A Policy Analysis of Curative Health Service Delivery in North Darfur State, Sudan

Abdallah Ibrahim Adam Yagoub
Student Number: 208530293

Submitted in partial fulfillment of the requirements of the degree of Doctor of Philosophy (Policy and Development Studies) in the School of Social Sciences in the University of KwaZulu-Natal, Pietermaritzburg, South Africa

Supervisor: Professor Ralph Lawrence

November, 2012

Abstract

This thesis analyses the policy of curative health service delivery in North Darfur State, Sudan. Several authors have analyzed health service delivery issues, mainly focusing on controlling the spread of common diseases. No work has been done that focuses on the health policy aspect and its contribution to improving curative health service delivery, especially in areas affected by conflict since 2003. This study contributes to the body of knowledge on the nature and the evolution of health service delivery systems management, as well as policy implementation, thereby widening the discussion about the further projections of this field of study.

The main purpose of this thesis is to investigate how to enhance the effectiveness and efficiency of curative health service delivery systems management, as well as policy implementation, in fostering socio-economic development in North Darfur State. The study focuses on how the national health system and national health policy of Sudan have been managed and implemented in North Darfur State.

This thesis identifies the different health sectors, public, private and international NGOs, that provide curative health services in North Darfur State, and the difficulties that have been facing the population in accessing these health facilities. Investigations showed that curative health services are not adequate in the public sector, and that they are very expensive in the private sector. The exception is the NGO sector but it is not guaranteed to be sustainable in providing curative health services to poor and conflict-affected people.

This thesis also identifies the mechanisms of health system management and policy implementation, by means of co-ordination and collaboration between the various government sectors, federal, state and district, in a decentralized system working in concert with international NGOs. The results show that there is poor co-ordination between the three levels of government, especially at district level, as well as poor collaboration between government and international NGOs, caused by government's lack of human and financial capacity.

The potential for improvement in curative health service delivery are explored, particularly at district level. This is essential so that quality curative health services can be delivered to the population, thereby contributing to socio-economic development in North Darfur State.

Declaration of Plagiarism

I, Abdallah Ibrahim Adam Yagub, declare that:

1. The research reported in this thesis, except where otherwise indicated, is my original work.
2. This dissertation/thesis has not been submitted for any degree at any institute or university.
3. This dissertation/thesis does not contain other persons' data, pictures, graphs, or other information, unless specifically acknowledged as being sourced from other persons.
4. This dissertation/thesis does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:
    a. Their words have been re-written, but the general information attributed to them has been referenced.
    b. Where their exact words have been used, then their writing has been placed in side quotation marks, and referenced.
5. This dissertation/thesis does not contain text, graphics, or tables copied and pasted from the internet, unless specifically acknowledged and the source being detailed in the thesis and in the references section.

Student: Abdallah Yagoub Signed ……

As the candidate's supervisor, I certify the above statement and have approved this thesis for submission

Supervisor: Professor Ralph Lawrence Signed ……

Acknowledgements

Firstly, I thank Allah for giving me the strength and support to make it possible to complete my PhD thesis.

Secondly, I thank El Fasher University for giving me a scholarship to complete a PhD. Special thanks goes to those who participated and collaborated with me to make this PhD a reality. I would also like to express my gratitude, to all the individuals, institutes and organizations which contributed to this study directly or indirectly. My great thanks also to the interviewees who participated in this study in Khartoum and El Fasher.

Thirdly, a very big 'thank-you' goes to my supervisor, Prof. Ralph Lawrence, for his confidence in me; scientific guidance; and his commitment and moral support, which have enabled me to complete my PhD research. It would not have been possible without his encouragement. I also thank the staff of Policy and Development Studies at the University of KwaZulu-Natal for their support and friendship. My special gratitude goes to Mrs. Nancy and Mrs. Perai, who were always ready to help me.

Fourthly, the Sudanese families and colleagues in KwaZulu-Natal, South Africa are thanked for their support. Special thanks are extended to Dr. El Hadi Adam for helping me greatly and for providing me with the maps for this study. I would also like to thank my colleagues, Mr. Khalid Mansour, and Mr. Hafiz Abdallah, for their support and encouragement of my research. I'm delighted to extend my sincere thanks to: Dr.Omar Seabeil; Dr. Abdallah Arabi; Dr. Ismail Hashem Dr. Saied Kuzi; Dr. Suleiman Noreen; Dr Yahi El Die and Dr Adam Abdurrahman (El Fashir University) for their continuous encouragement and support throughout my study. Special thanks go to Dr. Ibrahim Elzain (El Fashir University) for his support and assistance in taking care of my family in Sudan during my absence.

Fifthly, this work would never have been completed without the contribution of wonderful people at the State Ministry of Health in El Fasher: Mr. Amir Basher; Mr. Mudther Kiter; and Mr. Ali Ahmed Ali and Kamal Bakhiet deserve special thanks for all the hours I spent with them in their offices gathering data and conducting interviews with health administrators and professionals: thank you for your support and for being good friends.

Sixthly, my gratitude goes to my family: my Mother and Father, brothers, sisters and all my friends for their love and support.

Finally I extend my sincere gratitude to my loving wife, Howida El Sheikh, for being a devoted and helpful wife during all the difficulties we faced whilst in South Africa. Without her support, my research would not have seen the light of day. In addition, I extend my gratitude to my son, Mohammed, and my daughter, Malaz. It was always difficult for me to leave you at home and to go to work during weekends and at night, when you would have liked me to stay and play with you!

Dedication

In view of the enormous contribution and sacrifice of my family towards the completion of the study, I dedicate this thesis to my dearly beloved parents Ibrahim Adam and Mora Nour; my much loved wife Howida El Sheikh; and my precious son Mohammed, and daughter Malaz; in gratitude for their support and prayers for my successful completion of this thesis.

Table of Contents

Abstract		ii
Declaration of plagiarism		iii
Acknowledgements		iv
Dedication		vi
List of Figures		xii
List of Tables		xiii
List of Abbreviations		xvi
	Chapter 1: General Introduction	1
1.1	Background	1
1.2	Profile of the study	3
1.2.1	Location and size	3
1.2.2	Physical background	4
1.2.3	Population background and their activities	5
1.3	Health issues in North Darfur State	7
1.3.1	Diarrhoea	10
1.3.2	Malaria	11
1.3.3	Other common diseases	11
1.4	Research objectives	12
1.5	Research methods and methodology	12
1.5.1	Data analysis	15
1.5.2	Reliability and validity	15
1.6	The challenges of this study	15
1.7	Structure of the thesis	16
	Chapter 2: Public Policy Management and Implementation	18
2.1	Introduction	18
2.2	Public policy	18
2.3	Health policy analysis	18
2.4	Policy implementation	20
2.4.1	Brinkerhoff and Crosby's framework for policy implementation	23
2.4.2	Types of policy implementation	25
2.5	Public policy management	27
2.5.1	Decentralization of health policy management and implementation	29

2.5.2	Co-ordination between the levels of government in managing and implementing health policy	31
2.5.3	Co-ordination between government and NGOs in managing and implementing health policy	32
2.6	Conclusion	34
	Chapter 3: The Health System and National Health Policy (2007) of Sudan	35
3.1	Introduction	35
3.2	System of governance	35
3.3	The structure of the health system and policy at federal, state and district level in Sudan	37
3.3.1	Federal Ministry of Health	38
3.3.2	State Ministry of Health	41
3.3.3	District level	44
3.4	National health policies of Sudan	47
3.5	The National Health Policy 2007-2011	49
3.6	Content analysis of the seven key areas of the National Health Policy of 2007 of Sudan	50
3.6.1	First key area	52
3.6.2	Second key area	53
3.6.3	Third key area	54
3.6.4	Fourth key area	56
3.6.5	Fifth key area	58
3.6.6	Sixth key area	60
3.6.7	Seventh key area	61
3.7	Conclusion	62
	Chapter 4: The Provision of Curative Health Services in North Darfur State	63
4.1	Introduction	63
4.2	The provision of curative health services in North Darfur State	63
4.2.1	The provision of curative health services by the public sector in North Darfur State	64
4.2.2	The provision of curative health services by the private sector in North	67

	Darfur State	
4.2.3	NGOs providing curative health services in North Darfur State	68
4.3	The distribution of health facilities in North Darfur State	71
4.3.1	The distribution of health facilities in the public sector	71
4.3.2	The distribution of health facilities in the private sector	76
4.3.3	The distribution of health facilities in the NGO sector	77
4.4	Access to health facilities in North Darfur State	81
4.5	Conclusion	83
	Chapter 5: Human and Financial Resources for Curative Health Service Delivery in North Darfur State	85
5.1	Introduction	85
5.2	Human resources for health service delivery in North Darfur State	85
5.2.1	Distribution of health staff in North Darfur State	89
5.2.1.1	Distribution of doctors at district level in North Darfur State	90
5.2.1.2	Distribution of doctors in the public and private sector in North Darfur State	94
5.2.1.3	Distribution of other health workers at district level in North Darfur State	96
5.2.2	Lack of training	99
5.3	Health financing: funding and expenditure	101
5.4	Comparison of funding for Ministry of Health in North Darfur State with other Ministries, 2000-2009	103
5.5	The sources of health services financing in North Darfur State	105
5.6	Private users' fees for curative health services in North Darfur State	108
5.7	The consequences of the lack of public financial resources for delivering curative health services	110
5.8	Health service expenditure in North Darfur State, 2000- 2009	112
5.9	Conclusion	112
	Chapter 6: Co-ordination between Federal, State and District Levels in Managing Health Systems and Policy Implementation in North Darfur State	114
6.1	Introduction	114
6.2	Factors affecting health system management and policy implementation at federal, state and district level in North Darfur State	114
6.2.1	Decentralization	114

6.2.1.1	Financing	116
6.2.1.2	Human Resources	117
6.2.1.3	Service delivery management and policy implementation	117
6.2.1.4	Operational maintenance	120
6.2.1.5	Information management	120
6.2.2	Conflict	122
6.2.2.1	The consequences of conflict on curative health service delivery	125
6.2.3	Distance and communications	127
6.2.4	Transfers of funds	131
6.2.5	Lack of trust between the authorities at federal, state and district levels	133
6.3	Managing co-ordination between levels of government	136
6.4	Conclusion	139
	Chapter 7: Collaboration between Government and NGOs in Delivering Curative Health Services in North Darfur State	141
7.1	Introduction	141
7.2	The structure of collaboration and co-ordination between the government and NGOs in managing and implementing health systems and policy in North Darfur State	141
7.3	Forms of collaboration between the State Ministry of Health and NGOs in providing curative health services in North Darfur State	144
7.3.1	Providing human resources	146
7.3.2	Providing financial resources	147
7.3.3	Providing materials and equipment	148
7.3.4	Communication and information exchange	149
7.3.5	Developing joint projects	152
7.3.6	Developing national health policy	155
7.4	Barriers affecting collaboration between government and NGOs to deliver curative health services in North Darfur State	157
7.4.1	The barriers of accessing of NGOs to the conflict- affected areas	158
7.4.2	The barriers to collaborate between government and NGOs	160
7.4.3	The barriers of experiences and capacity	161
7.5	Conclusion	162

Chapter 8: Improving the Effectiveness of the Curative Health Services in North Darfur 164

8.1 Introduction 164

8.2 The structure of the health system in Sudan and North Darfur State 164

8.3 Curative health services provision 168

8.3.1 The role of the public sector 168

8.3.1.1 Health facilities 168

8.3.1.2 Equipment and technical services 170

8.3.2 The role of the private sector 171

8.3.3 The role of NGOs 172

8.4. Human resources 173

8.5 Financial resources 176

8.5.1 Government expenditure on health 176

8.5.2 User fees 177

8.6 Co-ordination between the federal, state and district levels of government 179

8.7 Collaboration between the government and NGOs 186

8.8 Conclusion 193

Chapter 9: Prospects for Delivering and Managing Curative Health Services in North Darfur State 194

9.1 Introduction 194

9.2 The system of delivering and managing curative health services 195

9.3 Continuing the role of NGOs 200

9.4 Recent political developments 203

Appendix 1 Interview Questions for Health Administrators and Professionals in the Federal Ministry of Health, Khartoum 206

Appendix 2 Interview Questions for Health Administrators and Professionals in North Darfur State 208

Appendix 3 Interview Questions for Health Administrators and Professionals at District levels in North Darfur Sate 210

Appendix 4 Interview Questions for NGO Officials Working in Curative Health Services in North Darfur State 212

References 214

List of Figures

1.1	Locality of North Darfur State in Sudan	4
1.2	The most prevalent diseases in North Darfur State	10
3.1	Structure and organization of the health system in Sudan	38
3.2	Organizational structure of the Federal Ministry of Health in Sudan	39
3.3	Organizational Structure of Ministry of Health in North Darfur State	43
3.4	The districts in North Darfur State	45
3.5	Organizational structure of the health system at district level	46
4.1	The hierarchy of health facilities in North Darfur State	64
4.2	El Tina district hospital in 2009	73
5.1	Number of medical professionals in North Darfur State from 2000-2010	86
5.2	Number of other health workers in North Darfur State from 2002-2010	87
5.3	Relative financial support by NGOs to health services in North Darfur State in 2009.	107
6.1	El Tina district hospital, generator provided by UNAMID (27/08/2011)	131
7.1	Overview of co-ordination structure between government and NGOs in North Darfur State	142
9.1	Delivery of curative health services in North Darfur State	198

List of Tables

1.1	Interviewees involved in health system management and policy implementation in North Darfur State	14
2.1	A continuum of implementation task functions	24
3.1	Interviewees' comments on the achievement of the NHP's seven key areas in North Darfur State	51
3.2	NHP 2007: Key Area 1	52
3.3	NHP 2007: Key Area 2	53
3.4	NHP 2007: Key Area 3	54
3.5	NHP 2007: Key Area 4	56
3.6	NHP 2007: Key Area 5	58
3.7	NHP 2007: Key Area 6	60
3.8	NHP 2007: Key Area 7	61
4.1	The number of health facilities in North Darfur State, 2010	64
4.2	The trend in the growth of public health facilities in North Darfur State, 2002-2010	65
4.3	The ratio of public hospitals and beds for the population of North Darfur State	66
4.4	The number of basic health care units, primary health care centres and dispensaries in public sector available to the population of North Darfur State, 2010	66
4.5	The availability of technical medical assistance in public health facilities in North Darfur State, 2010	67
4.6	The private sector health facilities in North Darfur State, 2010	67
4.7	Number of private health facilities in El Fasher from 2000 to 2010	68
4.8	International NGOs working in curative health in North Darfur State, 2010.	70
4.9	The distribution of health facilities at district level in relation to the population size in North Darfur State, 2010	72
4.10	The ratio of health facilities in El Fasher District compared to other districts in North Darfur State, 2010	74
4.11	Technical services for medical assistance by districts in North Darfur State, 2010	75

4.12	Technical services for medical assistance in El Fasher compared to other districts in North Darfur State, 2010.	76
4.13	The distribution of private sector health facilities by districts in North Darfur State, 2010	76
4.14	The private sector health facilities in El Fasher District, as compared to other districts in North Darfur State, 2010	77
4.15	NGOs managing and supporting health facilities in five districts in North Darfur State, 2010	78
5.1	Numbers of medical professionals in North Darfur State, 2010	86
5.2	Number of other health workers in North Darfur State, 2010	87
5.3	The ratio of doctors per 100 000 population in North Darfur State	88
5.4	Ratio of other health workers per 10 000 population in North Darfur State, 2010	89
5.5	Distribution of doctors at district level in North Darfur State, 2010	90
5.6	The ratio of doctors between El Fasher District and other districts in North Darfur State, 2010	91
5.7	The distribution of doctors working in the public, private and NGO sectors in North Darfur State, 2010	95
5.8	Distribution of other health workers at district level in North Darfur State	96
5.9	The ratio of other health workers in El Fasher District, as compared with other districts in North Darfur State, 2010	97
5.10	Number of trained health cadres in North Darfur State in 2010	99
5.11	Health services expenditure in Sudan, 1997–2009	101
5.12	User fees expenditure as a percentage of private expenditure on health in Sudan, 1997-2009.	102
5.13	The distribution of budget by percentage among the different Ministries in North Darfur State, 2000 - 2009	104
5.14	Health finance in North Darfur State, 2003 - 2009.	105
5.15	Distribution of the public health budget in North Darfur State, 2000-2009	112
6.1	Responsibilities of the levels of government decentralization in Sudan for core health systems functions, service delivery, policy implementation, operational maintenance, and information management	115
6.2	The consequences of conflict for curative health service delivery system	125

	management and policy implementation in North Darfur State	
6.3	Interviewees who expressed their views about the co-ordination between federal, state and district level in health system management and policy implementation in North Darfur State	129
6.4	Interviewees' responses about transfers of funds from federal level to state and district levels in North Darfur State.	132
6.5	Interviewees' responses about the lack of trust between the authorities at federal, state and district level in managing and implementing health system and policy in North Darfur State.	134
6.6	Interviewees' responses about effectiveness of supervision of health service delivery between Federal, State and District levels in North Darfur State.	137
7.1	Collaboration between State and district levels and NGOs in providing curative health services in North Darfur State	145
7.2	Interviewees' responses about the situation of international NGOs providing human resources for curative health service delivery in North Darfur State	146
7.3	Interviewees' responses about the situation of international NGOs providing financial resources for curative health service delivery in North Darfur State	147
7.4	Interviewees' responses about the situation of international NGOs providing materials and equipment for curative health service delivery in North Darfur State	148
7.5	Interviewees' responses about the situation of communication and information exchange for curative health service delivery in North Darfur State	150
7.6	Interviewees' responses about the situation of developing and establishing joint health projects in North Darfur State	152
7.7	Interviewees' responses about the situation of NGOs' participation in developing national health policy in North Darfur State	155
7.8	Interviewees' responses about the difficulties that NGOs face in accessing conflict- affected areas in North Darfur State	158

List of Abbreviations

CPA	Comprehensive Peace Agreement
EQUINET	Regional Network for Equity in Health in East and Southern Africa
FMoH	Federal Ministry of Health
IDPs	Internally Displaced Persons
MDGs	Millennium Development Goals
MSF-S	Medecins Sans Frontieres- Spain
MSF-B	Medecins Sans Frontieres- Belgium
NGOs	Non-Governmental Organizations
NHP	National Health Policy
OAU	Organization of African Unity
SHSS	Sudan Health Service Standard
SMoF	State Ministry of Finance
SMoH	State Ministries of Health
SPLM/A	Sudan People's Liberation Army/Movement
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIMED	African Union/United Nations Hybrid Operation in Darfur
USAID	United States Agency for International Development
WHO	World Health Organization

Chapter 1

General Introduction

1.1 Background

Throughout the world, people are trying to determine how best to organize health systems and deliver health services (Fulop et al, 2003:155; Lopez, 2008:1527). The way in which health systems are designed, managed and financed, affects people's lives and livelihoods (World Health Organization (WHO), 2000:2). Good health care is one of the central concerns of social development policy in both the developed and developing countries. A main feature of a health service is its delivery system, which varies across countries (WHO, 2000:1). Health systems in developing countries differ in size, organization, level of development and capability in attempting to deliver health services effectively and efficiently (Bhatia and Mossialos, 2004:177).

Government officials in developing countries increasingly feel the pressure of budget constraints, accountability and higher public expectations in relation to public services. Officials need to develop, implement and evaluate policies and programs which address a range of pressing social and economic issues (Morse and Struyk, 2006:153). In order to address these issues, there is a need to increase research that can help to improve ways of organizing and delivering health services by all levels of government (Fulop *et al*, 2003:156). Recent research has identified numerous gaps and uncertainties regarding the mechanisms that influence the effectiveness and efficiency of health service delivery. Researchers suggest that further investigation is required in order to evaluate the effects of ongoing changes in the structure, financing, and staffing of health delivery systems (Mays *et al*, 2009:256).

The World Health Organization states that the goal of a health system should be to aim at the delivery of effective curative[1] health care to a country's whole population, equitably and efficiently (Kruk and Freedman, 2008:264). In developing countries, health systems need to

[1] Curative health care deals with cure or treatment of ill health as against preventive health care that deals with prevention of ill health (vaccination) (WikiAnswers. Answers Corporation, 2013).

undergo rapid change in order to meet the challenges of changing demographics, and patterns of emerging and re-emerging diseases, coupled with the rising costs of health-care delivery (WHO, 2006a:1). The governance of health systems, the financing of health care, human resource imbalances, and the accessibility and quality of health services all significantly affect the ability of health systems to deliver (WHO, 2006a:1). Additionally, developing countries face the following hurdles in the provision of health care: a shortage of qualified staff, especially in rural areas; an inequitable distribution of health workers, with too few in remote rural areas; and poor motivation that is probably caused by low pay, poor supervision and support, and unsatisfactory working conditions (Chopra *et al*, 2008:668). Therefore, according to WHO, decision-makers at all levels need to appraise the variation in health system performance, identify factors which influence this and articulate policies that will achieve better results in a variety of settings (WHO, 2006a:1).

Political conflict is a key social determinant of health services. Political conflict has a significant impact on health and health systems. Within a health system, conflict affects every element of its operation: policy formulation; human, material and financial resource availability; support and development; and the actual delivery of health services (Barnabas and Zwi, 1997:38). More data is needed to determine how conflict affects the provision of health services, and better evaluated strategies are needed to reduce inequity in health service delivery (Bornemisza *et al*, 2010:80).

The collapse of the health system in a conflict-affected area, as in Sudan, makes it easier for disease to spread, and often such states cannot recover without outside assistance (Newbrander, 2007:6) Health system issues in conflict-affected areas, such as North Darfur State, where parallel services are essential for displaced people in camps, are becoming increasingly important. These issues include health financing in protracted crises; barriers to access due to user fees; and the need to integrate services within the formal health system (Spiegel *et al*, 2010:342). All these issues affect curative health service delivery, health systems, and policy management and implementation in North Darfur State. They are the subject of this research.

1.2 Profile of the study

1.2.1 Location and size

The study area is constituted by North Darfur State. It is one of three states comprising the Darfur region of western Sudan, located in the north eastern part of Darfur at 12° – 20° north and 24° – 27° east, covering an area of 290,000 square kilometres (see Figure 1.1).

The state of North Darfur represents 12% of the total area of old Sudan[2] and 57% of the area of the Darfur region. North Darfur State is bounded in the northwest by Libya, in the north by Northern State, in the east by Northern State and North Kordofan State, in the southeast by South Kordofan State, in the south by South Darfur State, and in the west by West Darfur State and the Republic of Chad (Ministry of Cabinet Affairs Secretariat General, 2008).

[2] Sudan was split to two countries, Sudan and South Sudan in July 2011, but when I did fieldwork it was one country and the study area is not affected by the separation.

Figure 1.1 Locality of North Darfur State in Sudan

1.2.2 Physical background

North Darfur State includes part of the Marra Mountains. The climate varies from desert in the north, to semi-desert in the central part, to savannah in the eastern, southern and western areas. There are three geographic zones, ranging from the tropical lushness of Jebel Mara to the arid desert of the far north. In Jebel Marra rainfall is heavy and there is little danger of crop loss through drought. A number of great valleys (seasonal streams) drain from the watershed of the mountain range on its western side. The valleys provide a steady water

supply, encouraging permanent settlement and continuous development. The second geographic zone in the region is the goz (clay), or the southern savannah region. This vast flat and sandy region of dunes extending across central and southern Darfur and neighbouring Kordofan supports a wide variety of vegetation, from grass to trees, and many food crops. The rainfall in the central goz is sufficient to support agriculture through the runoff that collects in transient surface drainage systems.

In the transition zone between savannah and desert lies a third zone of sparse and variable rainfall. The climate of this semi-arid zone is marked by a prolonged dry spell of eight to eleven months a year. This is an important browsing and grazing area for both camels and sheep and is the home of nomadic camel pastoralists, as camels will not survive on land that is wet or muddy or where they may fall prey to biting flies. Thus the nomads of Darfur live in two different belts: the camel belt to the north on the edge of the desert and the cattle belt to the south on the edge of the rain-watered equatorial region. The need to access different ecological regions in different seasons dictates the nature of water, grazing, and cultivation rights, with joint rights over grazing and surface water but individual ownership of gardens and wells (Mamdani, 2009:9-11).

The region of Darfur consists of four main climatic zones. Firstly, the rich savannah in the south with an average rainfall between 400 and 800mm per year, where the rainy season varies between four and five months. Secondly, the poor savannah in the centre of the region with an average annual rainfall that ranges between 200 and 400 mm in a rainy season ranging between three to four months. Thirdly, the arid zone which occupies the middle of the northern parts of the region. The rainfall in this zone is limited, with high fluctuations and ranges from 100 to 300mm. The fourth zone is the desert zone and it is characterized by a lack of rainfall and high temperatures during the summer (Fadul, 2004:34).

1.2.3 Population background and their activities

North Darfur State is home to more than 80 tribes and ethnic groups divided between nomads and sedentary communities. The people of the region are divided into two main ethnic groups: those who are of Arab origin, and the local non-Arab population. These follow perfectly the ethnic lines of the population's subdivision: the Arabs, who are mainly nomadic, are either cattle or camel herdsmen, whereas the non-Arab indigenous people, with the exception of the Zaghawa, are settled traditional small-scale farmers (Suliman, 2008:8).

North Darfur State's population in 2008 reached 2 260 262, according to information gathered from the census of 2008 (Central Bureau of Statistics, 2008). Eighty percent of the population are practising agriculture and herding. The state possesses huge quantities of livestock wealth in the form of cattle, sheep and goats. In the field of agricultural production, the State produces millet, sorghum, Arabic gum, sesame seeds, and Sudanese beans in addition to different kinds of fruits. Other economic activity is comprised of handmade traditional industries and leather production.

The conflicts between tribes in Darfur are historical features of the society and stem from the strong competition for natural resources and grazing. The economic situation of most of the people, who work either in agriculture, which needs stability, or in herding which requires nomadism, created a tension which resulted in clashes and fighting. These kinds of clashes were traditionally solved by means of social, respectful and reliable mechanisms by tribal leaders without any government interference.

