CHAPTER FOUR

SOCIAL DEVELOPMENT IN SUDAN

4. 1. Introduction

The aim of this chapter is to survey the empirical literature and material evidence on the status of social development indicators in Sudan. Generally, the concept of social development is broader than the concept of human development. While the human development focuses on the well-being of individuals solely, the social development views the level of individuals in relation to their social development. It is concerned not only with the expansion of basic human capabilities but also with the level of social infrastructure, the nature of social institutions, the process of social change, and the like. Followed to this introduction, the rest of the chapter organized as follows: In section (4.2) we discuss the expenditure on social services, especially, health and education in Sudan. While in section (4.3) we provide more details on the health and social development in Sudan. In this section we give brief background of health status, the effects of structural adjustment programs on health sector and the then the health system in term of organization and finance. In section (4.4) we present the education and social development in Sudan, by describing educational policies. In section (4.5) we conclude the chapter.

4.2. Expenditure on Social Services in Sudan

According to (Babiker, Bell and Medani, 2004), social development indicators in Sudan placed behind its colleagues in the low-income and even the SSA group of countries. This should not be surprising, as in relative terms, Sudan allocates to social spending on education and health barely 25 per cent of what other low-income countries, as well as SSA and MENA countries, generally spend. While the government of Sudan has subscribed to and approved the Millennium Development Goals (MDGs) as a guide to social development in the country, progress in this respect has been slow. The reasons for this basically relate to the way economic stabilization was achieved in the latter half of the 1990s, particularly the severe retrenchment in expenditure on the social sectors, from table (4.1) below we can see the federal and state expenditure on social services in Sudan during the period (2000 – 2002)

Table (4.1): Total Federal and State Expenditure on Social Services in Sudan (2000 - 2002)

Year	**2000**	**2001**	**2002**
GDP Current Price (Billion)	2892	3371	3839
Education Sector (Billion)	**28.00**	**35.70**	**42.10**
Federal (Million)	1337	1736	2026
States (Million)	26654	33927	40116
Health Sector (Billion)	**12.60**	**18.30**	**21.20**
Federal (Million)	6228	8372	8556
States (Million)	6520	10017	12617
Water Sector (Billion)	**3.90**	**8.30**	**13.50**
Federal (Million)	210	907	183
States (Million)	3699	7441	13339
Total Social Services Expenditure (Billion)	**44.50**	**62.30**	**76.80**
Social Exp .% GDP	1.54	1.85	2.00
Education % GDP	0.97	1.06	1.10
Health %GDP	0.44	0.54	0.55
Water % GDP	0.14	0.25	0.35

Source: Data provided by Federal Ministry of Finance and National Development, Govt. of Sudan. Social Services include Education, Health and Drinking Water

Lack of significant progress with respect to health is due to the extremely low level of public spending on health. Spending on health amounts to 0.7 per cent of GDP, which implies a per capita health spending of less than $3 equivalent per month, as compared to the minimum required per capita per month of $10 equivalent (IPRSP, 2004). This has led to poor coverage of the health system, with poor capacity for delivery at all levels in the health system, but particularly the deterioration of primary health centers in rural areas where shortages of drugs, doctors and nurses are chronic. As in health, progress in education has been held back by low levels of public spending, which averages no more than 1 per cent of GDP, which has in effect meant physical deterioration of educational facilities, and limited geographical spread especially in a country like Sudan. This was aggravated by significant waves of brain drain to Gulf countries, as teacher salaries at home failed to keep pace with market conditions, thereby affecting the quality of teachers and ability of the system to retain qualified teachers. Teacher training also fell behind, resulting in deterioration in the quality of teachers. By some estimates, 50 per cent of primary school teachers are unqualified. Overcrowded classrooms and untrained teachers resulted in poor education (IPRSP, 2004). Table (4.2) reveals some social indicators in Sudan and millennium development goals target levels by 2015.

Table (4.2) Some Social Indicators and MDGs for Sudan

	Current Situation 2008	MDG Target: 2015
Health Indicators		
Under 5 mortality rate	104	45
Urban	101	39
Rural	105	48
Infant Mortality	68	25
Urban	67	24
Rural	68	26
Maternal Mortality Ratio	509	134
Urban	496	N/A
Rural	514	N/A
Education Indicators		
Gross Enrolment Ratio in Primary Education- Total	59.8	100
Males	61.8	100
Females	57.7	100
Gross Enrolment Ratio in Primary Education- Urban	78.1	100
Males	78.9	100
Females	77.3	100
Gross Enrolment Ratio in Primary Education- Rural	49.7	100
Males	52.6	100
Females	46.8	100

Source: IPRSR/Draft, Dec03/Jan04.

The Millennium Development Goals adopted by member states of the United Nations in September 2000 are evidence of an international consensus regarding human development: five of the eight goals relate to education or health. Recent research that links education and health suggests novel ways to enhance development policy by taking advantage of the ways in which the two interact.

However, development is a complex process involving multiple interactions among different components. In addition to health and education, the most important drivers of development include governance and other political factors, geography and climate, cultural and historical legacies, a careful openness to trade and foreign investment, labor policies that promote productive employment, good macroeconomic management, some protection against the effects of environmental shocks, overall economic orientation, and the actions of other countries and international organizations (World Bank, 1993). The interactions among these factors carry important

implications for our understanding of the development process as well as for policy. It is now clear that increased access to education, although of great importance, is by itself no magic bullet. Its positive effects on development may be limited by a lack of job opportunities that require high-level skills and therefore enable people to use education to their economic advantage. Better education and better health are important goals in themselves. Each can improve an individual's quality of life and his or her impact on others. There is an extensive literature on the importance of education and health as indicators and as instruments of human development (Sen, 1999). Education is recognized as a basic human right, and better education improves people's welfare. As an instrument of development, education fosters and enhances work skills and life skills such as confidence and sociability. These skills in individuals promote economic growth on a societal level via increased productivity and, potentially, better governance (Hannum and Buchmann, 2006).

Good health not only promotes human development, it also allows people to attend work regularly, to be productive at work, and to work for more years. Healthy individuals also contribute to the good health of those around them because they do not spread infection, and they have the physical and mental strength to look after others. Robust health can often serve as a platform for progress in other areas, given a suitable policy environment. Good health can also alter the population growth rate in ways that promote development.

4.3. Health and Social Development in Sudan

Sudan Country Strategy Note 1992-2002 (CSN) outlines the national health policies. The CSN recognizes the welfare of people as the ultimate goal of all development. Furthermore, it recognizes health as a right of all citizens, emphasizing the high priority to women and children. The main goal was to improve equity by generalizing the provision of basic health care to include prevention, treatment and rehabilitation. This very ambitious objectives and targets were adopted including among others; reducing infant mortality to 20 per 1000 live births; providing maternal health care throughout the country; eradicating epidemic and endemic diseases and achieving 100% immunization coverage; making essential medicines available to all and establishing the national industry for medical equipment and supplies and

drugs; developing human resources for health and reducing absenteeism at work; and updating health information systems and improving health education and awareness. During the 1990s the health policies and strategies were subjected to the effects of decentralization and public reforms. Within the health sector, the government aiming to achieve health development adopted new approaches and mechanisms. These include; cost sharing, health insurance and private sector, which drastically affect the overall performance of the health care delivery. Thus it would be unfair to visualize the health care delivery system and its development without objectively considering all these factors, not only this but other issues such as inflation, the civil war expenses, the migration of the health personnel (World Bank, 2003).

4.3.1. Background of Health Status in Sudan

Sudan is classified as a low-income country by World Bank standards. On the Human Development Index devised by UNDP, human development is also extremely low in Sudan. In 2003, Sudan ranked 138 out of 175 countries for which the index was calculated. Life expectancy at birth, a measure of the general health condition and an indicator of the standard of living was estimated around 54 years, about the average of least developed countries. The country suffers from continuous civil strife in the south and West, leading to successive waves of massive population movement, coupled with drought and desertification, major floods in the northern part of the country, and severe loss of human resources (brain drain) especially in health sector. All these factors have severely affected the health infrastructure and health status in the country. They further reduced the country's ability to undertake sustainable control without external support, table (4.3) and table (4.4) below shows the ten (10) leading diseases of admission hospitals and the ten (10) leading causes of deaths in hospitals (%) form total deaths in the year 2003 respectively.

