WHO-EM/ARD/032/E

Country Cooperation Strategy for WHO and Sudan 2008–2013

Sudan

World Health Organization
Regional Office for the Eastern Mediterranean

WHO-EM/ARD/032/E

Country Cooperation Strategy for WHO and Sudan 2008–2013

Sudan

World Health Organization
Regional Office for the Eastern Mediterranean

World Health Organization 2009 ©

All rights reserved.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Publications of the World Health Organization can be obtained from Health Publications, Production and Dissemination, World Health Organization, Regional Office for the Eastern Mediterranean, P.O. Box 7608, Nasr City, Cairo 11371, Egypt. tel: +202 2670 2535, fax: +202 2765 2492; email: PAM@emro.who.int. Requests for permission to reproduce, in part or in whole, or to translate publications of WHO Regional Office for the Eastern Mediterranean – whether for sale or for noncommercial distribution – should be addressed to WHO Regional Office for the Eastern Mediterranean, at the above address: email: WAP@emro.who.int.

Document WHO-EM/ARD/032/E
Design and layout by Pulp Pictures
Printed by YAT Advertising

Contents

Abbreviations

ACT	Artemisinin-based combination therapy
CBI	Community-based initiatives
CCA	Common Country Assessment
CCS	Country Cooperation Strategy
CPA	Comprehensive Peace Agreement
DOTS	Direct observation of treatment, short-course
EPI	Expanded Programme on Immunization
EWARS	Early Warning and Response System
FMOH	Federal Ministry of Health
GDP	Gross Domestic Product
GONU	Government of National Unity
GOSS	Government of Southern Sudan
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
JAM	Joint Assessment Mission
JPRM	Joint Programme Review and Planning Mission
MDGs	Millennium Development Goals
NGO	Nongovernmental organization
NHIF	National Health Insurance Fund
OS	Other sources
PA	Programme area
RB	Regular budget
SHHS	Sudan Household Health Survey
SMOH	State Ministries of Health
SO	Strategic Objective
SLM	Sudan Liberation Movement
SPLM	Sudan People's Liberation Movement
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNAMID	African Union/United Nations Hybrid operation in Darfur
UNCT	United Nations Country Team

Abbreviations

UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNMIS	United Nations Mission in Sudan
WHO	World Health Organization

Section 1

Introduction

Section 1. Introduction

The Country Cooperation Strategy (CCS) reflects a medium-term vision of WHO for technical cooperation with a given country and defines a strategic agenda for working in and with the country. The CCS is a key instrument for WHO in the context of improving aid effectiveness at country level through alignment and harmonization of the health and development agenda. The CCS clarifies the proposed roles of WHO and how its core functions are applied in supporting the national health and development plans and strategies. The CCS takes into account regional as well as Organization wide strategic orientations, priorities and the broader international legal and policy framework of the United Nations system such as the Millennium Development Goals, gender equity and the human rights-based approach to development.

The CCS examines the health situation in the country within a holistic approach that encompasses the health sector, socioeconomic determinants of health and national policies and strategies that have a major bearing on health. The exercise aims to identify the health priorities in the country and place WHO support within a framework of 6 years in order to strengthen the impact on health policy and health system development, as well as the linkages between health and cross-cutting issues at the country level. The CCS is the reference for WHO's work in the country, and guides planning, budgeting and resource allocation. It is the basis for reviewing WHO country presence and for mobilizing human and financial resources for strengthening WHO's support to health development in the country.

The CCS process takes into consideration the work of all partners and stakeholders in health and health related areas. The process is a strategic dialogue in the country and within the entire WHO secretariat: the country office, Regional Office and headquarters. It draws from, and contributes to, aid coordination and partnership platforms, in particular the Common Country Assessment/ United Nations Development Assistance Framework (CCA/UNDAF). It seeks to complement the cooperation strategies of other major external actors in the country.

The CCS process in Sudan has been sensitive to the special circumstances in Sudan during the past decade including the conflicts in the south and in Darfur. This situation, particularly in south Sudan, has led to a sharp reduction in the coverage and quality of health delivery through the publicly funded health care system.

The landmark Comprehensive Peace Agreement (CPA) in January 2005 and international peace and stability building efforts and arrangements provide an opportunity for health and development, both for the northern and southern parts of the country. In Darfur, despite a peace agreement, insecurity and uncertainty prevails. Accordingly, the CCS takes into account the health and development challenges in south Sudan and conflict affected Darfur.

During the preparation of the CCS, key officials in the Ministry of Health as well as officials from various other government authorities, United Nations agencies, nongovernmental organizations and private institutions were consulted. The list of persons met by the CCS mission is given in Annex 1. Health priorities of the country, as laid down in a variety of planning and strategic documents, were reviewed. This extensive consultation and review process has ensured that the strategic agenda is aligned with national priorities and concerns for the coming 5–6 years and also takes into account WHO's comparative advantage.

The timing of the formulation of revision of the CCS was opportune with respect to the increasing collaboration within the UN agencies. Preparations for the CCA/UNDAF exercise were under way in the country and the revised CCS document will help ensure the harmonization between the various UN agencies.

The mission also examined the follow-up of the first CCS formulated in 2002 and the implementation of the proposed strategic agenda. It was considered that the components of the strategic agenda were largely reflected in the Joint Programme Review and Planning Missions (JPRMs) covering the bienniums 2004–2005 and 2006–2007.

Section 2

Country Health and Development Challenges

2.1 Geography, ecology and demography

Sudan is the largest country in Africa and is spread over 2.5 million square kilometres. The northern part of the country is an extension of the Sahara desert, the central part is a dry savannah area and the southern part has a tropical forest climate. The poor infrastructure adversely affects coverage of health services and increased costs. Climatic factors contribute to humanitarian emergencies related to drought and flooding and the ecological factors expose much of the population to major infectious and parasitic diseases.

The country has a total population of 40 169 996, out of which 10 104 000 live in the southern states. It is growing at an annual rate of 2.6% and the total fertility rate is 5.9. The population below 15 years of age and below 5 years of age constitute, respectively, nearly 45% of the and 15% of total estimated population, while those aged 65 years and over represent 4% of the population.[1] Women (20 117 491) slightly outnumber men (20 052 504). 68% of the population lives in rural areas. The country is experiencing urbanization. There are nearly 5 million people living in Khartoum, including an estimated 2 million internally displaced persons. By 2015, the urban population is expected to equal the rural population. There is a high rate of dependency.

2.2 Political structure

Sudan is a decentralized federal state with a multi-tiered structure: the Government of National Unity (GONU) at the national level, the Government of Southern Sudan (GOSS) for the southern states, and the state and local governments.[2] Administratively, the country is divided into 25 states, 10 of which constitute south Sudan. Currently there are 87 localities in northern Sudan and 78 counties in south Sudan; however, this administrative level is undergoing change as new localities and counties are being created by redrawing the boundaries of the existing ones.

2.3 Economic, social and cultural factors

Sudan is rich in terms of natural and human resources, but it is a low-income country. In 2005 Sudan ranked 139 out of 177 countries in terms of human development indicators, with a Human Development Index of 0.505.[3] GDP per capita was US$ 700 in 2006. However, bolstered by higher oil production, good harvest and a boom in construction and services, the economy has recently grown at a fast pace: 11% growth in 2006. However, this growth has been unevenly distributed and is concentrated in central states around Khartoum. Agricultural activity provides a livelihood for 70% of the population, but its contribution to the GDP has decreased from 46.3% in 2000 to 39% in 2005. The overall

[1] Federal Ministry of Health. Sudan Household Health Survey. 2006
[2] Interim Constitution, 2005
[3] Federal Ministry of Health. Twenty-five year strategic plan for health sector in Sudan. 2004

resources available to the health sector have been limited and the austerity measures of recent years have further reduced them. Poverty is widespread with considerable variation between and within states. The Human Development Report 2007/2008 listed Sudan as 69th among 108 developing countries in terms of the human poverty index.

In 2004 the literacy rate of the population over 15 years of age was 50.6% for males and 48.2% for females. The average urban literacy was 67%.3 According to findings of the Sudan Household Health Survey (SHHS) in 2006, the proportion of children reaching the 5th grade is 90.3%, but only 19.4% complete primary school. Disaggregated data show considerable disparity between states.

Sudan is a multicultural society with hundreds of ethnic and tribal divisions and languages. The northern states cover most of Sudan and include most of the urban centres. A large majority of the population are Arabic-speaking Muslims. South Sudan has a predominantly rural subsistence economy and severely lacks infrastructure. Muslims and Christians constitute a significant proportion of the population.

2.4 Health indicators

The average health indicator trends mask the significant urban–rural and regional disparities that prevail particularly in the southern states, as well as some states in northern Sudan that are underserved. For example, children born in south Sudan have a 25% chance of dying before the age of 5, and only 25% are likely to live to the age of 65 years. Some important indicators are given in Table 1 below.

Again, findings of the SHHS show considerable variation between different states and between the northern and southern parts of the country.

2.5 Epidemiological trends and burden of disease

The epidemiological profile is largely dominated by communicable diseases.

Table 1. Sudan's main health status indicators (national and south Sudan)

Demographic indicators	National	South Sudan
Crude birth rate (‰)	37.8	50.5
Crude death rate (‰)	11.5	22.0
Total fertility rate (per woman)	5.9	6.7
Life expectancy at birth (years)	56.6	42
Infant mortality rate (per 1000 live births)	81	102
Under five mortality rate (per 1000 live births)	112	250
Maternal mortality ratio (per 100 000 live births)	1107	2054

Source: UNFPA. Situational analysis of reproductive health and adolescent sexual and reproductive health in South Sudan, April 2007

The main causes of morbidity and mortality are parasitic diseases such as malaria, and tuberculosis, diarrhoeal diseases and respiratory infections. Widespread chronic malnutrition, natural disasters and population displacement further accentuate the high mortality and morbidity rates. As well, maternal mortality is very high due to lack of health facilities and shortage of personnel, especially in the south. A host of tropical diseases such as leishmaniasis, human African trypanosomiasis, lymphatic filariasis, dracunculiasis, leprosy, dengue, trachoma, intestinal nematode infections and onchocerciasis are prevalent in south Sudan.

Malaria is a major cause of morbidity and its endemicity varies from hypo-endemic in the north to hyper-endemic in the south. Sudan accounts for 50% of the malaria burden in the Region. Over 90% of cases are caused by infection with Plasmodium falciparum. Anopheles arabiensis is the principal vector. Nearly 75% of the total population are at risk of malaria.