The State experienced drought and famine which resulted in widespread loss of life and occurred in 1913-1914 and more recently in 1984-1985. Since this latter period there have been cyclical periods of drought, which have gradually eroded traditional coping mechanisms (Sadler and Taylor, 2004:1), and increased the conflict between pastoralists and sedentary farmers and, ultimately, between the rebel groups and government. This is due to the marginalization of the region which began in 2003 and which has increased people's needs regarding health issues.

Drought and conflict in turn have increased the spread of diseases amongst the poor and the government has been unable to provide quality curative health services to them. Therefore, according to Rubenstein (2009:12), the massive civilian death toll in the Darfur conflict is not from direct conflict but from a secondary chains of events. These include: disease; malnutrition or other forms of vulnerability stemming from destruction or damage to water supplies; power and sanitation systems; physical displacement; the suspension of prevention programs and disease surveillance; the flight of health workers; the destruction of health facilities; and the manipulation of access by humanitarian organizations.

Similarly to other parts of Darfur, North Darfur State suffers from underdevelopment. However, the ecological degradation and the intervention of neighbouring countries during the Cold War era and currently has had a serious impact on North Darfur State and on Darfur in general. The shortage of water for people and animals is the worst. The majority of the labour force is unemployed, and poverty and unemployment have in the past led to serious security hazards, to the extent that banditry crimes were common in all parts of Darfur in the last two decades. No vehicle could travel from one town to another without being escorted. Internal Sudanese political rivalries aggravated the conflict.

The Sudanese government could not contain this conflict in the early stages, and when the government forces become involved, it was difficult to control them. The war took on a tribal dimension from early 2003 (Hamed, 2004:4) between Arab militias and the government on one side, and rebel groups on another side. This led to mass killing, internal displacements, and the flight of refugees to the Republic of Chad. All of these factors resulted in the majority of the population of North Darfur State living in economic poverty and suffering from the heavy burden of disease**.**

1.3 Health issues in North Darfur State

According to Spiegel et al (2010:342) Sudan is in the medium human development index category, but people living in Darfur and southern Sudan are estimated to have a far lower life expectancy than the national average. Infectious diseases and neonatal disorders remain the largest cause of increased mortality in conflict settings as a result of low incomes and low life expectancy.

In Darfur significant disparities are evident in the geographic distribution of health facilities. Many rural areas are underserved by the health system. Health centres and hospitals are clustered in towns and cities (WHO, 2006a:44). The United Nations Population Fund (UNFPA) (2006:22) argues that the access to healthcare in Darfur is inadequate to meet the population's needs. UNFPA, WHO, the Sudan Federal Ministry of Health, and the North Darfur State Ministry of Health are working together to increase the availability of health services; develop guidelines for improved medical response and to strengthen the capacity of service providers. For example, the number of health specialists in Khartoum State are 1 114, and serve 5 425 727 people; while the number of specialists in all other three Darfur States

(North, South and West) are only 63, and serve 7 733 228 people (Central Bureau of Statistics, 2008).

In North Darfur State, the effects of the conflict on health and the population have undoubtedly been significant. Health services, not well-developed even before the war, have deteriorated further over the two decades of conflict. Currently, health services in the conflict areas are mostly supported by international humanitarian agencies (WHO, 2006a:8). According to WHO (2004a:4-5) in North Darfur State, the health system is too weak and services are too under-resourced to support a targeted reduction in the disease burden, and to achieve universal access to improve people's health by controlling outbreaks of diseases, such as malaria and diarrhoea.

North Darfur State is considered to be one of the weakest states in Sudan due to the lack of human, financial and natural resources. There is a shortage of both government and private sector health facilities to serve the people who have been affected by conflict. In North Darfur State, the number of people who are affected by conflict is estimated to be about 1.5 million or 75% of the total population which includes approximately 500 000 Internally Displaced Persons (IDPs) (United Nations) (UN), 2008:1). These people are living in camps in the vicinity of large towns such as El Fasher, the capital of North Darfur State, and live in poor conditions, with outbreaks of diseases, such as malaria and diarrhoea a constant threat (World Bank, 2003:53). In Darfur, the sick have to travel an average of 35 km to find a doctor or a health dispensary. Secondary and tertiary health care is practically non-existent beyond the state capitals (Phillips, 2008:16). Consequently, the curative health delivery system in North Darfur State has not been able to cope with the rising need resulting from the rapid growth of civil and political conflicts. The health system has not been able to control outbreaks of malaria, and diarrhoea, and neither have health services been able to meet the needs of the vulnerable, such as women, children and the elderly.

In Darfur several types of emergency are interrelated. The internal displacement of populations caused by conflict and population movements due to drought has resulted in a strain on public health services and an inability to maintain adequate hygiene practices, and this has triggered frequent epidemic disease outbreaks, such as malaria and diarrhoea, leading to the exhaustion of public health resources and management (Xu and Bayoumi, 2009:18).

In North Darfur State, the political conflict forced people from their villages into fragile and poorly organized settlements and camps, putting pressure on already meagre household and community resources and basic services. With resources stretched to the limit, the health situation of both residents and IDPs became extremely precarious (WHO, 2004a:4-5). As a result of overcrowding, due to the conflict and limited access to health care, there was a serious risk of disease outbreaks, particularly diarrhoea, cholera, dysentery, malaria, polio, measles, and meningitis. The quality of the health services suffered from a lack of water, electricity, basic supplies, unhygienic conditions, and the lack of skilled personnel. This situation led to international and local NGOs intervening and supporting the State Ministry of Health in their task of improving the health situation of the population affected by the conflict.

According to the State Ministry of Health (SMoH) Survey Report (2008), outbreaks of disease are frequent in districts because of poor health facilities at this level. Additionally, North Darfur State experiences some of the most widespread poverty, marginalization and displacement on the continent, and environmental factors and degradation, due to the conflict. The most prevalent diseases in North Darfur State are diarrhoea, malaria, inflammation of the respiratory system, malnutrition-related diseases effecting children, women's reproductive-related diseases; and other common diseases, as shown in Figure 1.2 below.

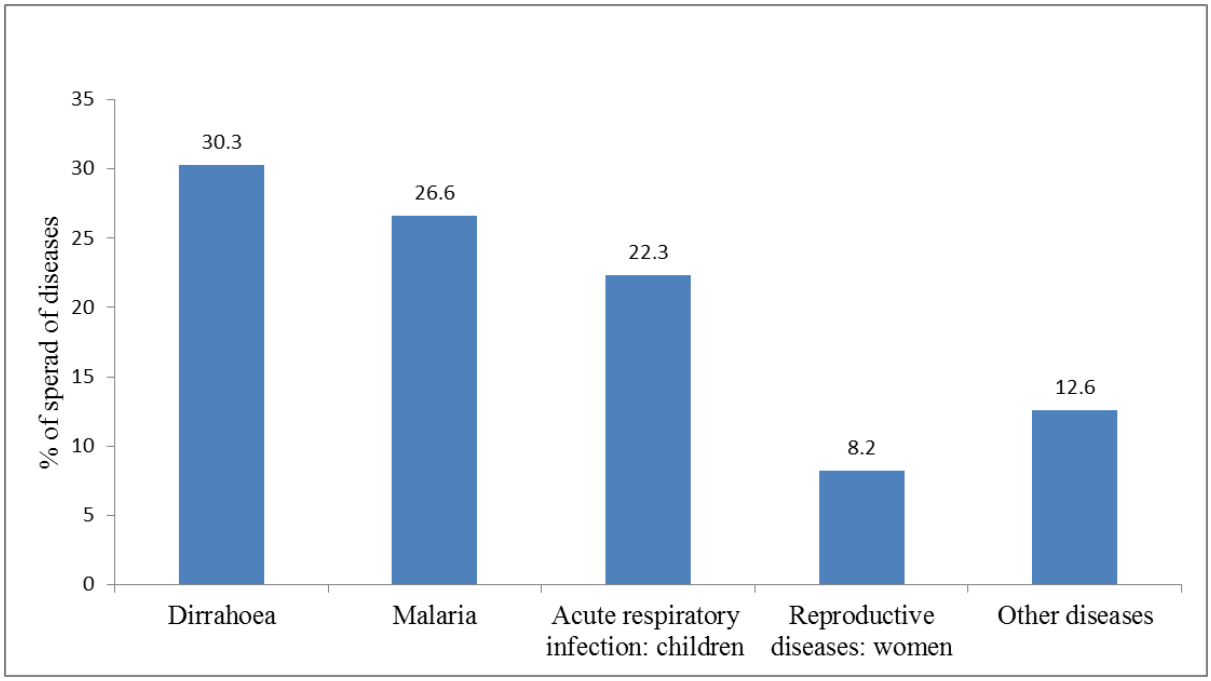

Figure 1.2 The most prevalent diseases in North Darfur State.

Source: State Ministry of Health Survey Report, December 2010.

As can be seen, the three most widespread diseases in North Darfur State are diarrhoea (30.3%), malaria (26.6%), and acute respiratory infection for children (22.3%). In North Darfur State, WHO estimated the crude mortality rate to be about three times the expected rate for Africa. Deaths resulting from diarrhoea, malaria and respiratory infections can also reflect poor access to, or poor quality of, curative health care.

1.3.1 Diarrhoea

According to WHO (2004b: IV) Report Diarrhoea is a major cause of death among children under five years of age. In North Darfur State, it resulted in 24% of deaths of children below five years while among adults between 15 and 49 years of age, injury or violence accounted for 44% of deaths. According to a SMoH Report (2009), diarrhoea accounts for 31% of hospital admissions of children below five years of age in North Darfur State. Deaths due to diarrhoea are likely to reflect poor environmental sanitation which occurs due to conflict (WHO, 2004b: 26). The incidence of diarrhoea rises during the rainy season, especially after heavy rain, which leads to an increase of flies and insects and pools of stagnant, polluted water in cities and towns.

1.3.2 Malaria

Malaria is the leading cause of morbidity and mortality in Sudan in general and in Darfur in particular. It is assumed that symptomatic malaria accounts for 20-40% of outpatient clinic visits and about 30% of hospital admissions (El Sakka, 2005:4). Almost 90% of all malaria cases are caused by falciparum malaria, which causes the most severe form of the disease and results in the most deaths related to malaria (El Sakka, 2005:4). It is estimated that 75% of the population (37 million) are at risk of endemic malaria while the remaining 25% may be subject to malaria epidemics (WHO, 2007a:36 and 40).

The incidence of malaria and its transmission increases from North to South. The northern area of North Darfur State is situated in the Sahara desert, which is characterized by low rainfall, whereas the southern area is characterized by more recurrent transmission and consequently people there are expected to have higher immunity. Therefore, people moving from areas of low transmission to areas of higher transmission in North Darfur State will be exposed to high malarial transmission when other favourable conditions for mosquito vectors are present, such as stagnant water, excessive rainfall and floods.

According to the SMoH Report (2010) in El Malha district, which is located in the north of North Darfur State, there is no malaria in the district because the rainy season is very limited; it ranges between four to six weeks only. Even during this time, there was no incidence of malaria among the population, but there was diarrhoea during the rainy season. The opposite situation occurs in the Dar El Salaam district, which is located in the southern part of the State, where malaria is the leading cause of morbidity and mortality, especially among children and pregnant women.

1.3.3 Other common diseases

The most common diseases in North Darfur State, which affect children especially, are waterborne- and sanitation–related. There is typhoid and schistosomiasis. These diseases can be prevented or reduced with the provision of improved water and sanitation services. According to the SMoH Report (2010), vaccination statistics showed that only 28% of the population were vaccinated. Malnutrition is also a major cause of death in humanitarian crisis situations; in North Darfur State it occurs at a high level in both urban and rural areas, especially in children under five years of age (SMoH Report, 2010).

According to Michael and Gary (2005:14), United Nations Children's Fund (UNICEF) reported that the infant mortality rate in North Darfur State before the conflict was given as 61/1000 live births. The maternal mortality rate was 700 /100 000 of live births and was well above the national rate of 509 /100 000 in Sudan. At the height of the crisis, overall mortality rates in excess of 2.5/10 000 per day were measured. The high level of mortality in Darfur was the result of two separate, if connected, causes: rapid environmental degradation, especially in North Darfur, and political violence. There has been an increasing need for curative health services in North Darfur State which lacks the financial and human capacity to deliver quality health services, to manage a health system and to implement health policy. This study investigates these matters.

1.4 Research objectives

The specific objectives of this study are:

1. To gain a comprehensive understanding of the curative health delivery system in North Darfur State.
2. To explore the main challenges currently affecting the curative health service delivery system in North Darfur State.
3. To analyze the co-ordination and collaboration between the federal government, local government and NGOs in managing and implementing curative health policy in North Darfur State.
4. To discuss further mechanisms of curative health service delivery in order to assist decision makers in North Darfur State.

This investigation is limited to an analysis of curative health service delivery in North Darfur State and, as such, the preventative health services have not been included in the scope of the study.

1.5 Research methods and methodology

Both quantitative and qualitative research methods were used. A general understanding of government health policy, the health system in Sudan, and the management and implementation of curative health policy in North Darfur State, was drawn from official documents and reports. The review of the literature included a review of modern health paradigms and of international health programs and strategies such as Brinkerhoff and

Crosby's (2002:25) framework for policy implementation. This helped in identifying forms of health service delivery system management and policy implementation to improve health, by considering all the major determinants: health facilities and infrastructure; health services resources (human and financial); structures of health service delivery systems; and type of collaboration and co-ordination between stakeholders to implement health policy. Documentation was collected from different sources including government offices and medical organizations, as well as from libraries, and academic and research institutes in Sudan.

Quantitative data were derived from health statistics, both nationally and internationally, including the Federal Ministry of Health (FMoH) in Khartoum; the State Ministry of Health in El Fasher; the Central Bureau of Statistics in Khartoum and El Fasher; international NGOs; WHO; the UN; and the World Bank.

The research methods included observation, recordings and open interviews. The researcher visited health facilities in the field and took notes, extensively interacting and discussing the issues with health administrators and professionals working in health facilities. A check list of items and themes was prepared in order to examine: curative health service provision; the physical condition of health facilities and equipment; and the management and monitoring practices of health systems and policy. Three health facilities from each category of government health facility (rural hospital, health centre and basic health unit) and one teaching hospital and one specialist hospital were investigated.

Open-ended interviews with those involved in health system management and policy implementation at district, state, and federal level, and with international NGOs, were conducted in Khartoum and El Fasher from November 2010 to February 2011. The interviews served to obtain important information and insights into health system management and policy implementation processes. Semi-structured individual interviews were used as sources of data. Four sets of respondents were interviewed in order to collect data from administrators and professional people working in the curative health service field. One set of interviews was conducted with two administrators and two professionals at the FMoH in Khartoum. The intention was to capture their knowledge of how the curative health service delivery system and policy is managed at federal level (see Appendix 1).

A second set of interviews was also conducted with ten administrators and ten professionals at State level in El Fasher, focusing mainly on those who work in the Ministry of Health and in large hospitals. As with the FMoH interviews, the intention, in this instance, was to capture their knowledge of how the curative health service delivery system and policy is managed and implemented, and to investigate how the co-ordination between all stakeholders involved in curative health policy and system management and implementation had been proceeding (see Appendix 2).

The third set of interviews was conducted with seventeen professionals and eight administrators at district level in Malit, El Malha, Kutum, Kabkabeiya, El Towasha, El Tina and Dar El Slam. The interviews focused on those who have long experience and are involved in curative health policy management and implementation (see Appendix 3).

The fourth set of interviews were conducted with fifteen administrators and professionals of NGOs who are working in curative health services such as Medecins Sans Frontieres (MSF.S), Medecins Sans Frontieres (MSF.B), Mercy Malaysian Organization and the Relief International Organization (see Appendix 4).

Convenience sampling was used in identifying the interviewees at all three levels of government and in the NGO sector. There were a total of 64 interviewees, as shown in Table 1.1 below.

Table 1.1 Interviewees involved in health system management and policy implementation in North Darfur State.

Level	Type of interviewees		
	Professional	Administrator	Total
Federal	2	2	4
State	10	10	20
District	17	8	25
NGOs	10	5	15
Total	39	25	64

These interviewees were visited in their offices, homes and in public places. The international NGO representatives who were interviewed included officials of WHO and UNICEF.

The guidelines of the questionnaires were translated into Arabic. All the government officials' interviews were conducted in Arabic and transcribed into English for analyzing, while interviews with some NGO officials were in English. Due to the conflict occurring in the State, most of the interviewees declined to have their responses recorded electronically; the exception to this were 11 responses (six interviewees from state level, three from district level, and four NGO representatives). Therefore, the researcher took notes on all the interviewees' responses.

1.5.1 Data analysis

The interviews were transcribed and analyzed. According to Pope and Mays (1995:3) content analysis is a systematic examination of text (field notes) by identifying and grouping themes and coding, classifying, and developing categories. The data sets were approached with the aim of identifying, illustrating and analyzing the research questions. The data and information were treated as factual. While policy analysis has informed the interpretation, quantitative data was analyzed through simple cross-tabulations and charts developed with Microsoft Excel and Word.

1.5.2 Reliability and validity

Data were collected to achieve specific research objectives using triangulation[3] methods. The results from different sources, both written and oral were substantiated by comparing data and thus enhancing the findings. These methods of varied data collection ensure the required degree of reliability and validity of the research.

1.6 The challenges of this study

The main challenge of this study was the lack of data. Statistics about mortality and morbidity are not available in hospitals because most deaths occur at home, and most people

[3] Triangulation is the act of combining several research methods to study one thing. These methods including: analytics, stakeholder interviews, interviews (face-to-face or phone as needs be), cultural probe (aka diary study), focus groups or workshops, secondary research (including an examination of market research data) quantitative survey and usability testing of existing product or early concepts (Kennedy, 2009:2-3).

living in rural areas and IDP camps use traditional treatments. Even those who reach the public health facilities have not been registered because there are no effective information management systems in place. If some data are nonexistent and difficult to obtain, it may be questioned why such a study has been undertaken. The answer is that this seems to be the first time that such a study has been attempted in North Darfur State where there is a considerable need to address issues on health policy and management.

In conducting interviews many obstacles and difficulties were experienced. Professionals such as doctors and top-level managers in the health sector, as well as international NGO representatives, had difficulty finding the time to complete the interviews. In some cases, appointments with these people were cancelled and had to be made time and again. Most interviewees, when they learned the purpose of the interview, suggested approaching another person, typically newly-appointed administrators in the State Ministry of Health. The top level of health directors usually became uncomfortable when asked to comment on the weaknesses of health system management and policy implementation, as well as on the poor health conditions in the country.

Due to the conflict in North Darfur State, interviewees did not want to be involved in political issues. Therefore, they supported the government's views and avoided commenting on the lack of curative health service provision, on the weak health system management and on policy and implementation failures in the State. Interviewees working at the lower levels, in districts and international NGOs, were more critical. They spoke freely, communicating their personal views and experiences, and discussed the difficulties and obstacles which they experienced. They also provided alternative sources of information to government reports.

Challenges were also experienced with regard to the availability of certain data in the NGO sector, especially reports. This was because the government expelled 13 international NGOs from Darfur in early March 2009 (Wasabi, 2009:1068), for allegedly spying and, therefore, the NGOs officials feared supplying the researcher with any documents about their activities.

1.7 Structure of the thesis

Chapter Two provides a conceptual framework of public policy management and implementation, covering public policy, health policy analysis, policy implementation, and

public policy management in decentralized systems as well as the co-ordination and collaboration between government levels and NGOs in managing and implementing the health system and policy. Chapter Three focuses on understanding health service delivery systems and policy in Sudan and particularly in North Darfur State. Chapter Four analyses the provision of curative health services in the public, private and NGO sector, and the distribution of health facilities in North Darfur State. Chapter Five investigates the availability of human and financial resources for curative health service delivery there. Chapter Six determines intergovernmental relations between the federal, state and district levels in managing and implementing health systems and policy, while Chapter Seven explains the level of collaboration and coordination between government and NGOs in health service delivery in North Darfur State. Chapter Eight discusses possible improvements to delivering and managing curative health services there. The final chapter explores the prospects for such improvements.

Chapter 2

Public Policy Management and Implementation

2.1 Introduction

In addressing issues pertaining to health service delivery in North Darfur State it is necessary to provide an overview of approaches to public policy management and implementation.

2.2 Public policy

Anderson (1997:9) asserts that public policy is a purposive course of action followed by an actor or set of actors in dealing with a problem or matter of concern. This definition indicates that policies are created by key actors to address certain problems. According to Dye (2005:1), public policy is concerned with what governments do, why they do it, and what difference it makes. Fox and Meyer (1995:107) argue that public policy is driven by a commitment of government to improve living conditions of the community. It is important to note that public policy is comprised of authoritative statements made by legitimate public institutions about the way in which they propose to deal with policy problems.

Public policy influences the ways in which society and governments respond to and think about issues that impact the health of communities. It is essential, therefore, that communities learn to understand the policy-making process. It is also critical that policy makers learn how to work with communities and to tap into the wealth of knowledge, experience and diversity that can help create better public policy (Dodd and Boyd, 2000:1).

2.3 Health policy analysis

Health policy analysis examines what a government's response has been in addressing health problems; in improving health services; in preventing health problems; and in stimulating a healthy population, especially in developing countries. Policy analysis means different things to different people. For some, policy analysis concerns policy content, while others argue that it focuses on policy context and process (Khan, 2006:110). Alternatively, policy analysis could concentrate on the outcomes of policies or the effects that a policy has on people (Collins, 2005:193). The dominant focus of policy analysis in the health sectors of

developing countries has been largely technical, investigating which policies and interventions can most effectively address specific problems (Gilson, 2007:1). However, health policy analysis also describes the contextual factors, including political, economic, socio-cultural and demographic aspects, which affect the health policy process and its health outcomes directly and indirectly.

Health policy analysis aims to substantially increase what we know about strengthening health system policies and interventions in ways which benefit those who are poor. It also aims to strengthen the capacity of partners to support local and global policy development through relevant, high quality, timely and well communicated research. New knowledge can be generated by combining the analytical frameworks of economics and policy analysis in order to help countries address not only the design of policies, but also their effective implementation. New insights into the policies and approaches to implementation which are likely to be effective in different contexts can be derived through cross-country comparative analysis (Gilson, 2007:1).

A purpose of health policy analysis is to explain why certain health issues receive political attention and why others do not by enabling the identification of which stakeholders may support or resist policy reforms, and why. Health policy analysis can also identify the perverse and unintended consequences of policy decisions, as well as the obstacles that undermine policy implementation and so jeopardize national goals for improved health. In these ways, policy analysis supports more realistic expectations about the time-frames and nature of policy reform and can assist in enabling successful policy development and implementation. It can also support the use of technical evidence in these processes. Health policy analysis is, in other words, not only of practical importance in public health, but is also a legitimate area of academic inquiry (Gilson *et al*, 2008:292).

Harrington and Estes (2004:1-5) argue that health policy is designed to address problems or changes which need to be made, but that the key issues are initially identifying and understanding such problems and then following a model to direct or intervene in the public policy-making process. The major purpose of health policy is to enhance health or facilitate its pursuit by the public and the defining purpose of governmental health policy is to support the public in its quest for health. Khan (2006:9) states that public health policies in

developing countries tend to address infectious and common diseases such as malaria, tuberculosis and diarrhoea by following the biomedical[4] model of health.

EQUINET (2009:2) argues that health policy analysis investigates how and why national health policies achieve less than is expected, perform differently from what is expected, and succeed in either achieving their goals or failing. It focuses on understanding the forces influencing why and how policies are initiated, formulated, negotiated, communicated, implemented and evaluated. It includes particular consideration of the roles of actors or stakeholders in policy change, their use of power in the processes of policy change, the influences of rules, laws, norms and customs over their behaviour, and the influence of global interests and forces. Gilson (2007:1) argues that many policies and interventions do not achieve their goals or have unintended and unwanted consequences. Since the mid-1990s there have, therefore, been calls for work that applies policy analysis frameworks to better understand the political nature of the processes of policy development and implementation in developing countries.

2.4 Policy implementation

Policy implementation relates to actions which are carried out in terms of established policies. It refers to the process of converting human, financial, technical and material inputs into outputs, that is, goods and services (Makinde, 2005: 63). In policy implementation, the goals should be clearly defined and understood, resources made available, the chain of command be capable of assembling and controlling resources, and the system able to communicate effectively and control those individuals and organizations involved in the performance of tasks (Parsons, 1995: 464). Brynard (2005: 9) states that policy implementation is regarded as the accomplishment of policy objectives through the planning and programming of operations and projects so that agreed upon outcomes and desired impacts are achieved.

According to Brinkerhoff and Crosby (2002: 23-24), policy implementation is similar to project or program implementation but on a broader scale. However, assuming that policy

[4] The biomedical model of health is used to bring down the number of morbidity and premature mortality. It focuses on the treatment rather than the prevention (WikiAnswers. Answers Corporation, 2013).

implementation is simply project or program management writ large will lead reformers astray. Perhaps the most significant differences are the following:

- Policy implementation is rarely a linear, coherent process (Brinkerhoff and Crosby, 2002: 23). Projects and programs have a beginning and an end; there are specific time-lines; targets and objectives are clearly specified for each stage; and action strategies are defined to reach those targets. While policy statutes set objectives and goals, the policy implementation can often be multidirectional, disjointed, often broken up, unpredictable, and very long term.
- No single agency can manage the policy implementation effort (Brinkerhoff and Crosby, 2002: 23). Programs and projects have program heads or project managers. But policy implementation needs the intensive actions of many agencies and groups, both outside, from civil society and the private sector, and within government.
- Policy implementation creates winners and losers (Brinkerhoff and Crosby, 2002: 23). Programs and projects provide benefits to those they affect. When policies change, old groups may face difficulties and not benefit from that policy change, while new groups will benefit from it.
- New policies generally do not come with budgets (Brinkerhoff and Crosby, 2002: 24). Policies have only promises of resources, especially at the start of the reform process. Making progress in policy implementation means creating new source of funds, identifying offered sources and potential of support, and negotiating for resource reallocation to carry on policy implementation.

According to Brinkerhoff and Crosby (2002: 33), one of the most serious problems facing policy implementation is that reforms take several years or even decades to fully accomplish their objectives. If a country takes twenty years to fully implement reform, the government could change several times during the process. Therefore, given the length of time required and the changing nature of socio-political conditions in most countries, what is clearly required is a strategic outlook on policy implementation.

