economic slowdown in the aftermath of the global financial crisis is believed to be the major factor for the further decline in FDI and remittances by another 30-36 percent compared to their respective levels in 2006. The decline in oil revenue in the aftermath of the financial and economic crisis has also impacted Sudan through a decline in oil prices and hence oil revenue. A recent IMF report ranked Sudan as one of the most vulnerable low income

countries to the global financial crisis due to its high vulnerability to shocks transmitted through trade (drop in oil prices), aid and remittances (IMF adjusted 2009 GDP growth projections for Sudan downwards by 6.7 percent, representing the fourth largest adjustment of the 71 low income countries assessed).

Notwithstanding these developments, past growth has not sufficiently been broad-based. Investments and services have been concentrated in and around Khartoum state and to a lesser extent in Juba, the capital of Southern Sudan. The significant development disparities between urban and rural areas and between regions contributed to growing inequalities and an increasing urban informal sector accounting for more than 60 percent of GDP. This state of affairs has aggravated migration from rural to urban centers that is believed to have weakened agricultural productivity and deepen poverty in both urban and rural areas. Overall per capita income of the Sudan increased from US$ 777 in 2004 to US$ 1,454 in 2009. However; the distribution of the income reflects regional disparities and imbalance. The achievement of macroeconomic stability is reflection of sound macroeconomic policies pursued by the Government in containing inflation (single digit inflation during the period 2004-2007). Due to the inflationary effects that engulfed the world in 2008 and 2009 the inflation rate in Sudan reached double digits at 14.9% and 11.2% in 2008 and 2009 respectively. The drivers of inflation were the food and energy sectors. The Ministry of Finance and National Economy in collaboration with the Central Bank of Sudan tightened fiscal and monetary policies to combat the rising inflation rates. The current account recorded fluctuating deficits due to increased imports as a result of foreign investment expansion and the decline in oil prices brought about by the slowdown in the global economy following the aftermath of the financial and economic crisis which reached its peak towards the end of 2008 (Ministry of Finance & National Economy and CBS, 2009). Sudan's national investment as a ratio to GDP increased from 18.4% in 2004 to 19.3% in 2009. Sudan's foreign direct investment (FDI) increased to reach 10 billion US$ in 2009. This growth reflects the improvement in foreign direct investment largely driven by the oil and the telecommunications and the financial sectors and policies pursued to attract investors in the respective areas.

3.8. Public Expenditure on Health and Education in Sudan

According to Sudan Public Expenditure Review (SPER, 2007), the document summarizes a comprehensive picture of federal and northern states' spending on health, which has grown sharply but was still only 1.4 percent of GDP in 2005. The bulk occurs at the state level, consistent with the fact that the primary responsibility for basic service delivery lies with state governments. Thus the growth is driven by rising federal transfers to Northern states, though the growth in health spending has been lower (39 percent annual growth in 2005 relative to 155 percent for total state transfers). A major concern is the extremely low level of investment spending in the health sector, with over 95 percent going for current expenditure. In 2005, development spending rose to 9.3 percent of health expenditure, but from negligible levels in both absolute and relative terms. However, assessing the appropriate balance between recurrent and capital expenditures will require more detailed sector-specific analysis than is currently available.

Table (3.9): Federal and Northern States Health Spending in Sudan 2000-2005

	2000	2001	2002	2003	2004	2005
	SDD billions					
Total Health Expenditure	**23.2**	**32.5**	**37.9**	**49.1**	**75.2**	**98.4**
Current spending	21.7	30.5	37.2	47.7	71.7	21.7
Development spending	1.5	2.0	0.7	1.4	3.5	1.5
Federal Expenditure	**7.1**	**9.0**	**8.8**	**11.7**	**20.8**	**7.1**
Current spending	6.0	7.3	8.7	11.3	18.8	6.0
Development spending	1.1	1.7	0.1	0.4	2.0	1.1
State Expenditure	**16.1**	**23.5**	**29.1**	**37.4**	**54.3**	**16.1**
Current spending	15.7	23.2	28.5	36.4	52.9	15.7
Development spending	0.4	0.3	0.6	1.0	1.5	0.4
Breakdown of total health expenditure (%)						
Current spending	93.5	93.7	98.1	97.2	95.4	93.5
Development spending	6.5	6.3	1.9	2.8	4.6	6.5
Breakdown of federal health expenditure (%)						
Current spending	84.1	80.7	98.9	96.5	90.4	84.1
Development spending	15.9	19.3	1.1	3.5	9.6	15.9
Breakdown of northern states health expenditure (%)						
Current spending	97.7	98.7	97.9	97.4	97.3	97.7
Development spending	2.3	1.3	2.1	2.6	2.7	2.3