Table (4.3): the Ten (10) Leading Diseases of Admission Hospitals for 2003

Diseases	Cases	%
Malaria	152686	21.1
Pneumonia	81281	11.2
S.S.Delivery	59936	8.3
Obs&Gyna	38409	5.3
Asthma	35308	4.9
Case. Delivery	22308	3.1
Dehydration	21263	2.9
Diarrhoea&Eg	19792	2.7
Malnutrition	15891	2.2
Injuries&W	14660	2.0
Total	461534	63.7
Total of other Diseases	263096	36.3
Grand Total	**724630**	**100.0**

Source: Federal Minister of Health, Statistical Department, 2003.

Table (4.4): the (10) Leading Causes of Deaths in Hospitals (%) form Total Deaths 2003

Diseases	Deaths	%
Malaria	2479	12.9
Pneumonia	1661	8.6
Septicemia	1089	5.7
Circulatory	931	4.8
Anemia	798	4.1
Malnutrition	722	3.7
Dehydration	706	3.7
Acute Renal Failure	678	3.5
Diarrhoea&Eg	665	3.5
Other Heart Diseases	603	3.1
Total(10) Deaths	10332	53.6
Total of other Deaths	8935	46.4
Grand Total	**19267**	**100.0**

Source: Source: Federal Minister of Health, Statistical Department, 2003

Sudan has 26 State Ministries of Health (SMOH), one in each State. The Federal Ministry of Health (FMOH) is responsible for the development of national health policies, strategic plans, monitoring and evaluation of health systems activities. The SMOH are mainly responsible for policy implementation, detailed health programming and project formulation. The implementation of the national health policy is undertaken through the district health system based on the primary health care concept. Health

services are provided through different partners including in addition to federal and state ministries of health, armed forces, police security, universities, private sector (both for profit and philanthropic) and civil society. However, those partners are performing in isolation due to ill defined managerial systems for coordination and guidance. The adoption of the decentralized system in Sudan was faced with many problems arising from the abrupt implementation without prior effective training programs. The qualifications of many of the senior staff at state ministries of health are irrelevant to the assigned jobs. The federal rules, although comprehensive, are not equally understood at the state level, moreover, lack of mechanisms to identify, analyze and solve problems has led to accumulation of many unsolved problems, and there is no system for experience exchange between different states. The main problems with the organizational structures in the governmental health services at different levels are:

1. Rigidity of the organizational structure.
2. Poor coordination between departments.

The federal ministry of Health experienced marked reforms in its general directorates during 2002. Even though, its systems are still immature to withstand integration of programmes between different directorates. Both evidence based decision-making and collaboration needs to be promoted.

With the introduction of federalism and decentralization in 1995, State Ministries of Health were established and attributed responsibility for administration and financial management of health services in the states while Federal Ministry of Health maintained the overall responsibilities for national planning, coordination and monitoring. The states however face serious shortages of financial resources and still remain dependent on centrally approved budgets. From the managerial point of view, the decentralization reform is considered as an advanced step to improve the performance of the health care delivery system provided that the state and local levels capacities and capabilities were adequately strengthened. Less than half of the localities have functioning Health Area System in place, and only 19 are reportedly working according to the policy. For reasons basically related to the way economic stabilization policies were implemented during the latter half of the 1990s particularly the severe retrenchment in expenditures on the social sectors (World Bank, 2003). Progress towards MDGs has been very slow, if not insignificant. The situation seems to have changed as far as Government resources devoted to health are concerned. It

has been reported that recently, increased government revenues (largely due to oil revenues) have allowed an increase in public expenditures on the health sector. According to World Bank, it is estimated that total out-of-pocket expenditures are as large as or larger than total government health spending (that is, 1% or more of GDP). In addition, the national health insurance scheme similarly spends around 1% of GDP, so that total health expenditures in Northern Sudan are likely in the range of 4 or 5% of GDP, or US$ 15 to 20 per capita. This level would be consistent with the lower range of total spending in countries in Sub-Saharan Africa).

This low level of health spending is hence legitimately claimed to be the main reason behind the deterioration in the health sector performance indicators as measured by major health status indicators. More specifically the Interim Poverty Reduction Strategy Paper has the following to say "... The lack of significant progress in the health sector is due to the extremely low level of public expenditures on health. This has lead to poor coverage of the health system with poor capacity for delivery at all levels in the health system, but particularly the deterioration of primary health centers in rural areas where shortages of drugs, doctors and nurses are chronic. The poor funding of the system and the resulting deterioration were important factors in the increased brain drain of trained medical personnel at all levels, Atabani (2004). The low level of health related spending did not only affect the efficiency of health services delivery through brain drain and underutilization of fixed health assets such as buildings and equipment but also via demoralization of remaining staff due to the extremely low salaries and incentives for medical and paramedical personnel Babiker (1996).

The level and structure of health spending mentioned above has had adverse equity effects, this is basically due to the large share of out of pocket sending as a percentage of total spending. It is estimated that out of pocket constitutes about 60% of total health spending in Sudan (Elidrissi, 2002). Given that out-of-pocket payments benefit the better-off more than the poor. While the insurance system covers only a small sector of the population (mostly government employees), it is a short step to conclude that "the Sudanese health system seems to be highly skewed towards the better-off (World Bank 2003).

4.3.2. The Effects of Structural Adjustment Programs on Health Sector

During the last two decades Sudan's national health policies witnessed a considerable development. There have been commitments by the government to achieve health for all the population by the year 2000. It was committed to realizing that goal through the implementation of the Primary Health Care Approach. In 1992 the government framed the Comprehensive National Strategy (CNS) for socio-economic affairs covering the period 1992-2002. Strategies were designed to secure good health services and ensure the well being of the whole population. However, the implementation of the programme of the CNS has been constrained by many factors, namely; lack of financial resources, shortage of trained human resources for health, and administrative problems resulting from implementation of federal government law which led to the establishment of 26 states, instead of 9. Many of the new states inherited poor infrastructure for services. So there is a need for establishing new systems of management, logistics, financing, etc. As a result of adopting SAPs, government spending allocated for health sector has been significantly reduced, although prior to the implementation of SAPs, this sector was facing a lot of difficulties because of the deterioration in the economic conditions. These difficulties were reflected in insufficient resources allocated for the sector, inefficiency in the utilization of the resources, unsatisfactory and unequal geographical distribution of health care facilities and personnel, deterioration in the work environment, and the continuous decline in manpower in this sector.

After the implementation of SAPs and the cutback in the government funds for the health sector, the situation started to become severe. The curative health resources witnessed a sharp decline. That deterioration was manifested in the continuous decline in the curative health personnel. The number of general physicians declined by 35% during the period 1990/93, that of medical assistants by 10%, and that of nurses by 4% during the same period (Muneef, 1996). The serious decline in the number of professional personnel from the service was attributed basically to the deterioration in the living conditions of health workers who were suffering a continuous fall in their real income. The tendency of deterioration was also manifested in the lack of necessary expansion in the number of health care units and facilities needed to meet the increasing demand for health services by the growing population, and even the decline in the number of primary health care units

which witnessed an average annual rate of decline of 4.2% during the period 1990/93 Muneef (1996). On the other hand, the government started to change the existing method of funding through the public budget by introducing a system of cost-sharing whereby users are charged for the services. Although it was claimed that the imposition of user charges was to improve the quality of the services provided, it was primarily to offset the decline in the government's budget allocation to the health services and to ensure the sustainability of providing health services through channels other than the government budget.

Despite the different titles under which that policy was implemented, its common feature is that the consumer must pay when seeking medical treatment in public health institutions. Although some compensatory measures were implemented to help the poor who seek treatment in public health care units through provision of "Takaful" and "Zakat" funds support. But the fund was inadequate to meet the increasing demand for such subsidized services, as the number of applicants seeking support was growing as a result of the continuous increase in the cost of health services and the sharp decline in the real income of the people. Furthermore, adoption of SAPs has led to a regressive effect on the standard of living of the population.

According to Ali (1994), the number of poor families was 2.7 million in 1986. By 1994, that number was 3.4 million. Also it was revealed that the percentage of population below the poverty line was 77.8% and 91.41% in 1986 and 1994 respectively. Deterioration in real income, together with the imposition of charges and the cut-back in government spending on health services, added to the existing factors that negatively affected the accessibility of health services to the vulnerable groups and hence their health status.

4. 3.3. The Health System in Sudan: Organization and Finance

The Government health system in Sudan was challenged over the 1990s by a combination of decentralization of responsibilities and funding cuts. Under the federal system in place since the mid1990s, responsibility for management and financing of most of the health system has been devolved to the States and localities. On the one hand, all but the best-off States and

localities do not have sufficient financial resources, as well as managerial capacity, to fully take up their new responsibilities. On the other hand, government austerity measures have limited transfers of financial resources from the center to the States.