Makinde (2005:66) argues that policy formulation and implementation are not completely different stages of activities, and that there is no certain end to policy implementation. The problem facing developing nations mostly is not the problems of policy formulation but of policy implementation. According to Makinde (2005: 63) implementation problems occur

when the desired impact on the target beneficiaries is not achieved. Such problems are not restricted to developing nations. Wherever and whenever the basic critical factors that are crucial to implementing public policy are missing, there is bound to be a problem with implementation. These critical factors include communication, resources, dispositions or attitudes, and the bureaucratic structure. Other serious problems are those of bribery and corruption, which have contributed greatly to the failure of policy implementation in developing countries. Makinde (2005:64) argues that, stripped of all technicalities, the implementation problem in most developing nations is the problem of a widening gap between intentions and results. Another cause of an implementation gap is the failure of the policy makers to take into consideration the social, political, economic and administrative variables when analyzing policy formulation. In most developing countries, the planning of a policy is from the top-down. And, by implication, the target beneficiaries are not allowed to contribute to the formulation of the policies that affect their lives (Makinde, 2005:65). Effective policy implementation requires a good chain of command and a capacity to co-ordinate and control the policy implementation (Parsons, 1995:465).

According to Pearson (1986: 148-149), health policies in developing countries which are adequate and appropriate in meeting the basic needs of the people are not a simple matter of providing more expensive hospitals and doctors. The essence of any effective health policy is that it should be appropriate and relevant to local health care needs, incorporate services which are acceptable and accessible to the local population, and be feasible within existing physical and financial constraints. This means giving due consideration to a comprehensive definition of need, based on the epidemiology, demography and spatial distribution of the local population.

According to Makinde (2005:69), for any government to be judged administratively competent, there must be evidence of bridging the gap between the intention of a policy and its actual achievement. Thus it becomes necessary for any policy maker in the government sector to take the issue of policy implementation seriously, even at the formulation stage. In order to be so:

(a) Target beneficiaries should be involved at the formulation stage in order for them to have an input regarding that which affects their lives;
(b) Attention should be paid to both the manpower and financial resources which will be needed to implement the policy;

(c) There must be effective communication between the target beneficiaries and the implementers of policy programmes;

(d) The culture of discontinuing a policy once there is a change in government should be discouraged because even though governments come and go, administration is continuous. There should be continuity in policy except if the policy is found not to be useful to the target beneficiaries and;

(e) Provision should be made for the adequate monitoring of projects, as poorly monitored projects will only yield undesired results (Makinde, 2005:69).

Brinkerhoff and Crosby (2002:6) note that designing and having policies in place is relatively easy, but that managing their implementation is always challenging. Brinkerhoff (1996:1497) argues that policy implementation requires bringing together multiple agencies and groups to work in concert to achieve a set of objectives. Making these joint arrangements function effectively depends upon multi-actor linkages and co-ordination.

2.4.1 Brinkerhoff and Crosby's framework for policy implementation

Brinkerhoff and Crosby (2002:25) adopted a framework for policy implementation through a set of tasks which include policy legitimization; constituency building; resource accumulation; organizational design and modification; mobilizing resources and actions; and monitoring progress and its impact. This is represented in Table 2.1 below.

Table 2.1 A continuum of implementation task functions

Policy implementation (emphasis on strategic) ←	Program implementation	→ Project implementation (emphasis on operating tasks)
• Legitimization • Constituency building • Resource accumulation • Organizational design and modification • Mobilizing resources and actions • Monitoring progress	• Program design • Capacity building for implementers • Collaboration with multiple groups and organizations • Expanding resources and support • Active leadership	• Clear objectives • Defined roles and responsibilities • Plans/schedules • Rewards and sanctions • Feedback/adaptation mechanisms

Source: Brinkerhoff and Crosby (2002:25).

As Table 2.1 shows, the major emphasis of policy implementation is at the strategic end of the continuum. It also reveals the tasks of project and program management that are necessary for the operational tasks of policies once their components are translated into programmatic outputs.

Legitimization and constituency building have proven to be essential; firstly, to bring suspicious public officials on board with reforms, and, secondly, to win over members of the health establishment who are not convinced of the need for change.

In resource accumulation, in order to implement new policy, human, technical, material, and financial resources must be allocated. Low or unsustainable levels of financial resources are not the only problem. Many developing countries also suffer from a scarcity of skilled human resources, and a lack of sufficient resources for implementing policy change.

In organizational design and modification, the implementation of new tasks and objectives associated with policy reform will likely cause modifications by the implementing organizations. Organizational design poses several problems. With significant policy change, an agency can be affected in terms of its internal arrangements and in its relationship with its operating environment. Since successful actions by one entity may depend upon the implementation of complementary action by other agencies, there will be greater need for sharing information and resources. If policy change is to achieve results, then resources and action must be mobilized in the appropriate manner. This entails both planning and implementing. Monitoring the progress and impact of policy change will reveal transformed behaviours, greater or improved benefits to consumers, and more effective or efficient production and use of resources.

This implementation task framework is useful for a number of purposes. Firstly, it can help to assess the progress of the policy implementation process at a given point in time, and it can identify what steps need to be taken next and how long the process might take to accomplish. Secondly, the task framework may be used as a diagnostic instrument for pinpointing potential problems. Thirdly, the task framework can be of considerable assistance in mapping the implementation strategies. Fourthly, the framework's recognition of the sequential nature of policy implementation tasks makes it simpler to identify actions and their scheduling. Fifthly, the implementation task framework can be a valuable aid to policy managers in the development of more realistic and accurate indicators for monitoring progress towards the desired impacts of a policy.

2.4.2 Types of policy implementation

Approaches to policy implementation have been dominated by a debate as to whether decision-making is top-down or bottom-up, or a synthesis of the two (Walt et al, 2008: 312). Top-down approaches see policy implementation as a rational process that can be pre-planned and controlled by the central planners responsible for developing policies. The requirements of implementation are presented as a generalized list of conditions, which if met will enable effective implementation. Policy implementation failure, seen in the gap between policy objectives and achievements, is therefore the result of failing to plan adequately for implementation (Walke and Gilson, 2004:1251). Top-down approaches consider how centrally defined goals are implemented in complex systems by statutory or voluntary mechanisms such as intra-governmental coordination, and agreement on objectives and

appropriate sequencing (Schneider *et al*, 2006:52). According to Walker2 and Gilson (2004:1251), this perspective also emphasizes the need to understand implementation systems and the actors responsible for implementation in order to understand why policies do not achieve expected outcomes. For some, the gap between objectives and outcomes is a demonstration of how policy is recreated through the process of implementation, rather than an implementation failure; developing inter-personal competence and trust within organizations is necessary to strengthen implementation. According to Matland (1995:146), top-down supporters see policy designers as the central actors who concentrate their attention on factors that can be manipulated at the national level.

According to Walker and Gilson (2004:1251-1252), bottom-up theories are generally judged to have particular relevance to the delivery of social services such as health care because those providing these services must exercise discretion in taking decisions which allow them to respond effectively to variable client needs. Additionally Schneider *et al* (2006:52) argue that bottom-up perspectives focus on the extent to which central mandates are implemented in practice and often highlight the many ways in which sub-national and local actors adapt or distort policy in favour of their own interests. Matland (1995:148-149) argues that local service deliverers have expertise and knowledge of the true problems and are, therefore, in a better position to propose purposeful policy and to implement it. That service deliverers ultimately determine policy is a major tenet of bottom-up models. Therefore supporters of the bottom-up model emphasize target groups and service deliverers, arguing that policy is really made at local level. Most implementation problems stem from the interactions of a policy within micro-level institutional settings. Central planners can only indirectly influence micro-level factors. Therefore, there is wide variation in how the same national policy is implemented at local level. Under these conditions, according to the view of the supporters of the bottom-up approach, if local-level policy implementers are not given the freedom to adapt the program to local conditions, it is likely fail (Matland, 1995:148).

The top-down and bottom-up perspectives in policy implementation contain kernels of truth (Matland, 1995:171). For example, EQUINET (2008:2-3) argues that health policies are often challenged by the common practices and hierarchies within health systems, including decisions over who gets access to health services, as well as what types of care are offered to different people and groups. Weak communication in health systems is often attributed to unrealistic expectations about the role of community members – especially the marginalised–

in local decision-making structures intended to facilitate local influence over health. Such learning from applying policy analysis can be used to address and overcome weaknesses that undermine equity in both the development and implementation of policy.

Elements of the two major approaches are considered by including signals from both the top- and bottom levels. Kickert *et al* (1997:8-9) argue that the 'top-down' policy approach usually fails because there is too little local discretion, since local actors are excluded from policy formation and resources are lacking. Public policies and governance can be improved by increasing the discretion of local actors. This could lead to decentralization, self-government, and privatization, which in fact means the retreat of central government from the public domain. At the same time, central government is urged to give more attention to the problems of local sectors and to provide them with more resources. According to Sundewall (2009:25), each case of policy implementation has characteristics which are commonly associated with both the bottom-up and the top-down perspectives. Both perspectives are tools for analyzing policy implementation and each has its inherent flaws and limitations. Both perspectives will be taken into consideration in this thesis in order to understand the collaboration between levels of government and NGOs in implementing curative health policy.

2.5 Public policy management

In term of public policy management, several interdependent, mutually inclusive administrative functions are often carried out to achieve specific goals. These functions include: policy-making, financing, staffing, determining work procedures and control (Hanekom, 1987:1). The first task of improving policy management is to ensure government's capacity in the existing system so that the fundamental problems can be dealt with in successful, sustainable ways (Kaul, 2000:28). Governments everywhere are under pressure to perform better with fewer resources and lower capacity. In developing countries, there has been an organizational shift from central planning and management to local government being responsible for the delivery of many public services. This has led to a need for creative and effective policy-makers because decentralization from central planning has dramatically expanded the number of policy players in regional and local government. Effective policy-makers and analysts are those who approach each new problem with critical thinking, that is, they are able to conduct rigorous analyses, generate creative solutions, and

bring experience as well as good judgment to decision-making (Morse and Struyk, 2006:1 and 4).

The effectiveness of health service delivery depends upon the extent to which those who deliver it are held accountable for their performance. This includes two kinds of accountability: hierarchical accountability, which is based on bureaucratic controls within government; and social accountability, which involves communities in the management and monitoring of programs. Hierarchical accountability entails monitoring the performance of public servants, rewarding them for good performance and punishing them when performance is bad. In term of social accountability, health service providers are made accountable to their clients, either by having community members participate in managing the service, or by providing them with information, choice, or opportunities to voice their concerns if the service fails to meet their needs (Khaleghian and Gupta, 2005:1093-1094).

A health system reflects the relationships between five major groups of actors: health care providers; the population; the state; the organizations that generate resources; and the other sectors which produce services which impact upon health. A health care system can be seen as the "vehicle for the organized social response to the health conditions of the population" (Frenk, 1994:19). The main function of health systems is to be responsive to the needs and demands of the population. In developing countries, governments whose health budgets are highly constrained are generally expected to deliver essential rather than comprehensive health services. Therefore, governments need tools to monitor and evaluate the functioning of the system on a routine basis and to allow for more informed decisions about funding, organization and policies of health systems (Kruk and Freedman, 2008:264).

A main challenge facing the health sector in developing countries is how to manage and organize the delivery of health services, including resources to finance them (Murray, 1995:101). Health financing is a key determinant of health system performance in terms of equity, efficiency, and quality. It encompasses resource mobilization, allocation and distribution at all levels (national to local), including how providers are paid (Islam, 2007:5). The fairness of financial contributions has been recognized as a key dimension of health system performance (WHO, 2000: ii). To measure a health system's production function, it should be constructed using three critical inputs. Firstly, estimates of the regional burden of

disease in terms of dalys or some other measure of population health status is required. Secondly, estimates of the cost-effectiveness of the functions of preventive and curative health interventions are required. Thirdly, the available human and physical infrastructure in different regions of the country and the proportion of the population with access to the system must be estimated (Murray, 1995:102-103). There are often considerable gaps between the declared health policy objectives and the resources and implementation instruments needed to achieve those objectives; this dilemma has always characterized the health policy of developing countries (Khan, 2006:96).

Generally, national health policies in developing countries suffer from various weaknesses of management and do not offer appropriate solutions to many health problems because of a lack of capacity in human and financial resources (Khan, 2006:9). Kruk *et al* (2010:95) state that as the fundamental aspiration of a health system should be to improve health, health system activities which could build trust in government, or result in other social gains, could in the longer term lead to better and more sustainable health outcomes. This depends on an appropriate system of health governance and management.

2.5.1 Decentralization of health policy management and implementation

Decentralization is defined as the presence of a government regulatory authority in the form of sub-national authorities such as state, provincial, district or municipal governments. Decentralization has become an increasingly familiar theme in development theory and practice over the past two decades. Decentralization is introduced to bring government 'closer' to the community, and to facilitate access to local information. Decentralisation can also preserve the consistency and parsimony of centralized decision-making and maintains the relative ease of centralized policy implementation (Khaleghian, 2003:1-2). Mays *et al* (2009:258) argue that decentralized governmental authority and decision-making may yield superior public services because local governments, as opposed to state administrative units, are often better informed of, and responsive to, local community needs. However, alternative theories suggest that a centralized provision of services may be more effective and efficient in coordinating activities and correcting inequities in the distribution of resources across communities.

In many developing countries that have applied a decentralization system local officials have found themselves without the basic administrative capacity to take on their new roles, leading to failures in service delivery and the basic functions of government (Khaleghian and Gupta, 2005:1088). A key constraint in the successful implementation of a decentralized system is that it can provide limited opportunity for a health management team to make decisions and take actions (El-Saharty *et al*, 2009:41).

Assessments of health systems should take account of the degree of government decentralization and of the levels of authority in decision-making. Questions to be asked in this regard are: which administrative levels have authority over planning, budgeting, human resources, and capital investment? Is the health sector represented at the local level? And does the local authority have a role in policy development, resource allocation and human resource planning? These issues underscore the need to approach health system performance by understanding the interaction and linkages which exist between health financing, service delivery and the management of human resources in the health sector (Islam, 2007:4).

In many developing countries, decentralization policies have weakened central government agencies to the extent that their corrective hands are tied, leading to policy fragmentation and an inability to take responsibility in effectively implementing policy. When this is so, decentralization in the sense of formally transferring responsibility for certain functions to local government, seems to not work well (Khaleghian and Gupta, 2005:1088-1089). Decentralized health policies in these instances have usually led to increasing the responsibilities and capacity of lower levels of government, such as a district or a province, transferring authority for facilities such as hospitals and clinics (Mills, 1998:506). Where there is a need to address horizontal imbalances or differences between regions, national governments might be able to distribute equalization grants. This is important because the poorest regions often have the greatest need for social services, yet have the weakest ability to pay for them. To address this, national governments could aim to distribute equalization grants to vulnerable local governments with a low fiscal capacity (Morse and Struyk, 2006:138).

According to El-Saharty *et al* (2009: iii) decentralization in the health sector is likely to be more effective when it is implemented as part of a broader government decentralization policy across sectors. At the sub-national level, decentralization was found to be more

effective in those regions which increasingly strengthened their management and institutional capacity and where regional governments set priorities and adapted the strategies to local needs. Overall, the key lessons for implementing improvements in health service delivery is that the lack of any critical inputs (facilities, health workers and drugs) inevitably limits the overall impact of the strategy and that the implementation of such key inputs should be carefully co-ordinated and properly synchronized.

2.5.2 Co-ordination between the levels of government in managing and implementing health policy

A government needs to know how, why, with whom and under what conditions a policy can be successfully implemented and delivered (Davies, 2004:14). For example, according to Khan (2006:77), the existing health systems at the federal and provincial levels in Pakistan are not sufficiently decentralized and participative in responding adequately to health problems and in finding practical solutions at lower levels. At a local level the delegation of authority for operational decision making is absent, with decisions on program budgeting and finance restricted to the top levels of the provincial and federal hierarchies. At the local level the population needs health care but these needs are not recognized at the provincial and national level; the local level is responsible only for the implementation of plans and recommendations of the provincial health ministry. Centralization also hinders wider participation by professional groups, NGOs and communities in the health policy process and often results in implementation failures.

National departments, as the principal governing bodies of health systems, have a mandate for health policy-making, planning, regulation, monitoring and evaluation, and for ensuring access to essential health services. In some countries, a Ministry of Health is responsible for policy formulation and implementation, while in others implementation of health services falls under the jurisdiction of sub-national (state, provincial, district or local) governments (Siddiqi *et al*, 2009:18). In implementing health policies, health professionals, civil servants and administrators working at the federal, provincial and district levels play various roles according to their qualifications and professional capabilities. Usually, the implementation process suffers from communication gaps between health professionals, civil servants and administrators at the different levels. These communication gaps hinder the flow of information from upper to lower level actors, particularly in understanding the specific objectives of planned health projects before policy implementation commences (Khan, 2006:101).

According to Sundewall (2009:15), co-ordination is a tool that enables a health system to work more effectively. In this regard, Exworthy and Powell (2004:264-278) argue that successful policy implementation is more likely to occur when policy streams are aligned across the vertical (central-local) dimension, and the horizontal dimensions of both central-central (joined-up government at the centre) and local-local (joined-up governance at the periphery). Successful policy implementation requires confluence at the central-central, local-local and central-local levels.

Policy implementation specifically concerning the implementation of an infrastructure policy is considered to be the outcome of the interaction between central-local relations and inter-organizational co-ordination (Panday, 2006:43). According to Brynard (2005:10), insufficient co-ordination of policy implementation is cited in virtually all sectors and has significantly hampered the implementation of policies. In addition, insufficient staffing and capacity in all three levels of government (national, regional and district) as well as the linkages between them, have largely worked against the successful implementation of policies. These findings have demonstrated an adverse effect on successful service delivery.

2.5.3 Co-ordination between government and NGOs in managing and implementing health policy

NGOs are important in policy development in identifying needs, providing services, assisting with policy implementation, linking the government and the community, and sharing their expertise (Keen, 2006:37). NGOs have numerous comparative advantages in health services provision, such as serving the community in remote places and within close proximity to the community. This tends to create a situation in which governments may prefer to work with them rather than with profit-making firms (Wamai, 2004:3). The primary purpose of co-ordination and collaboration between government and NGOs is to achieve maximum impact with existing resources, and to avoid a duplication in the provision of health services. The major weaknesses of NGO-provided services are that they are often poorly co-ordinated; act in parallel with the state systems; have a different vision of the system, which they are seeking to bolster or re-establish; and compete for partners, resources and publicity. Increasingly, there is a debate regarding how best NGOs could interface with host government services and policy, and how such services could reinforce the limited capacity of host governments (Hopkins, 2004:63).

NGOs can play a vital role in the co-production of policy. Brinkerhoff and Crosby (2002:86-87) argue that the implementation of objectives by NGOs can be varied for a number of reasons. Firstly, there is a multiplicity of actors, whose benefits are diverse. For example, national governments, international donors, international NGOs, local NGOs, and other civil society organizations all have conflicting agendas. Secondly, there is a power differential among the different actors which arises as a function of differences in resource levels, operational capacities and political influence when governments partner with local NGOs. Thirdly, there is a tendency for partners' individual objectives to shift over time from the goals of the partnership. This can happen, for example, when the NGOs initially involved as service delivery agents begin to want more of a say in policy and resource allocation decisions, or when a new government is elected and the officials assuming power have a different agenda from that of their predecessors. Such change can contribute to the partnership's objectives having to be re-negotiated.

A leading health agency's responsibility is to co-ordinate all the activities of agencies working in the health sector and to help ensure the alignment of activities and strategies with the host government's policies. Co-ordinating with the lead health agency, therefore, is the key mechanism for interfacing with the host government and for identifying ways to reinforce the limited capacity present. This supports the 'strengthening of health systems and infrastructure approach' rather than establishing parallel health systems. Therefore Stone (1993: 6) argues that in order to avoid this government must blend their capacities with those of various non-governmental actors.

According to the Health and Fragile States Network Report (2009: 38), the provision of health services in conflict areas requires good relations and co-ordination between health stakeholders in order to overcome significant infrastructural and human resources constraints, and to have the opportunity to start a new health system using experience from similar contexts. For example, the provision of health services in southern Sudan moved from 'crisis' into 'transition' with the establishment of a Ministry of Health in January 2006. During the NGO Health Forum at the first Southern Sudan Health Assembly in 2007, NGOs described a need to change from their traditional role of direct service providers with little co-ordination, to a more structured one of working alongside the Ministry of Health in Southern Sudan in implementing health care and supporting it at all levels in order to strengthen the health system. Therefore Newbrander *et al* (2007:319-320) argue that in post-conflict countries,

rebuilding the health system requires co-ordination and collaboration efforts between government, donors and NGOs, so that resources can be used effectively to reach large unserved and underserved populations, to reduce morbidity and mortality, and to establish a framework for delivering health systems.

2.6 Conclusion

In this chapter, different approaches and issues concerning policy implementation and management have been discussed. The High-Level Forum on the Health Millennium Development Goals (2004:12-13) argues that a health systems approach is the best way forward in achieving health policy objectives. But there is much debate on how best to formulate a health system. There are two issues to be considered: firstly, how should services be delivered? The debate centres on how a vertical, disease-specific approach should be integrated with more horizontal system-wide approaches. The second question concerns who should provide health services. Most developing countries rely on the state. Some argue that 'contracting out' can help reduce some of the inefficiencies often associated with state provision of health care. Under such a model, the state continues to formulate policies and regulate provision, whilst accepting health services via contracts with non-state providers, such as NGOs.

The challenges of public policy management and implementation in the health sector in developing countries are often blamed on the lack of appropriate systems and communication technology linking the levels of the government and stakeholders, due to the poor infrastructure and resources to meet the needs of the population.

A successful framework for health policy implementation and management requires the adequate provision of health facilities; human and financial resources; modern communication tools; and strong co-ordination and collaboration between the levels of government, as well as between government levels and other health providers, such as NGOs, in order to provide quality health services to the population. The next chapter begins to explain these issues in relation to Sudan.

Chapter 3

The Health System and National Health Policy (2007) of Sudan

3.1 Introduction

This chapter commences by describing the health system in Sudan. Thereafter the focus shifts to a discussion of the National Health Policy (NHP) which was adopted in 2007. The seven key areas will be investigated in detail. Health officials in government, especially those working at district level in North Darfur State, who actually implement the policy, were questioned about their understanding and experience of the NHP.

3.2 System of governance

The modern health care system in Sudan dates back to 1899 when Sudan was governed by Anglo-Egyptian regime the health care was delivered by the army. Some hospitals were built and smallpox immunization programs were run. A medical department was established in northern Sudan in 1904, while southern areas remained under military government. In 1905, a Central Sanitary Board was established to oversee public and curative health affairs. In 1924 the Sudan Medical Services was established and managed by a director who was responsible for all health services, including those of the military (WHO, 2006a:14). In 1949 the Ministry of Health was established. A federal system of government was introduced during the colonial era and Sudan has experienced several models of government since then (WHO, 2006a:50). Between 1951 and 1960, health affairs were managed according to the Local Government Act of 1951, in terms of which rural and civil councils represented the local government, which was responsible for basic service delivery, including health (WHO, 2006a:14). From 1960 to 1971, health affairs were managed according to the Province Administration Act of 1960, which aimed at strengthening the provinces in order to activate an effective mid-level administration that represented central government. This was followed by the Popular Local Governance Rule of 1971 in terms of which provinces remained responsible for basic services, including health. The provinces were answerable to the local government affairs office that was in turn accountable to the Presidency of the Republic.

The 1972 Addis Ababa agreement ended civil conflict that had begun in the 1950s. The regional government which was born from this agreement was in place from 1972 until 1983, when war broke out again. The federal system of governance continued with the Constitutional Decree, which created nine states, in 1991. In 1992, the government adopted macro-economic reforms, including the liberalization of trade, privatization, the devaluation of the currency, and a reduction in government expenditure.

The Federal Government Act of 1993 established three levels of health system management, federal, state and district. The Federal Ministry became responsible for formulating and administrating national sector policies, as well as for human resources, international relations and the allocation of central funds to the states (WHO, 2006a:15). Shifts to decentralization and finally to decentralized federalism were the result of a search for a system of governance that would help achieve stability, socio-economic development, equitable resource allocation and effective and efficient service delivery. In 1994, the Sudanese political system moved further towards federalism, with the country sub-divided into 26 states, each with significant autonomy and powers. This impacted on the health sector since this led to a complex structure of a Federal Ministry of Health and 26 State Ministries.

Also in 1994, social health insurance was introduced, which was administrated administered by a central parastatal body, the National Health Insurance Corporation. It set the health insurance policy framework, the premiums which had to be approved by the council of ministers, and guidelines for resource allocation, utilization and co-ordination between the states' insurance authorities. A State's health insurance corporations were given more autonomy to collect premiums, manage their resources and manage their own affairs in accordance with central policy (WHO, 2006a:50-51).

According to WHO (2006a:50-51), private for-profit clinics, hospitals and medical centres started to flourish in the 1990s. With the introduction of a user-fees policy in 1991 and the absence of clear mechanisms for public health financing and prepaid schemes, the situation arose in which access to health care was based upon the ability to pay.

In 1998, the Local Governance Act was enacted wherein the structure of government, in descending order of jurisdiction, was established as follows: Federal level; state level (26 states); provincial level (17 provinces); and local level (633 districts). Districts were given

financial responsibilities regarding raising revenue. There were agro-pastoral production taxes (60% to be used locally, 40% to be transferred to the state level), and business and trade taxes (40% to be transferred from the state to the districts). There were also locality investment revenues and locality development fund transfers. In addition, a district generated a share of investments within its locality. Districts were also given the responsibility to manage and deliver the provision of social services including health services.

In 2003, the Local Governance Act abolished the previous districts and provincial levels of the 1998 Act (WHO, 2006a:50-51). The national administrative structure is currently a three-tiered system of governance in Sudan with a federal government, 15 states and 195 districts. Districts have been given greater administrative and executive authority, with responsibilities for service provision and development, including monitoring and supervision.

3.3 The structure of the health system and policy at federal, state and district level in Sudan

The management and delivery of health services in Sudan operates in a decentralized environment. According to World Bank Report (2003:86), in 1993 a federal government Act in Sudan was adopted and renewed in 2007, which stipulates the respective responsibilities of the three main levels of the health system:

a. The Federal Ministry of Health is responsible for formulating national policies, international relations, human resource development, health legislation, and the control of epidemics;

b. The State Ministry of Health is responsible for planning, administration and financing of health services within the framework of national health policies; and

c. The Health Area System is responsible for planning and implementing health programs at the district level.