The annual estimated number of malaria episodes is 5.5 million. Reported cases of 2.7 million in 2007 are considered a fraction of the total cases due to the weak surveillance system. In north Sudan, malaria represents around 21% of outpatient consultations and around 30% of inpatient admissions.

The rates are significantly higher in rural compared to urban populations. Malaria causes considerable mortality in Sudan, especially among young children and pregnant women. In northern Sudan, 16% of hospital deaths are attributed to the disease. Studies of individual hospitals in northern Sudan have found case fatality rates of between 5% and 12%, with children under 3 years of age four times more likely to die than others.

The malaria treatment protocol has changed from chloroquine to artemisinin-based combination therapy (ACT) based on research evidence. The new medicine is readily available in public health facilities and the market. Medicine is provided to the patients free of cost under an arrangement with the Global Fund and the percentage of malaria cases/fever patients treated with ACT is increasing from 10.5% in 2005 to 27.6% in 2007. Insecticide treated nets are the main preventive tool and are being distributed through campaigns with the percentage of households with at least one insecticide treated nets increasing (from 21% in 2005 to 43% in 2007) but still far below the target coverage of more than 80%. Challenges for the malaria control programme in Sudan are poor health infrastructure and weak health system, insufficient trained staff at local levels, weak monitoring and evaluation and surveillance systems, security issues and weak coordination.

The incidence of tuberculosis in Sudan constitutes nearly 8%–11% of the cases in the Eastern Mediterranean Region.[4] In 2005 the total number of new smear-positive cases was 36 741, or 101 per 100 000 population. The prevalence of all forms of tuberculosis was 145 021, or 400 cases per 100 000 population. The overall estimated

[4] WHO. Annual tuberculosis report 2002

death rate, including among HIV-infected tuberculosis cases, was 65 per 100 000 population in 2005. The case detection rate is 35%, which is much lower than the target of 70%. However, this small proportion of detected cases was successfully treated (treatment success rate was 81% for the 2005 cohort), bringing treatment success closer to the to the 85% target.[5]

The national tuberculosis programme has managed to expand in 15 northern and 6 southern states. For every 100 000 people, there is a tuberculosis management unit serving as a diagnostic unit, and for each management unit there are three treatment support centres. These centres are led by the central unit at federal level and by the state coordinator's office and locality coordinator at state level. Difficulties constraining treatment are under-utilization of microscopy laboratory; poor recording, low detection rates, high defaulter rates and insufficient technical and managerial capacity in the national tuberculosis programme. The Government receives major support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (round 5), Norwegian Heart and Lung association, WHO, Global Development Finance, International Union Against Tuberculosis and Lung Disease, and the Islamic Development Bank for the national tuberculosis programme.

The national health policy and strategy give priority to the control and prevention of HIV/AIDS. The country is at an early stage of a generalized epidemic.[6] Data on the burden of HIV/AIDS in Sudan remain limited. The estimated data show a prevalence rate of 2.6% for the entire country (based on WHO/UNAIDS modelling), with the prevalence probably higher in the south, the east and Khartoum. Antenatal sentinel surveillance in 2005 put the prevalence at 1% in the northern states and 3.4% in the south. Data confirm the existence of risky sexual behaviour where over 70% of young people reported being a previous sexual encounter.[7] Plans for conducting a comprehensive nationwide AIDS indicator survey, to collect behavioural and infection prevalence data are well advanced, and it will probably take place in 2009. Stigma and discrimination remain a problem. Due to diversity of social, economic and cultural backgrounds among the population, interventions have to be tailored to local customs and traditions.

The HIV/AIDS situation is likely to become more serious due to increased movement across the borders of neighbouring countries with higher HIV infection rates. Knowledge about preventing HIV transmission is limited: 0.1% of women in the Northern and River Nile states, 6.8% in Khartoum; and 24.6% in Central Equatoria reported knowledge of how HIV is transmitted.[1]

Schistosomiasis is the most prevalent parasitic disease in Sudan, with 24 million people at risk, 5 million cases of infection and a prevalence rate of 20%. The government response has been inadequate. Leishmaniasis is also endemic, with nearly 8000–10 000 cases being notified yearly

[5] World Health Organization. Global tuberculosis control: surveillance, planning, financing. 2007
[6] Federal Ministry of Health. Behavioural and epidemiological survey report, 2002
[7] UNICEF Sudan 2005

mostly from the states of South Kordofan, Gedaref, Sennar, Upper Nile, Blue Nile, South Darfur and Unity. Epidemiological mapping for lymphatic filariasis was carried between 2003 and 2006 in 63 localities in 12 states and showed that the prevalence of disease ranged from 1% in Sennar to as high 41% in North Kordofan. Sudan harbours more than 80% of the global burden of guineaworm infection. In 2005 about 5000 cases were reported in the country. Sero-positivity for human trypanosomiasis has shown rates around 48% in the state of Central Equatoria, while nearly two million people area at risk of developing onchocerciasis, mainly in North Bahr Al Gazal and Northern states.

Sudan is prone to epidemics of other diseases such as meningococcal meningitis, viral haemorrhagic fevers, cholera etc, resulting from poor reporting, environmental factors and inadequate health services.

In addition to the huge burden of communicable diseases, Sudan is also experiencing a rapidly increasing burden of noncommunicable diseases. Of these, diabetes mellitus, cardiovascular diseases and cancer have been among the top ten causes of hospital admission and deaths in Sudan since 1998. Based on the Sudan Household Health Survey, the prevalence of hypertension and diabetes mellitus in people 25 years and older was estimated at 4% and 2% respectively, with a larger proportion of cases expected to be seen in the urban population. As patients suffering from both these conditions often go undetected, the actual prevalence could be 2–3 times higher. A recent survey conducted in Khartoum state estimated the prevalence of overweight and obesity (body mass index greater than 25) to be 53.7% and hypertension 19.7%.

The overall health and nutrition situation in south Sudan is among the worst in the world, as seen in the findings of the Sudan Household Health Survey. 25% of the population is covered by basic health services. Common communicable diseases account for the largest share of the burden of disease, with malaria responsible for a high proportion of morbidity and mortality. Maternal and child mortality rates in south Sudan are among the highest in the world and need urgent attention. The incidence of tuberculosis is estimated at 325 cases per 100 000 population. The prevalence of HIV/AIDS has been estimated to be around 3.4%, but this could well be an underestimation.

2.6 Organization and management of health

2.6.1 Historical background

The modern health care system in Sudan goes back to 1899, when health care was being delivered by the army. In 1924, the Sudan Medical Services was established and it became the Ministry of Health in 1949. Sudan has 25 states, and each state has a ministry of health. Within each state there are number of localities (134 in total) managed through a district health system approach according to the local government.

2.6.2 Health policies and strategies

The Interim Constitution (2005), which went into effect after the signing of CPA on 5 January 2005, gives special emphasis to health. The Constitution requires the state to

promote public health and guarantee equal access and free primary health care to all people of Sudan.

The national government has developed a 25-year long term and a 5-year medium term strategic plan. The 25-year plan (2003–2027) gives priority to reforming and rebuilding the health system based on fair financing, and aims to reduce the burden of diseases, promote healthy lifestyles, develop and retain human resources, and introduce advanced technology, while assuring equity, quality and accessibility of health services. The 5-year health sector strategy (2007–2011), in line with 25-year plan and national health policy, focuses on ensuring the provision of health care to the citizens of Sudan, especially poor and vulnerable populations.[8]

The key principles guiding the 5-year strategy can be categorized as follows.

- Health will be central to sustainable development and peace
- Sustainable quality health care will be provided to all through the primary health care approach
- Priority will be given to building capacity in policy formulation, priority-setting, management and planning, health information and research at all levels
- The health system will be strengthened to focus especially on accelerated child survival, reducing the burden of prevalent diseases, and strengthening emergency and humanitarian action for health

In 2005, the Government of Southern Sudan produced a health plan within which primary health care remains the cornerstone of the health system and the focus is on equity, pro-poor policies and good governance. The policy emphasizes 18 priorities. Among these 18 are 10 that have not received adequate funding and are a top priority for resource allocation.

- Reducing inequalities in access to health care
- Fostering community participation
- Developing and implementing a minimum package of health care
- Developing and implementing an essential package of hospital services
- Improving delivery of maternal and child health related interventions
- Developing health facility infrastructure
- Institutional development
- Human resource development
- Health financing
- Health policy making, planning, monitoring and evaluation

2.6.3 Health system – public sector organization and management

The country has a three-layered health system: Federal Ministry of Health in the Government of National Unity (GONU), the Government of Southern Sudan (GOSS), and

[8] Federal Ministry of Health, Health sector strategy: investing in health and achieving the MDGs, 2007–2011

the state ministries of health and locality/ county health management authorities. In the south, however the GOSS has included the municipality as another layer in the organizational hierarchy of the health system. The Federal Ministry of Health works in collaboration with the 25 state ministries of health and is responsible for formulating national health policies, human resources planning and development, strategic planning, health legislation, response to epidemics, international health, in addition to monitoring and evaluation of all health activities and interventions in the country.

The state ministry of health is responsible for implementing policy, detailed health planning, and programming and project formulation. This level organizes health services in state and supports the local health authorities. At the third level, based on district health system, a local health authority delivers health care through the primary health care approach.

The governance function needs to be strengthened at all levels of the health system. The organizational and management capacity of the majority of state ministries of health is limited in terms of financing, personnel supervision, logistics management, essential services, medicines and supplies.

2.6.4 Health care delivery and health system resources

Article 46 of the Interim Constitution of the country states that the government is responsible to provide universal and free-of-charge basic health services. The minimum package of primary health care services should include the Expanded Programme on Immunization, Integrated Management of Childhood Illnesses, reproductive health, essential medicines, nutrition, health education and treatment of common illnesses.

Health care is delivered at three levels. At the apex are teaching, general and specialist hospitals, having a varying number of specialties and beds providing secondary and tertiary care. In the second level are the rural hospitals providing secondary care and diagnostic facilities. Primary care is provided

Table 2. Type and number of facilities according to functional status

Type of facility	Total	Functional	Non-functional
Hospitals including rural hospital	357	357	
Urban health centres	558	558	
Rural health centres	485	485	
Dispensaries	1226	1060	166
Dressing stations	762	601	161
Primary health care units	3044	2404	640

Source: Federal Ministry of Health. Sudan health system survey, 2004

through a variety of outlets: primary health care units, dressing stations, dispensaries and health centres.