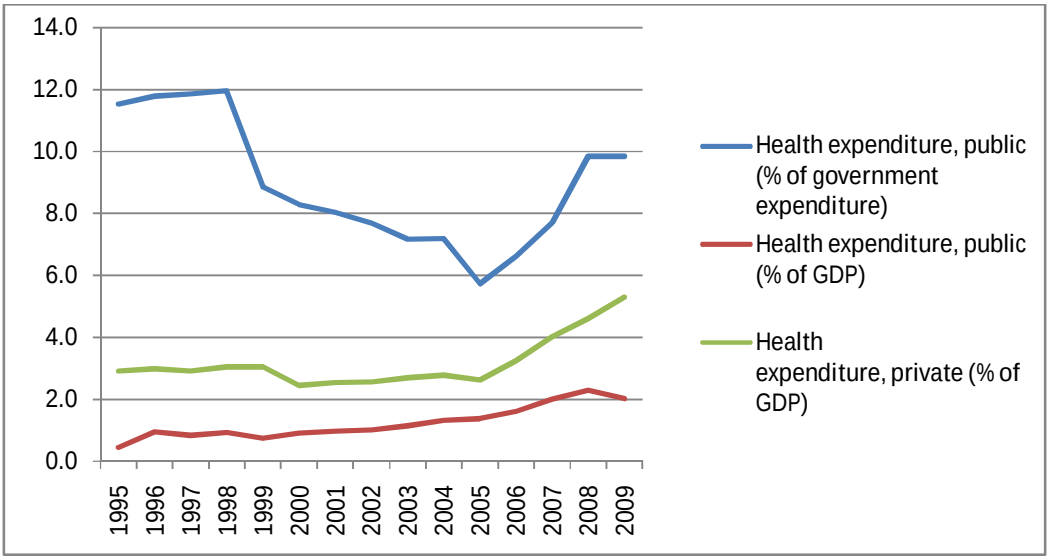
These factors led to deterioration of the primary health care system, in particular in rural and marginal areas. One estimate is that less than half of primary health care units are staffed with community health workers. Another result of these factors is significant regional disparities in health services, which follow the center-periphery pattern shown by the MDG indicators. All physicians are concentrated in Khartoum and the better-off northern central States. In Khartoum, there are 35 physicians per 100,000 populations, while in Darfur and most of Kordofan, there is 1 or 2 physicians per 100,000 populations. Such disparities in services are mirrored by weak planning and managerial capacities at the State and locality levels. Recently, increased government revenues (largely due to oil revenues) have allowed an increase in public expenditures on the health sector. Federal and State spending on the government health system doubled between 1999 and 2002, this allow to the budgeted to increase a further 70% in 2003. However, it is also shown that as a proportion of total government spending, public health expenditures have remained relatively constant at between 2 and 3%. Similarly, government spending on health has remained at less than 1% of GDP. Both in absolute and relative terms – at perhaps US$4 per capita and under or around 1% of GDP, thus government health spending in Sudan ranks among the lowest in the world. However, total health expenditures seem to be considerably higher. Along with decentralization, reforms in the mid-1990s included a national health insurance scheme, institution of user fees at public facilities, and encouragement of private sector provision. Out-of-pocket payments for health services are therefore considerable, including significant expenditures by the well-off for care abroad. Although no data are available on household health spending, it is estimated that total out-of-pocket expenditures are as large as or larger than total government health spending (that is, 1% or more of GDP). In addition, the national health insurance scheme similarly spends around 1% of GDP, so that total health expenditures in northern Sudan are likely in the range of 4 or 5% of GDP, or US$15 to 20 per capita. This level would be consistent with the lower range of total spending in countries in Sub-Saharan African.

Table (4.5) Health Expenditure in Sudan during the period 1995-2009

Year	Health expenditure, public (% of government expenditure)	Health expenditure, total (% of GDP)	Health expenditure, public (% of GDP)	Health expenditure, private (% of GDP)
1995	11.5	3.4	0.5	2.9
1996	11.8	4.0	0.9	3.0
1997	11.9	3.8	0.8	2.9
1998	12.0	4.0	0.9	3.1
1999	8.9	3.8	0.7	3.1
2000	8.3	3.4	0.9	2.4
2001	8.0	3.5	1.0	2.6
2002	7.7	3.6	1.0	2.6
2003	7.2	3.8	1.1	2.7
2004	7.2	4.1	1.3	2.8
2005	5.7	4.0	1.4	2.6
2006	6.6	4.9	1.6	3.2
2007	7.7	6.0	2.0	4.0
2008	9.8	6.9	2.3	4.6
2009	9.8	7.3	2.0	5.3

Source: The World Bank: World Development Indicators 2011

Figure (4.1) the Trends of Health Expenditure in Sudan during 1995-2009



Source: Own calculation based on data on table (4.5) above.

Health spending in northern Sudan, however, seems to be highly skewed towards the better-off. Out-of-pocket payments, of course, benefit the better-

off more than the poor, while the insurance system covers only 8% of the population, mostly government employees. At the same time, much government spending is focused on hospitals, which tend to be used less by the poor. Indeed, recent increases in government health spending seem to have been devoted to a considerable extent to the development of referral level facilities, leading to an unbalanced health system favoring hospitals and higher-level health cadres. While the total number of primary health care facilities decreased slightly from 6,413 in 1994 to 6,184 in 2000, the number of general or rural hospitals increased from 162 to 200 and the number of tertiary-level hospitals increased from 78 to 109. Similarly, the number of medical schools has exploded in recent years, now totaling 24 public faculties and 5 private. Development of the private sector in recent years, encouraged by the government, both supplied a market for the enormous production of doctors. Private health services, concentrated mainly in urban and better off rural areas of northern Sudan, are perceived to be of better quality than government services, and tend to be accessed more by the better-off. In Khartoum, an increasing number of hospitals and clinics are run by the private sector, leaving lower-level primary care facilities to the public sector. There are 39 private hospitals, compared to 39 government facilities, and 450 private clinics, compared to 118 government health centers in 2003. NGOs are also playing an important role filling some of the gaps in coverage of the government system and serving populations which are not attractive markets for private providers, such as IDPs. In Khartoum, for example, the number of NGOs health centers (114) is comparable to the number of government centers (118).

4.4. Education and Social Development in Sudan

4.4.1 Background

Economists of different schools of thought confirmed the essential role of education and human capital in the creation, acceleration and sustainability of economic growth, and improvement of the quality of life in any society. In particular, endogenous and new growth theories and empirical literature recognized the importance of human capital accumulation/formulation for economic growth in both developed and developing countries (Lucas 1988, Romer 1990). Before 1971, the educational ladder had divided the general education in Sudan into three stages, namely the primary, the intermediate

and the secondary stage, with duration of four years each. The primary stage begins by admitting children of seven years. In 1971 the educational ladder was modified. The new one is composed of the elementary stage (6 years), the general secondary stage (3 years) and the high secondary stage (3 years). More recently, this system has been modified while maintaining the secondary education stage (3 years). In 1990, the educational ladder was modified such that the elementary and general secondary stages were merged into one stage, namely the basic education stage which extends over 8 years), admitting those of age six. Secondary education stage involves the academic education and technical education, each extending for three years, admitting pupils of the eighth's class after successfully completing the basic education stage at the State level (Eldaw, 2010, sited in abdelmawla, 2011).

The policy of universalization of basic education faces many challenging problems represented in inadequacy of public finance, which resulted in the unavailability of schools in some underdeveloped areas of Sudan and inaccessibility for the poor children because of the high school user fees. The education system in Sudan is facing a host of problems, which include, high illiteracy rate among the active population and an uneven distribution and settlement between rural and urban areas, the migration of skilled youth creating a scarcity in qualified manpower to be employed to implement educational change, the weak infrastructure due to civil war and natural resources disasters, and the declining foreign aid coupled with an imposed economic embargo (Abdelmawla, 2010).

4.4.2. Characteristics of Educational Policies in Sudan

In this subsection we discuss the supply and demand sides, the major characteristics and implications of educational policies in the Sudan.

4.4.2.1. General Characteristics of Educational Policies in Sudan

It may be useful to begin with a brief explanation of the major characteristics of educational policies in the Sudan, in particular the structure and pattern of educational policies, the supply side as measured by resources or priority of financial and human investment in education, and the demand side for education as indicated by enrolment ratios and access to schooling and the impacts on literacy, school life expectancy, and quality of education.