These three levels are shown in Figure 3. 1 below.

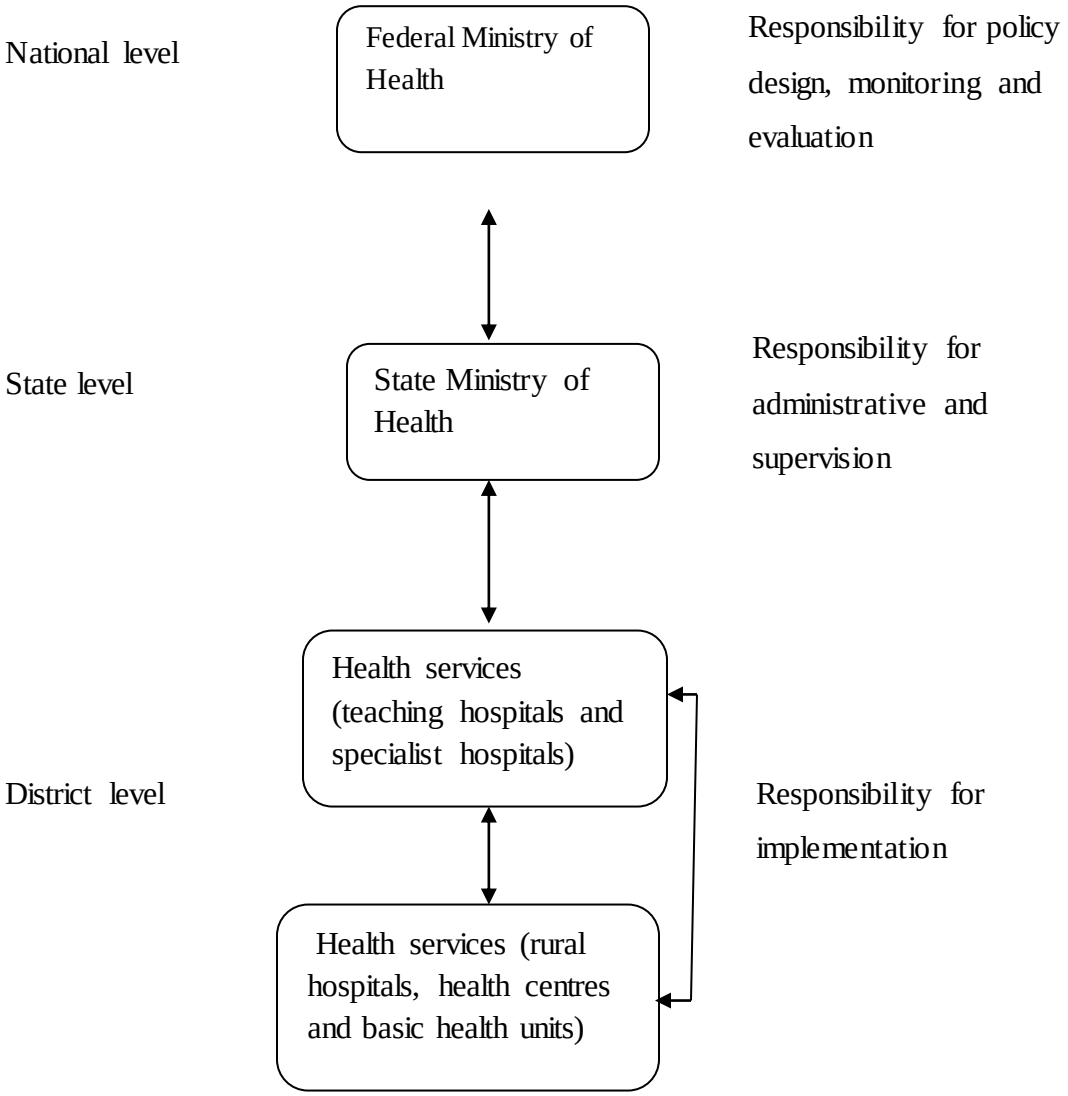

Figure 3. 1 Structure and organization of the health system in Sudan.
Source: The Sudan Health Service Standard, 2004.

3.3.1 Federal Ministry of Health

The Federal Ministry of Health works in collaboration with the 15 state ministries of health. North Darfur State is one of these 15 states (WHO, 2009a: 21). The structure of the Federal Ministry of Health is described in detail in Figure 3. 2.

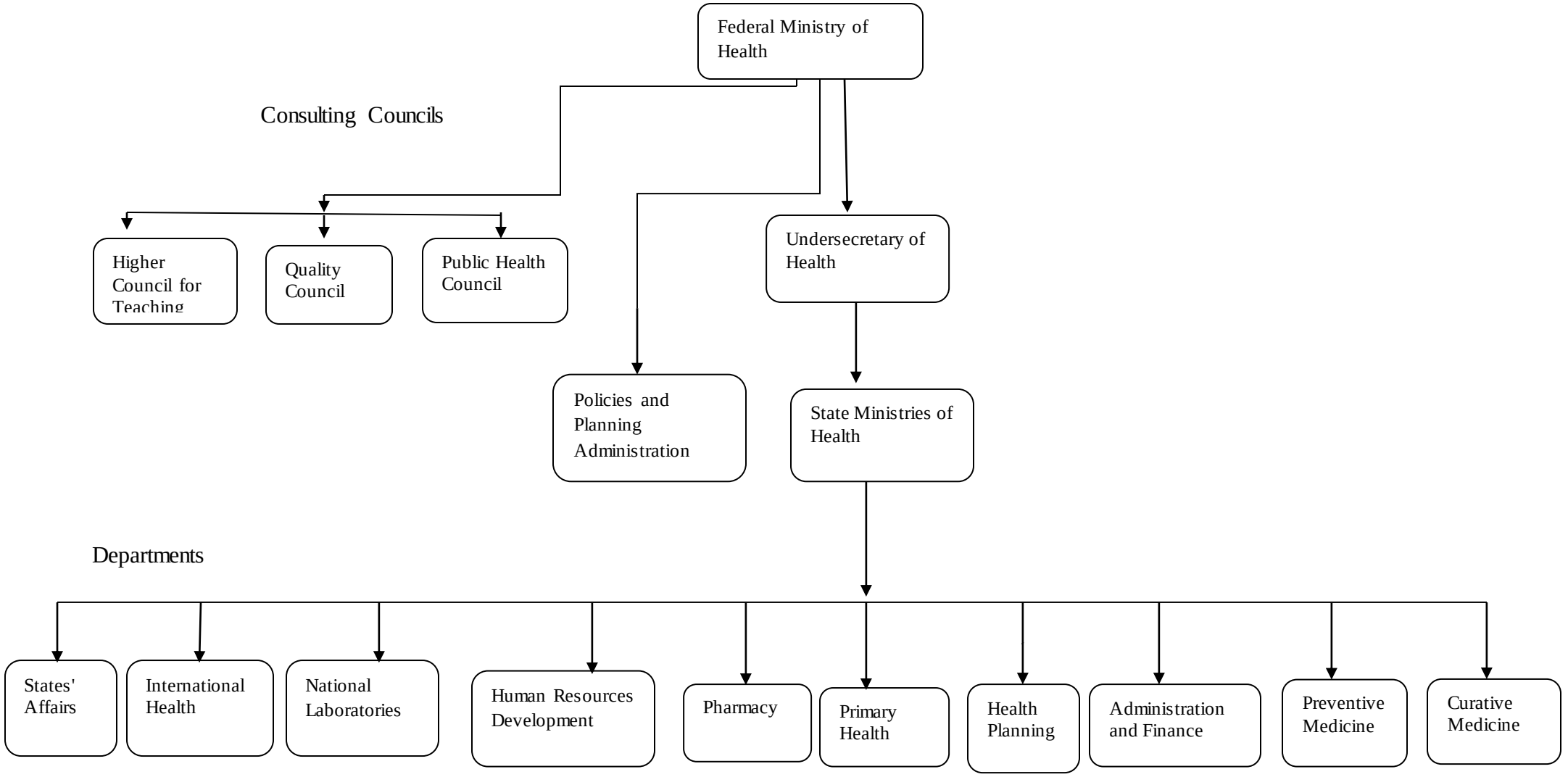

Figure 3.2 Organizational structure of the Federal Ministry of Health in Sudan.

Source: WHO-Health System Profile- Sudan, 2006a.

The Under-Secretary Council takes the lead role among the different State Ministries of Health and Departments of the Federal Ministry of Health. The Councils are under the Federal Ministry of Health, which convene regular meetings with policy makers at federal and state levels; set standards, norms, protocols and guidelines for the federal level and for states; and develop check-lists for supervision, monitoring and evaluation (WHO, 2006a:25).

Policies and Planning Administration is in each state and is directly responsible for the following:

1. Health policy formulation on the setting of national priorities according to the state's needs;
2. Ensuring that these are implemented and co-ordinated with state levels;
3. Developing national health policy plans, and state and districts' planning guidelines;
4. Allocation of resources and budgets, especially capital funds;
5. Monitoring and evaluation of national health policy implementation;
6. Sources of high level technical and legal advice on specific or general projects;
7. Managing and controlling the quality and licensing of drugs companies and pharmacies, and distribution of supplies;
8. Regulation of human resources skills-development;
9. Regulation of private profit-making and non-profit-making health providers;
10. Control and development of research institutes at national level;
11. Communication with international health organizations and aid agencies; and
12. Co-ordination of the activities of health service delivery in each state (Federal Ministry of Health report, 2006).

The FMoH is responsible for the design, monitoring and evaluation of health policy. The Federal Councils are required to hold regular meetings with State Council representatives (Federal Ministry of Health report, 2006).

3.3.2 State Ministry of Health

A State Ministry of Health is mainly responsible for the management of the health system and the supervision and monitoring of health policy implementation in a particular state. Each state has an appointed Minister of Health, whether a physician or not, who ensures that the Ministry's policy is implemented in the state, through co-operation with the state governors and their administration staff. The State Ministry staff are responsible for monitoring and supervising the health service delivery work of the districts' health services.

At state level, there is a committee of health which consists of the Minister of Health as president of the committee, and representatives from: the State Governor; health professionals; civil society; the private sector; NGOs; and representatives of health committees from each district. This committee holds meetings four times during a year in order to discuss issues of health services delivery.

A State Ministry of Health is primarily responsible for implementing national health policy, and for co-ordination between federal and district levels, with more direct control over the provision of health services. Its main functions are the following:

1. Health policy implementation through intersectoral activities by co-ordination with the districts;
2. Monitoring and evaluation of national health system in terms of effectiveness and efficiency;
3. A source of technical advice on the kinds of diseases which are common in the state;
4. Control of the quality of health service delivery, the licensing of private health providers and pharmacies, and the distribution of health services' supplies;
5. Regulation of the needs of human resources and training;
6. Regulation of non-private health services provider organizations;
7. Allocation of resources particularly donor funds; and
8. Co-ordination of all state health activities, and managing the technical supervision of districts' health teams and their logistical support (State Ministry of Health Survey Report, 2008).

A State Ministry of Health is responsible for managing and implementing health systems and health policy, by holding regular meetings with district representatives (State Ministry of Health Survey Report, 2008).

The number of departments in the Ministry of Health in North Darfur State is eight according to the structure of the Ministry as shown in Figure 3. 3 below. At the higher level, there are State Ministry of Health and general manager: they are responsible for administration of emergency and humanitarian work, which became necessary due to the civil conflict. The large numbers of NGOs work to provide health care to IDPs and the affected population in co-ordination with the State Ministry of Health.

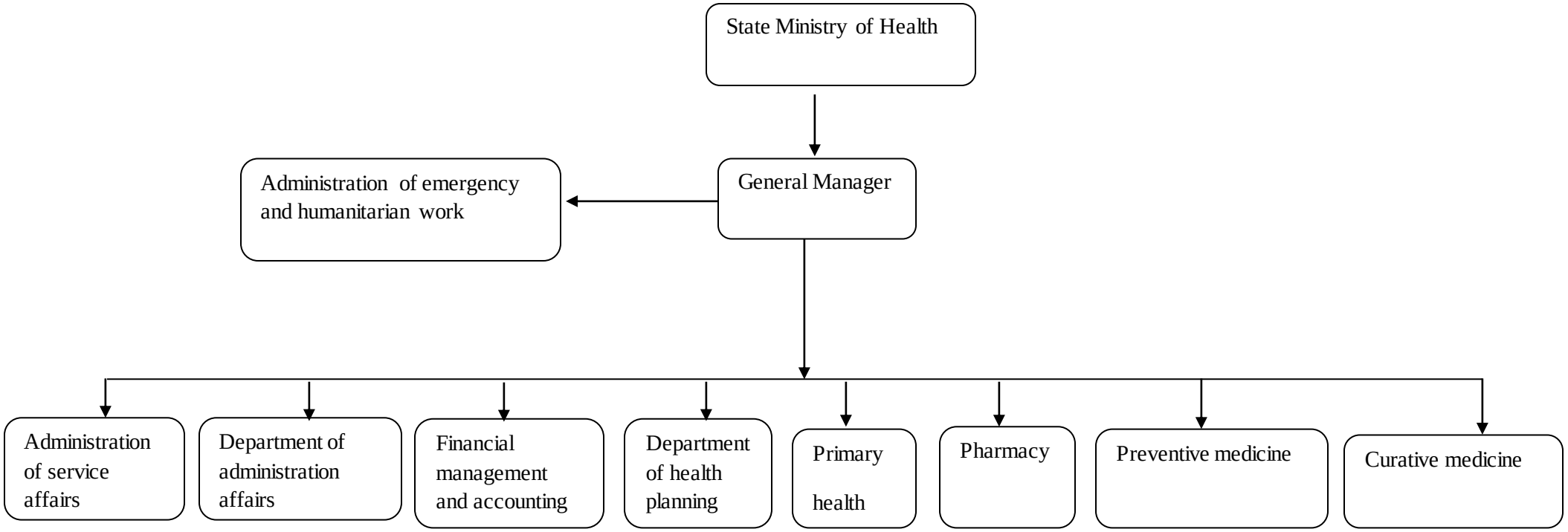

Figure 3.3 Organizational Structure of Ministry of Health in North Darfur State.

Source: State Ministry of Health Survey Report, 2010

3.3.3 District level

The district health staff are responsible for running health services. A district is the organizational level that implements health services and disease control. They are responsible for providing primary health care, that is, organizing a minimum package of curative and preventive services in line with national health policy, in order to respond to the health problems and needs of the local population. The district health services fall directly under the control of the local district administration.

According to State Ministry of Health Survey Report (2008) the main functions of district health authorities are as follows:

1. Running and organization of district hospitals, health centres and basic health units;
2. Control of local health finance and budgets;
3. Co-ordination and supervision of all public health facilities, and non-governmental and private health services providers within the district;
4. Encouragement of the community to participate in health plans;
5. A source of additional local funds which are collected from charities;
6. Indication of the needs of health workers and their training gaps;
7. Control and supervision of community health workers in the district; and
8. A source of health information for communication to the health ministry.

The districts are responsible for implementation within their areas, according to the guidelines of National Health Policy, in order to serve the people of each district. The Directors of health service delivery in each district, who are appointed by the State Ministry of Health, might or might not be health professionals, and have been given wide powers to manage health institutions' buildings, budgets, staff, appliances, and equipment. However, not all health institutions within districts are the responsibility of district authorities. For example, although teaching hospitals and specialist hospitals are included within a district, the Director is not responsible for the activities of these hospitals; they have their own administrative head working directly with the State Ministry of Health. The Director is responsible only for rural hospitals, health centres, and Basic Health Units.

According to the structure of the health system of Sudan, there are 134 districts in total in Sudan. There are 15 in North Darfur State but in reality there are 14 districts, as depicted in Figure 3.4, because El Waha district is a district for nomads with its administration office in El Fasher, the capital of North Darfur State (Ministry of Cabinet Affairs Secretariat General, 2008).

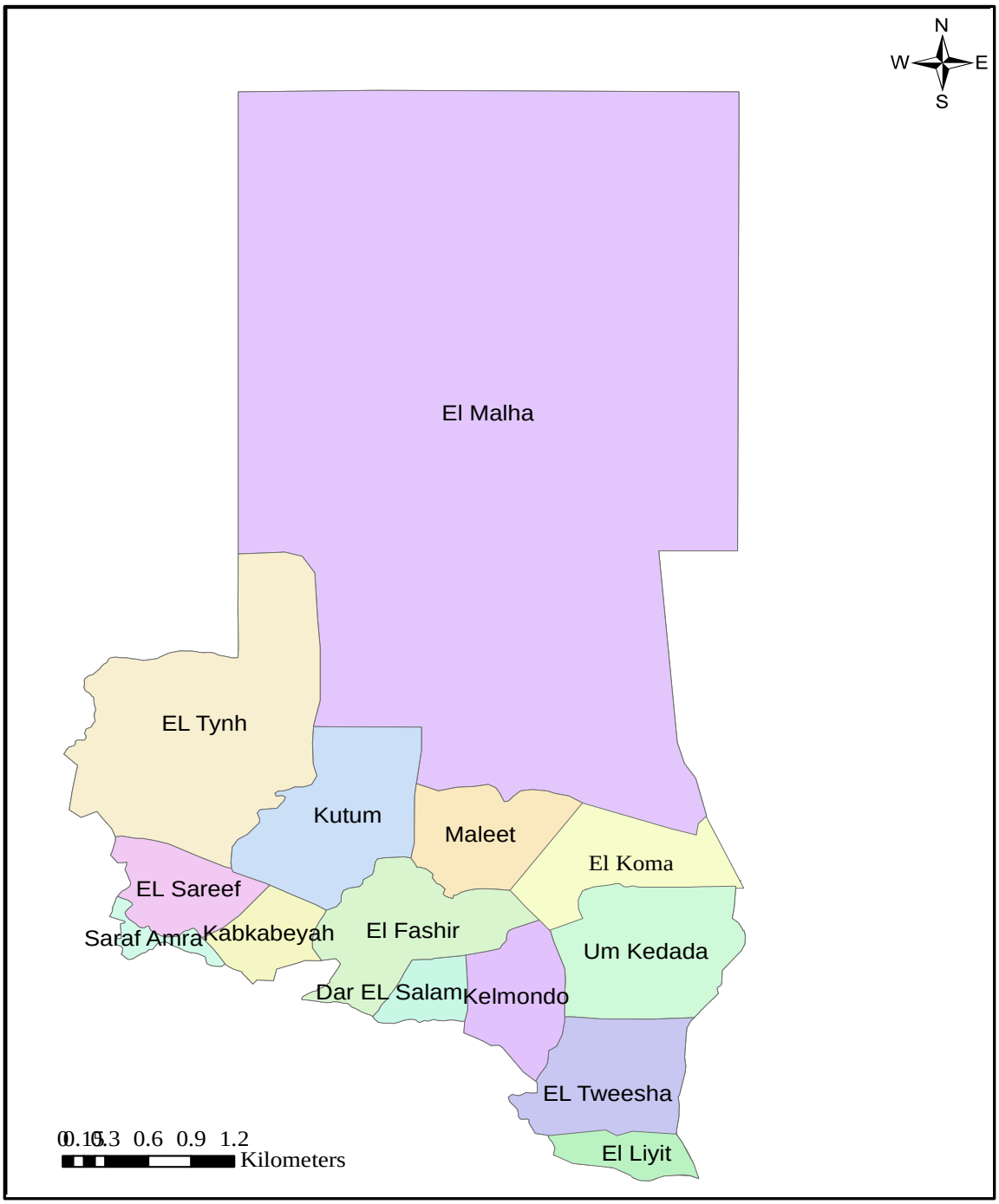

Figure 3.4 The districts in North Darfur State.

The district health system teams are accountable to the district health council, which is part of the local council administrative setup, which falls under the technical direction of the State

Ministry of Health. According to the State Ministry of Health Survey Report (2010), due to the lack of health resources experienced by the State Ministry of Health, the structure of the health system at district level is very simple, as shown in Figure 3. 5 below.

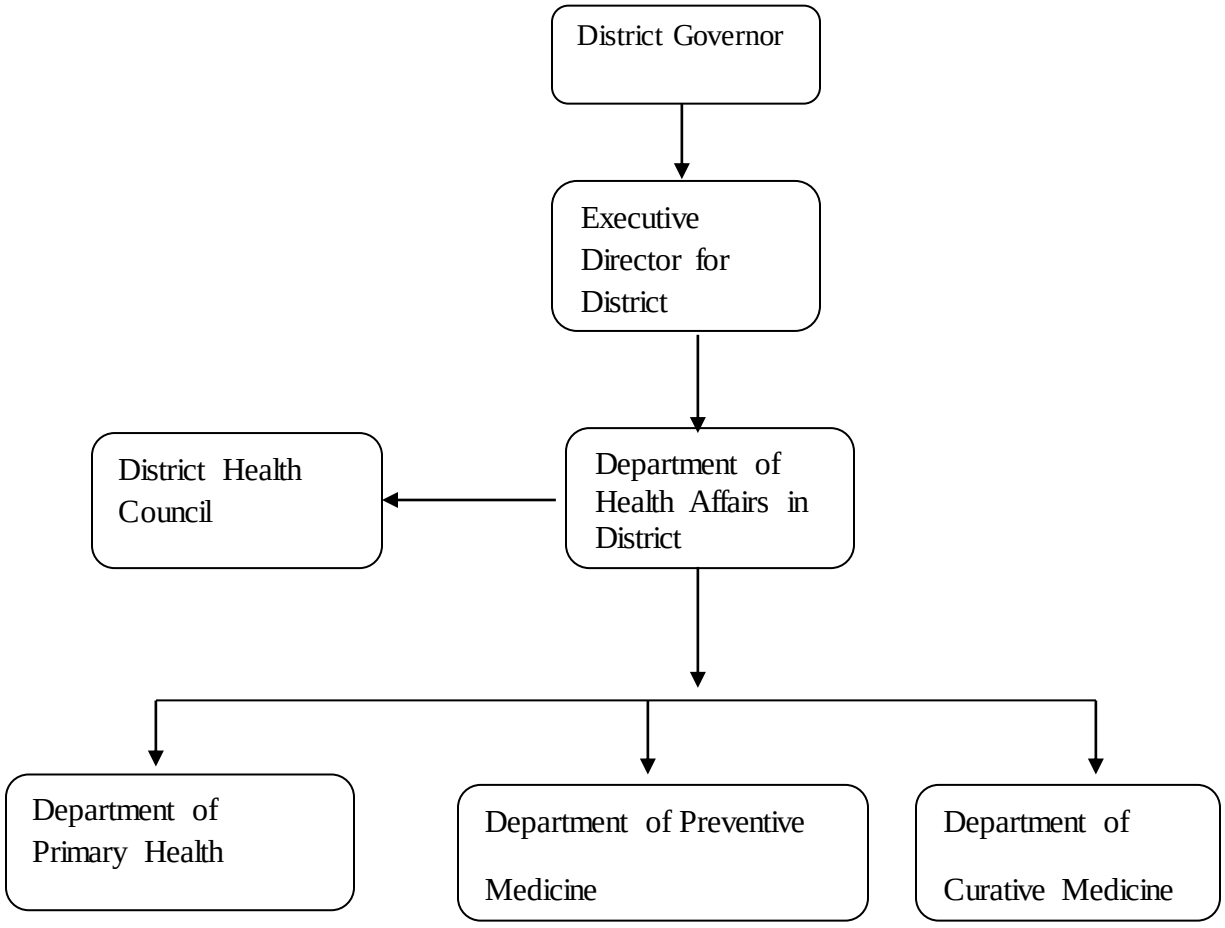

Figure 3.5 Organizational structure of the health system at district level.

Source: State Ministry of Health Survey Report, 2010.

From Figure 3.5, above, it can be inferred that the District Governor is responsible for health system management in the districts, and the Executive Director is responsible for the implementation of health programs at district level. The District Health Council is responsible for providing financial and material support to the health sector in a district, through contact with the State Ministry Health, the Governor of the State and the Federal Ministry of Health. The Department of Health Affairs is responsible for the management of the Departments of Primary Health, Preventive Medicine and Curative Medicine.

The general purpose of the national, state and district structures in Sudan is to implement health policies and programs.

3.4 National health policies of Sudan

The Federal Ministry of Health (FMoH) adopted the first National Health Policy (NHP) in 1990. The central vision, goals and objectives of this policy are found in the Ministry's ten year National Strategy (1992-2002), which emphasized the need to place human development at the centre of the overall national development strategy and was based on the principle of citizenship for health (FMoH Report, 2007a:7-8). Health was identified as a social right, with family and community participation as the cornerstone of health development. The main goal was to improve equity, by generalizing the provision of basic health care to include prevention, treatment and rehabilitation (World Bank, 2003:85).

Thereafter, a 25 year long-term strategic plan (2003-2027) and a five year medium-term strategic policy (2007-2011) were adopted (WHO, 2009a:20). According to the FMoH Report (2007b:4-5) and WHO (2009a:20), the long-term strategic plan (2003-2027) is based on fair financing. It aims to: reduce the burden of disease; promote healthy lifestyles; develop and retain human resources; and introduce advanced technology, whilst assuring the equity, quality and accessibility of health services. The five year health sector strategy (2007–2011), in line with 25-year (2003-2027) strategic plan, focuses on ensuring the provision of health care to the citizens of Sudan, especially poor and vulnerable populations. Both the long-term strategic plan (2003-2027) and the medium-term strategic policy (2007-2011) concentrate on reforming and rebuilding the health system.

According to FMoH Report (2007b:4-5) and WHO (2009a: 20), the general guiding principles for long-term health strategy plan (2003-2027), as stipulated in the national health policy, were stated as follows:

- The health system is to be built on the following principles: adoption of a comprehensive concept of health; attention to health promotion; continuous quality-improvement and client satisfaction; accountability; equity; accessibility; affordability; appropriateness; efficiency; effectiveness; transparency; intersectoral collaboration; partnership; community participation; innovation; work values and ethics; gender equity; and teamwork.