Generally, the health care network has a curative bias. The number of hospitals increased from 253 in 1995 to 357 in 2004, i.e. the hospital/population ratio is 1:100 000. The number of hospital beds also increased from 22 444 in 1995 to 24 785 in 2004, or 72 beds per 100 000 population. However, there has been little investment in primary care facilities. Table 2 summarizes the findings of a health infrastructure survey conducted in 2004. Results showed that overall, 36% of primary health care facilities are not fully functional in the northern states. Furthermore, the various types of health facilities are unevenly distributed in the different states of the country, as shown in Table 3.

In south Sudan, the coverage of basic health services is around 25%. Health service infrastructure and equipment are inadequate, poorly maintained and unequally distributed among the regions. In rural areas there are around 100 health centres and 550 health units, resulting in a ratio of around one health centre per 75 000 people and one health unit per 14 000 population. There is one hospital for 400 000 people; in effect, the rural south has literally no access to the hospital care. Most of the health services in south Sudan are provided by international nongovernmental organizations and faith based organizations.

In addition to the Federal Ministry of Health, the Armed Forces and Ministry of Higher Education also provide curative health services. The private sector is expanding rapidly. Nongovernmental organizations are currently the major providers of health services in south Sudan. GOSS has been considering contracting out health services to the nongovernmental organizations.

2.6.6 Private health care

The National Health Accounts study and household health expenditure survey have not been carried out. The health sector is under-funded: public health expenditure is 1.5% of the GDP and around 4.8% of government budget. Public health expenditure was approximately US$ 11 per capita in 2005. Out-of-pocket expenditure is estimated at US$ 19–21 per capita and constitutes 70% of total expenditure. Health spending is skewed towards hospital care, and primary and first-referral care are under-funded and lack resources, particularly in the poorer states. For example, in 2005 public expenditure on health in Blue Nile State was US$ 3 per capita, allocated mostly to salaries and secondary hospitals in the capital. However, the CPA and increasing oil revenues and foreign investments have raised the GDP and hence government expenditure on health has also risen steadily.

The government has adopted a medium-term expenditure framework which aims at raising domestic public expenditures on the health sector to 1.5% of GDP by 2008, equivalent to around US$ 15 per capita. In 2005, the external resources channelled through the Ministry of Health amounted to US $ 46.1 million, mainly from UN agencies. In 2005, international nongovernmental organizations contributed US $ 390 million in health and other humanitarian assistance. The exact amount spent on health care services is unknown.

State	Hospitals	Urban health centres	Rural health centres	Dispensaries		Dressing stations		Primary health care unit	
				Functioning	Non functioning	Functioning	Non functioning	Functioning	Non functioning
Khartoum	43	114	30	177	22	0	0	41	0
Gezira	52	48	141	0	0	0	0	739	0
Sinnar	13	12	13	34	36	58	73	0	0
Blue Nile	13	13	3	32	8	47	35	23	22
White Nile	34	24	28	79	0	61	0	57	11
Red Sea	19	19	14	31	6	14	5	115	56
Gadarif	16	19	19	20	0	85	0	64	0
Kassala	10	37	23	94	10	33	10	89	10
Northern	26	6	62	145	20	46	13	11	3
River Nile	28	49	116	68	11	71	17	31	14
North Kordofan	16	43	2	90	0	77	0	318	128
South Kordofan	10	54	2	55	30	0	0	120	52
West Kordofan	10	10	15	32	0	31	3	149	112
North Darfour	11	10	17	30	23	0	0	46	175
South Darfour	10	18	0	43	0	11	0	295	0
West Darfour	4	6	0	37	0	11	5	126	57

Table 3. Distribution of various health facilities in the different states

Table 3. Distribution of various health facilities in the different states

State	Hospitals	Urban health centres	Rural health centres	Dispensaries		Dressing stations		Primary health care unit	
				Functioning	Non functioning	Functioning	Non functioning	Functioning	Non functioning
Upper Nile	9	10	0	16	0	0	0	43	0
Bahr El Gazal	4	19	0	14	0	3	0	55	0
Unity	4	13	0	9	0	17	0	0	0
Buhyrat	3	0	0	0	0	0	0	0	0
Jonglei	4	10	0	0	0	0	0	0	0
East Equatoria	7	13	0	14	0	34	0	8	0
West Equatoria	7	5	0	4	0	0	0	8	0
North Bahr El Gazal	1	4	0	2	0	0	0	4	0
West Bahr El Gazal	2	2	0	34	0	2	0	23	0
Warab	3	0	0	0	0	0	0	0	0
Total	357	558	485	1060	166	601	161	2404	640

Note: The numbers for southern Sudan states have not been updated

Source: Federal Ministry of Health: Sudan health system survey, 2004

In Sudan, three types of health insurance scheme coexist. The National Health Insurance Fund (NHIF) covers approximately 25% of the target population and is distributed in 21 states. NHIF expenditure in 2005 was estimated at US$ 1 per capita per year. The benefit package includes all medical consultations, admissions, diagnosis procedures and therapies including surgical operations. The insured person has to pay 25% of medicine costs as a co-payment. The NHIF provides services through 779 health centres, directly owned by the NHIF or contracted. The other two types of scheme are the military health insurance system and the employee-based schemes of some large companies (e.g. Sudanese Airways).

A crucial policy challenge for health financing is to increase government investment in health, reduce financial burden on households and remove social inequalities in access, utilization and health outcomes.

2.6.7 Human resources for health

The gap in human resources is huge. The shortage of adequately trained nurses and medical assistants has severely constrained the coverage of primary health care. For these cadres, not only is the attrition rate due to migration (i.e. "brain drain") high, but production is also low. Out of a total of 21 000 physicians registered with Sudan Medical Council, over 60% work outside Sudan. Federal institutions and the State Ministry of Health in Khartoum attract the majority of the country's skilled health human resources, leaving few in the rural areas. Table 4 shows the distribution of workforce.

No efforts have been made to explore options for retaining the health workforce within the country or for ensuring their deployment in underserved and rural areas. Continuous professional education and on-the-job training opportunities are limited to national training activities supported mainly by the UN agencies. Career structures are ill defined and incentives and compensation are meagre. Health services have suffered as a result, particularly in the south.

A recent survey that mapped human resources in the northern states (excluding the three Darfur states) showed a total of 61 323 health personnel in the public and private sectors (Figure 1).

The shortage of trained health workforce in south Sudan is severe. In rural areas there are around 4600 trained personnel, more than half of whom work in Equatoria. About 3000 of these are primary health care workers with less than one year of training. There are fewer than 40 physicians and about 650 nurses; hence ratios of skilled personnel to population are exceptionally low (0.5 physicians and 9 nurses per 100 000 population).

2.6.8 Human resource development

There are 75 health institutes offering diploma or degrees (28 offering diplomas and 47 offering degrees) in the health field. 14 of these are in the private sector, and the remaining 61 belong to a variety of stakeholders including the Federal Ministry of Health, state ministries of health, police, military health services and universities. A summary of the type of institutions is given in Table 5.

Generally speaking, scant attention is given to updating of the curriculum and the teaching/training methodology. However, in response to the pressing need for health workers in primary health care facilities, a Sudan Declaration for Nursing and Allied Health Workers was signed by the Federal Ministers of Health and of Higher Education and by the WHO Regional Director for the Eastern Mediterranean in 2001. The main thrust of the Declaration is to raise the level of nursing and allied health education. To implement the Declaration, an Academy of Health Sciences was established in 2005, with branches in five states (Khartoum, River Nile, White Nile, Gadarif and Blue Nile), and plans were made to open branches in the remaining 10 states in the north. Students have been accepted for courses leading to nursing diploma and for training as general medical assistants and midwives. A continuous professional development centre was also established in Khartoum to provide in-service training to the health workforce. The Federal Ministry of Health is establishing a public health institute for pre-service and in-service training in public health, including planning and management.

2.6.9 Health management information system

Lack of data makes proper monitoring and evaluation difficult. Selected studies (surveys in 1978, 1999, 2000, 2006) have been undertaken. However, their findings are isolated islands of information in the

Table 4. Urban–rural distribution of health workforce in 12 states

No	State	Urban	Rural	Total	Urban–rural %
1.	Khartoum	21 965	899	22 864	96:4
2.	Gezira	3461	4382	7843	44:46
3.	South Kordofan	2146	1866	4012	53:47
4.	Sinnar	2249	1542	3791	59:41
5.	North Kordofan	2637	958	3595	73:27
6.	Kassala	2405	1050	3455	69:31
7.	River Nile	2000	1442	3442	58:42
8.	Northern	1082	1768	2850	38:62
9.	Red Sea	1744	1080	2824	62:38
10.	Gadarif	1846	758	2604	70:30
11.	White Nile	1608	808	2416	66:34
12.	Blue Nile	1204	423	1627	74:26
	Total	44 347	17 976	61 323	72:28

Source: Federal Ministry of Health. Report of human resources for health survey in 12 states, 2006

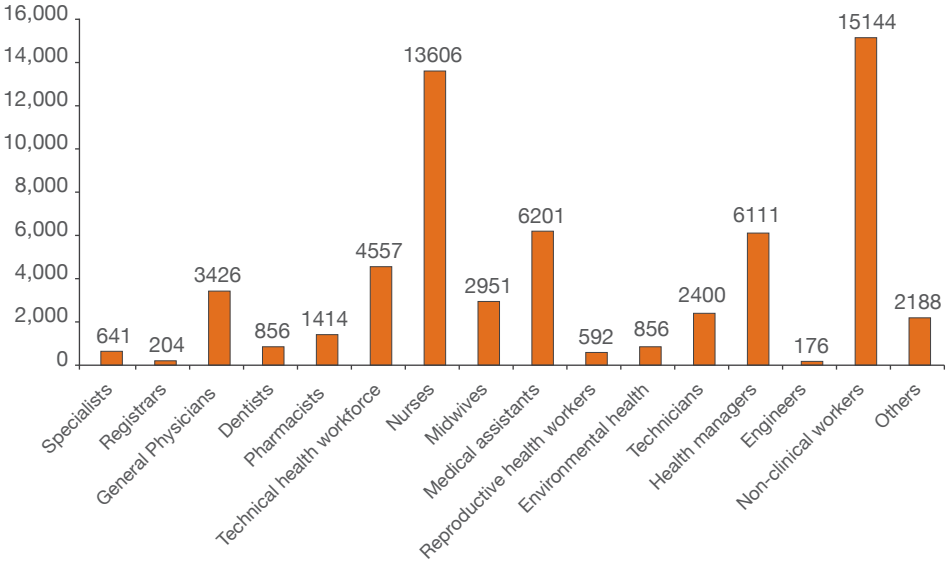

Figure 1. Distribution of various categories of health workforce in northern Sudan

Source: Federal Ministry of Health. Health workforce survey, 2005

Table 5. Summary of higher education institutes related to the health sector

College or institute	Number		
	Public	Private	Total number
Medicine and health sciences	19	6	25
Medical laboratory sciences	2	5	7
Medical laboratory sciences	9	6	15
Pharmacy	3	4	7
Public and environmental health	4	-	4
Higher nursing	3	3	6
Basic and applied medical sciences	2	-	2
Medical radiology	2	1	3
Optics sciences	1	-	1

Source: Federal Ministry of Health. Health workforce survey, 2005

health system. Although data are collected, they remain in different departments/ programmes, and are not consolidated. The routine health information system does not cover a large population, leaving substantial gaps, especially for mortality and related indices. The private sector is not covered, and other groups such as the army, police etc. are not linked to the public sector health information system. Only 58% of births were recorded and there is no death registration system. These conditions hinder proper assessment of Sudan's achievements and progress towards the MDGs and highlight the need for developing a comprehensive health management information system.