Source: State Final Accounts Annual Reports, MOFNE. Note: total health expenditures exclude the GOSS.

Commenting on the weak links that several studies have found between public spending on health and health status, the authors argue, "…changes in the price or availability of government interventions may induce a private supply response that can mitigate any actual impact on health outcomes." Thus, if an increase in public spending on health "crowds out" private sector provision of such services then the likely impact of an additional unit of public spending on health status may be minimal. While this could be a plausible reason affecting the efficacy of public spending, efficiency gains can be achieved when the subsidies produce external benefits or correct for a market failure. Equity is also an important objective of public spending. Education and health care, in particular, are understood to be basic services that are essential in any fight against poverty. The World Bank's strategy for poverty reduction, for example, combines broad-based growth with human

capital development (World Bank, 1990). As we shown the comprehensive picture of federal and Northern states' spending on health, Table (10) shows that the federal and Northern state allocations on education. The trend and composition is broadly similar to health, albeit with more modest growth and slightly higher state and recurrent shares. Total education spending was 1.3 percent of GDP in 2005. Over the period 2000-2005, education averaged 4 percent of federal and 23 percent of state expenditure. As in the health sector, increases in state-level spending have been almost entirely absorbed by salaries, however, as mentioned with health spending, more detailed sector work is required to assess the right recurrent/development balance. Capital investment (i.e., school construction) is possibly necessary but certainly not sufficient to improve education services. Improved teacher remuneration, as well as public financing of other recurrent costs (particularly textbooks) will be vital to reduce the financial burden on households among the poor and in under-served rural areas. In states and cities where enrolment is relatively high, investment in quality improvement would appear necessary.

Table (3.10): Federal and Northern States Education Spending in Sudan, 2000-2005

	2000	**2001**	**2002**	**2003**	**2004**	**2005**
	SDD billions					
Total Education Expenditure	32.7	37.3	53.8	58.9	91.4	32.7
Current spending	32.0	36.3	44.8	57.3	85.2	32.0
Development spending	0.7	1.0	9.1	1.7	6.3	0.7
Federal Expenditure	14.3	17.0	21.7	29.1	40.7	14.3
Current spending	13.8	16.2	21.6	27.8	36.3	13.8
Development spending	0.5	0.8	0.1	1.3	4.4	0.5
State Expenditure	18.4	20.3	32.1	29.8	50.8	18.4
Current spending	18.2	20.1	23.1	29.4	48.9	18.2
Development spending	0.2	0.2	9.0	0.4	1.9	0.2
Breakdown of Total Education Expenditure (%)						
Current spending	97.9	97.2	83.2	97.1	93.1	97.9
Development spending	2.1	2.8	16.8	2.9	6.9	2.1
Breakdown of Federal Education Expenditure (%)						
Current spending	96.6	95.0	99.8	95.4	89.2	96.6
Development spending	3.4	5.0	0.2	4.6	10.8	3.4
Breakdown of Northern Sstate health expenditure (%)						
Current spending	99.0	99.1	72.0	98.8	96.3	99.0
Development spending	1.0	0.9	28.0	1.2	3.7	1.0

Source: State Final Accounts Annual Reports, MOFNE. Note: total health expenditures exclude the GOSS.