- Strategic plans with clear priorities, objectives, aims, performance-based targets (indicators) and outcomes are to be set out. These documents also prioritize the following health problems: malaria; HIV/AIDS; tuberculosis; bilharzias; diarrhoea; respiratory infections; nutritional disorders; immunisable diseases; vector-borne diseases; maternal and child mortality; and life-style related diseases.
- Primary health care will be the main basis for providing sustainable quality health care for all. The main goal continues to be to the expansion of the provision of basic health services, with emphasis on the reduction of inequalities in health provision and access to health care services.
- More emphasis will be placed on addressing human resource issues, particularly the retention and redeployment of health staff, as well as on improving staff performance and the quality of services provided.
- Sustainable and equitable health care, especially for the poor, must be provided with special consideration to financial, technical and administrative sustainability. Services that have a predominantly public effect or deal with vulnerable sections of the population shall be provided free of charge.
- Emphasis will be given to reforming health-care financing so that it becomes pro-poor and to increasing budget allocations for health. Reform of the health financing system is emphasized in order to enhance cost effectiveness, obtain better value for money, and better protect the poor and the most vulnerable.
- Health will be used to enhance lasting peace and reconciliation, through encouraging communities to play a major part in all aspects of health services. Once peace has been realised, the government should increase the funding for health services because the resources from outside will be limited.
- The national health system should be founded on solid policies, based on the best available evidence. The policies should emphasize a primary health care model built according to: financial sustainability; accountability; poverty reduction; community participation; self-reliance at local level; investment in health; the provision of drug supplies; and human resource management. The policies will also be committed to the achievement of the Millennium Development Goals (MDGs).
- Health will be central to the overall national development policy by improving individual and community participation in service development and financing.

- Priority will be given to capacity building at the federal, state and local levels in policy formulation, priority-setting, management and planning, as well as in the development of health information and research capacities. The role of community health workers within a functioning local area health system to increase access to services at the community level, and to increase the demand for services, should be emphasized. The remuneration of this level of health workers will be given consideration.

3.5 The National Health Policy 2007-2011

The Federal Ministry of Health has prepared a five year policy (2007-2011), for all social services sectors including health following the Comprehensive Peace Agreement (CPA). The CPA has acted as a means to build peace and bring development to conflict-affected and natural disaster-prone Sudan, and has formed the basis for the interim constitution of Sudan, which was promulgated in 2005. This constitution gives special emphasis to health, and requires government to promote public health and guarantee equal access and free primary health care to all the people of Sudan (WHO, 2009a:19-20).

The National Health Policy (NHP) of 2007-2011 is focused on investing in the health of the citizens, and on fostering progress towards achieving the international commitment towards the MDGs, which include reducing the child mortality rate, improving maternal health and combating HIV/AIDS, malaria and other diseases. The plan advocates increasing government spending on health to a level that will enable the health sector to deliver a quality and accessible primary and secondary health service to all Sudanese citizens. The plan reiterates national and international commitments, such as the Alma-Ata Declaration and the Health-for-All Strategy, the Millennium Summit Declaration and other global strategies such as Roll Back Malaria and Stop TB; and the Global Strategy for the Prevention and Control of Sexually Transmitted Infections, including HIV/AIDS (FMoH, 2007a:4-5).

According to FMoH (2007a: 9-13), WHO (2007a:20) and Burgess (2007: 4-5) the NHP reflects a focused approach, by identifying key areas of action which have the potential to improve both the delivery of health services and the overall health of the population of Sudan. The NHP aims to concentrate on the following seven key areas:

1. To improve the weak governance and weak management systems, including health information and health financing - especially at state and district levels.

2. To reduce child and maternal morbidity and mortality, and to control the spread of diseases, by strengthening the district health system and by promoting a continuum-of care-approach.
3. To increase health expenditure levels; the policy document has identified increasing the health expenditure percentage as a total of government expenditure.
4. To improve the availability, quality and capacity of health's human resources.
5. To increase the coverage of health facilities, and to have them more equitably distributed. This includes primary health care institutions, and health services at state and district level.
6. To support and improve the organization and management of the decentralized health system.
7. To improve infrastructure, supplies, logistics, equipment, and transportation for primary health services.

3.6 Content analysis of the seven key areas of the National Health Policy of 2007 of Sudan

Has the NHP of 2007 helped in advancing health care? This was answered in broad terms by asking government officials to express their opinions about each of the seven key areas of the policy. The categories of officials who were interviewed are portrayed in Table 3.2 below.

Table 3.1 Interviewees' comments on the achievement of the NHP's seven key areas in North Darfur State.

Level	Federal		State			District		Total
Actor	Professionals	Managers	International (NGOs)	Professionals	Managers	Professionals	Managers	
Total number of interviewees	2	2	15	10	10	17	8	64 (100%)
Interviewees who responded	1	2	11	7	7	12	6	46 (72%)

Sources: Fieldwork Data, December, 2010

Findings on the seven key areas follow. For each a quantitative result is reported, together with illustrative quotations from interviews with the officials concerned.

3.6.1. First key area

Table 3.2 NHP 2007: Key Area 1.

Has progress been made in improving the weak governance and weak management systems, including health information and health financing-especially at state and district levels?

Level of government	Number of responses	Answers	
		Yes	No
Federal	3	3 (100%)	0 (0%)
North Darfur State	25	10 (40%)	15 (60%)
District	18	3 (17%)	15 (83%)
Total	46	16 (35%)	30 (65%)

Source: Fieldwork Data, December, 2010.

As can be seen in Table 3.2, those in federal government believe that the health management system has been strengthened during the time of NHP 2007. But the majority at state level (60%), and especially officials in the districts (83%) suggest that no such progress has happened.

According to an interviewee (2[5]-1 21 December 2010, El Fasher) in the State Ministry of Health:

> The management of the health system in the State is very weak and needs to be improved. The weakness of the health system is due to the weak communication between the federal, state and district levels, because there are no modern communication facilities, such as public phone lines, internet, and vehicles to link the administration levels together to exchange the information. Also, there are no qualified administration staff especially at district levels to provide good information about health issues and problems. Added to that, the state and districts levels are facing a lack of financial resources, which affects their jobs performance. These factors affect regular bottom-up communication, which can be improved by

[5] The interviewees and interviews are coded as follows: 1= professional (doctor), 2= administrator. Thus 1-1 indicates an interview with the first professional, 1-2 with the second professional, and so on.

the provision of human and financial resources, and modern communication tools between the three levels which could assist in the development and improvement of the health system management and health services.

3.6.2. Second key area

Table 3.3 NHP 2007: Key Area 2.

Has progress been made in reducing child and maternal morbidity and mortality and controlling the spread of diseases by strengthening the district health system and by promoting a continuum-of care-approach?

Level of government	Number of responses	Answers	
		Yes	No
Federal	3	2 (67%)	1 (33%)
North Darfur State	25	13 (52%)	12(48%)
District	18	2 (12%)	16 (88%)
Total	46	17 (37%)	30 (63%)

Source: Fieldwork Data, December, 2010.

This second key area is very broad, but the emphasis is on the health management necessary to reduce the incidence of diseases, especially among children. Those at the federal and state levels officials offered mixed responses when asked about this. But, noticeably, according to interviewees in the districts, 88% of them thought that little progress had been made.

According to an interviewee (1-1 21 December 2010, El Fasher) working in Kepkabiya district hospital:

> In Kepkabiya district, the level of child and maternal morbidity and mortality is very high, especially in the rainy season due to the spread of diseases, such as malaria and diarrhoea. However, due to the poor capacity and capability of Kepkabiya district hospital, and the illiteracy and poverty among the people in the district, we don't have the exact figure of the child and maternal morbidity and mortality rate because most of them die and are treated in their homes. Infant and under-five mortality is very high due to a lack of nutrition and poor health service delivery. There are many challenges affecting the government efforts to reduce child and maternal morbidity and mortality relating to the

access and availability of key resource inputs (human resources, essential equipment and supplies, infrastructure).

The interviewee further commented that:

> The international NGOs have made good efforts in controlling the spread of diseases to reduce child and maternal morbidity and mortality, particularly as a result of the targeted interventions in malaria and diarrhoea control. In the absence of international NGOs, the level of child and maternal morbidity and mortality will increase more and more, because the NGOs provide free drugs for people - especially for infants and children under-five; nutrition; as well as immunization against the six childhood diseases.

The interviewee also stated that:

> NGOs have comprehensive programs for making pregnancy safer, in order to reduce maternal morbidity and mortality, and, therefore, the government needs to co-ordinate well with international NGOs to reduce the child and maternal morbidity and mortality.

3.6.3. Third key area

Table 3.4 NHP 2007: Key Area 3.

Has progress been made in increasing health expenditure levels as a portion of government expenditure?

Level of government	Number of responses	Answers	
		Yes	No
Federal	3	1 (33%)	2 (67%)
North Darfur State	25	7 (28%)	18(72%)
District	18	3 (17%)	15 (83%)
Total	46	11 (24%)	30 (76%)

Source: Fieldwork Data, December, 2010.

All categories of representatives strongly indicated that health expenditure has not increased. Interviewees stated that complete and reliable statistical data on governmental expenditure on the health sector do not exist. This negatively affects improving health service conditions, because

low governmental expenditure on health leads to resource constraints for the health sector, as indicated by most interviewees.

According to an interviewee (2-2 20 December 2010, El Fasher) in the finance division in the State Ministry of Health:

> Government expenditure on health is very little when compared with other services, such as security. For example since the conflict started in North Darfur State in 2003, the government spent 70% of its financial budget on security, while it spent it less than 1% on providing health services. Therefore the provision of health services in this State is not a governmental priority, leaving the provision of health services to the international NGOs which provide 80% of curative health services to the State's population. The government failed to pay health workers salaries on time at the end of each month.

Furthermore, according to an interviewee (2-3 18 December 2010, El Fasher) in the finance division in the State Ministry of Health,

> The government annually increases its budget expenditure on health just on paper, but in reality, since 2002, the budget allocated for health services has decreased annually. For example, the total budget for health in the State in 2000 on paper was 7.6[6] million Sudanese pounds and it decreased to 5.6 million in 2009. From 5.6 million we have received only 3.8 million which was allocated for health workers salaries, and the remaining budget was allocated for health services development which included the provision of equipment, the maintenance of old buildings, the establishment of new health facilities and the training health staff.

The interviewee also said that:

> Low salaries for health workers resulted in most of the health workers, especially those who were working in rural health facilities, resigning from the public sector, in order to

[6] This percentage and the other statistics were provided by the interviewer from unofficial government documents.

work for international NGOs or in the private sector where their monthly salaries are much better than in the public sector. Therefore, health services deteriorated in North Darfur State due to the lack of expenditure on health services, which resulted in the population depending on international NGOs to provide them with health services, or the population bearing the burden of paying treatment at private health facilities.

The interviewee further noted that, 'the lack of expenditure on health makes the achievement of National Health Policy objectives very difficult or impossible. Therefore, if the government wants to achieve the national health objectives, it should increase its expenditure on health services in order to provide better health system management, besides increasing the salaries of health workers - especially those working at district level'.

3.6.4. Fourth key area

Table 3.5 NHP 2007: Key Area 4.

Has progress been made in improving the availability, quality and capacity of human resources for health?

Level of government	Number of responses	Answers	
		Yes	No
Federal	3	2 (67%)	1 (33%)
North Darfur State	25	11 (44%)	14 (56%)
District	18	5 (28%)	13 (72%)
Total	46	18 (39%)	28 (61%)

Source: Fieldwork Data, December, 2010.

Has the availability, quality and capacity of human resources in the health sector increased since NHP was introduced in 2007? Two of three interviewees in federal government thought that improvements have occurred, but (56%) at state level and even more (72%) in the districts disagreed.

Interviewees stated that the government needs to establish schools of medicine and nursing in each state, thereby increasing the numbers of doctors and nurses, as most graduates are not well trained. Many of the staff work in the private sector, because there are no job opportunities in the

public sector, on one hand, and because of the low salaries in the public sector, on the other hand. Interviewees further indicated that the country is experiencing the challenge of a brain drain of medical staff due to poor working conditions. For example, out of a total of 21 000 physicians registered with the Sudan Medical Council, over 60% of them are working outside Sudan (WHO, 2009a:25). The interviewees also stated that there is a lack of specialists in fields such as pharmaceuticals, paediatrics, surgery, gynaecology and ophthalmology in the district hospitals. The interviewees confirmed that primary health care and family planning should be available in the district areas.

According to an interviewee (2-4 15 December 2010, El Fasher) in the State Ministry of Health:

> In this State, we have a shortage of health staff to deliver adequate health services in order to achieve National Health Policy objectives. The number of health workers is not adequate in comparison to population size, which results in poor service in terms of the national standards for health care delivery. In this regard, we have two problems: shortages in number and inequitable in distribution, and inadequate numbers of trained health care workers. For example, in some districts, such as El Lit, we don't have any doctors, and in most of the districts, such as Kalamondo and nine other districts, we have only one doctor in each due to bad work conditions and low salaries. Our salaries are lower than other professions, and poor administrative structures ensure that the payment of salaries are not made on a regular and timely basis, which has led to most of the qualified health workers leaving the public sector to the private sector, including NGOs. All specialist doctors are concentrated in El Fasher, the capital of the State. This reflects the lack and inequitable distribution of health staff. Also we don't have properly trained health care workers. More than 70% of our health workers do not have any practical training after their graduation due to the lack of a financial budget allocated to the training.

In addition, the interviewee stated that:

> A health system with a lack of human resources for health makes it difficult to achieve the National Health Policy objectives. In my experience as a senior administrator, if government wants to improve human resources for health, this requires efforts at all government levels: national, state and district. Only then can there be any chance of improving essential health care for all people, especially in a fragile state such as North Darfur.

The interviewee asserted that in order for the government to do so, it needs to increase its health workforce, support the health staff financially and professionally to do their jobs properly, and try to retain the existing health staff within the health system.

All of the interviewees stated that the existing human resources for health are not balanced in terms of distribution but are concentrated in towns and large cities, rather than in the rural areas. In terms of training, health authorities have been trying to increase the low number of training opportunities for doctors, but not for nurses and others technical staff and administrators.

3.6.5. Fifth key area

Table 3.6 NHP 2007: Key Area 5.

Has progress been made in increasing the coverage of health facilities and having them more equitably distributed in terms of primary health care institutions and health services at state and district level?

Level of government	Number of responses	Answers	
		Yes	No
Federal	3	2 (67%)	1 (33%)
North Darfur State	25	9 (36%)	16 (64%)
District	18	3 (17%)	15 (83%)
Total	46	14 (30%)	32 (70%)

Source: Fieldwork Data, December, 2010.

Have health facilities expanded and has their distribution increased to states and districts? Two federal informants believe so, while one does not. Most in State government (64%) have not witnessed improvement, and even more in the districts (83%).

Interviewees confirmed that a sick person walks about 30 km, on average, to reach the nearest health facility, while the NHP of 2007 stated that a walking distance of a maximum of 5 km has to be aimed for when assessing coverage of health facilities, particularly in rural and underserved areas (FMoH, 2007a:16).

According to an interviewee (1-2 12 December 2010, El Fasher) working in El Towasha district hospital:

> The availability and accessibility of health services reflects the reach and coverage of health service facilities, which cannot be easily reached by people in El Towasha district. Health facilities are concentrated in El Towasha town only. While most of population in this district are living in small villages engaging in agriculture, there are no health facilities around their villages. Therefore, patients and their families are cut off by the long distance to El Towasha town to get the treatment; some of whom are cut off by about 150 km to from El Towasha town. If they don't find treatment because a doctor is absent and the patient does not recover, they continue to travel to El Fasher, which is about 200 km away from El Towasha to get treatment. Therefore, the people in El Towasha district are finding it difficult to access health facilities. Most of them have resorted to using traditional drugs to treat the patients.

According to an interviewee (2-5, 22 December 2010, El Fasher) in State Ministry of Health:

> The health facilities do not cover all the districts in North Darfur State. In some districts, such as El Waha which has a population of 60 000 people, there are only two dispensaries. Although the El Tina district has no residents, it has a rural hospital and health centre. Most health facilities, including specialist hospitals, are concentrated in the El Fasher district. This inequitable distribution of health facilities is currently due to the conflict. This, together with the reduction of

> government expenditure on health makes it very difficult for government to establish new health facilities outside of El Fasher district. Before the conflict began, the government established health facilities in districts according to the political loyalty of the district population. If most of a district's population was loyal to the government's political party, government would build them health facilities. If they did not support the government party, the government would not build health facilities for them.

Interviewees expressed a similar view about the inequalities in health service facilities between states and within states, and between rural and urban areas. They also emphasized a need to redistribute health facilities according to the need of the population, especially in rural areas.

3.6.6. Sixth key area

Table 3.7 NHP 2007: Key Area 6.

Has progress been made in supporting and improving the organization and management of the decentralized health system?

Level of government	Number of responses	Answers	
		Yes	No
Federal	3	1 (33%)	2 (67%)
North Darfur State	25	12 (48%)	13 (52%)
District	18	4 (22%)	14 (78%)
Total	46	17 (37%)	29 (63%)

Source: Fieldwork Data, December, 2010.

Most respondents indicated that how the decentralized health system is organized and managed has not improved since 2007. This negative response was particularly evident among those at district level (78%).

According to an interviewee (2-6 22 December 2010, El Fasher) working in State Ministry of Health:

> Sudan applies the decentralized health system, and its organization and management in North Darfur is very weak and there are many obstacles, such as

poor communication tools linking the different levels of government together; that is, federal, state, and district levels, in order to share health information. A lack of financial resources, a shortage of qualified staff, weak management of health systems and a lack of equipment and infrastructure pose additional challenges. In terms of the decentralization system, the government transfers the funding for health system management and service delivery to the lower level; that is, states and districts. However, these lower levels are not able to on take these new responsibilities. Therefore, all the districts in North Darfur State experience a lack of technical, managerial, and financial skills needed to deal with their new responsibilities. This negatively affects the achievement of the National Health Policy objectives.

3.6.7. Seventh key area

Table 3.8 NHP 2007: Key Area 7.

Has progress been made in improving infrastructure, supplies, logistics, equipment and transportation for primary health care?

Level of government	Number of responses	Answers	
		Yes	No
Federal	3	1 (33%)	2 (67%)
North Darfur State	25	12 (48%)	13 (52%)
District	18	4 (22%)	14 (78%)
Total	46	17 (37%)	29 (63%)

Source: Fieldwork Data, December, 2010.

Infrastructure, supplies, logistics, equipment and transport for primary health care seem not to have benefited from NHP 2007. This is the opinion of 67% at federal level, 52% in North Darfur State and 78% of those working at district level.

Interviewees stated that the infrastructure that is available is insufficient, poorly maintained, and unequally distributed among the state districts. They also confirmed that many parts of districts are still without basic health services infrastructure, such as electricity and roads.

According to an interviewee (1-3 22 December 2010, El Fasher) in the State Ministry of Health:

> North Darfur State has poor health services infrastructure, such as the routes which link districts with the State capital. It also lacks vehicles, whether for health administration staff to be transported between the districts and the capital of the State, or for an ambulance to attend to a patient, as there is only one located in El Fasher. Moreover, the one available is mechanically unsound, and is in need of maintenance. All the roads in the state are not tarred. Pot-holed roads link the districts with the State capital, and most of bridges are in a state of disrepair making most of the districts isolated from the capital in the rainy seasons. Besides these challenges, the communication tools and the electricity supply are very poor. Also, most of the health facilities in this State are old and in need of maintenance. They also need equipment, because of the government's failure to provide health equipment to the public health facilities. Most of them now have been supplied by NGOs with equipment. Also, the logistics and supply chain system is very poor. There is a need to enhance the delivery of medicines, equipment and relief health services to vulnerable communities which are affected by conflict. Currently, the government depends completely on international NGOs to provide curative health services. All these challenges affect the improvement of health infrastructure, supplies, logistics, equipment and transport to achieve the National Health Policy seven key areas.

3.7 Conclusion

The introduction of the National Health Policy in 2007 seems not to be have made a significant impact in improving the health system, its management, its facilities, its human resources, or the quality of health care provided. In general, the lower the levels of government, the more negative the response. Thus those working in the districts are the most critical of NHP 2007. Extensive quotations were used from those who are involved in implementing NHP 2007 since their views illustrate in detail the issues that arose from the questions that they were asked. The next chapter begins to offer a more detailed explanation by investigating the provision of curative health services in North Darfur State.

Chapter 4

The Provision of Curative Health Services in North Darfur State

4.1 Introduction

Improving the access, coverage and quality of health services depends on the effectiveness of the health system structure. After the outbreak of the crisis in North Darfur State in 2003, delivering equitable health services in the State was become a greater challenge and a heavier burden on the country's limited resources. There has been an inability to provide quality curative health services to the poor and vulnerable, who have been seriously affected by conflict since 2003.

Health facilities are unevenly distributed, and the increase in the number of health centres and clinics has been almost exclusively in urban areas. The urban bias in these trends in health centres, clinics and hospitals has resulted in a substantial drop in the relative access of rural people to health care facilities at all levels, compared with a substantial rise in access by the urban population to a broader range of more sophisticated facilities (WHO, 2006a:44).

This chapter analyzes the current situation of curative health service delivery in North Darfur State, in the public and private sectors, as well as the NGO sector. It also examines the availability and structure of health facilities and their distribution in the State.

4.2 The provision of curative health services in North Darfur State

According to a SMoH survey report (2010), the health care infrastructure in North Darfur State consists of a range of care provided from three different sources: government, private, and NGOs. Primary health care is provided mainly by NGOs, and secondary health care is provided mainly by private clinics and the government teaching and specialized hospitals. Current curative health services consist of a mix of mostly NGO-run humanitarian interventions in rural areas, and some limited government health services in major towns. The public sector provides health services through a network of institutions as well as through an out-reach service. It focuses on providing curative health services, and preventive services, especially vaccinations.

4.2.1 The provision of curative health services by the public sector in North Darfur State

In North Darfur State, there are approximately 393 health institutions. These health institutions are hospitals (18) including rural hospitals, health centres (61), dispensaries (111) and basic health units (203), as shown in Table 4.1 below. These health institutions include military hospitals and police hospitals.

Table 4.1 The number of health facilities in North Darfur State, 2010.

Facilities	Number of facilities
Hospitals	18
Primary Health care centres	61
Dispensaries	111
Basic health units	203

Source: The State Ministry of Health Survey Report, December 2010.

Providing curative health services in the public sector is the responsibility of the SMoH in El Fasher, the capital of North Darfur State. The SMoH is responsible for managing all health facilities and hospitals, and procuring drugs and supplies. All hospitals in the public sector are organized into an extensive referral system with a hierarchy of several organisations that provide curative health services, from primary level institutions to teaching and specialist hospitals. These are depicted in Figure 4.1 below.

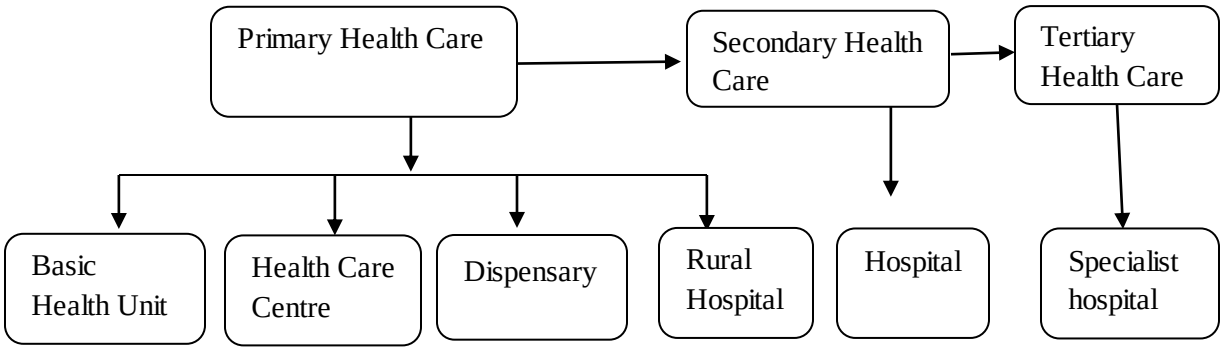

Figure 4.1 The hierarchy of health facilities in North Darfur State.

Source: State Ministry of Health Report, 2009.

According to the Sudan Health Service Standard (SHSS) (2004), the Basic Health Unit is the first point of contact between a community and the health system. A Basic Health Unit serves about 5 000 people living in a geographical area of 5km in diameter, or any village with a population of 1 000 that is remote from any health institution. A Primary Health Care Centre is the first level for patient transfers. It serves a surrounding population of 20 000 and is located near the Basic Health Unit of the district. A dispensary is the second level for patient transfer. It serves 25 000 people and is located in rural and urban areas where it supports the Basic Health Units of the district. A rural hospital is the next level of reference. It has a maximum of 40 beds, and serves 100 000 - 250 000 people.

The state teaching hospital is the State's main hospital, and is located in the capital, El Fasher. This hospital delivers integrated health services including clinical, preventive, rehabilitative services, and health promotion, in addition to research and development and the continuing professional development of employees.

Since the need for health care has increased since civil conflict broke out in 2003, to what extent has the government been able to expand public health facilities? Statistics are presented in Table 4.2

Table 4.2 The trends in the growth of public health facilities in North Darfur State, 2002-2010.

Type of health facility	Number in 2002	Number in 2010	Increase/ (Decrease)	Change
Hospitals	11	18	7	+39%
Hospital beds	939	1063	124	+13%
Primary health care centres	82	61	21	-26%
Dispensaries	111	79	32	-29%
Basic Health Units	203	73	130	-64%

Sources: The Federal Ministry of Health Report, 2006; the State Ministry of Health Survey Report, December 2010.

In North Darfur State there were 18 hospitals, including rural hospitals, to serve 2 113 626 people in the State according to Central Bureau of Statistics report (2008), with 1 063 hospital beds. This is shown in Table 4. 3 below.

Table 4. 3 The ratio of public hospitals and beds for the population of North Darfur State, 2010.

Size of population	Number of hospitals	Number of beds	Hospitals per 100 000 population	Beds per 10 000 population
2113626	18	1063	1.2	0.2

Sources: The State Ministry of Health Survey Report, 2010; and Fieldwork Data, December 2010.