2.6.10 Pharmaceuticals

The Federal Ministry of Health has a national essential medicines programme with a national drug policy (updated in 2005). The national essential medicines list and national drug formulary are reviewed and updated on a regular basis. There are no specific programmes for the rational use of drugs and no standard treatment guidelines. Currently 19 national pharmaceutical manufacturing groups with sufficient capacity are producing a narrow range of essential medicines, but not in injectable dosage form. A unit for information management is working at the federal level only. The national policy for traditional medicines is not yet fully developed.

A good drug registration system is in place using WHO's electronic drug registration system. However, the national drug quality control laboratory is weak. In the southern states, most of the medicines are provided by nongovernmental organizations and faith-based organizations. The Ministry of Health, under the auspices of Multi-Donor Trust Fund, has recently procured a large quantity of medicines, but there are concerns for effective inspection, quality control, storage and distribution.

The major challenges facing the pharmaceutical sector in Sudan are ensuring access to essential medicines and their rational use, establishing fully functional drug regulatory authorities with legislative power, improving communication and information exchange and increasing the purchasing power of the Central Medical Stores Public Corporation.

2.7 Emergency and humanitarian action

The conflicts in the south and in Darfur have resulted in considerable loss of life and damage to the physical infrastructure and socioeconomic development process. Capacity for effective response and rehabilitation has not been built. While international agencies, including nongovernmental organizations and UN agencies, continue to render the assistance, there is inadequate emphasis by the government on comprehensive disaster risk management.

There is insufficient awareness of the importance of institution building and of the need for a multidisciplinary approach in assessing and managing disaster risk. Therefore, while the health policy of the both GONU and GOSS emphasizes taking adequate steps, there is a need for focusing on several key activities.

- Strengthening capacity for decentralized and coordinated emergency health

preparedness, mitigation and response including early warning and response systems (EWARS)

- Identifying the transitional strategies for the post-conflict and early recovery actions and their linkage to humanitarian interventions during the acute emergency phase

- Enhancing the health sector as well as nutrition sector partnership and intersectoral coordination, especially at the level of service delivery and resource mobilization

2.8 Immunization

The national Expanded Programme on Immunization (EPI) with substantial funding from the GAVI Alliance, has been supported to increase routine immunization coverage. The total financial investment to EPI and the polio eradication programme was US$ 15 million during the first phase of GAVI support. WHO/UNICEF estimates of coverage show promising progress (Table 6). However, findings of the recently conducted household health survey (Table 7) put the coverage at lower rates.

Detailed coverage rates for different states and for the northern and the southern part of the country are given in the Sudan Household Health Survey.

Progress in eradicating polio is notable, with wild poliovirus transmission interrupted since mid June 2005 and confirmed by the Regional Commission for Certification of Poliomyelitis in 2006. WHO and other partners have made substantial investment in the polio eradication programme. Challenges for EPI include poor service delivery, lack of resources, and skilled staff.

2.9 Maternal and child health

Sudan is facing serious challenges in achieving the Millennium Development Goals (MDGs), particularly Goal no. 5. The levels of maternal and neonatal mortality in the country are unacceptably high. In 2006, the maternal mortality ratio was estimated at 1017 per 100 000 live births, a significant increase from 1999 estimates of 509 per 100 000 live births. The reasons for high rates are: high percentage (more than 76%) of deliveries taking place at home; low percentage (only 6%) of deliveries attended by a physician; rates of very low Caesarian section indicating lack of basic obstetric care, early marriage and questionable skills of staff providing antenatal care. Current neonatal mortality and infant mortality rates are reported at 41 and 81 per 1000 live births, respectively, in the survey. All three indicators show significant variation across regions, levels of maternal education and wealth quintiles.

To address this situation, a road map has been prepared with the aim of reducing maternal mortality. Actions include: upgrading the midwifery cadre and skilled birth attendants;[9] providing

[9] Skilled attendant – "an accredited health professional-such as a midwife, doctor or nurse-who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns". WHO. Making pregnancy safer: the critical role of the skilled attendant. (Document MPS/RHR/WHO) Geneva, 2004.

Table 6. WHO/UNICEF estimates of immunization coverage rates, 2000–2006

Year	BCG (%)	DTP3/OPV3 (%)	Measles (%)	HBV3 (%)
2000	56	62	58	0
2001	67	66	74	0
2002	65	60	58	0
2003	69	69	65	0
2004	66	74	67	0
2005	72	78	69	22
2006	77	78	73	60

Source: WHO and UNICEF Joint Reports

Table 7. Findings of immunization coverage survey (2006)

Vaccine	Coverage (%)
Tuberculosis	72.9
DPT	52.9
Polio	59.5
Measles	59.3
Fully immunized children	31.8
Neonatal tetanus	48.3

Source: Sudan Household Health Survey, 2006

emergency obstetric care in rural hospitals, raising awareness on high risk pregnancy; strengthening family planning services; and developing effective partnerships with the relevant sectors. A maternal and neonatal mortality reduction council, chaired by the president, has been established, along with a steering committee chaired by the Federal Ministry of Health. The establishment of a maternal and neonatal mortality reduction council and support teams at state and local levels is in progress.

2.10 Social determinants of health

2.10.1 Nutrition

The 2006 household survey shows cause for concern with regard to nutrition (Table 8), especially in the southern states. The prevalence of malnutrition is compounded by drought, displacement, lack of food security, low quality food and inadequate knowledge of nutrition. As well, low vaccination

Table 8. Selected nutritional indicators (2006)

Nutritional status	Underweight prevalence (%)	8.3
	Stunting prevalence (%)	10.1
	Wasting prevalence (%)	3.5
Breastfeeding	Exclusive breastfeeding rate (0–5 months) (%)	33.5
	Timely complementary feeding rate (%)	55.5
	Continued breastfeeding rate (at 12–15 months) (%)	83.4
	Continued breastfeeding rate (at 20–23 months) (%)	34.9
	Adequately fed infants (infants aged 0–11 months) (%)	34.9
Salt iodization	Iodized salt consumption (%)	11.6
Vitamin A	Vitamin A supplementation (under-fives) (%)	76.2
	Vitamin A supplementation (postpartum mothers) (%)	18.3

Source: Sudan Household Health Survey, 2006

coverage, lack of access to good health facilities, safe water and sanitation adversely impact nutrition status.

Micronutrient deficiencies are widespread. Iodized salt consumption stands at only 11.6% in the north, though it is much higher in the southern states. The incidence of serious vitamin A deficiency has decreased substantially due to repeated vitamin A supplementation during national polio immunization day campaigns.

2.10.2 Lifestyle and health promotion

The Federal Ministry of Health has re-designated the Health Education Department as the Directorate of Health Promotion. It is now dealing with health education, school health, occupational health, oral health, tobacco control, mental health and noncommunicable diseases including cancer prevention, diabetes mellitus, prevention of cardiovascular diseases and care of the elderly. It is in need of more resources and skilled staff.

Recent needs assessment by the school health department in 10 states shows that most schools lack the basic elements of healthy environment, water and sanitation services and periodic medical check-up of the students. Rates of tobacco consumption are high and are rising, especially among women and youth. According to the Global Tobacco Youth Survey (2005), 18.5% of Sudanese youth (13 to 15 years old) are currently using different types of tobacco products.

2.10.3 Sustainable health and environment development

The national community based initiatives (CBI) programme, formerly known as Basic

Development Needs, aims at community empowerment and involvement in development. The CBI programme is under the sub-directorate of local health systems in the Directorate of Primary Health Care in the Federal Ministry of Health. During the past 10 years it has covered 74 areas with varying degree of success in improving health and socioeconomic indicators. WHO's collaboration in this initiative has included support to field mangers, supervision and provision of income-generating projects to communities. With the CPA and increased inflow of donor funding, particularly with regard to early recovery and development, there are opportunities to expand the CBI programme.

Responsibility for environmental health promotion in Sudan is shared between different bodies with different roles. The result is duplication of effort and lack of coordination between these bodies. WHO collaboration in environmental health has decreased considerably compared with the past. Currently, the water supply and sanitation conditions and lack of other environmental health measures in south Sudan pose a major health hazard and contribute significantly to high rate of mortality and morbidity. UNICEF and a number of other donors are assisting the local authorities, but there is a need for community-based action for improvement of water, sanitation and vector control measures. Training of community volunteers and local health workers ranks high among the priorities. Country-wide management of hazardous materials, food safety, water quality and solid waste management remain weak.

2.11 Partnership

2.11.1 Overview

There are a large number of the United Nations, multilateral, bilateral, international, global and regional funds, nongovernmental organizations and charity organizations that are directly or indirectly supporting the health sector in Sudan. With the decentralized state system, very robust capacity is needed in the federal and state ministries of health to enhance partnership with related sectors and players, coordinate external support and mobilize additional external assistance. At present such capacity is lacking. With the CPA and increasing involvement of international community, there are good opportunities for the UN system and international partners to help the government in developing such capacity.

In the case of south Sudan, since almost all health care services are provided by nongovernmental organizations and other external partners, the most immediate need is the establishment of a focal unit, with training of staff and development of procedures to manage, supervise and coordinate the work of nongovernmental organizations effectively.