In the instance, the recent North Kordofan Basic Services Study demonstrates some early work in this direction. The Federal and State

Ministries of Health and the World Bank undertook a study in 2006 of the financing of basic health services at the local level in North Kordofan. Financial data were collected from the State and Locality administrations, a facility survey measured service quality and utilization indicators, and focus groups revealed patient perceptions. The main finding of this study is that:

1. Most state/locality public spending on health is for salaries, with negligible investment spending. Health services in the state, including primary health care and hospital services, are largely the responsibility of the state and localities. Total estimated government spending on these services in 2005 was around SDD 2,400 million, or $10 million. This represented about SDD 1,500 per capita, or $6.20. Of this, about $4.00 was spent by the state government and USD 2.20 by localities, mostly on salaries financed by transfers from the State. It is estimated that 60 percent of public spending on health is for salaries. Investment spending is negligible. This health spending, although steady as a proportion of total government spending, is considerably increased from previous years in line with the overall growth in public spending, linked to increased federal transfers to the state. In 2003, for example, state government health spending was SDD 700 million, about half the 2005 figure.

2. Higher spending is correlated with higher levels of service utilization. Estimated public spending on non-hospital services varies considerably by locality and is well-correlated with utilization rates. Without accounting for possible confounding factors such as differing levels of socio-economic status between localities, utilization increases by 0.05 patients per capita annually with each increase in spending on non-hospital services of SDD 10. Utilization is similarly well-correlated with numbers of health workers, and this.

3. Spending is concentrated on urban health services in hospitals. About two-thirds of government health spending in the state is allocated to the 14 hospitals, concentrated in urban areas, in particular the state capital. Seventy percent of spending on hospitals services is for salaries. Non-hospital basic services receive only about a third of public spending on health in the state, and of this about 40 percent is for staff remuneration.

4. Facilities rely on cost recovery for significant financing. Official user fees are a significant revenue source for the financing of basic health services, representing about a fifth of total expenditures. In addition, many fees retained by health facilities are not included in revenue reports, but certainly

represent a significant source of financing, likely covering most non-salary recurrent costs. By policy, most drug costs are borne by patients. As would be expected, higher fees are charged in higher-level facilities staffed by more skilled personnel. The reported cost to patients of treatment for an episode of malaria ranged from SDD 500 ($2.20) in primary health care (PHC) units to SDD 870 ($3.80) in hospitals. Public spending on education and health care and the MDGs government expenditure policy will have a key role in determining whether countries meet the MDGs. In many countries, the government will have a central role in ensuring that its citizens, especially the poor, have access to education and health services by either providing these services itself or financing private sector provision. As such, it is critical to understand the link between government spending on these programs and performance on indicators that measure the health and education status of the population. Of special interest is how government spending affects the achievement of the social and human development indicators that have been selected to monitor progress toward the achievement of the MDGs.

Public health spending can also have a positive effect on health status.Public outlays on health care are positively correlated with life expectancy at birth and negatively correlated with malnutrition rates. However, the majority of econometric studies find that per capita income is a much more important determinant of health outcomes than health spending. Nonetheless, many of these studies have focused on the nexus between total public spending on health care and the health status of the population as a whole. Pritchett and Summers (1996), following Preston (1975), supported the view that, other things being equal, the level of income has a positive impact on health. The mechanism through which this association works is straightforward. Income directly affects health through its influences on individuals' consumption of commodities. Pritchett and Summers, found that "wealthier is healthier" and that higher income causally lowers infant mortality. Since the poor are more likely to utilize public health services, a more useful approach would be to assess the impact of government health spending on the indicators measuring the health status of the poor. Recent research along these lines confirms that government spending has a salutary effect on the poor's health status, underscoring the potential role of higher outlays in helping countries meet the MDGs. Increased public expenditures for improved water supplies and

sanitation would also help improve health indicators, as well as those relating to environmental sustainability.

3.9. Summary

In this chapter literature review on public expenditure policies on social services in Sudan was reviewed, the Sudan macroeconomic policies and macroeconomic performance during the period 1980- 2009 was discussed. Furthermore, poverty and inequality and growth-poverty nexus in Sudan was discussed in some details. In addition to that, public finance: revenue-expenditure nexus and federal government budget was discussed respectively. Finally, empirical literature on public expenditure on health and education in Sudan was reviewed.