North Darfur State has a relatively low number of hospitals beds, 0.2 beds for every 10, 000 people, while in Africa 10 per 10, 000 is regarded as a norm (WHO, 2009b: 95).

In North Darfur State there are 73 Basic Health Care Units, 61 primary health care centres, and 79 dispensaries, as shown in Table 4.4 below.

Table 4.4 The number of basic health care units, primary health care centres and dispensaries in the public sector available to the population of North Darfur State, 2010.

Facility	Numbers of facilities	Health facility per population
Basic Health Care Unit	73	28 953
Primary Health Care Centre	61	34 649
Dispensary	79	26 754

Sources: State Ministry of Health Survey Report, December 2010; and Fieldwork Data, December 2010.

From Table 4. 4, above, it can be seen that a Basic Health Unit serves 28 953 people, a Primary Health Care Centre serves 34 649 people and a dispensary serves 26 754 people. According to the norms of SHSS (2004), a Basic Health Unit serves should 5 000 people, a Primary Health Care Centre should serve 20 000 people and dispensary should serve 25 000 people. North Darfur State fails to meet these standards, especially in relation to Primary Health Care Centres and even more so for Basic Health Care Units.

Table 4.5 indicates the range and extent of technical equipment which was found in public facilities throughout North Darfur State.

Table 4.5 The availability of technical services for medical assistance in public health facilities in North Darfur State, 2010.

Technical service	Number
Blood Bank	3
X-Ray Unit	8
Laboratory	22
Endoscopy	1
Ultrasound	3
Dialysis Unit	1

Source: North Darfur State Ministry of Health Survey Report, December 2010.

The adequacy of such facilities will be discussed later in this chapter.

4.2.2 The provision of curative health services by the private sector in North Darfur State

In North Darfur State, the role of the private sector in providing health services is not well documented. The private health sector is composed of health workers of different levels, who run their private clinics either on a full-time or on a part-time basis. Most government employees also work in private clinics in the urban areas. The privately run pharmacies dispense medicines, including many antibiotics. The availability of curative health services in the State depends upon the ability of people to pay for them. The range and numbers of private facilities is shown in Table 4.6 below.

Table 4.6 The private sector health facilities in North Darfur State, 2010.

Type of private health facility	Number
Pharmacy	16
X-Ray Unit	4
Laboratory	26
Dentist clinic	3
General doctor clinic	14
Specialist clinic	29

Source: State Ministry of Health Survey Report, December 2010.

The private health facilities focus on curative health services and have little role in the provision of preventive interventions. Private health facilities at present account for 33% of all the X-ray units and 54% of the total of laboratories in North Darfur State. The number of private health facilities increased, especially in El Fasher since 2010, as shown in Table 4. 7 below. El Fasher's dominance in North Darfur State will be explored later in more detail.

Table 4. 7 Number of private health facilities in El Fasher from 2000 to 2010.

Type of health facility	2000	2005	2010
Private pharmacy	12	10	16
X-ray Unit	2	2	4
Laboratory	12	16	26
Dental clinic	1	2	3
General doctor clinic	5	6	14
Specialist clinic	15	21	29
Total	49	60	92

Source: Federal Ministry of Health Report, 2006; and State Ministry of Health Survey Report, December 2010.

4.2.3 NGOs providing curative health services in North Darfur State

According to Phillips (2008:16), in North Darfur State the poor level of access in remote areas due to the conflict and related conditions of insecurity has led to the total breakdown of the health care system. International health organizations and local health organizations in North Darfur State have come to play an important role in filling some of the gaps in the public system, and in serving that part of the population which is not an attractive market for private providers, such as IDPs. According to a United Nations Report (2011:58), in North Darfur State the conflict-affected population is 1.6 million, or 81% of the State population. 63% of this number is residents, and 37% are IDPs who depend completely on international NGOs for health services in their camps and around the larger towns, such as El Fasher, Kutum, Mellit and Kepkabiya. Since the conflict started in 2003, NGOs established have 24 health centres in IDP camps, and 20 health centres across all the districts in North Darfur State; this occurred in co-operation with the community and the Ministry of Health (SMoH Survey Report, 2010). The total number of health

staff managed by NGOs is 1 390, more than that of the State Ministry of Health, which has 1164 staff (WHO, 2010:12).

Currently 22 international NGOs provide 70% of health services in North Darfur State (State Ministry of Health Survey Report, 2010). These NGOs are led by the WHO and UNICEF. The WHO is not an implementing agency, but plays a co-ordinating role. It initiates the necessary health actions in close collaboration with the Federal Ministry of Health, the State Ministry of Health, and NGOs such as Médecins Sans Frontières (MSF) and Oxfam (WHO, 2004a:8). A list of NGOs is presented in Table 4.8.

Table 4.8 International NGOs working in curative health in North Darfur State, 2010.

	Name of Organization	Commencement date
1	Saudi Red Crescent	2008
2	Egyptian Medical Mission	2008
3	Oxfam America Organization	2004
4	Relief International Organization	2005
5	Mercy Malaysian Organization	2008
6	Kuwait Medical Mission	2008
7	The Irish Organization	2003
8	African Humanitarian Aid	2005
9	Medecins Sans Frontieres – Spain	2004
10	Medecins Sans Frontieres– Belgium	2004
11	U.S. Agency for International Development	2002
12	United Nations Population Fund	2004
13	Goal Ireland Organization	2003
14	German Red Cross	2005
15	Humanitarian Aid and Development	2004
16	Partner Aid International	2004
17	World Food Programme	2003
18	MALTESER	2005
19	Plan Sudan	2003
20	International Committee of the Red Cross	2003
21	United Nations Children's Fund	2003
22	World Health Organization	2003

Sources: World Health Organization, 2010 and State Ministry of Health Survey Report, December 2010.

According to the SMoH survey report (2010), there have also been ten local organizations working in the health field since the conflict started in North Darfur State in 2003. However, because of funding problems, their numbers decreased to three by 2010. Those that continue are the Sudan Red Crescent, and the Sudan Humanitarian Aid Development, and Project of Water and Environmental Sanitation, which is supported by UNICEF. They concentrate their work in urban areas because of their lack of capacity.

4.3 The distribution of health facilities in North Darfur State

The sum of health facilities available in North Darfur State becomes even more significant once the distribution of health services across the 15 districts is taken into account.

4.3.1 The distribution of health facilities in the public sector

How health facilities in the public sector are distributed is reported in Table 4.9.

Table 4.9 The distribution of health facilities at district level in relation to the population size in North Darfur State, 2010.

No	District	Population size	Number of hospitals	Hospital beds	Population per hospitals bed	Health centres	Dispensaries	Primary Health care Units
1	El Fasher	787 880	6	538	1 464	26	23	9
2	El Koma	29 574	1	15	1 971	1	2	3
3	Kalamondo	71 098	0	0	0	1	10	2
4	Mellit	125 771	1	71	1 771	10	4	2
5	Dar El Salam	109 456	1	40	2 736	1	2	4
6	El Malha	64 113	1	34	1 885	4	8	7
7	Kutum	196 942	1	65	3 030	3	7	2
8	El Siraf	73 840	1	46	1 605	1	1	0
9	Saraf Omra	119 456	1	53	2 254	2	2	0
10	El Liyit	93 878	1	37	2 537	4	10	12
11	El Towasha	89 704	1	23	3 908	0	5	9
12	Umm Kaddada	89 895	1	48	1 873	3	3	15
13	El Tina	0	1	20	0	1	0	0
14	El Waha	64 113	0	0	0	0	2	0
15	Kepkabiya	197 446	1	73	2 704	4	0	8
Total	15	2 113 626	18	1063	19 862	61	79	73

Source: Central Bureau of Statistics, 2008; State Ministry of Health Survey Report, 2010; and Fieldwork Data, December 2010.

Due to the conflict in the State, some hospitals were closed, such as El Tina Hospital (pictured in Figure 5.1) which closed at the start of the conflict in 2003. However, it reopened in early 2010,

after the governments of Chad and Sudan signed an accord to normalize relations, thus enabling Darfur refugees in Chad to visit El Tina for health services.

Figure 4.2 El Tina district hospital in 2009.

From Table 4.9, it can be seen that there are significant disparities in the geographical distribution of health facilities between State districts. Many districts are underserved by the health system because functional facilities, in particular health centres and hospitals, are clustered in towns and cities. There are also significant differences between the old districts and the new ones. The latter, such as Kalamondo and El Tina, were created after the conflict started in 2003. The government built health facilities in these new districts in an attempt to stop the population from becoming involved in the rebel movements.

Another significant factor in Table 4.9 is the dominance of the largest urban area, El Fasher. This becomes particularly evident in Table 4.10 where a comparison of health facilities is made between El Fasher and the other 14 districts.

Table 4.10 The ratio of health facilities in El Fasher District compared to other districts in North Darfur State, 2010.

Type of health facilities	The ratio of health facilities	
	El Fasher District	Other Districts
Hospitals	33%	67%
Hospitals beds	51%	49%
Health centres	43%	57%
Dispensary	29%	71%
Primary Health Units	11%	89%

Source: Calculated from State Ministry of Health Survey Report, December, 2010.

El Fasher District has 33% of hospitals, but 51% of hospital beds. It also has 43% of health centres. Conversely El Fasher fewer primary health facilities, with only 11% of Primary Health Units. The tendency is for districts with few or inadequate health services to refer patients to facilities in El Fasher. The shortage of specialized services beyond El Fasher can be seen in Table 4.11 below.

Table 4.11 Technical services for medical assistance by district in North Darfur State, 2010.

No	District	Blood Bank	X-Ray Unit	Laboratories	Endoscopy	Ultrasound	Dialysis Unit
1	El Fasher	2	3	7	1	3	1
2	El Koma	0	0	1	0	0	0
3	Kalamondo	0	0	0	0	0	0
4	Mellit	1	1	2	0	0	0
5	Dar El Salaam	0	0	1	0	0	0
6	El Malha	0	0	1	0	0	0
7	Kutum	0	1	2	0	0	0
8	El Siraf	0	0	1	0	0	0
9	Saraf Omra	0	0	1	0	0	0
10	El Liyit	0	1	1	0	0	0
11	El Towasha	0	0	1	0	0	0
12	Umm Kaddada	0	1	1	0	0	0
13	El Tina	0	0	1	0	0	0
14	El Waha	0	0	0	0	0	0
15	Kabkabeiya	0	1	2	0	0	0
Total	15	3	8	22	1	3	1

Source: North Darfur State Ministry of Health Survey Report, December 2010.

Very few technical services are available outside El Fasher. This becomes even more apparent in Table 4.12.

Table 4.12 Technical services for medical assistance in El Fasher compared to other districts in North Darfur State, 2010.

Health facility	The ratio of medical assistance health facilities	
	El Fasher District	Other Districts
Blood Bank	67%	33%
X-Ray Unit	38%	62%
Laboratory	32%	68%
Endoscopy	100%	0%
Sound waves	100%	0%
Dialysis Unit	100%	0%

Source: North Darfur State Ministry of Health Survey Report, December 2010.

The other districts combined have a large share of X-ray units and laboratories but in other respects El Fasher dominates the State and is the only source of facilities for endoscopy, sound waves and dialysis.

4.3.2 The distribution of health facilities in the private sector

The health services available in North Darfur State are indicated in Table 4.13 below.

Table 4.13 The distribution of private sector health facilities by districts in North Darfur State, 2010.

District	Private pharmacies	Public pharmacies	X-Ray units	Laboratories	Dentists clinics	General doctor clinics	Specialists clinics
El Fasher	16	5	4	20	3	8	29
Mellit	0	0	0	2	0	1	0
Kutum	0	0	0	1	0	1	0
Kepkabiya	0	0	0	1	0	1	0
Umm Kaddada	0	1	0	2	0	3	0
Total	16	6	4	26	3	14	29

Source: State Ministry of Health Survey Report, December 2010.

Note that private health facilities are confined only to six districts, with most of them situated in El Fasher. This is highlighted in Table 4.14.

Table 4.14 Private sector health facilities in El Fasher district, as compared to other districts in North Darfur State, 2010.

Type of health facility in the private sector	The ratio of health facilities in private sector	
	El Fasher district	Other districts
Private pharmacy	100%	0%
Public pharmacy	83%	17%
X-Ray Unit	100%	0%
Laboratories	77%	13%
Dental clinic	100%	0%
General-doctor clinic	57%	43%
Specialist clinic	100%	0%

Source: State Ministry of Health Survey Report, 2010.

El Fasher monopolizes all private pharmacies, X-ray units, dental clinics, and specialist clinics. 83%, 77% and 57% of public pharmacies, laboratories and general-doctor clinics, respectively, are also located in El Fasher District.

4.3.3 The distribution of health facilities in the NGO sector

NGOs are the most important partners of public sector health services in the rural areas of North Darfur State. The distribution of NGOs is not homogeneous; they work mainly in the most challenging areas and with the most disadvantaged groups. NGOs manage and support public health facilities, sometimes in partnership with the State Ministry of Health. The NGOs and the five districts where they are located in North Darfur State are presented in Table 4.15.

Table 4.15 NGOs managing and supporting health facilities in five districts in North Darfur State, 2010.

District	NGOs		Health facilities				Total
El Fasher	Management	Support	Rural Hospital	Primary Health Care Centre	Basic Health Unit	Mobil clinic	
	Egyptian Mission	Egyptian Mission	-	-	1	-	1
	Humanitarian Aid and Development	Humanitarian Aid and Development		1			1
		World Health Organization / United Nations Children's Fund / United Nations Population Fund	-	-	1	-	1
	Kuwaiti Patient's Helping Fund	World Health Organization / United Nations Children's Fund / United Nations Population Fund	-	1	-	-	1
	MALTESER	MALTESER	-	1	2	-	3
	Mercy Malaysian Organization	World Health Organization/ United Nations Children's Fund / United Nations Population Fund	-	-	1	-	1
	Medicines Sans Frontiers – Spain	Medicines Sans Frontiers – Spain	-	2	-	-	2
	Partner Aid International	Partner Aid International	-	-	1	-	1
		Partner Aid International/ World Health Organization / United Nations Children's Fund	-	1	1	-	2
	Relief International Organization	Relief International Organization	-	3	2	-	5
		State Ministry of Health	-		2	-	2
		World Health Organization/ United Nations Children's Fund / United Nations Population Fund	-	1	1	-	2

Source: World Health Organization Report, 2010.

Table 4.15 NGOs managing and supporting health facilities in five health districts in North Darfur State, 2010.

District	NGOs		Health facilities				Total
El Fasher	Management	Support	Rural Hospital	Primary Health care Centre	Basic Health Unit	Mobil Clinic	
	Saudi Red Crescent	Saudi Red Crescent	-	2	-	-	2
	State Ministry of Health	Partner Aid International/ World Health Organization / United Nations Children's Fund	1	13	1	-	15
	Saudi Red Crescent / German Red Cross	Partner Aid International / World Health Organization / United Nations Children's Fund	-	1	-	-	1
Kepkabiya	Medicines Sans Frontiers – Belgium	Medicines Sans Frontiers – Belgium	-	1	5	1	7
	Relief International Organization	Relief International Organization	-	1	-	-	1
	State Ministry of Health	World Health Organization / United Nations Children's Fund / United Nations Population Fund	3	-	-	-	3
Umm Kaddada	Relief International Organization	State Ministry of Health	-	1	-	-	1
Kutum	Goal Ireland Organization	Goal Ireland Organization	-	11	1	1	13

Source: World Health Organization Report, 2010.

Table 4.15 NGOs managing and supporting health facilities in five health districts in North Darfur State, 2010.

District	NGOs		Health facilities				Total
Kutum	Management	Support	Rural Hospital	Primary Health care Centre	Basic Health Unit	Mobil Clinic	
	State Ministry of Health	State Ministry of Health / World Health Organization/ United Nations Children's	-	-	1	-	1
		Medicines Sans Frontiers – Spain	-	2	3	-	5
		United Nations Children's Fund / United Nations Population Fund	-	2	-	-	2
		World Health Organization / United Nations Children's Fund / United Nations Population Fund	1	-	-	-	1
Mellit	African Humanitarian Aid	African Humanitarian Aid	-	1	1	-	2
	Relief International Organization	State Ministry of Health	-	1	1	-	2
	State Ministry of Health	United Nations Children's Fund / United Nations Population Fund	1	1			2
	Saudi Red Crescent / German Red Cross	United Nations Children's Fund / World Food Programme	-	-	-	4	4
	Saudi Red Crescent / German Red Cross	World Health Organization / United Nations Children's Fund / United Nations Population Fund	-	-	5	-	5
Total			6	47	30	6	89

Source: World Health Organization Report, 2010.

Over half of the NGOs are concentrated in El Fasher District. In North Darfur State 64 health facilities are managed by NGOs and only 25 by the State Ministry of Health, while 83 of health facilities are supported by NGOs, and only 6 are supported by the State Ministry of Health.

According to an interviewee (2-2, 25 December 2010, El Fasher) in the State Ministry of Health:

> The State Ministry of Health neglected establishing new health facilities, in order to rehabilitate old ones affected by the conflict and needing maintenance. This is one of the greater problems which has increased the role of NGOs in economic and social activities, including health. Therefore, the role of government in establishing new health facilities has shrunken considerably. The lessening role of government in the health field is recognized as a risk in further weakening government health care delivery, and thus increasing the health care system's vulnerability after NGOs leave the State.

4.4 Access to health facilities in North Darfur State

Two objectives of the health standards model in Sudan are the realization of balance in the distribution of health service facilities, and the guarantee of coverage, accessibility, and utilization of health services. This entails ensuring that those in need have reasonable access to appropriate health facilities. As mentioned before, a Basic Health Unit is meant to serve about 5 000 people living in a geographical area of 5 km in diameter, or any village with a population of 1 000 or more, and that is remote from any health institution (SHSS, 2004). But weak infrastructure and the limited distribution of health facilities in North Darfur State are a challenge in regard to access to health services, especially in the rural areas of North Darfur State. Both patients and medical personnel have to make difficult journeys.

According to an interviewee (2-3 16 December 2010, El Fasher) in Dar El Salaam District:

> The patients in Dar El Salaam District experience challenges in relation to accessing health facilities. Especially in the rainy seasons, they have to travel 105 kms by car or on animals in order to access the health facilities, and obtain

> medication for malaria. Sometimes, the rural hospitals are without a doctor, because the doctor is a doctor and a manager at the same time, and therefore, the doctor/manager travels a lot to the El Fasher District to meet the general manager of State Ministry of Health. The doctor/manager does this in order to try to address to the health issue challenges which are difficult to solve at district level, and also to obtain some medicine and equipment for the district hospital. If the doctor is not available, the patient will have to continue travelling to El Fasher to obtain treatment; however, the distance from Dar El Salaam to El Fasher is 90 km.

Another interviewee (2-4 23 December, El Fasher) in State Ministry of Health disclosed that:

> In urban areas, health care services are easily accessible but it is difficult for rural people, where 75% of the population live in rural areas and IDP camps. Only 30% of the population in rural areas have access to health services within 50 km travelling distance. The transport costs and insecurity issues are significant deterrents to the poor accessing health care services in rural areas. Therefore, most people use their animals to travel to the health facility.

This confirms an earlier SMoH survey report (2008), which points out that the distance from a health centre can also be a subjective measurement. While some citizens might be 50 kms from a well-equipped hospital on a tarmac road, many others might indeed be only 4 kms from a health facility in an urban area, but this may be a limited facility (for example, a dispensary) with few resources, no doctors, and accessible only by foot.

According to an interviewee (1-4 23 December 2010, El Fasher) working in a NGO health centre associated with IDP camps:

> The health centres which are operated by NGOs are often the best balance of care and cost, where they are available, compared to public health centres. As a result of the high quality of care and no cost to patients, patients around the camps come from a wide area of up to 50 to 60 kms in order to access the facilities. Therefore the three biggest factors currently preventing health care from reaching the larger

proportion of the population in North Darfur State are the availability of health care, the high cost of services, and poor access to health facilities.

Accessing health facilities in rural areas can be very difficult. According to an interviewee (1-6 12 January 2011, El Fasher) who works in Kutum District hospital, 'Sick people are travelling two hours (80 Kms) by car and two days by animal to access the nearest health facility in Kutum town. Cars are not available all the time. You can find a car on market day and usually there is only one day for the market. On that day all the people in the District come to do their shopping, and it is then that the patients' relatives can find a car to reach the health facilities in towns like Kutum or El Fasher, which are 110 kms from Kutum'.

These reports confirm Phillips' earlier research: he stated (2008:16) that in Darfur sick people have to travel an average of 35 kms to find a doctor or a health dispensary and that secondary health facilities are not found anywhere except in State capitals, such as El Fasher. The continuing conflict in Darfur has only worsened Sudan's poor health system. The distances travelled to obtain health services have increased because people have been displaced. The health system is almost collapsing and almost no one travels to access the services in the rural areas due to the dangerous situation.

4.5 Conclusion

In North Darfur State, the curative health services are delivered by the public, the private and the NGO sectors. The public health facilities, despite some growth, still fall short of the Sudanese government's own norms and standards, as well as those of the WHO. The private health facilities have expanded but are largely confined to a single district in North Darfur State, the main urban centre, El Fasher. Access to private health care, though, depends on an ability to pay, which is not an option for the many poor vulnerable and displaced people. As a consequence, international NGOs have come to play a considerable role in providing and supporting curative health facilities.

Furthermore, most public and private health facilities are concentrated in El Fasher District. NGOs' health facilities are mostly offered in rural and IDP camps, where people are in great

need of curative health services, although a majority of NGOs are themselves also based in El Fasher. Therefore, the sick face difficulties in gaining access to health facilities, having to undertake long and arduous journeys.

The effectiveness of the health system and its structure, the lack of health facilities, poor health service infrastructure, and the lack of human and financial resources, are serious problems facing North Darfur State. The next chapter investigates in detail the current circumstances of human and financial resources for the provision of curative health services.

Chapter 5

Human and Financial Resources for Curative Health Service Delivery in North Darfur State

5.1 Introduction

The government of Sudan has provided health services to its citizens, including the free supply of medicines, which are funded by general resources. However, the government has been constrained by an array of political and economic problems (Mohamed, 2007: 30). Factors of health service resources include: number of health facilities; number of personnel; availability of financial resources; and technology such as drugs and equipment. The availability and coverage of these resources have been limited compared to the population size which made health services not affordable and accessible for all (WHO, 2001: 16).

North Darfur State lacks health personnel and many of those who are in service are mostly newly appointed and inexperienced since they graduated recently from medical school. Additionally, due to the conflict, most health personnel left the rural areas for towns and cities where the security situation is much better. The State also faces a significant shortage in health financing because both the federal and state governments have failed to provide adequate financial resources. For all these reasons, this chapter will analyze the availability of, first, human, then financial resources for health services in North Darfur State.

5.2 Human resources for health service delivery in North Darfur State

There are two categories of health personnel engaged in health service delivery in the State, professionals and medical assistants. The range and number of medical professionals is presented in Table 5.1.

Table 5.1 Number of medical professionals in North Darfur State, 2010.

Professionals	Deputy specialist	Specialist	General doctor	Dentist	Pharmacist	Total
Number	18	30	107	4	11	170

Source: State Ministry of Health Survey Report, 2010.

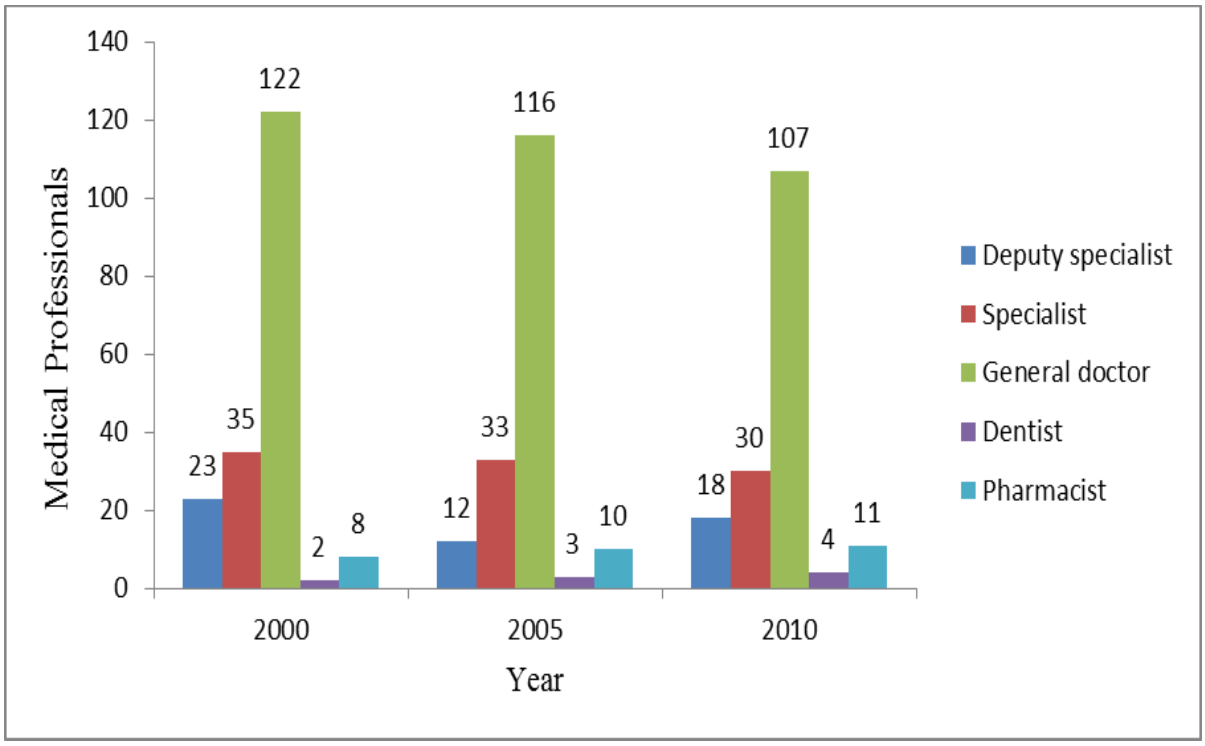

Figure 5.1 Number of medical professionals in North Darfur State from 2000-2010.

Sources: Federal Ministry of Health Report, 2006 and State Ministry of Health Survey Report, 2010.

Except for dentists and pharmacists, the number of all other health professionals decreased in the period from 2000 to 2010.