2.11.2 Millennium Development Goals

In 2004, the Government of Sudan in collaboration with the UN Country Team carried out an assessment of the status of achievement of the MDGs.[10] Although better than those of sub-Saharan African countries,

[10] Sudan Millennium Development Goals, Interim Unified Report, 2004

Table 9. Status of MDG indicators in 2004

Goals and related indicators	Sudan	Sub-Saharan Africa	Middle East and North Africa
MDG 1: Eradicate poverty and hunger			
Prevalence of child malnutrition (underweight) (% under 5)	29.6	30.0	17.0
Prevalence of child malnutrition (stunting) (% under 5)	31.3	42.0	23.0
Prevalence child malnutrition (wasting) (% under 5)	13.7	8.0	7.0
MDG 4: Reduce child mortality			
Under-5 mortality rate (per 1000)	72	162	54
Infant mortality rate (per 1000 live births)	51	91	43
Measles immunization (% of children 12–23 months)	63	53	86
MDG 5: Improve maternal health			
Maternal mortality ratio (per 100 000 live births)	638	1100	360
Births attended by skilled health staff (%)	68	44	63
MDG 6: Combat HIV/AIDS, malaria and other diseases			
Contraceptive prevalence rate (% of women aged 15–49 years)	1.6	9.2	0.3
Proportion sleeping under insecticide-treated bed nets (% children under 5)	49.8	2	NA
Proportion of children with fever treated with anti-malaria medicines (% children under 5 with fever)	50	42	NA
Incidence of tuberculosis (per 100 00)	180	339	66
Tuberculosis cases detected under DOTS (%)	44.3	NA	NA
MDG 7: Ensure environmental sustainability			
Access to an improved water source (% of population)	59.3	55	90

Table 9. Status of MDG indicators in 2004

Goals and related indicators	Sudan	Sub-Saharan Africa	Middle East and North Africa
Access to improved sanitation (% of population)	31.2	55	83
General Indicators			
Population (million)	35.5	674	300
Total fertility rate (births per woman aged 15–49 years)	5.9	5.1	3.3
Life expectancy at birth (years)	57.9	46.2	68.2

NA: not available
Source: Sudan Millennium Development Goals, Interim Unified Report, 2004

the low health indicators in northern Sudan show poor health system performance. The health indicators given in Table 9 list the national averages; further analysis shows that the national averages disguise significant inequalities and a poor health situation at the state level.

Additional and more recent data from the Sudan Household Health Survey (2006) show that the northern states fare better than the southern states.

2.11.3 Response of the international community to CPA

Joint Assessment Mission

With the landmark CPA, a joint assessment mission was launched from April 2004 to February 2005 co-led by representatives of the Government of Sudan and Sudan People's Liberation Movement (SPLM), along with United Nations agencies and the World Bank. The mission comprised eight teams focusing on eight clusters: capacity building and institutional development; governance and rule of law; economic policy; production sector; basic social services; infrastructure; livestock and social protection; information and statistics; and the "three areas", i.e. South Kordofan/Nuba Mountains, Blue Nile and Abeyi.

Within the remits of the basic social services cluster, the mission made recommendations for water and environmental sanitation, health and education. While keeping in view the status, policies and stakeholders, the desired situation was delineated and priorities determined accordingly. For health, the mission defined the following targets for achievement by 2011, both in the north and south.

- Expand service delivery for long term, in parallel with implementation of 'quick win' projects
- Develop an equitable and efficient infrastructure network of health care

- Provide an adequate and sustainable system for delivering basic health care, especially in the disadvantaged areas
- Expand the availability of human resources for health care

Multi-Donor Trust Fund

After the signing of the peace agreement, a Multi-Donor Trust Fund (MDTF) was set up: one for northern states and the other for the southern states. US$ 500 million was raised in the Oslo Donor Conference on Sudan held in April 2005. Under the MDTF, a decentralized health system development project was started in the health sector for northern states with a total cost of US$ 89 million. The project aims at expanding access to primary health care; developing the decentralized health system; building capacity; and supporting policy development in health care financing, pharmaceutical supply, health planning and human resources development.

The GOSS and the MDTF for south Sudan are co-financing a health sector development programme with a total cost of US$ 60 million for the first phase. The three year programme focuses on health care financing, technical assistance and capacity-building and investment in infrastructure and human resources. In the field of health, essential medicines and bednets are being distributed to the vulnerable population for malaria prevention. Also through the MDTF, 47 wards of Juba hospital were rehabilitated and water supply and sanitation projects are being supported.[11]

Darfur Joint Assessment Mission

With the signing of the Darfur Peace Agreement between GONU and the Sudan Liberation Movement (SLM) in July 2006, the Darfur Joint Assessment Mission was launched in an effort to address the most urgent needs of population. The assessment team comprised 49 experts including Sudanese nationals and expatriates as well as representatives from donor agencies, academia, civil society, GONU, SLM and United Nations agencies. The areas assessed included basic social services, conflict-affected communities, rule of law, capacity building of local institutions, returns, and peace and security. The mission also addressed cross-cutting issues, such as gender, protection, environment, HIV/AIDS and conflict resolution and reconciliation.

2.12 Health and development challenges

The health challenges in Sudan are formidable, and include acute conditions requiring humanitarian action as well as a larger host of development issues. Some of the challenges are as follows.

- Making the best use of the opportunity afforded by the CPA and the national and international efforts at building peace and stability for health development
- Developing a pragmatic phased approach, using the district health model, to enhance decentralization of health services, scaling up primary health care services, building the organizational

[11] The World Bank News Release, Juba, Southern Sudan, 21 July 2008

and management capacities of states ministries of health, especially improving logistic support, availability of medicine, contraceptive supplies and maintenance

- Radically reducing the huge burden of communicable diseases, e.g. malaria, tuberculosis, hepatitis, vaccine-preventable diseases and neglected tropical diseases in the south and the emerging problems of noncommunicable disease and HIV/AIDS
- Defining an advocacy strategy and capacity to strongly promote the reduction of poverty and malnutrition as a prerequisite for health action
- Increasing the low coverage of routine immunization, compounded by the poorly developed surveillance system and insufficiently developed network of public health laboratories
- Dramatically reducing the high maternal and child mortality, especially in the south
- Strengthening inadequate national capacity to effectively mobilize and sustain the flow of additional internal and external resources for health and humanitarian crisis
- Improving the inadequate coordination mechanism that should be supported and strongly advanced by donors and external support agencies
- Overcoming the lack of proper human resources and developing a clear cut plan to produce a balanced mix of medical staff (physicians, allied health workforce nurses and medical assistants)
- Achieving geographically equitable distribution of human resources and efficient management and maintenance of the health workforce
- Introducing family physicians as gate-keepers of the health system for strengthening primary health care at the grass-roots level
- Strengthening capacity at the federal and state level to deal with the humanitarian crises, disease outbreaks and response to emergencies
- Forcefully advocating action to address the chronic health crisis caused by poor access to sanitation and potable water in the south and in the rural areas of other parts of the country

Section 3

Development Coordination and Partnerships

3.1 The international aid flow for humanitarian aid, recovery and development

3.1.1 Multi-Donor Trust Fund

The joint assessment mission after the CPA advocated international assistance for the humanitarian action, recovery and development. It called for an estimated input of US$ 7.9 billion in Phase 1. Of this amount, US$ 4.3 billion was earmarked for the northern states. US$ 0.7 billion for the three areas, and US$ 3.6 billion for the southern states. Two-thirds of the total amount was to be provided by the governments and the remaining third was to be raised by bilateral and multilateral donors. Two MDTFs were created in 2005, one for the north, one for the south, both administrated by the World Bank.

3.1.2 The Common Fund for Humanitarian Assistance

A common fund for humanitarian assistance, which is consistent with the principles of good humanitarian donorship and works on a needs-based approach with flexible, timely, predictable and adequate funding, has been created as a tool to coordinate the inputs to fund priority humanitarian needs. Under this umbrella, donors and agencies in consultation with the nationals decide what projects and activities should be funded. During 2006–2007, a total of US$ 45.4 million was invested through this fund for eligible projects, of which some US$ 15 million was for projects in the health sector.

3.1.3 Post-conflict community-based recovery and rehabilitation programme

This programme, managed by UNDP, was established by the European Commission for post-conflict recovery and rehabilitation projects. This is a Euro 50 million project aimed at providing a "jump start" to the agriculture sector and undertaking rural interventions at county/locality levels. It is being implemented by a consortium of nongovernmental organizations over a four-year period of time.

3.1.4 GAVI Alliance

As a result of having vaccinated more than 8 million children against poliomyelitis and measles the circulation of wild poliovirus was interrupted and the number of measles, cases reduced by 83%. Improved routine immunization against childhood diseases has contributed to reducing child morbidity and mortality. The total financial investment in EPI/polio was US$ 15 million from the GAVI Alliance during the first phase of GAVI support, US$ 15 million from the polio programme and US$ 2.5 million from various sources.

3.1.5 The Global Fund to fight AIDS, Tuberculosis and Malaria

Sudan was granted a total of approximately US$ 183 million in four grants for HIV/AIDS, malaria, and tuberculosis. WHO is sub recipient for an amount of US$ 21.7 million out of the US$ 58.3 being disbursed for the first two years. South Sudan has benefited

from an additional US$ 95.5 million over five years for fighting the three diseases, of which US$ 36 million has been allocated for the first two years.

3.2 Main government partners

3.2.1 The United Nations in Sudan

Since 2005, the United Nations and partners have been engaged in the formulation of a collaborative yearly work plan covering both humanitarian needs and development programming. The plan encompasses the contribution of 13 UN agencies. WHO is working closely with sister agencies, mainly with UNDP, UNFPA, UNICEF and UNAIDS.

WHO is the lead UN agency for the health sector. The WHO office in Sudan is one of the largest in the Region, employing over 420 staff members. It has six sub-offices and seven field offices. The majority of staff is involved in emergency and humanitarian activities. The United Nations Children's Fund (UNICEF) works closely with WHO in the health and nutrition sector, focusing on mothers and children. The United Nations Population Fund (UNFPA) is a close partner of WHO in the Safe Motherhood initiative, HIV/AIDS awareness creation and preventive services, emergency reproductive health, and reproductive health services and information.

The United Nations Development Programme (UNDP), in addition to managing the common humanitarian fund acts as the principal recipient for support from the Global Fund to fight AIDS, Tuberculosis and Malaria in northern and southern Sudan, responsible for coordination, financial management, procurement, planning, tracking and oversight, capacity building and reporting. It focuses on promoting good governance and social inclusion for peace building and recovery. UNDP is also managing the Sudan post-conflict community-based recovery and rehabilitation programme funded by the European Commission for post-conflict recovery and rehabilitation projects. This Euro 50 million project, implemented by a nongovernmental organization consortium, aims to undertake rural interventions at country/locality level.