The UNESCO-UIS (2011) data on the structure/nature of educational system indicates an insufficient duration of compulsory education in Sudan. For instance, the duration of compulsory education in the Sudan lasts for 8 years and falls behind the international standard of 12-13 years of compulsory education attendance in the advanced countries such as the USA, UK, Belgium, Germany and the Netherlands and 9-11 years in Korea, Japan and Canada respectively. Moreover, in Sudan as in most Arab countries, the structure and pattern of the educational policies is characterized by a centralized bureaucracy which, as remarked by Al-Sulayti "implies a high degree of centralization and intervention from the governments/ministries of education to control all the educational institutions. Sometimes, the education and higher education institutions lack independence and initiatives in the area of R&D. They are often subordinate to and/or feel the negative effects of state bureaucracy, routine, institutional rigidity and lack of transparency, dynamism, flexibility, planning, organizational development, monitoring and assessment. They also sometimes, lack a proper articulation of "educational policies, dynamism, flexibility, planning, organizational development, monitoring, assessment, cooperation and problem solving ability (Suleiman, 2007; Jalal al-Din, 2002).

4.3.2.2. The Supply Side of Educational Policies: Finance and Human Resources

Here in this subsection we begin with the adequacy of the supply side and priority of public investment in education as measured by the financial resources devoted to education, which is indicated by the share of public spending on education as a percentage of GDP and total government expenditures. For instance, table(3.5) below illustrates that the low adequacy and priority of public spending on education, as measured by public spending on education as a percentage of GDP and of total government spending in Sudan lag far behind the levels prevalent in the Arab Gulf countries and the developed countries. However, in this respect (Nour, 2011) explore that, in the period (1995-2000), the highest public spending on education as percentage of GDP and total government expenditure in Saudi Arabia was close to three and sixth times those of the Sudan respectively. Moreover, public spending on education as a percentage of GDP shows considerable disparity and fluctuation in the Sudan over the

period 1970-2002. For instance, he observed the great and continuous decline in public spending on education as percentage of GDP from 4.8% in 1980 to 4%, 0.9%, 0.6% and 1.4% in 1985, 1990, 1991 and 1996 respectively. In addition, the great and continuous decline in the trend of public spending on education also holds for the trend of public spending on education as a percentage of total government expenditure, also, he observed that over the period (1986-2001/2002), public spending on education as percentage of total government and public expenditure in Sudan continuously declined from 15.1% in 1986 to 2.8%, 8.4%, 7.7%, 7%, 6.4% and 6.9% in 1990, 1997/1998, 1998/1999, 1999/2000, 2000/2001 and 2001/2002 respectively.

Table (4.6) Public Expenditure on Education in Sudan Compared to World Countries (1990 – 2001/2002)

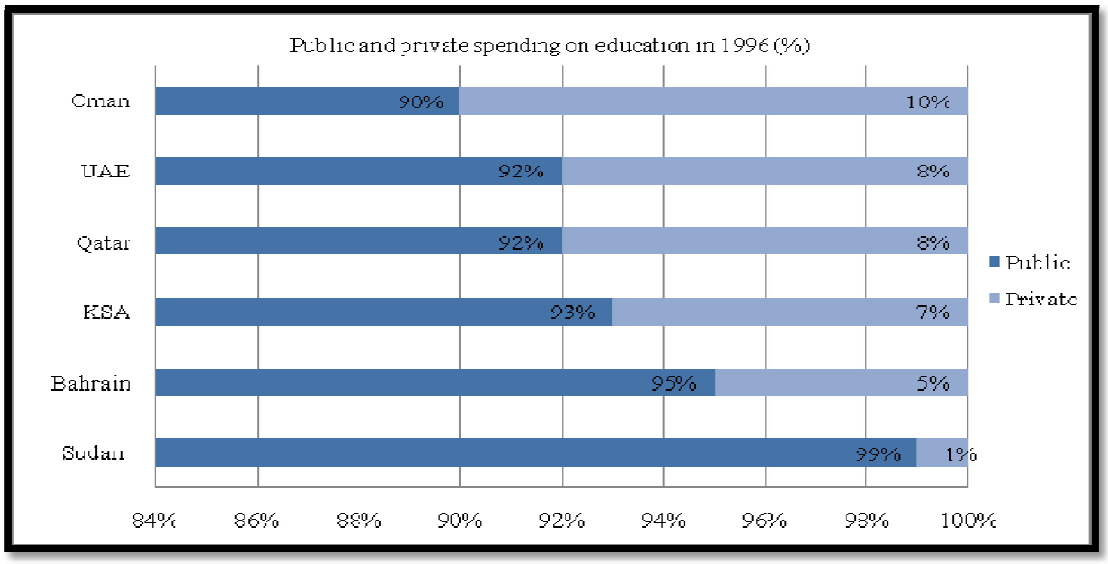
Country	**Public expenditure on education as percentage of**						
	GDP			**Total government expenditure**			
	1990	1998/1999	1999/2001	1990	1995/1997	2000/2001	2001/2002
Sudan	**0.9**	**0.6(1991)**	**1.4(1996)**	**2.8**	**8.4**	**6.4**	**6.9**
Bahrain	4.2	3.67	3.00	14.6	12	11.41	n/a
Kuwait	4.8	n/a	6.6	3.4	14	n/a	14.8
Oman	3.1	3.87	4.2	11.1	16.4	18.2	21.5
Qatar	3.5	3.58	3.6	11.1	n/a	n/a	n/a
Saudi Arabia	6.5	9.47	8.3	17.8	22.8	22.7	24.8
UAE	1.9	1.95	1.9	14.6	20.3	22.2	22.8
United States	5.2	5.01	5.6	12.3	14.4	15.5	17.1
Sweden	7.4	7.98	7.6	13.8	12.2	13.40	12.8
Norway	7.1	7.68	6.8	14.6	16.8	16.18	16.1
Republic of Korea	3.5	4.07	3.6	22.4	17.5	17.38	14.7
United Kingdom	4.9	4.71	4.6	n/a	11.6	11.4	11.4

Sources: (a) UNDP Human Development Report (2004), (b) UNESCO–UIS (2003), (c) UNESCO–UIS Sudan Ministry of Finance-Ministry of Education (2003:12). Note (1) Data refers to the year (1999-2001) (sited in Nour 2011)

These results in table (4.6) imply that until recent time the low adequacy of the supply side and public investment in education in Sudan remained low and fall below the standardized international adequacy criterion which was earlier adopted in the 1960s and related to the supply side and implies the allocation of either 8% of GDP on education or 20% of total government or

public spending on education. These results led to increasing debate that the low commitment to standardized international adequacy criterion is somewhat surprising in view of the structural change in Sudan economy that turned into an oil dependent economy in 1999, which implies that the increasing revenues from oil has the potential to enhance increasing spending on social development issues including health and education. Moreover, although oil leads to increase in public spending and increase in the share of development expenditure as a percentage of total public expenditure from 9% in 1999 to around 31% in 2004 but its share declined and sustained at 24% from the total public spending over the period 2006-2009. Furthermore, the development expenditures include all public spending in development issues including public spending on education, health, etc. In their analysis to the low commitment to the standardized international adequacy criterion in Sudan adopted by World Bank in the 1970s, (Nour 2011), said that there are two interpretations of the low commitment to the standardized international adequacy criterion in Sudan. The first interpretation of the low commitment to the standardized international adequacy criterion in Sudan was, despite the increasing oil production, but the uncertain public revenues (oil revenues in particular) and increasing competition for these revenues for defense (due to political instability) and infrastructure spending, notably, the increasing public spending on defense and security issues probably put further pressure on public spending on education and make it difficult for the government in Sudan to continue allocating high proportions of public revenues on education. The second explanation for the low commitment to the standardized international adequacy criterion is probably related to the potential limitation of the private spending on education to compensate the declining public spending on education despite the recent increasing expansion and facilities offered for the introduction of private education institutions in Sudan. Figure (3.3) show the share of public and private spending on education in 1996 (%).

Figure (4.2) Public and Private Spending on Education in Selected Countries in 1996 %



Source: UNESCO–UIS (2000) World Education Report (2000): UNESCO's World Education Indicators, (b) UNESCO- UIS (2003).