Doctors cannot provide effective health services without integrating their efforts with other health workers, such as nurses, medical assistants, technicians and Primary Health Officers.

Table 5. 2 Number of other health workers in North Darfur State, 2010.

Health workers	Technicians	Medical assistants	Nurses	Public Health Inspectors
Number	293	436	578	33

Source: State Ministry of Health Survey Report, December 2010.

As shown in Table 5. 2 above, there are 293 technicians, 436 medical assistants, 578 nurses and 33 public health inspectors to serve all people in the State. How the numbers have changed in the period from 2002 to 2010, is shown in Figure 5.2 below.

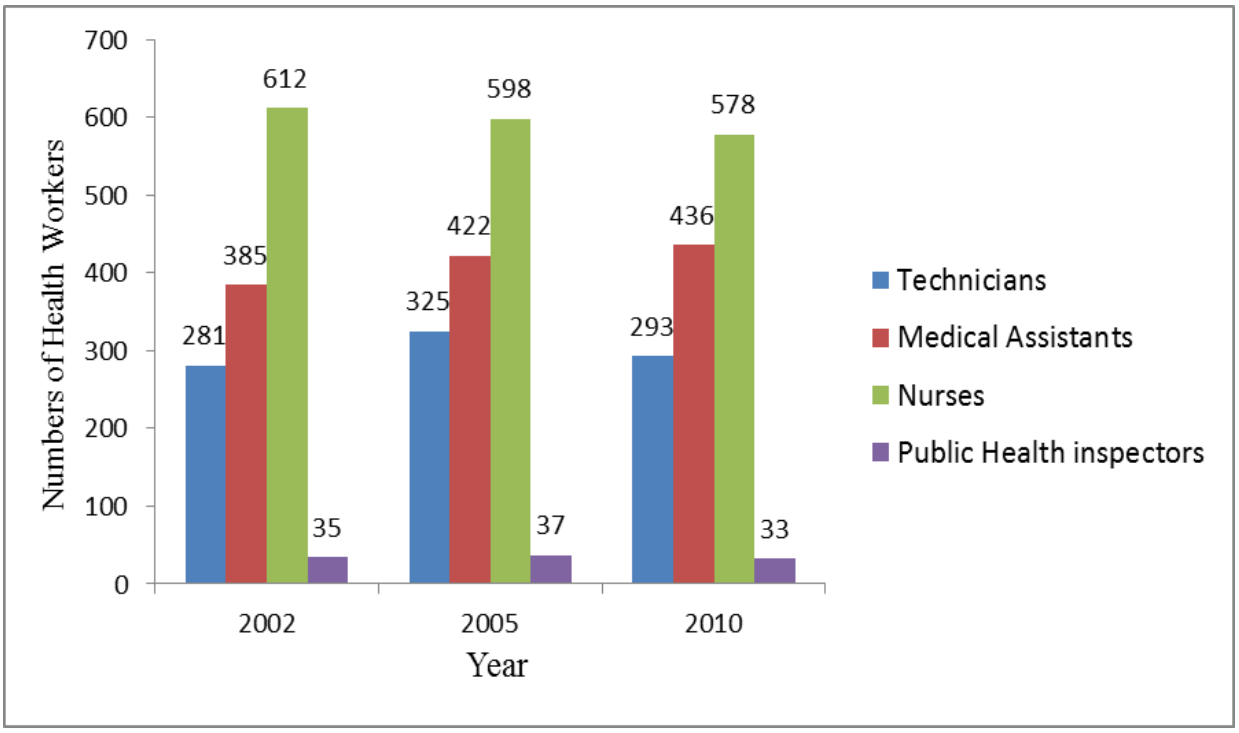

Figure 5.2 Number of other health workers in North Darfur State from 2002-2010.
Sources: State Ministry of Health Survey Report 2008 and Ministry of Health Survey Report, December 2010.

The number of health workers, such as technicians, increased by 4.2% from 281 in 2002 to 293 in 2010. The number of medical assistants increased by 13.2% from 385 in 2002 to 436 in 2010, while the number of nurses decreased by 5.5% from 612 in 2002 to 587 in 2010. The number of

public health inspectors decreased by 5.7% from 35 in 2002 to 33 in 2010. The number of medical assistants and nurses working in the private sector and with NGOs is unknown.

Are there sufficient health personnel in North Darfur State? And how are professionals and other health workers distributed across the State?

Table 5. 3 The ratio of doctors per 100 000 population in North Darfur State.

Numbers					
Population size	Deputy specialists	Specialists	General doctors	Dentists	Pharmacists
2113626	18	30	107	4	11
Ratio per 100 000 population					
	Deputy specialists	Specialists	General doctors	Dentists	Pharmacists
	0.9	1.5	5.2	0.2	0.6

Sources: State Ministry of Health Survey Report, 2010 and Fieldwork Data, December, 2010.

As can be seen in Table 5.3 above, approximately one deputy specialist, two specialists, and five general doctors serve 100 000 people. In Sudan the ratio of specialists to service a population of 100 000 is 3.3. The ratio of general doctors in Sudan is 20 per 100 000 population (WHO, 2006a:36). According to Logie *et al* (2008:257), WHO suggested that a minimum of 10 doctors serve 100 000 people. Therefore the provision of specialists and doctors in North Darfur State is below average for Sudan and also below that of that suggested by WHO.

The availability of supporting health workers in relation to the size of population in North Darfur State is also inadequate as shown in Table 5. 4 below.

Table 5.4 Ratio of other health workers per 10 000 population in North Darfur State in 2010.

Numbers				
Population size	Technicians	Medical assistants	Nurses	Public health inspectors
2113626	293	436	578	33
Ratio of medical assistants per 10 000 population				
	Technicians	Medical assistants	Nurses	Public Health Inspectors
	1.4	2.1	2.8	0.16

Sources: State Ministry of Health Survey Report, 2010 and Fieldwork, December, 2010.

1.4 technicians; 2.1 medical assistants; 2.8 nurses; and 0.16 public health inspectors serve 10 000 people. If one consider the ratio of nurses for every 10 000 people, the statistic of 2.8 in 2010 in North Darfur State is dramatically lower than that of Sudan which was 4.9 in 2006 (WHO, 2006a:36) and far below the norm of 9 recommended by the World Bank (2010:55) and that of 12 suggested by WHO (Bateman, 2007:1022).

5.2.1 Distribution of health staff in North Darfur State

An unequal distribution of health workers is a major problem in many developing countries, especially in rural areas (World Bank, 2010: 56). In North Darfur State, the geographical distribution of critical human resources between urban and rural areas is imbalanced, with the majority of trained providers preferring to work in urban areas. All interviewees at State and district level disclosed that in rural areas the lack of management practices and incentives which effectively support performance have resulted in deficient work environments, low workforce motivation and poor results. The migration of skilled health personnel, especially from the public sector to the private sector, is also rated as one of the most crucial challenges for human resources in the State.

5.2.1.1 Distribution of doctors at district level in North Darfur State

Table 5.5 shows significant disparities in the distribution of health personnel according to population size at district level in North Darfur State.

Table 5.5 Distribution of doctors at district level in North Darfur State, 2010.

Districts	Population size	No of Specialists	No of Deputy specialists	No of General doctors	Ratio of doctors per 100 000 population		
					Specialists	Deputy specialists	General doctors
El Fasher	787 880	30	18	83	4	2.3	10.6
El Koma	29 574	0	0	1	0	0	3.4
Kalamondo	71 098	0	0	0	0	0	0
Millet	125 771	0	0	5	0	0	4
Dar El Salaam	109 456	0	0	1	0	0	1
El Malha	64 113	0	0	2	0	0	3.2
Kutum	196 942	0	0	5	0	0	2.6
El Sireaf	73 840	0	0	1	0	0	1.4
Saraf Omra	119 456	0	0	1	0	0	0.9
El Liyit	93 878	0	0	1	0	0	1.1
El Towasha	89 704	0	0	1	0	0	1.2
Umm Kaddada	89 895	0	0	2	0	0	2.3
El Tina	0	0	0	1	0	0	0
El Waha	64 113	0	0	0	0	0	0
Kabkabeiya	197 446	0	0	2	0	0	1.1
Total	2 113 626	30	18	107	1.5	0.9	5.2

Sources: Central Bureau of Statistics, 2008; State Ministry of Health Survey Report, 2010 and Fieldwork Data, December 2010.

It can be seen that deputy specialist doctors and specialists are concentrated in El Fasher, as shown in Table 5. 6 below.

Table 5.6 The ratio of doctors between El Fasher District and other Districts in North Darfur State, 2010.

Types of doctor	Ratio of doctors between El Fasher district and other districts	
	El Fasher district	Other districts
Deputy specialist	100%	0%
Specialist	100%	0%
General doctor	77%	23%
Dentist	100%	0%
Pharmacist	100%	0%

Source: Calculated from the State Ministry of Health Survey Report, December, 2010.

Only 23% of general doctors are working outside El Fasher district and there are no deputy specialists, specialists, dentists or pharmacists working in other districts in the State. There are districts such as Kalamondo, with 71 098 people, without any health facilities and health staff, and districts like El Tina with one rural hospital and one doctor but with no population. Also in many districts, such as Saraf Omara with 119 456 people, Dar El Salaam with 109 456 people, and El Liyit with 93 878 people, there is approximately one doctor per 100 000 population.

North Darfur State faces a lack of health personnel in secondary level institutions such as district hospitals. Health centres also tend to have insufficient numbers of health personnel. For example, 22 out of 30 specialist doctors are working at the El Fasher teaching hospital alone and there are none working in district hospitals. 77% of all doctors are in El Fasher hospitals, leaving only 23% of doctors in the other 10 district hospitals. This lack of health personnel at secondary level is a serious problem and affects primary level institutions in North Darfur State in delivering a proper curative health service to the population. This causes patients to bypass the referral system (SMoH Report, 2009).

The uneven distribution of doctors and specialists across North Darfur Sate was revealed in interviews. According to an interviewee (1-1, 05 January 2011, El Fasher) in El Fasher hospital:

> The reason for the disparity in distribution is the demand for services itself. An urban area such as El Fasher has tertiary hospitals, such as a teaching hospital and specialist hospitals. These hospitals have a large number of health personnel, and they care not only for people within a district but also for people from other regions and neighbouring countries such as Chad. Another reason for the inequality in distribution is that after working hours, these doctors work in private institutions, increasing their income from working just working hours in district health facilities.

Due to the conflict situation in North Darfur State, an interviewee (2-1, 23 December 2010, El Fasher) in the State Ministry of Health, pointed out that:

> Health staff, especially doctors, usually refuse to work in conflict-affected areas due to the security issues and bad working environment. For example, in El Tina district, located on the border with Chad in the west, there is only one doctor, and he works there because he is from that district. No other doctor wants to go there because the district is located in a conflict-affected area. In this manner, there is a huge differentiation in cadre vacancies among districts in North Darfur State.

According to Samb (2009: 2154), a strong positive correlation exists between health workforce-density, service coverage and health outcomes, indicating the importance of the health workforce for the health of populations. Shortages in human resources for health have been widely reported as the main obstacle to increasing interventions which are specific to certain diseases.

According to an interviewee (1-2, 05 January 2011, El Fasher) working in Dar El Salaam rural hospital:

> I have been working alone as a doctor and administrator at the same time in the hospital. Sometimes I travel to El Fasher to bring medicines and some equipment and usually I spend two or three days to get that because the process to find medicines and equipment from the Ministry of Health is very complicated. Sick

> people come to the hospital and find no doctor available but they find medical assistants and nurses and those are usually dealing with serious cases. They don't have enough experience to treat patients or the problem of no drugs and other facilities.

He also disclosed that:

> I travel a lot to El Fasher to meet the general manager of the State Ministry of Health to solve problems of health issues which are difficult to solve at district level. When patients do not find me, they have two choices: wait until I come back; or continue to travel to search for other hospitals, maybe needing another six hours to reach the hospital in El Fasher. Therefore many patients die due to the absence of doctors in rural hospitals.

According to an interviewee (1-3, 10 January 2011, El Fasher) working in El Towasha district hospital:

> Rural hospitals face a lack of doctors and bad working environments. For example, there is only one doctor in the hospital and I'm receiving around 90-120 patients daily in the rainy season when the number of people with malaria increases. We don't have enough equipment to treat patients, and we don't even have oxygen to save people's lives in emergencies. We also don't have free medicine; the only one thing we have free is death certificates. Every treatment we claimed, patients bought the medicine from private pharmacies with their own money.

Regarding hospital beds, he said, 'We don't have enough beds in the hospitals, we have only 23 beds'. When asked why he didn't report these problems to the state health officer to solve, he said that he did, but that the officers didn't respond. When asked whether he had requested aid assistance from NGOs working in the health field in the district, he said that there were no NGOs now working in El Towasha district.

This situation confirms Mahmoud's study (2010), which stated that it is not surprising to find an abandoned dispensary, a rural hospital without doctors or a health unit without medicine in Darfur.

According to Badr (2007:26), the wages of health workers are generally low compared to those for other public sector employees within the civil service. Several categories, such as judges and oil engineers, enjoy exceptionally high wages of more than double that of doctors. In the health sector, doctors, in addition to dentists and pharmacists, are better remunerated than nurses, technicians and other allied health personnel.

The gradient difference in salary between the public and private sector for health workers is wide and in favour of those employed by private sector institutions. According to an interviewee (1-4, 04 December 2010, El Fasher) employed by in El Fasher teaching hospital, 'physicians' salaries are very low (US$ 200 per month) compared to those of other equivalent professionally trained persons in the private sector, especially those working with NGOs (US$ 1 000 per month at least)'. (See, too, Badr (2007:26)). Therefore Medical Officers in North Darfur State tend to work at private hospitals after they finish their duty at public hospitals, in order to earn an additional salary, even if they remain in the public sector. The State Ministry of Health Financial Report (2009) also pointed out that salaries are paid irregularly, especially outside Khartoum. This explains the high attrition rate of doctors in the public sector. 50% of them leave, either for private practice, or move to another country (State Ministry of Health Survey Report, 2009).

5.2.1.2 Distribution of doctors in the public and private sector in North Darfur State

The consequences of the public sector proving to be less attractive to doctors can be seen in Table 5.7.

Table 5.7 The distribution of doctors working in the public, private and NGO sectors in North Darfur State, 2010.

Sector	Deputy Specialist		Specialist		General doctor		Dentist		Pharmacist	
	No	%	No	%	No	%	No	%	No	%
Public only	0	0	0	0	0	0	0	0	0	0
Private only	0	0	0	0	0	0	0	0	8	73
Public and private	12	67	30	100	75	71	4	100	3	27
NGOs only	6	33	0	0	32	29	0	0	0	0
Total	18	100	30	100	107	100	4	100	11	100

Source: State Ministry of Health Survey Report, 2010.

With the exception of pharmacists, no medical specialists are solely in the public sector or only in private practice. All of the specialists and dentists, 71% of general doctors and 27% of pharmacists in the State combine working in the public and private sectors. Thirty three percent of deputy specialists and 29% of general doctors work with NGOs, and the majority of pharmacists are in the private sector, most of them in El Fasher town.

According to an interviewee (2-2, 09 December 2010, El Fasher) in El Fasher teaching hospital:

> Most doctors in public health facilities left to work in the private sector, especially with NGOs where the work environment is much better than in the public sector and also the salaries are much better. Therefore patients face difficulties to get consultations in public health facilities because the doctors are not available. At the same time, they are not able to get consultations in private health clinics because of the expense. Therefore most poor patients seek consultation and treatment from NGO health facilities because it is free of charge.

5.2.1.3 Distribution of other health workers at district level in North Darfur State

The State also has an unequal distribution of other health workers such as nurses, medical assistants and technicians, especially in rural hospitals in the districts. This is shown in Table 5. 8 below.

Table 5. 8 Distribution of other health workers at district level in North Darfur State.

District	Population size	No of technicians	No of medical assistants	No of nurses	Ratio of health workers per 10 000 population		
					Technicians	Medical assistants	Nurses
El Fasher	787 880	252	268	322	3.2	3.6	4.2
El Koma	29 574	0	0	0	0	0	0
Kalamondo	71 098	0	0	0	0	0	0
Millet	125 771	10	26	47	0.8	2.2	3.8
Dar El Salam	109 456	0	10	8	0	1	0.8
El Malha	64 113	0	18	6	0	3	1
Kutum	196 942	10	31	73	0.5	1.6	3.8
El Siraf	73 840	0	4	8	0	0.5	1.1
Saraf Omra	119 456	0	0	0	0	0	0
El Liyit	93 878	6	13	6	0.7	1.4	0.7
El Towasha	89 704	2	8	13	0.23	0.9	1.5
Umm Kaddada	89 895	6	20	36	0.7	2.3	4.1
El Tina	0	0	3	7	0	0	0
El Waha	64 113	0	6	0	0	1	0
Kabkabeiya	197 446	7	29	52	0.37	1.5	2.7
Total	2 113 626	293	436	578	1.4	2.1	2.8

Sources: Central Bureau of Statistics, 2008 and Fieldwork, December 2010.

Districts such as El Koma with 29 574 people and Kalamondo with 71 098 people have no personnel at all. By contrast, El Fasher has 252 technicians, 268 medical assistants and 322 nurses, serving a population of 787 880 residents, which yields an average of about four medical workers for every 10 000, well below the WHO standard of 12 (Bateman, 2007:1022). But, in reality, the ratio in El Fasher is even less favourable, since, as has been discussed, many in other districts travel to El Fasher for medical treatment.

A main reason for this problem of unequal distribution of health workers is that few are prepared to be based in many of the less secure districts. As an interviewee (2-3, 26 December 2010, El Fasher) in the State Ministry of Health stated:

> The districts cannot recruit personnel, especially those more affected by conflict. Therefore those who are recruited from urban areas tend to avoid going to district areas because of instability and insecurity. This precipitates a problem resulting in a lack of health manpower in the rural areas, as it would be a disadvantage for health personnel to go to remote areas in terms of career development and income.

Most health workers are concentrated in El Fasher district, as shown in Table 5.9 below.

Table 5.9 The ratio of health workers in El Fasher district, as compared with other districts in North Darfur State, 2010.

Type of health worker	Ratio of health worker between El Fasher district and other districts	
	El Fasher district	Other districts
Technician	81%	19%
Medical assistant	63%	37%
Nurses	55%	45%
Public Health Inspector	61%	39%

Source: State Ministry of Health Survey Report, December 2010.

In North Darfur State, 81% of technicians, 63% of medical assistants, 55% of nurses and 61% of public health inspectors are in El Fasher district.

Regarding this, an interviewee (2-4, 28 December 2010, El Fasher) in the State Ministry of Health stated that:

> There are three main reasons leading to health staff being concentrated in El Fasher district or El Fasher town. The first is due to insecurity issues due to the conflict. The second is the low salaries which health staff earn in district hospitals. The third is the poor working conditions in district areas, ranging from working in conflict areas to inadequate facilities and shortages of essential medicines. These are the most pressing problems facing health care staff and which have created an imbalance in health staff distribution among the districts in North Darfur State.

An earlier study by WHO (2000:78) noted that without functioning facilities, diagnostic equipment, and medicines, even if staff skills are high, the delivery of services will still be poor. The motivation of health staff depends not only on working conditions. Financial payment and other benefits are also important, as are the overall management of staff and the possibilities for professional advancement.

According to an interviewee (2-5, 05 January 2011, El Fasher) in the State Ministry of Health:

> The State Ministry of Health faces shortages of health staff; therefore preparations need to be made to improve the capability and the number of health staff available in the State, especially at rural hospitals and health centres at district areas. Human resources availability and development is not something that can be hurried but it should be started as soon as possible. Both in the State and externally, professional training should be supported by the Federal Ministry of Health and other partners such as donors and NGOs.

One of the biggest challenges to date in North Darfur State has been the unequal distribution of medical professionals and health workers between urban and rural areas. In order to make

positions with the Ministry of Health more attractive, financial incentives need to be considered as well as trying to create an attractive working environment with appropriate medical equipment and enough medical supplies. But apart from quantity, that is, the numbers of health staff, quality is also a significant factor.

5.2.2 Lack of training

The quality of the health service in North Darfur State is poor partly due to inadequately skilled personnel.

According to an interviewee (2-6, 21 December 2010, El Fasher) in the State Ministry of Health:

> The issue of quality of health service staff in North Darfur State has two main aspects: technical competency; and human attitude. People's satisfaction and responsiveness is related to the aspect of human attitudes. Supervision and performance appraisal should be established in each State Ministry of Health and service providers should be oriented towards a courteous and kind attitude from the beginning of their career. This is not found in the State administration system. Therefore North Darfur State does not have sufficient trained health staff.

This is confirmed by the SMoH survey report (2010), which stated that: most health workers are not trained; 85% of administrators have no training in their field; 66% of nurses were not trained after graduation; and 65% of general doctors do not receive training after graduation. Table 5.10 below indicates the extent of training in the health sector.

Table 5.10 Number of trained health cadres in North Darfur State in 2010.

Type of health cadre	No of health cadres	No of trained health cadres	Percentage of trained health cadre
General doctor	107	37	35%
Medical assistants	436	165	38%
Technicians	293	102	35%
Nurse	578	200	34%
Total	1414	504	36%

Source: State Ministry of Health Survey Report, December 2010.

The percentage of trained health cadres in North Darfur State is low, especially for nurses, technicians and medical assistants, 34%, 35% and 38% respectively. Moreover, only 35% of general doctors had received further professional training after graduation. However, NGOs working in the health field play an important role in training health staff on emergency treatment and war surgery, especially those working in rural areas and IDP camps.

According to an interviewee (2-7, 15 January 2011, El Fasher) in the State Ministry of Health:

> Due to the conflict cost among other things, the health workforce in North Darfur is still operating under emergency management. The effective performance of the human resources in the health sector is hampered by a series of structural bottlenecks and imbalances in the health system. For example, in limited resource situations, the state is still investing in operating expensive tertiary level facilities rather than in more efficient and affordable primary care services. In the shift to support policy-and health systems development, a substantial part of the WHO budget is being spent on training health workers who are not able to use what has been learned to improve their work performance.

This view was confirmed by another interviewee (1-5 23 December 2010, El Fasher) working in the State Ministry of Health as a co-ordinator of NGOs:

> Health staff in the State are inadequately trained, poorly paid and work in outdated facilities with constant shortages of equipment. Therefore most qualified health staff have migrated abroad and since conflict started in the State in early 2003, approximately 50% of qualified health staff have moved into the private sector. The content of health staff training needs to be developed in relation to their actual job content and, generally, supply often needs to be attuned and supported from the Federal and State Ministries of Health and NGOs to meet employment opportunities.

The scale and level of training of health personnel in the public sector is related to funding provided by government.

5.3 Health financing: funding and expenditure

In Sudan, the government allocates the majority of funding to security and not to social services such as health. For example, according to Mohamed (2007:41), in 2002, military and security spending in Sudan took up a significant proportion (32%) of public recurrent expenditure, while the allocation for health stood at a lower level of government expenditure. Efforts to increase health service efficiency and revenue have often been frustrated, as the availability of funds in Sudan remains a major constraint on health policy processes, especially as the health services are mainly financed by government, together with some support from international donors. The financial context of the health sector is conveyed in the Table 5.11.

Table 5. 11 Health services expenditure in Sudan, 1997–2009.

Measures of expenditure	Year				
	1997	2000	2003	2006	2009
Total expenditure on health as a percentage of Gross Domestic Product	3.8	3.8	4.3	4.9	7.3
General government expenditure on health as a percentage of general government expenditure	11.9	8.6	9.1	6.6	9.8
Per capita total expenditure on health at average exchange rate (US$)	13	13	21	95	95
General government expenditure on health as a percentage of total expenditure on health	22.4	34.5	43.2	33.2	27.4
Private expenditure on health as a percentage of total expenditure on health	77.6	65.6	56.8	66.8	72.6
User fees expenditure on health as a percentage of private expenditure on health	92.8	95.9	96.3	93	96.2
Externally funded expenditure on health as a percentage of total expenditure on health	1.7	2.4	2.2	8.7	3.2

Sources: World Health Organization Report, 2006b and 2011.

As shown in Table 5.11 above, the total expenditure on health as a percentage of Gross Domestic Product almost doubled from 3.8% in 1997 to 7.3% in 2009.

Total government expenditure on health in 1997 was 11.9%. This decreased by 2.1% to 9.8% in 2009. Therefore Sudan is very far from achieving the 15% share of government expenditure on health services, agreed upon by the member states of the Organization of African Unity (OAU) to improve their health sectors (OAU, 2001: 5, and WHO, 2008b:15).

Government expenditure on health as a percentage of total expenditure on health in 1997 was 22.4%. This increased to 34.5% in 2000 and increased again to 43.2% in 2003. However it decreased dramatically to 27.4% in 2009. This suggests that the majority of health expenditure comes from other sources. The share of external funding rose systematically, from 1.7% in 1997 to 8.7% in 2006. These were the years of civil conflict. But then the level of assistance fell to 3.2% in 2009, a reduction of 5.5%.

Private expenditure on health was 77.6% of overall expenditure in 1997, dropping to 56.8% in 2003, which then grew again to 72.6% in 2009. More noticeable still, however, is that much of this private expenditure comes from payment of user fees, over 90% since 1997, reaching 96.2% in 2009. This is a substantial portion of overall expenditure in health, as Table 5.12 reveals.

Table 5.12 User fees expenditure as a percentage of total expenditure on health in Sudan, 1997-2009

Health services financing indictors	Year				
	1997	2000	2003	2006	2009
Private expenditure on health as a percentage of total expenditure on health	77.6	65.6	56.8	66.8	72.6
User fees expenditure on health as a percentage of private expenditure on health	92.8	95.9	96.3	93	96.2
User fees expenditure as a percentage of total expenditure on health	72	62.9	54.6	62.1	69.8

Sources: World Health Organization Report, 2006b and 2011.

As can be seen, almost 70% of all expenditures in the health system comes from those who pay for the services that they receive.

5.4 Comparison of funding for Ministry of Health in North Darfur State with other Ministries, 2000-2009

North Darfur State is a poor region which has felt the effects of civil conflict over the past decade. In these circumstances, how much priority has the State government given to health in its annual budget? This is addressed in Table 5.13.