As the country is moving from a humanitarian crisis to recovery and development, the United Nations in consultation with the Government is formulating a four-year (2009–2012) development assistance framework (UNDAF). The UNDAF will enhance synergy and coherence among all UN agencies in support of efforts to achieve the MDGs through enhancing national capacity for development planning and management, including capacity for policy analysis, monitoring and evaluation and for coordination. The UNDAF aligns with government plans and policies and will guide collaborative programming. It will bring greater coherence to the input of various UN agencies and will reinforce the partnerships for development in the country. The UNDAF will be based on a UN-supported country analysis of existing documents such as the Sudan Household Health Survey 2006 and the joint assessment mission. The UNDAF will adopt a region-based structure to reflect the decentralized system of government.

In Sudan the United Nations, which alongside many nongovernmental organizations, particularly in the south,

had been addressing humanitarian needs, played a key role in brokering the peace. To consolidate peace, under the UN Security Council Resolution 1547, a first UN mission was deployed in the southern states and the three areas. In 2005, UN Security Council Resolution 1590 called for the establishment of the United Nations Mission in Sudan (UNMIS) to support the implementation of the CPA. While the CPA was being agreed between the government and the SPLM, another conflict erupted, engulfing the whole region of Darfur. An African Union mission to Sudan was deployed to escort the UN humanitarian assistance convoys and to protect the human rights officers. Following the signing of the Darfur Peace Agreement between the GONU and the SLM in May 2006, the deployment of an unprecedented African Union/United Nations Hybrid peacekeeping operation in Darfur, UNAMID, started in January 2008.

Future interaction between the UN Country Team (UNCT) and UNAMID will be guided by the June 2007 Report of the Secretary General and the Chairperson of the African Union Commission recommending to maintain the distinction between the UNCT and the peacekeeping operation. Overall coordination between the broader humanitarian community and the mission should remain a Humanitarian Coordinator function undertaken through the existing coordination mechanism in Khartoum and in Darfur.

Under the current system, UN agencies have specific responsibilities. WHO leads the coordination for health and nutrition, UNICEF leads the coordination of child protection activities, and UNAIDS leads the coordination mechanism for HIV/AIDS. In Darfur, UN agencies are leading the current relief effort aimed at assisting approximately 4.2 million conflict-affected people, in coordination with the Red Cross/Red Crescent societies and more than 80 nongovernmental organizations.

3.2.2 The World Bank

After an absence of 12 years, the World Bank opened offices in Khartoum (for the north), Nairobi and Juba (for the south). Its involvement in the Sudanese health system started with an assessment of the health sector and a report that was published in 2003. Then, as co-leader of the joint assessment mission, it worked closely with the UN agencies including WHO. After the signing of the CPA, the World Bank has played a key role as administrator for the MDTF, both for the north and the south, particularly in implementing decentralized health system development projects designed for the recovery of the transition states and executed by the federal and state ministries of health.

3.2.3 Nongovernmental organizations

The role of nongovernmental organizations in building peace in Sudan has been vital. There are over 250 national and international nongovernmental organizations and community-based organizations, including 85 in northern Sudan (Darfur excluded), 65 in south Sudan and 65 in Darfur, that are active in different fields of humanitarian assistance, providing support in emergency relief rehabilitation, education, orphan sponsorships, mother and child care, health services, environment, water supply

and sanitation among other development activities. In addition, there are several more working in Eastern Kassala state and the three areas.

3.3 Challenges for development assistance and partnerships

The main challenges are lack of adequate communication and information exchange between partners, lack of transparency, and weak coordination and alliance building.

Section 4

Current WHO Cooperation

4.1 WHO in Sudan

Since Sudan became a member of WHO in 1956, WHO has been considered a technical partner in all issues related to health and development, with the main goal of improving the health status of the Sudanese people. WHO works to reduce mortality, morbidity and disability, and to improve health, especially of vulnerable populations. This aim is achieved with other partners through building national capacities in policy formulation, strategic planning and management and training across all public health interventions, focusing on strengthening the health system, in addition to providing humanitarian assistance and support during emergency and recovery. WHO works in partnership with the Government of National Unity, Government of Southern Sudan, United Nations agencies, nongovernmental organizations and other relevant health and development agencies and plays a crucial role in coordinating the inputs of all these partners with reference to health sector action.

This partnership supports national efforts for achieving better health for the population through focusing on key areas of work. This support is regulated by an agreement between the Ministry of Foreign Affairs and WHO.

4.2 WHO country priorities

WHO's strategic approach recognizes three priorities.

- Ensuring adequate and timely response to health hazards through coordination with all partners
- Addressing inequality in the delivery of priority health services across the country by targeting the most under-served areas and filling service gaps
- Supporting the recovery of the health sector by strengthening health services, while sustaining the institutional capacity of ministries of health and increasing financial resources

4.3 Current WHO country activities

The priority focus of current and medium-term WHO support to Sudan is on the following five areas.

1. Integrated control of communicable disease
2. Child survival and reduction of maternal mortality and reproductive health
3. Health system and service development and capacity building
4. Emergency preparedness and humanitarian action
5. Health promotion and protection, emphasizing preventive approaches and healthy lifestyle

Support for capacity-building is the common denominator in all WHO collaborative activities. As part of this, WHO supports policy formulation and human resources development, through training in and outside of Sudan. WHO contributes to rehabilitation, maintenance and capacity-building in the local hospitals and laboratories, especially in conflict areas. Implementation of the rational use of drugs programme within primary and secondary health care facilities is an essential element complementing the provision of high quality services.

The field of health promotion focuses on improving access to primary health care and on environmental health, particularly the provision of clean drinking-water, vector control, solid waste removal, excreta disposal and promotion of a healthy environment in the camps. This area of work also includes nutrition, reproductive health, gender-based violence and mental health advocacy.

4.4 Country programme budget and financial resources

4.4.1 Biennium 2006–2007

The WHO country regular budget for the biennium 2006–2007 was US$ 4.48 million. It comprised 29 programme areas (PA) grouped under 6 work plan titles as follows.

1. Primary health care (10 PA)
2. Integrated communicable disease surveillance and control (9 PA)
3. Policy formulation, planning and management (7 PA)
4. Emergency and humanitarian action
5. Human resources for health
6. Pharmaceuticals

Allocations for each of the six work plan titles from the regular budget were 25.8%, 29%, 24.7%, 6.3%, 20.1% and 4% respectively. Funds from other sources for the biennium 2006–2007 were estimated at US$ 49.83 million, distributed among the six work plans as follows: 41.5%, 23.2%, 13.8%, 0.8%, 11.7% and 1.8% respectively. Although programme area 1.6.1 Immunization and vaccine development was allocated only US$ 83 000 (1.9%) from the regular budget, the allocation from other sources was US$ 17.47 million (35.1%). The regular budget for 2006–2007 was almost fully implemented, while there is no clear information regarding the total funds collected from other sources and how they were distributed.

The workplan allocation for the biennium 2006–2007 according to budget category is given in Figure 2.

4.4.2 Biennium 2008–2009

The proposed country budget for the biennium 2008–2009 is allocated according to the strategic objectives in the WHO Medium-term strategic plan 2006–2015, inclusive of objectives 1–11 only. The regular budget (RB) is US$ 4.49 million, an increase of only US$ 13 000 (0.03%) from the 2006–2007 regular budget. The budget from other sources (OS) is reduced by US$ 5.63 million (11.3%) from 2006–2007. For the purposes of comparison, the 11 strategic objectives were grouped into work plan titles used in the biennium 2006–2007.

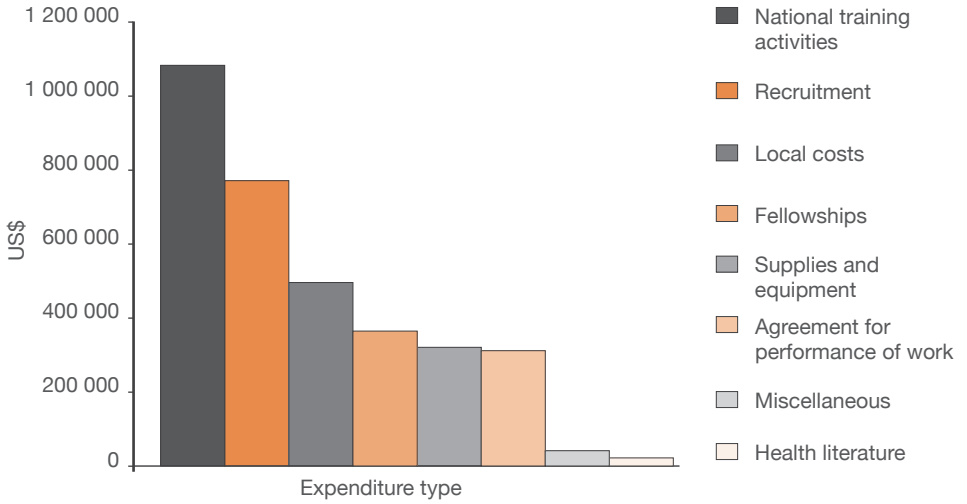

Figure 2. Workplan 2006–2007 allocation by budget category

1. Primary health care (SO 3,4,6,7,8 and 9)
2. Integrated communicable disease surveillance and control (SO1,2)
3. Policy formulation, planning and management (SO 10)
4. Emergency and humanitarian action (SO 5)
5. Human resources for health (SO10)
6. Pharmaceuticals (SO11)

The regular budget funds were allocated as follows: primary health care US$ 593 000 (13.2%), integrated communicable disease surveillance and control US$ 948 000 (21.1%), policy formulation, planning and management and human resources for health US$ 2 million (53.5%), emergency and humanitarian action US$ 268 000 (5.9%), and pharmaceuticals US$ 277 000 (6.2%). The allocation of funds from other sources was US$ 7.29 million (16.5%), US$ 28.7 million (64.9%), US$ 3.24 million (7.3%), US$ 4.01 million (9.1%) and US$ 956 000 (2.2%), respectively.

4.4.3 Comparison

Regular budget funds represented 8.2% of the 2006–2007 biennial budget as compared to 9.2% of the 2008–2009 biennial budget, although the amount in US$ is nearly the same (Figure 3).