Table (4.7): The Distribution of Current Investment in Basic, Secondary and Tertiary Educational Level in Sudan (1993/1994-2008/2009

	1993/1994	1995/1996	1996/1997	1997/1998	2000/2001	2002/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
Number of institutions											
Basic	12515	10713	10969	11278	12539	11541	14071	15089	15907	18095	18052
Secondary	641	1206	1412	1648	1835	1642	2268	2877	32243	3478	3455
Tertiary	29	47	45	47	57	68	72	73	78	90	106
Number of students											
Basic	2823	2963.7	2978.8	3030.7	3451.6	3966.9	4299.7	4713.4	4785.9	5253	5800
Secondary	292.8	363.7	448.5	485.6	437.5	526.2	611.2	569.7	602.9	648	753
Tertiary	116.2	125.7	171.6	172.3	254	315	447	488	440.2	508.2	519
Number of teachers											
Basic	73654	94414	98747	103082	125391	136401	141315	143327	145999	155023	161345
Secondary	7909	9902	12117	13247	19783	22951	32917	34222	38953	39874	43028
Tertiary	5268	3148	5394	5623	7481	7804	9248	10063	10251	12560	12720
Pupils teacher ratio											
Basic	38	31	30	29	28	29	30	33	33	34	36
Secondary	37	37	37	35	22	23	19	17	15	16	28
Tertiary	22	50	50	31	17	-	-	15	15	22	13
Pupils institution ratio											
Basic	226	277	272	269	275	344	306	312	301	290	321
Secondary	457	302	315	295	238	320	270	198	187	186	218
Tertiary	4007	2674	3813	3666	4456	4632	6208	6685	5644	5647	4896

Sources: (a) Sudan Ministry of Education, the Annual Educational Statistics Reports Various Issues (sited in Nuor 2011).

This table shows that there is considerable effort made by the government of Sudan during (2000/2001 - 2008/2009) with regard to basic and secondary education, but it still remain below the required level, as it can be seen in the following table:

Table (4.8): Number of Schools, Students, Teachers and their Growth Rates in Sudan (2000/2001 – 2008/2009).

Item	Basic			Secondary		
	2000/2001	2008/2009	Growth Rate	2000/2001	2008/2009	Growth Rate
Number of Schools	12539	18025	44%	1835	3455	88.3%
Number of Students	3451611	5800829	68.1%	437461	753070	62.1%
Number of Teachers	125391	161354	28.7%	19783	43028	117.5%

Sources: (Sudan Central Bureau of Statistics (2010) "Annul Statistical Year Book and Statistical Series (1990-2009).

Table (4.8) above illustrate the growth rate of the number of basic and secondary schools, students and teachers growth by 44%, 68.1% and 28.7% in basic and by 88.3%, 62.1% and 117% in secondary education respectively during the period (2000/2001 – 2008/2009) due to considerable effort made by government of Sudan. (Nour, 2011), observed that, the low commitment to equity and the incidence of wide regional disparity between the main geographical regions in Sudan in terms of both supply of and demand for education. As for the commitment to equity criterion in the supply side he observed that the priority and trend of distributing the public and private investment in education varies across the main geographical regions in Sudan.[i] As it shown in the following table (4.9):

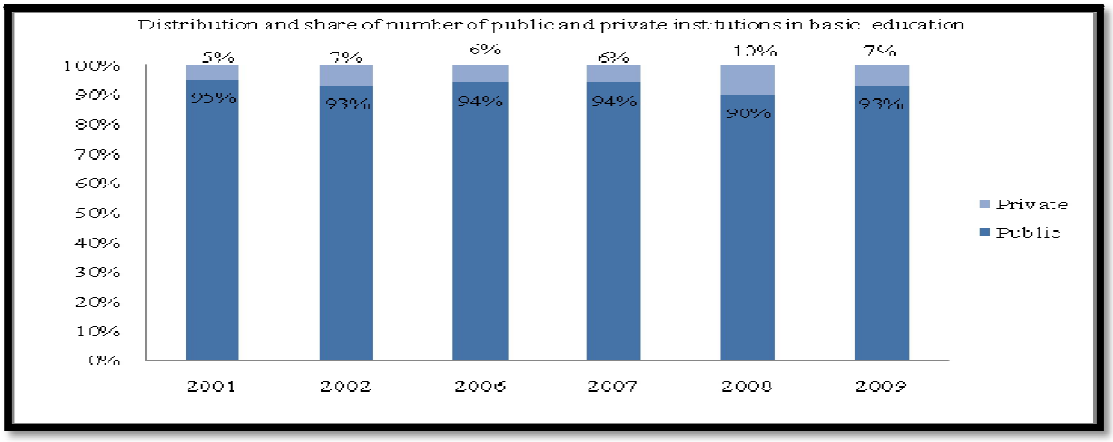
Table (4.9): Regional Distribution and Share of Main Regions in Total Number of Schools in Basic and Secondary Education in Sudan (%) (2001-2009)

Share in total%	2001	2002	2004	2006	2007	2008	2008	2001	2002	2004	2006	2007	2008	2009
	Number of Basic Schools							Number of Secondary Schools						
All Sudan	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Northern	9%	9%	9%	7%	7%	7%	7%	10%	10%	9%	8%	8%	8%	8%
Khartoum	14%	15%	12%	13%	13%	12%	13%	24%	28%	25%	23%	24%	30%	25%
Central	27%	26%	27%	24%	23%	25%	22%	32%	30%	35%	37%	37%	35%	35%
Kordfan	17%	17%	20%	15%	15%	16%	17%	8%	7%	9%	8%	8%	8%	9%
Darfur	20%	19%	19%	21%	20%	19%	21%	12%	13%	11%	13%	12%	9%	12%
Eastern	11%	12%	10%	10%	11%	12%	11%	10%	10%	9%	8%	8%	7%	7%
Southern	3%	3%	3%	10%	9%	9%	9%	3%	2%	3%	3%	3%	3%	3%

Sources: (Nuor, 2011) from his own calculation based on Sudan Ministry of Education, the Annual Educational Statistics Reports Various Issues.

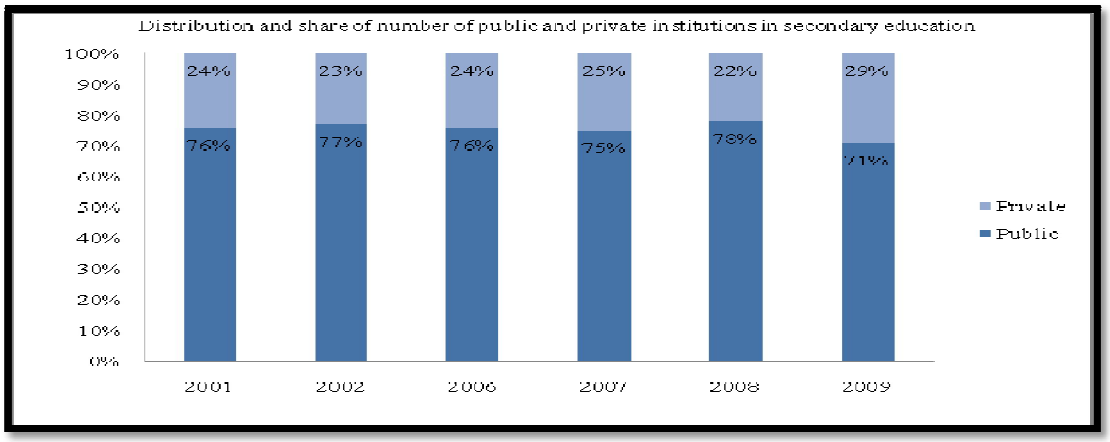
Table (4.9) indicates the low commitment to equity and the incidence of regional disparity that appears from the share of the main regions in public, private and total number of schools in basic and secondary education in Sudan over the period (2001-2009). Form the table, we observe the large share of the central region followed by Dafur, Kordofan and Khartoum as compared to Eastern, Southern and Northern regions in total numbers of basic schools and the large share of the central region followed by Khartoum, Dafur and Kordofan as compared to Northern, Eastern and Southern regions in total numbers of secondary schools over the period (2001-2009).