The allocation for primary health care (WHO SO 3,4,6,7,8,9) and integrated communicable disease surveillance and control (WHO SO 1,2) was US$ 2 million (44.8%) in 2006–2007 as compared to US$ 1.5 million (34.3%) in 2008–2009. However, the allocation for both primary health care and integrated communicable disease surveillance and control from other

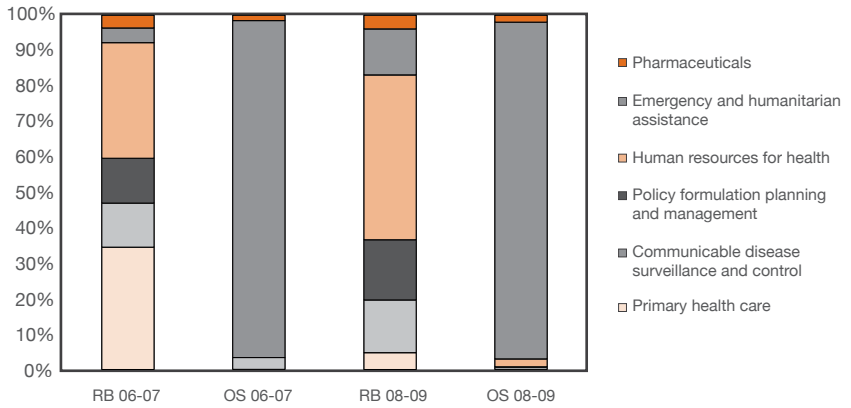

Figure 3. Allocations by workplan titles, 2006–2007 and 2008–2009 bienniums

sources increased from US$ 33.8 million in 2006–2007 to US$ 36 million in 2008–2009.

4.4.4 Conclusions

There is a high level of trust and collaboration between WHO and national authorities. Furthermore, WHO has successfully utilized high quality national expertise in its collaboration, producing excellent results and saving time and resources. Through such opportunities, WHO has a strong comparative advantage to assist the health sector in Sudan. However, there is a need for a marked shift of focus in some important areas, which should be reflected in the CCS 2008–2012.

- WHO collaboration should be more strategic and focused on fewer selected priority areas, reflecting an amalgam of global, regional and national priorities, i.e. emphasizing the comprehensive primary health care strategy and its role as a point of entry for achieving the agreed objectives
- Increased emphasis should be given to WHO's role as a broker of alliances and an engineer of partnership to strengthen the community and primary health care approach at all levels
- Opportunities should be sought for increasing and strengthening structured partnership with other international and national agencies, including nongovernmental organizations working in the field of health
- Innovative approaches should be sought to increase the effectiveness of WHO's role, support and leadership
- The time frame of biennial operational planning should be reconsidered since it is too short to measure the impact and outcome

4.5 WHO team in Sudan

As of August 2007, 439 staff members were employed in the WHO office in Sudan, including more than 65 internationals. WHO

Sudan has sub-offices in El Fasher, Nyala, El Geneina, Juba, Kassala, and Kadugli and field offices in Malakal, Damazin, Rumbek, Wau, Yambio, Port Sudan and Zalingei. Most of the staff is working on Special Service Agreement contracts.

A major challenge facing the WHO team in Sudan is how to configure itself, in terms of skill mix and staffing levels, to meet the health development challenges during the coming six years and to successfully implement the strategic agenda described in Section 6.

In order to meet this challenge in a technically sound and professional manner, it is suggested that a detailed study on the human resource needs and planning should be carried out by skilled (human resources) experts, preferably from the private sector, in view of the limited resources available with in the Organization for this purpose.

In view of critical health condition in south Sudan and to provide timely and more effective assistance, WHO has strengthened its sub-office in Juba, south Sudan. In view of lack of roads, infrastructure and access, the operation is challenging. WHO efforts in the south are particularly concentrating on helping the local authorities with improving health infrastructure, training nurses, midwives and other health workers, and supporting malaria and tuberculosis control, prevention and treatment of HIV/AIDS and immunization.

Section 5

Strategic Agenda for WHO Cooperation

Section 5. Strategic Agenda for WHO Cooperation

5.1 Introduction

The WHO Country Cooperation Strategy (CCS) reflects a medium-term vision of the World Health Organization (WHO) for its cooperation with the country and defines a strategic agenda for working with Sudan. The CCS clarifies the proposed roles of WHO and how its core functions are applied in supporting the national health and development plans and strategies It represents a focus on selected country priorities, as analysed by WHO in full consultation with national stakeholders and partners at country level. The CCS is a key instrument for WHO in the context of improving aid effectiveness at country level through the alignment and harmonization agenda.

WHO's Country Cooperation Strategy 2008–2012 in Sudan is aligned with the Sudan National Health Policy 2007, the 5-year Health Sector Strategy: Investing in Health and achieving the MDGs (2007–2011), and the Southern Sudan Interim Health Policy (2006–2011). The strategic agenda for the WHO cooperation takes into account the global country commitment to achieve the health-related Millennium Development Goals by the year 2015 as well as the health priorities and emerging needs identified at the federal and state levels.

The peace process in Sudan, the signing of the landmark Comprehensive Peace Agreement, as well as national and international peace and stability building efforts and arrangements provide a window of opportunity for health and Development in Sudan, both for the south and the north. That is the background against which the strategic directions for WHO's technical cooperation in Sudan for the next five years have been identified.

To facilitate the implementation of the strategic agenda and given the disparities in the health indicators and the health infrastructure among the various states in the country, and taking into account the current decentralization, WHO in the coming years will increasingly extend its technical support to the state level.

5.2 Strategic agenda

5.2.1 Strengthen governance and health management at the federal, state and local level

- Strengthen the stewardship function of ministries of health, especially with the GOSS, focusing on their capacity to regulate and monitor the health sector, and define the working framework for nongovernmental organizations and the private sector
- Support the completion and dissemination and implementation of national policies and strategies, guidelines and legislation at the state and locality level
- Provide technical support for drug quality control, including building capacity for the implementation of good manufacturing practice

- Enhance evidence-based decision-making processes through emphasis on health system research, and the building of a robust national health management information system

5.2.2 Monitor and secure investment equity in the health sector at the federal and state levels

- Facilitate equitable financing of the health sector to address geographical disparities and to adopt pro-poor policies
- Develop and use national health accounts to provide evidence and monitor health financing

5.2.3 Improve the capacity of the health sector to enter into partnerships with all stakeholders

- Strengthen the leadership role of ministries of health in facilitating partnership and coordination in the health sector to guarantee the implementation of the essential public health functions at the federate and state levels
- Strengthen the federal and states ministries of health infrastructure, personnel and capacity to foster partnership, coordinate and monitor external assistance
- Strengthen the capacity of the Ministry of Health to forecast external requirements for assistance, develop proposals and secure the required external support
- Establish, with strong support from international partners and funds, a formal health group forum with a view towards harmonizing and unifying health information, periodic health status assessment report and a health hotline and information hubs

5.2.4 Support health care delivery based on comprehensive primary health care, especially in rural areas and for vulnerable populations

- Contribute to the development/ rehabilitation of an accessible, affordable system for service delivery, removing the existing regional disparities and ensuring acceptability among communities
- Support the consolidation of the primary health care package and emergency/ obstetrical referral care with equitable access and special emphasis on rural areas
- Train and support local women community health volunteers to advise people on water safety, hygiene, sanitation and basic self health care
- Further encourage active community participation in planning, implementing and evaluating the implementation of primary health care, making use of successful experiences such as community-based initiatives
- Include the special needs of returnees

5.2.5 Improve development and management of human resources for health

- Improve the skill mix of health teams at various levels of service delivery

- Identify mechanisms for facilitating the deployment of professionals and other health personnel to underserved and rural areas in order to improve equity in the distribution of human resources
- Strengthen the process of accreditation of medical schools and initiate the process in health personnel training and other academic institutions
- Implement the comprehensive plan which has been prepared for human resources for health in south Sudan
- Support on a priority basis the medical, academic and health institutions
- Support in-service training in health management, hospital administration and integrated training of health care providers
- Develop environmental health community workers and health hygienists, particularly in the south

5.2.6 Strengthen health information system

- Assess the current status of information collection production and dissemination at all levels
- Develop a proposal for integrated health information systems at various levels in an incremental and phased manner
- Develop procedures and train staff for developing information as basis of planning and policy development
- Computerize the information system in a phased approach
- Improve the registration of vital information

5.2.7 Reduce the high maternal and the under-five mortality rates

- Provide technical support to the country in developing/updating and implementing national policies, strategies and action plans on maternal and neonatal health necessary to achieve the related Millennium Development Goals; especially ensuring availability of emergency obstetric facilities within the primary health care network and referral system
- Support the development of an adequate of number of midwives and skilled birth attendants
- Collaborate with the departments responsible for health system related issues to improve the health system elements affecting primary child health care
- Continue supporting the expansion of promising interventions with Making Pregnancy Safer and availability of skilled birth attendants
- Assist in strengthening existing national surveillance systems to assess mortality and morbidity trends among mothers and newborn babies for formulation of evidenced-based policies and plans to improve conditions
- Assist in establishing a national maternal mortality committee to review and monitor maternal deaths in the country

- Incorporate public health approaches related to maternal and neonatal health into formal teaching curricula of medical and paramedical schools
- Develop further alliances with the major national and international partners working in this field, including the African Child Survival Initiative and mobilize political leadership and resources for improving reproductive health

5.2.8 Reduce the burden of communicable diseases

- Promote control of tuberculosis, malaria, HIV/AIDS and other communicable diseases with special emphasis on the adoption of national protocols and their uniform implementation by all health actors across states and counties
- Develop human resources at the peripheral level
- Facilitate extension of malaria service delivery to the community level
- Support rapid scaling up of the available effective preventive and treatment tools (ACT and long-lasting insecticidal nets)
- Support accelerated control of neglected tropical diseases in south Sudan
- Support control of vaccine-preventable diseases
- Provide technical assistance for resource mobilization from global partnerships

5.2.9 Develop a consolidated disease surveillance and early warning system

- Support accelerated implementation of the International Health Regulations (2005)
- Strengthen the existing epidemiological surveillance system, and support the establishment of an early warning system and rapid response system for outbreaks and other emergencies
- Facilitate the incorporation of the existing different surveillance activities into a comprehensive national surveillance system
- Strengthen the public health laboratory network as part of the communicable diseases surveillance and control system at federal and state level

5.2.10 Reduce the burden of noncommunicable diseases, mental heath and unhealthy lifestyles

- Assess the magnitude and the burden of noncommunicable disease and disabilities in a demonstration state
- Develop procedures and regulations and implement steps for the prevention of hereditary and genetic conditions such as thalassaemia
- Develop and implement an evidence-based pilot strategy for the advocacy and promotion of healthy lifestyles

- Initiate the chain-free initiative in mental health hospitals and institutions
- Develop a strategic plan and programme for road traffic accidents and injury prevention

5.2.11 Support early preparedness and response to emergencies and humanitarian needs

- Strengthen the capacity of the federal and state ministries of health for emergency preparedness and response, including EWARS
- Support the development of transitional strategies for post-conflict and early recovery actions that are linked to humanitarian interventions during the acute emergency phase
- Assist in strengthening coordination to support the health and nutrition sector at the level of service delivery and resource mobilization
- Support the government in addressing the humanitarian health needs of returnees and internally displaced persons

Section 6

Implementing the Strategic Agenda: Implications for WHO

Section 6. Implementing the Strategic Agenda: Implications for WHO

The implications of the CCS on WHO at country, regional and headquarters level are immense. The burden of communicable diseases, especially malaria, HIV/AIDS and tuberculosis is huge. The strengthening of health system outreach and decentralization will require considerable support and technical input from WHO. Furthermore, it is anticipated that the state of conflict and human emergency will be less acute, yet remain a chronic problem in the interim period. One of the most critical factors requiring special focus is the health conditions in the south. There are many other priorities and issues yet WHO should accord the priority to the fundamental challenges mentioned above. The implications of CCS at different levels are presented below.