Figure (4.3): Distribution and share of number of public and private institutions in basic education in Sudan (2001-2009) (%)



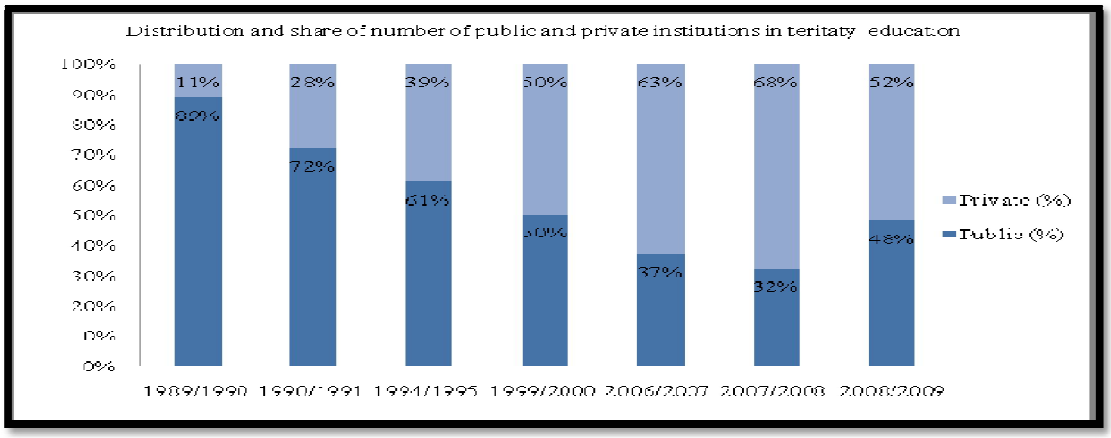
Sources: Noor 2011

Figure (4.4): Distribution and share of number of public and private institutions in secondary education in Sudan (2001-2009) (%)



Sources:(Nuor 2011)

Figure (4.5): Distribution and share of number of public and private institutions in tertiary education in Sudan (2001-2009) (%)



Sources:(Nuor 2011)

Suleiman (2007) discusses the equity standard criterion and notes that the imposition of tuition fees does not help to achieve this equity standard criterion and to reduce differences between high income earners and low income earners. Going in smeller line, one serious problem with respect to human resources in education in Sudan is the low commitment to the standardized international adequacy criterion in terms of quantity of teaching staff as measured by the high pupils/teachers ratio in primary and secondary education and in terms of quality and efficiency of teaching staff as measured by the low share of trained teachers in primary, secondary and tertiary education in Sudan as compared to other Arab and Gulf countries . As reported in Sudan and Gulf literature, "the educational system in the Sudan and Gulf countries suffers from serious weak performance, low quality of teachers due to a lack of trained teachers and weak teaching skills and knowledge of recent teaching and learning techniques."

4.4.2.3. The Demand Side of Education: Enrolment in Education

It is also important to examine the demand for education as measured by enrolment ratios. Table (3.10) below shows that enrolment ratios vary across the main regions in Sudan, decline with the increase of education level and on average, lag behind the levels in Arab, Gulf and developed countries. The large quantitative increase in enrolment in higher education due to higher education revolution in 1990s should not hide the fact that at least until 2000/2001 on average gross enrolment ratios in tertiary education in Sudan

(6- 6.85%) remain low and fall behind the levels of the Arab (11.4-21%), Gulf (21.35-24.75%) and developed countries (58.39-94%). That also holds for net enrolment ratios in primary and secondary education in Sudan that lag far behind those of the Arab, Gulf and developed countries.

According to Nour (2011), probably, the low enrolment at secondary level is attributed to high poverty rate, the high drop out in transition from primary to secondary schooling and the lack of effective actions in educational policy to legitimize the compulsory education.

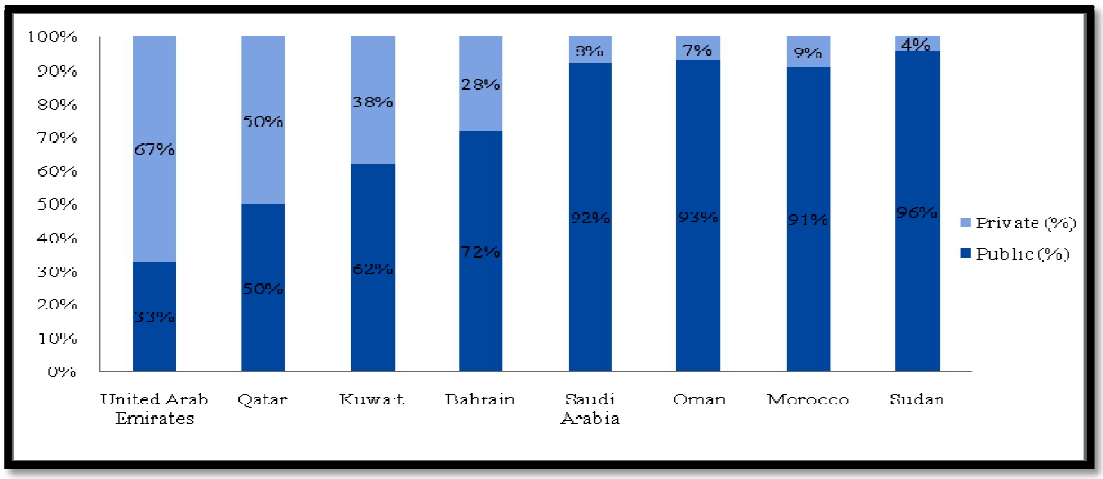
Suleiman (2007) finds that the issue of free education, especially basic education has raised a lot of controversy in Sudan. He argues that, in Sudan it is necessary to confirm the commitment for making basic education free and compulsory at the same time and it is the duty of the State to begin soon in the preparation of a plan for a period of three years or five years at most to achieve free and compulsory basic education. Albeit gradually, with implementation to begin in the peripheral and poor regions that suffer from poverty. Other region can be offered an alternative option of reduced fees that determined by school according to student family income level and the ability to pay for school fees, this can be an option or first step to achieve free education in Sudan in the long run. The plan should ensure that the schools do not have to be compelled to re-impose fees to pay salaries or other new expenses by provision of adequate ongoing or current funds necessary for the establishment and preparation of schools and teachers in light of rapid survey and assessment needs of the most needed States. If there is some shortage of school buildings, girl students can be taught in the morning and boys students in the afternoon, until a sufficient number of schools are available.

Suleiman (2007) indicates that in the Interim Constitution of the Sudan for the year 2005 (which is the Constitution that guarantees many rights for all citizens), the article 44 of it indicates that (1) "Education is a right for every citizen and the State to guarantee access to education without discrimination on the basis of religion, race, ethnicity, gender or disability "and (2)" Primary education is compulsory and the State shall provide it for free." He suggests cooperation of all people to the enforcement of this Constitution, especially as it is stated the rights of citizens. Thus, he argues that the

education tuition fees and weak potential to get a job is likely paying much of today's youth to frustration and apathy.

Moreover, another problematic feature on the demand side of education in Sudan and Arab countries is the lack of incentives/minimal enrolment in private education compared to intensive enrolment in public education that probably related to high cost of private education and minimal contribution of the private sector in total spending on education compared to the public sector. Enrolment in private education in Sudan is low and falls below the level in some Arab Gulf countries that probably attributed to high poverty rate in Sudan figures no (4.6) below. Similar to public enrolment, private enrolment ratio increases with the increase of educational level, i.e. are higher at secondary level, followed by tertiary level and lower at primary level.

Figure (4.6) Distribution and share of students' enrolment in public and private basic education in Sudan as compared to Arab and Gulf countries (%) (2008-2009)

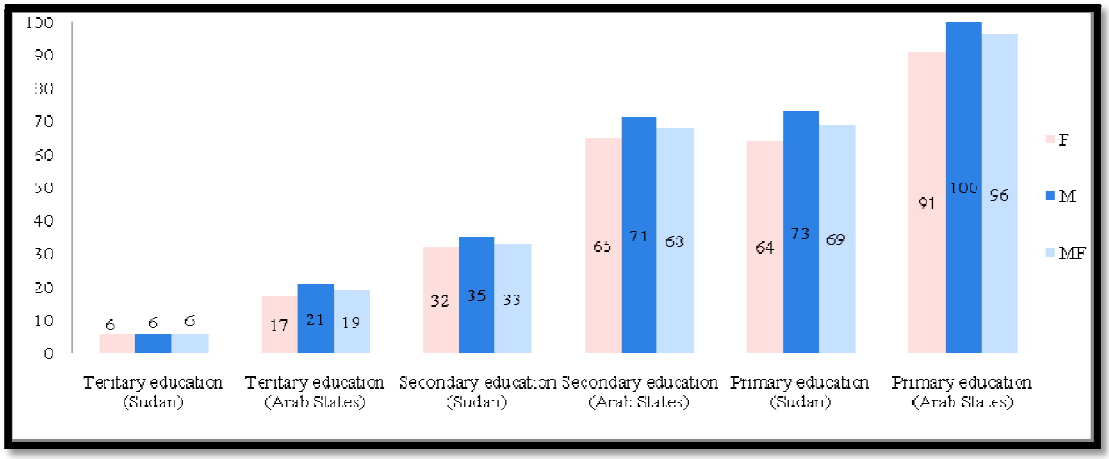


Source: UNESCO Global Background information on Education Statistics: UNESCO- UIS Data Centre: Beyond 20/20 WDS (2011).

It is worth noting that despite the tremendous spread of private education institutions and despite great regional disparity in private enrolment in basic, secondary and tertiary education but private primary, secondary and tertiary enrolment ratios have not shown a large increasing trend over time in Sudan. (Nour,2011), find evidences on the low commitment to the standardized international equity criterion in the demand side that appears in terms of the gender differences in educational attainment as measured by the gross

enrolment ratio of female for primary, secondary and tertiary education. Figure no (4.7) and Table no (4.13) below illustrate that the percentage of female students for all levels of education in Sudan are lower than male students and both are low compared to the average for the Arab countries. For Sudan, female enrolment in secondary education is better than primary education, which implies that the gender gap in primary education is higher than in secondary education. We observe the differences in the regional distribution in the incidence of the gender gap across the main regions in Sudan which probably implies that the presence of gender disparity in primary education as the gross intake and enrolment rate for female fall below the gross intake and enrolment rate of male in all regions. For secondary and tertiary education, gender disparity exists for the most poor and rural regions as the gross intake and enrolment rate for female fall behind the enrolment rate of male, by contrast for all Sudan and for relatively more urbanized and less poor regions the gross intake and the percentage of enrollment rate for female fall above the enrolment rate of male.

Figure (4.7) Enrolment ratios in basic, secondary and tertiary education in Sudan compared to the average for the Arab countries defined by educational level and gender (2000) (%)



Source: Arab Knowledge Report (2009: 279)

Table (4.10): Regional Distribution of Student's Enrolment Rate in Basic Education Level defined by Education Levels and Gender in Sudan (%) (2001-2009)

Year	2001			2006			2007			2008			2009		
	M	F	MF	M	F	MF	M	F	MF	M	F	MF	M	F	MF
All Sudan	57.4	49.3	53.4	69.8	59.3	64.5	72	60.3	66.2	73.9	63.4	68.7	67.4	64.6	66.1
Northern	94	90	92	98	91	96	91	82	86	93	84	89	88	86	87
Khartoum	88.4	83.7	86.1	83.2	79	81.1	85.5	81.6	83.6	88.8	88.5	88.6	91.5	95.9	93.7
Central	65	42	60	72	61	66	78	64	71	82	69	75	84	74	79
Kordofan	50	43	46	63	57	60	67	52	60	67	55	61	84	74	79
Darfur	45	33	27	65	46	56	46	51	60	69	56	62	67	60	64
Eastern	48	38	43	67	50	58	70	50	60	67	48	58	51	49	50
Southern	24	17	21	55	45	50	55	52	53	56	52	54	49	48	49

Source: Nour,2011

Table (4.11): Regional Distribution of Student's Enrolment Rate in Secondary Education Level defined by Education Levels and Gender in Sudan (%) (2001-2009)

Year	**2001**			**2006**			**2007**			**2008**			**2009**		
	M	F	MF	M	F	MF	M	F	MF	M	F	MF	M	F	MF
All Sudan	18.1	18.4	18.2	26.2	25.3	25.7	26.9	25.7	26.3	29.6	26.3	28	29.4	29.9	29.7
Northern	39	52	45	45	52	49	42	48	45	46	52	49	46	53	49
Khartoum	35.7	40.8	38.1	44	50.6	47.9	52.9	56.4	54.6	54	55.8	54.9	62.1	68.9	65.4
Central	20	22	21	28	28	28	30	30	30	32	30	31	39	35	37
Kordofan	10	10	10	21	17	19	21	18	20	24	19	21	30	24	27
Darfur	14	9	12	24	18	21	18	12	15	26	15	20	22	18	20
Eastern	20	21	21	24	22	24	23	22	22	23	21	22	19	18	18
Southern	3	2	3	6	4	5	7	5	6	7	5	6	7	6	7

Source: Nour,2011

Table (4.12): Regional Distribution of Student's Enrolment Rate in Tertiary and Higher Education Level defined by Education Levels and Gender in Sudan (%) 2001-2009

Year	2001			2006			2007			2008			2009		
	M	F	MF	M	F	MF	M	F	MF	M	F	MF	M	F	MF
All Sudan	49.7	50.3	100	47.8	52.2	100	48	52	100	48.7	51.3	100	47.9	52.1	100
Northern	4.2	5.8	10	4.5	6.2	10.6	4.4	5.6	10	4.4	5.9	10.3	4		9.5
Khartoum	13.3	16.5	30.4	14.4	17.4	31.8	15	18.1	33.1	15.2	17.9	33.1	13.7	5.5	30.9
Central	15.7	17.1	32.6	14.5	16	30.5	14.5	15.8	30.2	14.2	15	29.2	14.4	16	30.4
Kordofan	3.4	3.2	6.6	2.6	2.7	5.2	3	3.2	6.2	3.3	3.3	6.5	3.6	3.9	7.5
Darfur	8.4	3.8	12	4.9	4.1	9	4.4	3.8	8.2	5.2	3.9	9	5.7	4.1	9.8
Eastern	3.5	3.2	6.7	4.1	4.4	8.5	3.8	4.1	8.1	3.5	3.8	7.4	3.6	4	7.7
Southern	2	0.9	2.7	3	1.4	4.2	3.1	1.4	4.4	2.9	1.6	4.4	2.7	1.5	4

Source: Nour,2011

This implies that gender disparity and gap is more critical for more poor and rural regions and population groups, i.e. poor female and female living in rural areas are facing by serious situation of inequality and are suffering more in terms of net attendance or access to primary and secondary education in Sudan. Somewhat surprising the gender disparity is more serious in primary education compared to secondary education, especially for poor female; this is consistent with the findings based on the data from UNESCO (2006) which w presented in Nour (2011). Also this implies that, especially among the poor, economic reasons were considered to be the most important factor limiting girls' potential to complete their primary (basic) and secondary school education and that the factors preventing males from

completing their education differ from those hampering females. Family economic problems impact more negatively on female than on male education. Likewise, families perceive educating girls to be less important than schooling boys. It is the need to work that has the largest effect on the withdrawal of boys from school. (Nour,2011) said that, it is worth noting that despite the tremendous spread of girls' education in the last five decades, Sudanese women remains poorly prepared to participate effectively and fruitfully in public life by acquiring knowledge through education. This is most clearly manifested in the extent to which girls and women are still deprived of education and knowledge, especially those forms of knowledge that bring high social returns.

4.4.2.4. Efficiency and Quality of Education in Sudan

In this section we outline the policies that have great return in the education in Sudan, focusing on basic, secondary and tertiary levels. According to (Nour, 2011), one of common characteristics of the educational system in the Sudan is the low commitment to the standardized international efficiency criterion and the weak internal efficiency/quality of primary, secondary and tertiary education; the severity of the problem varies across the main regions in Sudan. He attributed the poor quality in education to the (a) High repetition rates in primary and secondary levels, (b) Weak absorptive capacity and performance level of students at all levels, (c) Failure of educational strategy to motivate innovative skills and problem solving.

The UNESCO indicators on the quality of education imply that the average for Sudan and the Gulf countries in terms of quality of education has improved over time, the performance for Sudan is lower than the Gulf as is apparent from the considerable decline in the percentage of repeaters in primary schooling and increase in the percentages of transition from primary to secondary education, however, across the main regions in Sudan, poor quality is still obvious. Throughout the period 2006-2009, the percentages of repeaters in primary schooling increased from 2.7% in 2006 to 6.5% in 2007 and 5.3% in 2008, but it declined to 4.3% in 2009, moreover, throughout the period 2006-2009, the percentages of dropouts from primary schooling increased from 1.4% in 2006 to 3.3% in 2007 and to 2.6% in 2008 but it is declined to 1.3% in 2009. This implies that, further efforts are needed to enhance the quality of education at all levels, in order to avoid the

exacerbation of the problems that will result in the event of a failure to implement some effective policies to improve the quality of education in Sudan. In addition, the poor quality of education can be observed from the results of the percentage of successors in Sudan's basic education certificate (2000/2001-2008/2009) and percentage of success in Sudan's secondary school certificate (1996/1997-2007/2008). Table (4.16) below indicates that throughout the period (2000/2001-2008/2009), the percentages of successors in Sudan basic education certificate declined from 71.9% in 2001 to 71.4% in 2006 and then it increased to 73.7%, and 76.4% in 2007 and 2008, respectively, but it declined to 74.9% in 2009. Moreover, Table (4.16) indicates that over the period (1996/1997- 2007/2008), the percentages of success in Sudan's secondary school certificate increased from 69.4% in 1996/1997 to 73.5%, 75.4% and 75.9% in 2000/2001, 2001/2002 and 2002/2003, respectively, but it then fluctuated to 72.1%, 71.4%, 73.7%, 74.1% and 73.7% in 2003/2004, 2004/2005, 2005/2006, 2006/2007 and 2007/2008, respectively. Furthermore, the reported annual success in the Sudan academic secondary education is higher than Sudan technical secondary education; the technical education did not only show a very poor but also a continuous declining annual rate of success over the period (1996/1997-2007/2008)