Country level

Currently WHO's position is favourable, as there is mutual trust and respect and close collaboration with the Ministry of Health at federal and state levels. Similarly, WHO enjoys a close relationship and active cooperation with other UN agencies and international partners and civil society. WHO has a large number of professional health staff throughout the country, including a large crew of international and national staff for polio eradication and other communicable diseases, a health system specialist, and other staff.

The current WHO staffing level for most programmes is adequate except vector control and environmental health. With respect to tuberculosis, malaria and AIDS as well as the health system, the input of WHO has been in major strategic issues and in important operational matters.

In the areas of resource mobilization, enhancing partnership, reproductive health and environmental health, WHO input needs strengthening in terms staff and resources.

The health situation in south Sudan and very low capacity of the health system calls for development of a package of integrated high priority action. Since it appears the health ministry in the south is going to use nongovernmental organizations to deliver services under contract, WHO operations should be shifted to developing necessary guidelines, criteria, monitoring procedures and oversight. There is considerable need for training in all areas. WHO needs to assist in mobilizing human and financial resources and provide technical training for trainers Due to difficulties in access and lack of infrastructure, WHO needs to be active in training local level volunteers to assist in health and environmental matters.

WHO also has to play a key role, in partnership with UNICEF and UNFPA, in developing detailed operational plans for radically changing the health conditions in the south. The areas of critical need are assignment of a long-term international environmental health expert and further support for reducing maternal and child mortality.

In the south, living conditions and food preparation, as well as space at work,

need major improvement. Rotation of staff between the south, the Regional Office and country offices may be considered on a short term basis. In Khartoum, in view of the large number of staff, the need for a senior Finance and Administration Officer and other support is crucial.

Regional level

The vast needs in Sudan, including the situations in the south and in Darfur, call for much closer involvement of staff of the Regional Office. With respect to AIDS, malaria and tuberculosis, the involvement of the Regional Office is already extensive. However, in matters dealing with environmental health, nutrition and reproductive health, efforts must be expanded, particularly in the south. The Regional Office should assist in the development of long-term operational plans in line with the strategic directions set in CCS for the following areas for Sudan, specifying critical areas such as the south and Darfur: maternal and child health; nutrition; environmental health, particularly safe water, sanitation, hygiene education and vector control; human resources assessment and training; information and data; and interactive health system development.

Implementation of the CCS will need regular joint review by different technical staff from the Regional Office. Preparation of the "road map" for each of the areas above will require close follow-up by the Regional Office.

Headquarters level

Technical staff from headquarters should join the Regional Office team on strategic missions. In missions where road maps for operational plans with a longer-term vision are prepared, the support expected from headquarters in terms of technical input must be identified. In terms of resource mobilization, interaction with potential donors is an area where adequate staff and resources are needed from headquarters.

Table 10 shows in more specific terms some of the operational and programmatic shifts needed to implement the CCS.

Table 10. Shifts in the priorities for WHO's collaboration with Sudan in order to implement the strategic agenda during 2008–2013

Shifts in priority	Implications for WHO as a whole
Increased technical support to the GOSS and the states in the north	Need for a Memorandum of Understanding with the FMOH, GOSS and SMOH Develop criteria for selecting states (or parts thereof) and programmes for intensified collaboration Modalities for collaboration with health related sectors at state and local authority level
Focus on selected priorities	Operational planning procedures for budgeting may need modification CCS to be used as a guideline for resource allocation Ensuring alignment of selected priorities for WHO collaboration with national priorities Commission from country, intercountry and global sources health system research studies to arrive at a better understanding of needs and priorities at the community and state levels
Increased and closer collaboration with sister UN agencies in a spirit of harmonization	CCS to serve as a major WHO contribution to the CCA/UNDAF process Procedures for joint planning, programming and monitoring to be formed up
Greater effort directed at mobilizing local resources	Appropriate advocacy tools to be developed Communication skills of staff in country offices to be strengthened Capacity for developing proposals for funding to be strengthened Increased contacts with other stakeholders at the country level including civil society/ nongovernmental organizations, politicians etc
Shift in focus in biennial budget	Shift in budget to follow the change in emphasis in technical support Reduction in support for items such as national training activities, local costs

Table 10. Shifts in the priorities for WHO's collaboration with Sudan in order to implement the strategic agenda during 2008–2013

Shifts in priority	Implications for WHO as a whole
Immediate improvement in the quality and timely delivery of technical support	Systematic assessment of staff needs. Need for additional staff to be met by fresh recruitment and/or shifting existing staff from sub and field offices (See Section 4.5) Recruitment procedures to be revised to facilitate expeditious recruitment of well qualified and experienced consultants WHO Representatives to be authorized to assist in locating consultants and ascertaining their availability The WHO roster of potential consultants to be completely revamped on the private sector model Greater use of national consultants Shift in the use of consultants from short term to longer term Exploration of other opportunities for technical support such as agreements with schools of public health for provision of technical advisory services and for accepting trainees

Annex 1

Members of the CCS mission and list of persons met by the CCS mission

Members of the CCS mission

Dr Mohammed Abdurrab, WHO Representative, Khartoum, Sudan

Dr Abdullah Assa'edi, Assistant Regional Director, WHO EMRO

Dr Marie-Andre Romisch-Diouf, Director, Country Focus, WHO headquarters

Dr Javid Hashmi, WHO Consultant, PME, WHO EMRO

Dr Tarin Ehsanullah, Medical Officer, Health System Development and Coordinator for CCS, WHO Sudan

Dr Mustafa Khogali, National Consultant for CCS, WHO Sudan

List of persons met by the CCS mission

Federal Ministry of Health, Khartoum

Her Excellency Dr Tabita Botros Shokai, Federal Minister of Health

Dr Abdullah Sid Ahmed, Under Secretary of Health

Dr Mustafa Salih, Director General, Planning

Dr Isam Abdallah, Director General, International Health

Dr Mohamed Ali El Abbasi, Director General, Primary Health Care

Dr Ismael Bushara Ahmed, Director General Human Resources

Dr Hatim Sidahmed, Director, State Affairs

Ministry of Health, Government of south Sudan, Juba

His Excellency Dr Joseph M. Wiejang, Minister of Health

Dr Majok Yak, Under Secretary, Ministry of Health

Dr Nathan Atem, Director General, External Relations

Dr Olivia Lomoro, Director General, MCH and Family Planning

Dr Manyang Agoth Thon, Director General, Pharmaceuticals

Ministry of Health of Blue Nile State, Damazine

Professor Idris Ali Mohammed, State Minister of Health

Dr Ali Ibrahim, Director General, Health Services

Dr Khalid El-Hag, Director Planning

Dr Mohammed El-Toum, Coordinator, MDTF

Representatives of the three State Ministries of Health, Darfur

Dr Khadiga Musa, Director General, State Ministry of Health, North Darfur

Dr Abdel Salam Mustafa Salih, State Ministry of Health, West Darfur

Dr Abdel Qayum Ibrahim Abdel Qayum, Director General, State Ministry of Health, South Darfur

Representatives of UN agencies and the World Bank in Sudan

Mr Oluseyi Bajulaiye, Deputy Resident Coordinator and Humanitarian Coordinator for the North, UN Mission in Sudan

Mr Ted Chaiban, UNICEF Representative in Sudan

Mr Simon Strachan, Director, UNICEF Office, Juba

Dr Dragudi Buwa, Head of Office, UNFPA, Juba

Ms Shameema Khan, World Bank, Manager, Multi Donor Trust Fund for the Government of Southern Sudan, Juba

Representatives of some nongovernmental organizations in Khartoum and in Juba

Mr Ibrahim Mekki, Save the Children, United States of America

Mr Mohamed Saeed El Shait, International Rescue Committee

Dr Hussien Ibrahim, World Vision, North Sudan

Dr Chris Lewis, Tearfund

Mr John Primrose, Medair

Sudan Academy of Health Sciences, Khartoum

Professor Mohammed Shakir, Dean

Dr Ismail Bushara Ahmed, Director General, Training and Human Resources

Dr Mohamed Hasan Ahmed, Director Academic Affairs

Dr Firdous Rahman Yousif, Deputy Director General, Training and Human Resources

Staff in the WHO Country Office in Sudan and Sub-Office in Darfur and Juba

Dr Salah Al Haithami, Medical Officer, Polio Eradication

Dr Ahmed Al Geneiny, Medical Officer, Humanitarian and Emergency Assistance

Dr Sumaya Al Fadil, National Professional Officer, Health Protection, Promotion and Sustainable Development

Dr Rogers Busulwa, Programmes supported by the Global Fund for Tuberculosis, Malaria and HIV/AIDS

Dr Nahid Saleh, National Medical Officer, Pharmaceuticals

Dr Hala Ismail, National Medical Officer, Health Protection and Promotion

Dr Abdullahi M Ahmed, Head of WHO Sub office, Juba

Dr Abedi Aden Mohamed, Head, WHO Sub office, Nyala, Darfur

www.emro.who.int