Table (4.13): Sudan Basic Education Certificate Basic Results Percentage of Successors (%) by Sex and State (2000/2001-2008/2009)

Year	2001			2006			2007			2008			2009		
	M	F	MF	MF	M	F	MF	M	F	MF	M	F	MF	M	F
All Sudan	73.1	72.9	71.9	71.4	72.7	74.5	73.7	72.9	80.4	76.4	73	73.5	74.9	-	-
Northern	76	78	66	93	86	92	89	92	96	94	92	97	95	-	-
Khartoum	68.5	74.2	71.4	65.3	65.3	59.4	62.8	75.2	82.8	79	63.8	71.1	67.3	-	-
Central	76	72	74	76	74	78	76	75	76	75	78	78	78	-	-
Kordofan	67	62	64	73	70	70	70	74	73	74	74	74	74	-	-
Darfur	75	67	72	60	73	69	72	67	59	64	67	60	64	-	-
Eastern	72	64	68	62	66	72	68	63	69	65	68	74	71	-	-
Southern	75	80	77	-	-	-	-	-	-	-	-	-	-	-	-

Source: Cited in Nour (2011).

Table (4.14): Sudan Secondary School Certificate Percentage of Successors According to Education Type (1996/1997-2007/2008) (%)

education type	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
Government Academic secondary education	69.4	70.8	62.1	63.4	73.5	75.4	75.9	72.1	71.4	73.7	74.1	73.7
Non-government Academic secondary education	66.0	67.4	73.1	76.3	79.0	78.8	70.9	73.6	74.1	72.0	71.9	73.5
Teacher union	59.6	48.3	60.6	60.0	66.6	66.7	60.6	65.3	65.8	63.5	64.2	65.3
Irregular	75.2	78.9	79.8	78.5	84.1	78.7	66.8	77.5	74.5	74.3	71.3	75.0
All academic education	66.9	66.0	65.1	66.5	74.3	74.1	70.1	71.3	70.8	70.7	70.4	71.3
Technical commercial secondary education	47.9	35.8	52.4	46.0	57.0	52.5	52.4	53.5	52.1	49.4	48.4	49.0
Technical industrial education	55.8	44.1	40.5	37.0	52.0	51.4	44.5	43.8	41.8	43.5	46.0	45.7
Technical agriculture education	37.3	29.2	44.9	26.7	47.0	44.8	46.5	45.8	49.3	52.7	54.2	49.7
Technical home education	35.0	41.3	40.3	23.4	48.7	45.7	42.3	39.8	59.8	62.4	41.0	43.7
All technical education	48.3	37.9	48.9	42.2	55.0	51.8	48.7	48.6	47.3	47.0	47.1	47.2
Vocational training	-	-	-	87.4	92.3	88.5	89.3	85.8	-	-	76.6	77.7
Ahlia	-	67.4	57.8	84.8	85.0	91.6	82.0	79.7	78.3	86.5	84.4	83.2

Source: Cited in (Nour,2011).

Al-tuhami (2007) highlighted many reasons of the poor quality problem of technical education in Sudan. For example, the lack of clear vision regarding technical education, lack of central body for organization, planning and development, the transfer of technical education schools to the states in 1993, weak relation between technical educational policies and development planning and mismatch between specializations and content of technical education courses and requirements in labor market. In addition to lack of financial resources, facilities and infrastructure (such as buildings, laboratories, workshops, halls, books and references), the critical shortage of qualified and trained Sudanese teachers and trainers specialized in technical education in accordance, the requirements in the labor market and the lack of

favourable educational environment and facilities for supporting, hosting and accommodating students in technical education. Further to the social/cultural aspects, due to high preference for enrolment in academic education, low preference for enrolment in technical education, lack of appreciation in the society and lack of attractive working conditions for graduates of technical education that discourage the involvement in technical education and work. In addition to deficiency of the current structure, which implies the sudden move of students from basic school to technical education, lack of specialized institutional body for preparing of technical secondary education courses, lack of linkage between technical education in secondary and tertiary levels, easy transfer from technical to academic education, and from industrial to technological colleges, low rates of enrolment and graduation and low opportunities for postgraduate studies in the fields of technical colleges and tertiary education.

Suleiman (2007) argues that there is a common complaint in the Sudan about the poor quality of education in all its stages: primary, secondary and university education in the Sudan. He indicates the difficulty to identify or measure the poor quality of education, but he observes that the failure to achieve acceptable standard of educational efficiency criterion takes the form of high rates of absence of pupils from attending school; high rates of repetition and failure in the final examinations; high number of unsuccessful educational institutions; poor training for teachers; overcrowded classrooms with students, shortages of teaching equipment and materials needed for teaching some courses, absence of textbook, even in the undergraduate, as well as the absence of libraries that adversely affect basic, secondary and tertiary education. Moreover, he notes that all indicators and reports show that the internal efficiency of public education is extremely low and means that the overall system of general education is characterized by waste, high rates of repetition and drop out, and low enrollment ratios.

Going with the same path, Suleiman (2007) finds that the explanation of poor quality of education is related to several reasons, the first reason is the low public spending on education as a proportion of total public spending, this low ratio has even declined from 8.4% in 1997/1998 to 6.9% in 2001/2002.22 This ratio does not include public expenditure on above secondary higher education and it could drop more and more when adding to

public expenditure on defense and security, especially given that public spending in these areas has increased greatly in the Sudan because of its circumstances. Also, this proportion may decline significantly if they attributed to the national income, which is a standard method that is often used for measuring the share of education of the country's resources and to compare between different countries in terms of allocation of appropriate resources for the provision of adequate level of education in terms of both quality and quantity. Another reason for the low quality of education in Sudan is that despite the expansion in public and private education but the adequacy standard criterion (as measured by the ratios of spending on education and enrolment in education) is not only still very low, but also still focus on quantity over quality in Sudan. Jalal al-Din (2002), argues that the financial difficulties faced by some Arab governments led to an unacceptable reduction in material resources and financial resources allocated to higher education institutions. He indicates that but it seem that public and political pressure forced many governments to swap the quality of education by quantitative expansion, while this a swap might seem politically acceptable in the short term but it will have serious repercussions on educational trends and economic and even political directions in the medium and long terms. He argues that in Sudan and some Arab countries, the continuous random unregulated expansion, establishment and opening of more universities and colleges and increase in students enrolment rates in the existing universities without allocation and provision of the required material and financial resources, sufficient numbers of qualified faculty members, sufficient facilities for libraries, books, laboratories, materials and equipment for laboratories led to serious deterioration in higher education institutions. Even due to lack of public funding to feed universities some universities and colleges were opened in the existing old buildings without making the sufficient reform in the infrastructure that were not originally suitable for academic higher education institution and even, libraries, which earlier was regularly subscribed on important periodic and journals no longer do so as they fail to acquire basic references due to lack of funding of both local and foreign currency led to further deterioration in higher education institutions.

4.5. Summary

In this subsection, we briefly summarize and conclude the chapter, thus a survey on empirical literature and evidence on the social development in Sudan, was reviewed. Hence, we was discussed the expenditure on social services, especially, health and education in Sudan. In addition the health and social development in Sudan was discussed in some details giving a brief background on health status, the effects of structural adjustment programs on health sector and the then the health system in term of organization and finance was discussed. Beside this we were presented education and social development in Sudan, by giving background and characteristics of educational policies. Then we concluded the chapter with some final remarks. In the following next chapter five we will go to discuss the research methodology.

In this research our analysis of the supply and demand for education from regional perspective is based on the classification of Sudan geographical areas according to main seven geographic regions that includes the Northern, Khartoum, Central, Kordofan, Darfur, Eastern and Southern regions. In particular, this classification implies that the Northern region includes Northern and Nahr Alnil states, the central region includes Aljazeera, Sinnar, White Nile and Blue Nile states, the Eastern region includes RedSea, Algedarif and Kassala states, the Western region includes Kordofan and Darfur regions that include all the states which are located in Kordofan and Darfur respectively and the Southern region includes Bahr Elghazal, Equatoria and Upper Nile states.[i]