Table 5.13 The distribution of budget by percentage among the different Ministries in North Darfur State, 2000 - 2009.

Year	Total budget in billion Sudanese pounds	Agriculture and national resources	Health	Education	Culture, youth and sports	Local government and civil service	Finance	State government: general allocation	Districts
2000	18.2	9.5	7.6	15.7	4.5	6.2	10.2	23.7	27.1
2003	6.4	7.5	6.2	12.7	3.5	6.1	11.2	31.7	21.1
2006	7.4	7.2	5.4	11.7	2.8	3.5	10.8	36.6	22
2009	8.6	6.8	5.6	11.9	3.2	3.1	11.4	38.2	19.8

Sources: State Ministry of Finance and Economy Reports, 2006 and 2009.

The budget allocation on health in North Darfur State has declined steadily from 7.6% of overall expenditure in 2000 to 5.6% in 2009. By contrast, the sum reserved for general allocation, which is mainly for security measures, has grown substantially, from 23.7% in 2000 to 38.2% in 2009.

Therefore the reasons for the discrepancy between overall health expenditure and availability of funds at local level needs to be understood in order to identify strategies for improving the low efficiency of the system.

5.5 The sources of health services financing in North Darfur State

As was discovered when investigating Sudan, in North Darfur State, too, there are various sources of funding for the health system, as Table 5.14 indicates.

Table 5.14 Health finance in North Darfur State, 2003 - 2009.

Year	Total budget for health in millions of Sudanese pounds	Federal contribution (%)	State contribution (%)	NGO contribution (%)	Other external support (%)
2003	327	40.3	7.7	30.6	21.4
2006	480	37.5	12.5	31.3	18.7
2009	1 134	26.5	7.4	52.9	13.2

Sources: State Ministry of Health Financial reports 2006 and 2009.

According to an interviewee (2-8, 23 December 2010, El Fasher) in the State Ministry of Health finance division:

> Due to the decentralization of the health system in Sudan, the state governments are primarily responsible for the funding and delivery of health services. Yet, the amount and type of public financing is jointly determined by both the central and state government. However the state government

> bears a large proportion of total government health expenditure, with the federal government accounting for only a small proportion.

As was discussed in Chapter Three, there are a set of structures that in principle draw together the Federal and State governments in deliberation over health matters. The statistics in Table 5.14 contradict the interviewee's view. The Federal government's contribution to the health budget in North Darfur State is much greater than that of the State government: 40.3% as opposed to 7.7% in 2003, leading to 26.5% versus 7.4% in 2009, although in 2006 the State's share rose to 12.5%. The North Darfur State government then is very reliant on Federal support. But it is also noticeable that the Federal government's contribution has declined significantly since 2003. This has not been reflected in monetary terms, however, since the overall sources of funding on health almost quadrupled over a six-year period.

What is listed as other external support in the State Ministry of Health statistics are user fees. This has also declined over the years, from 21.4% in 2003, to 18.7% in 2006, to 13.2% in 2009. Again, the source of payments in monetary value has remained fairly constant throughout. What is more telling is the indication in 2009, for example, that revenue from user fees was nearly twice as much as the contribution from State government and 50% of the federal government's provision.

Also as seen in Table 5.14, external financial support for health care in North Darfur State is substantial, and it has become increasingly so, from 30.6% in 2003 and 31.3% in 2006, growing even more to 52.9% in 2009. The State is therefore greatly dependent on the role of NGOs.

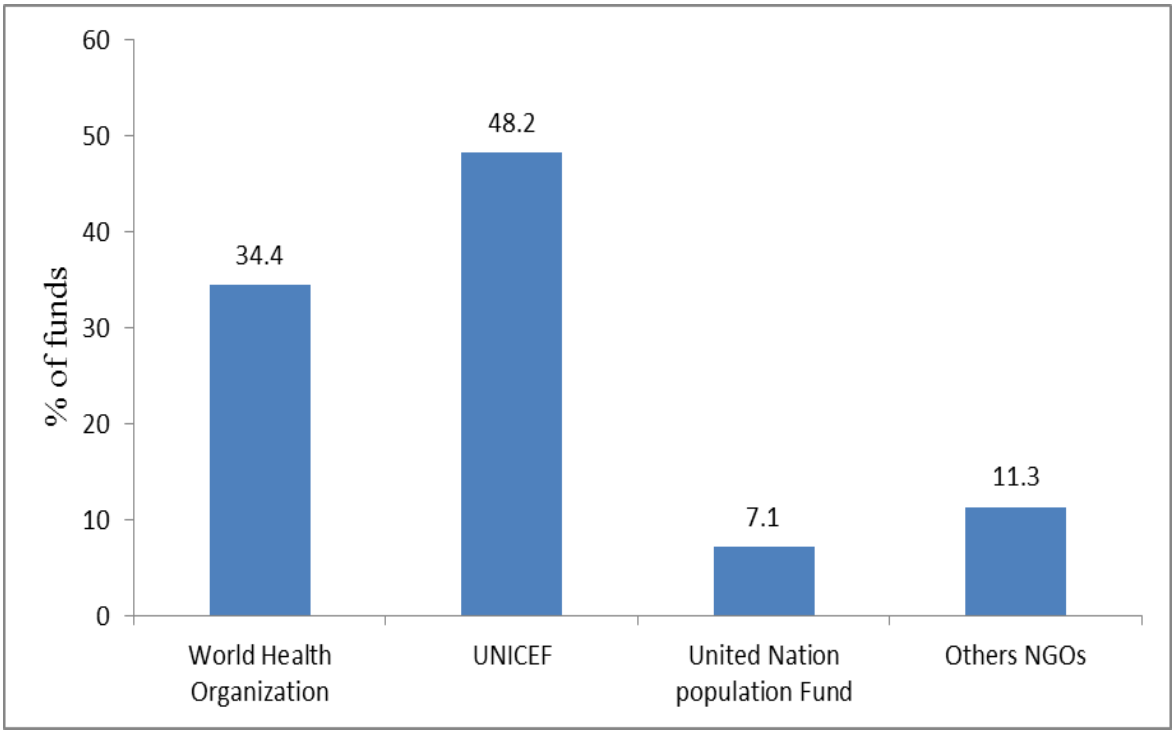

Figure 5.3 Relative financial support by NGOs to health services in North Darfur State in 2009.
Source: State Ministry of Health Financial Report, 2009.

As shown in the Figure 5.3 above, the main financial support from NGOs for health services in North Darfur State comes from WHO and UNICEF, which contribute 34.4% and 48.2 % of total health expenditure respectively.

The statistical portrait of sources of financing on health was confirmed in most of the interviews. According to an interviewee (2-9, 15 January 2011, El Fasher) in the finance division in the State Ministry of Health:

> The State Ministry of Health faces big challenges to finance health services in the State. Most people are not able to access health services by paying. In the meantime, the government is not able to provide free health services in the public sector because of financial problems. Therefore since the conflict started, the State Ministry of Health is depending completely on donors and international NGOs to support it. Currently the situation of financing health

> services is a little better than when the conflict started because the government makes a big effort to increase financing to provide health services to the all people in North Darfur State.

Ten of eleven interviewees disclosed that the financial situation of health services in the State is very bad and that the government is not able to provide enough funding to finance curative health services. Without support from donors and international NGOs, the government cannot provide curative health services to IDPs and all the poor affected by conflict. Only one interviewee stated that although there is a scarcity of funds to finance curative health services in the State, the government has been making a considerable effort and that the situation is now better than when the conflict started in 2003.

Besides relying on international NGOs, what is noteworthy is North Darfur State's dependency on private user fees. This will now be explained in more detail.

5.6 Private users' fees for curative health services in North Darfur State

The Sudanese government claimed that the objective for the imposition of user charges was to improve the quality and efficiency of the health services but in reality it has been to compensate for the cutback in government spending. In Sudan, the payments of user's fees are around 92-96% of total health expenditure (WHO, 2006a:27-28), (see Table 5.2). In North Darfur State, 70-80% of the cost of teaching hospitals were offset by user fees (State Ministry of Health Financial Report, 2009).

According to the State Ministry of Health Finance Report (2009), the health centres and clinics were allowed to retain only 20% of their revenue from user fees, and hospitals 40%. The rest, the majority, was sent to the State Ministry of Health. This occurred while health institutions such as rural hospitals and health centres in district areas were facing substantial shortages and lacked the financial resources to provide a more adequate health service.

There is no data available on household health spending in North Darfur State. According to the SMoF Report (2009), 80% of residents earned less than 400 Sudanese pounds, or $ 114 per month. Curative health service in the public sector is not free, except in the health centres serviced by international NGOs in the IDP camps surrounding the big towns in the State. The initial consultation with a doctor in a public facility is free. Drugs are provided free of charge in an emergency department for the first 24 hours of admission (WHO, 2006a:21). In the private sector for a consultation a patient needs to pay 25 pounds (US$ 7). All in all, bills of 100-150 Sudanese pounds (US$ 29-43) are not unusual for treatment, which is unaffordable for the lowly paid and the unemployed.

According to an interviewee (1-6, 15 January 2011, El Fasher) in El Fasher Teaching Hospital:

> The user fee varies according to the level of care. At the first contact level (primary health units, dressing stations and dispensaries) where the provider is a community health worker, a trained nurse or a medical assistant, the consultation is free. Nevertheless, users have to pay for simple diagnostic tests like blood films for malaria and urine or stool tests, in addition to the cost of medicines.

According to an interviewee (1-7, 18 January 2011, El Fasher) based at a private health clinic, 'the consultation fees and medical costs in the private sector are very high for the ordinary person to get treatment. Because 80% of people in the state are poor, they are not able to get treatment from a private clinic'. When asked why he made the consultation fees very high, this interviewee said that this is because of high taxes imposed by government. The high price of medicines, he said, is because most of them come from other countries such as Egypt and Jordan. Because of such expensive of medicines, 80% of rural people use traditional medicine.

The teaching hospital in El Fasher lacks many of the basic supplies that are necessary for providing proper medical care for patients, particularly for those with chronic diseases such as diabetes, TB and HIV. Therefore patients are required to pay for almost everything

needed for their medical treatment. This leads to an increase in hospital bills, placing a heavy burden on the patient and their family members.

In addition, if the relatives of patients wish to visit them in public hospitals such as El Fasher, they each have to pay an entry fee of about one Sudanese pound in the reception area. This cost is a further barrier to support for those who can least afford it.

5.7 The consequences of the lack of public financial resources for delivering curative health services

One consequence of the very limited government budget for health is that employees in the public sector are encouraged to supplement their incomes elsewhere, otherwise they might leave government service altogether.

According to an interviewee (2-10, 15 December 2010, El Fasher) in the State Ministry of Health finance division:

> Insufficient government funding for public health services has kept physicians' salaries very low, 600 Sudanese pounds per month (US$ 171) compared to what other equivalent professionally trained persons can earn in the private sector which is 2 100 Sudanese pounds per month (US$ 600) Therefore medical officers in North Darfur State tend to work at private hospitals after they finish their duty at public hospitals, in order to increase their monthly income.

Since staff are not highly paid in the public sector, in order to supplement their income the government allows doctors and technicians to work in private practice after their official working hours. This policy is abused by many of the workers, as many of them tend to work in the private sector during official working hours, thus impeding the provision of health care services in the public sector.

This was confirmed by an interviewee (2-11, 12 December 2010, El Fasher) in El Fasher hospital who stated that: 'when patients come to the hospital in the morning they will find the doctors around, but when the patients come after 10 a.m. they do not find any doctors around; usually the doctors go out for breakfast and after that they will go to their own private clinics'.

The WHO (2003:17), notes that most informants indicate that federal and state funds are scarce and are often insufficient to cover the totality of recurrent costs. Consequently, salaries are paid irregularly, especially outside Khartoum. Thus not only are salaries low in the public sector, but also their payment is not guaranteed.

A second consequence of the lack of public funds is reflected in a public health service which has been unable to meet the needs of the people and therefore has, in effect, transferred some of this responsibility to the private sector. The quality and prices of care in the private sector is often criticized, although it is perceived by the users to be better than government services. According to an interviewee (1-8 12 December 2010, El Fasher) working in a private health clinic:

> The curative health service in the private sector is of good quality and very easy to access for rich people, but it is not easy for the poor to access because it is very expensive. For example, to see a general doctor will cost a patient around 25 Sudanese pounds, (US$ 7). To see a specialist doctor will cost a patient around 50 to 70 Sudanese pounds, (US$ 14-20). This price does not include the cost of laboratories and drugs. These prices are affordable for those working in the public sector, but for those working in the private sector they are not.

Thirdly, financial factors have helped to cause a regional imbalance. Medical personnel are scarce in rural areas, and many of them have come to give more emphasis to private practice rather than public service. Moreover, in mid-2011 the federal government took the decision to concentrate all the public teaching and specialist hospitals in Khartoum. The costs of maintaining these facilities is planned to be subsidised by the State governments.

In health terms, this further disadvantages those who live in North Darfur State since they would have to bear the costs of additional travel to and accommodation in the national capital, a distance of about a thousand kilometers. These consequences are themes that will be addressed again in Chapter Eight.

5.8 Health service expenditure in North Darfur State, 2000-2009

The Ministry of Health in North Darfur State in its report for 2009 made four general points concerning expenditure on health. First of all, government expenditure on the war effort has seriously diminished the health budget for recurring expenditure. Secondly, health services mainly fund curative care. Thirdly, the districts receive relatively little financial support. Fourthly, resources flow mainly to El Fasher. It is difficult to analyse these four factors more precisely since the official data on health financing is deficient, especially at district level. However, a general pattern of public health expenditure in North Darfur State can be determined, as Table 5.15 shows.

Table 5.15 Distribution of the public health budget in North Darfur State, 2000-2009.

Year	Salaries (%)	Appliances and equipment (%)	Other kinds of expenditure (%)
2000	92.3	2.6	5.1
2003	93.7	3.2	3.1
2006	91.6	4.4	4.0
2009	98.8	0.6	0.6

Sources: State Ministry of Health Financial Reports, 2006 and 2009.

Well over 90% of the State's health budget is allocated for salaries. This leaves very little available for appliances and equipment, or for any other service.

5.9 Conclusion

To assure the clinical quality of curative health services, sufficient, fully trained health staff need to be available as well as adequate financial resources. This has not happened in

North Darfur State. The Sudanese government's and WHO's norms and standards for health personnel have not been achieved. Health staff in North Darfur State are also not well distributed across all districts, with most based in the main urban area, El Fasher. Most of the qualified health staff also work increasingly in the private sector, or for international NGOs.

The Ministry of Health in North Darfur State has had a shortage of public resources to finance health services. Government spending on health, at both the Federal and State levels, has not matched the needs of the region. Instead North Darfur State has come to depend on user fees and especially on international NGOs to finance health services. NGOs over the past few years represent the largest source of financial support for curative health services in the State.

The Sudanese government's NHP of 2007 emphasizes the need to coordinate federal, state and district structures, as was explained in Chapter Three. Given the scarcity of human and financial resources for curative health their effective use depends on how well they are managed and administered in the health system. This is the focus of the next chapter.

Chapter 6

Co-ordination between Federal, State and District Levels in Managing Health Systems and Policy Implementation in North Darfur State

6.1 Introduction

In Sudan, the three levels of government are responsible for health services. The Federal Ministry of Health is responsible for formulating national policies, international relations, human resource development for health, health legislation and control of epidemics. A State Ministry of Health is responsible for planning, administration and financing of health services within the framework of national health policies. Districts plan and implement health programs at the lower level (World Bank, 2003: 58).

Sudan, like many developing countries, has introduced decentralization. Consequently, the tasks of carrying out health policy have shifted from federal level to the state and district levels. Besides the poor ability of all three levels of government to manage and implement health systems and policy effectively, there are many factors that have affected and weakened the co-ordination between the three levels of government in context of North Darfur State. These factors include the system of decentralization itself, conflict, distance and communication, transfer of funds and lack of trust. Such factors will be investigated in this chapter.

6.2 Factors affecting health system management and policy implementation at federal, state and district level in North Darfur State

6.2.1 Decentralization

An understanding of what the decentralization of health services has meant in practice in North Darfur State was obtained from interviews with government officials. This is portrayed in Table 6.1 where the division of responsibilities between the three levels of government are indicated.

Table 6.1 Responsibilities of the levels of government in Sudan for core health system functions, service delivery, policy implementation, operational maintenance, and information management.

Health system functions	Level of government		
	Federal	North Darfur State	District
Financing			
Income generation and sources	****	***	**
Budgeting, revenue allocation	****	****	*
Expenditure management and accounting	***	****	**
Financial audit	****	****	**
Human Resources			
Staffing (planning, hiring, and evaluation)	****	**	*
Contracts	*	****	*
Salaries and benefits	****	**	*
Training	****	**	*
Service delivery management and policy implementation			
Health institutions and facilities management	*	****	***
Setting standards and regulation	****	*	*
Monitoring of service providers	*	****	***
Managing insurance schemes	****	*	*
Contracts with health providers	****	**	*
Payment mechanisms and regulations	****	*	*
Providing services for targeted people	****	***	*
Providing medicines and supplies	**	*	*
Policy design responsibility	****	*	*
Policy implementation responsibility	*	**	****
Policy supervision and evaluation responsibility	****	****	*
Operational maintenance			
Health facilities and infrastructure	*	****	**
Vehicles, equipment, and communication tools	*	****	*

Information Management

Health information systems design	****	*	*
Data collection and analysis	*	****	**
Information sharing with other partners	**	****	*

*= Not responsible; **= Limited responsibility; *** = Substantial responsible; **** = Widely responsible

Source: interviews, December 2010.

As shown in Table 6.1 above, most responsibility for health services delivery, system management, and policy implementation, has been assumed by the federal and state levels, while the actual provider of health services and the implementer of health policy is the district level.

6.2.1.1 Financing

As Table 6.1 indicates, the main responsibility of health financing is shared between the federal and state level.

According to an interviewee (2-1, 23 December 2010, El Fasher) working in the State Ministry of Health finance division:

> The central government's financial contribution is small but central government's influence can be considerable. Both central government and state government do not give a high priority to health. The lack of sufficient political commitment to make health a priority and the limitation of public administration means that states with low income find themselves fiscally constrained by two factors. Firstly, the central government's distribution of revenues across the States does not prioritise additional funding to poor states such as North Darfur State. Secondly, the fiscal space for development spending in the poor states is small and small states incur a large share of the obligatory expenditures, including wages, salaries etc. All these circumstances mean that the federal and state levels are not able to take their responsibilities to provide adequate financial resources to deliver quality curative health services and manage and implement health system and policy effectively.

6.2.1.2 Human Resources

As seen in Table 6.1 the federal government is mainly responsible for offering salaries and benefits as well as training while State government is in charge of contracts.

According to an interviewee (2-2, 23 December 2010, El Fasher) in the State Ministry of Health:

> In reality both levels [Federal and State] failed to take their responsibilities in providing health staff. For example, the conflict in the State since 2003 resulted in a severe shortage of qualified health workers of all cadres and had a negative long term impact on the stock of different categories of staff. The government does not take any care to appoint new health staff because health service is not its priority right now. The stability of security comes first by paying most of its budget to control the security situation. Therefore there are many hospitals and health centers in districts such as Kalamondo and El Waha districts without doctors. In addition to the shortage of health staff in North Darfur State, the majority of existing health workforce doesn't have adequate technical capacity to deliver quality health services and address the priority health problems and activate health system functions.

6.2.1.3 Service delivery management and policy implementation

The responsibility for managing health institutions and facilities and monitoring service providers belongs, as seen in Table 6.1, to the State and district levels, but the issue is whether they are able to carry this out. The responsibility for contracts with health providers, payment mechanisms and regulations, providing services for targeted people and providing medicines and supplies are mainly transfers from the federal government, but in reality these are left for State and district levels, as was disclosed by interviewees.

According to an interviewee (2-3, 23 December 2010, El Fasher) in the Federal Ministry of Health:

> The federal level has a right to sign contracts for international NGOs and donors to provide health services especially in conflict-affected areas such as North Darfur State. This is not difficult for the government because it does not cost them any

> money, but problems come when the federal level takes the responsibility for payment mechanisms and regulations and is not able to activate this task. The health administrators at State level are complaining about the system of payment. For example, some State administrators receive their salaries very late and no one at the federal level cares about this. This has resulted from the weakness of the payment mechanism system. Also sometimes the transfer of health equipment from federal to state to district level takes months to arrive.

The interviewee also mentioned that:

> The regulations are not active even at federal level let alone at the state and district level. Providing services for targeted people who are affected by conflict or epidemics is the responsibility of international NGOs, not federal or state levels. Currently the public health facilities have been supported by NGOs in providing medicines, especially life-saving drugs and other necessary supplies such as electricity to the poor and vulnerable people in North Darfur State.

According to Table 6.1 the federal government is responsible for policy design. Supervision and evaluation are shared between federal and state levels, while districts are mainly responsible for implementing policies. How this was realised in practice was expressed in interviews with public health officials in all three levels of government.

According to an interviewee (2-4, 3 February 2011, Khartoum) in the Federal Ministry of Health:

> Sudan applied decentralized administrative procedures to the lower levels but it is still strengthening central control over policy design and budgetary activities; decentralization is very sensitive in that it is concerned with the distribution of power and the locations of resources. The implementation of NHP in a decentralized system requires strong political commitment to achieve a good result. In North Darfur State, the State Ministry of Health is unwilling to implement NHP effectively because state and district authorities have been reluctant to accept their new responsibilities of power without resources.

According to an interviewee (2-5, 22 December, El Fasher) in the State Ministry of Health:

> Poor states such as North Darfur State do not have enough resources to meet their commitments regarding their responsibility to implement health policy successfully. In North Darfur State we struggle with insecurity regarding the financing of health services. We also don't have enough health administration staff and those that we do have don't have any training in how to manage and implement health systems and policies. Since 2002 we haven't received any budget from federal government for development of the health sector, and without these budgets, we are unable to manage and implement health systems and policies in the State.

According to an interviewee (1-1, 26 December 2010, El Fasher) in El Towasha district hospital:

> We don't have administration staff to control health policy implementation. I'm a doctor and administrator at the same time and I'm busy treating patients; I don't have time to manage health policy as well. The authorities at state level don't consult us when they are designing health policy and we are responsible for its implementation; we should be involved at the decision-making stage of health policy design.

According to an interviewee (1-2, 21 January 2011, El Fasher) in El Malha district hospital:

> A decentralized health system without qualified administration staff, good means of transport, modern equipment and enough funds to finance health services and to pay for health staff, cannot succeed at district level and achieve its objectives. We constantly complain about the poor situation of the health service delivery system, especially at district level. Implementing health policy in decentralized structures in North Darfur State represents an arena of struggle between a local level wanting more funding and autonomy, and a central level not providing adequate budgets to the lower levels.

6.2.1.4 Operational maintenance

Operational maintenance of health facilities and infrastructure, provision of vehicles, equipment, and communication tools, is mainly the responsibility of State government, as Table 6.1 indicates.

According to an interviewee (2-6, 20 December 2010, El Fasher) in the State Ministry of Health:

> Because North Darfur State experienced a lack of natural, human and economic resources as well as conflict, the health facilities infrastructure became very poor. Health facilities, especially in rural areas, were looted and destroyed and other health infrastructure issues still beleaguer the existing health facilities, including inadequate and/or complete lack of medical equipment, transport and communication equipment, water and energy, all of which are required for the health infrastructure to be fully functional.

6.2.1.5 Information management

Designing information systems for the health sector is very much the responsibility of the federal government, whereas operationalising the systems, that is, collecting, analysing and disseminating the data, is left mainly to the state level. This division of roles is indicated in Table 6.1. But in practice there seems to be confusion and uncertainty.

According to an interviewee (2-7, 05 January 2011, El Fasher) in the State Ministry of Health:

> In the State Ministry of Health here we don't have any kind of effective health information system. The health administrations at state and district levels are writing reports describing the situation of health service delivery but even these reports are not coming to the State Health Ministry regularly and at the federal level they didn't even ask for reports from State level. Therefore the communication across the district, state and federal levels is weak and is

> characterized by inadequate and inconsistent reporting, information gathering and feedback. This has resulted in a lack of clarity among health staff of key health policies, poor information sharing, and inadequate use of evidence to support planning and decision making. This undermines health system and policy development, stakeholder engagement, and policy implementation on the ground.

The interviewee also mentioned that:

> The monitoring and evaluation of the health system has the following challenges: poor coverage of information technology equipment to analyze and process data in the states; limited power sources such as electricity especially outside El Fasher town; communication and transportation problems for data to be transmitted from the collection to the processing points and no effective delegation for decision-making and action.

In general 90% of interviewees at federal, state and district level stated that the decentralized systems in Sudan and the effectiveness of health system management and policy implementation face many challenges. These are: shortages of trained human resources; a high turnover of existing qualified staff; inadequate office facilities; and limited financial resources within the State Ministry of Health and within health institutions at district level. Overall, data collection, reporting, use, and storage were a serious constraint hindering proper monitoring and evaluation of the implementation of the decentralization strategy at State and district levels.

This confirms recent research by El-Saharty *et al* (2009:33-34), which stated that the decentralization policy in Sudan created opportunities for local governments to be responsive to local challenges but it also created a major challenge in ensuring that national priorities were adequately funded in regional and district plans. Weak management capacity, in particular at the district level, stood out as a key constraint to governance in the health sector. Rapid staff turnover affected health sector management at all levels and was arguably the most common and serious bottleneck in the country's efforts to implement health service delivery policy. The key lesson learned was the need to

strengthen planning and management capacity at all levels, El-Saharty *et al* (2009:33-34) suggested. At federal level, all interviewees in this study stated that the decentralized health service delivery system in Sudan has not received adequate financial support, trained administration staff, or facilities, and this has led to failure in improving the overall performance of health services.

At state level, 94% of interviewees, administrators and professionals indicated that without sufficient funds coming from federal level, policy implementation in North Darfur State was affected, which led to state and district authorities being unable to carry out their responsibilities properly. All the interviewees at State and district level also pointed out that they did not have enough skills and knowledge on how to manage policy implementation. Therefore the implementation of health policy is failing in the decentralized system, interviewees say, because of a lack of sufficient knowledge on how decentralization can contribute to improving the performance of the health system.

At district level, which bears responsibility for health policy implementation, 81% of interviewees disclosed that the decentralized system, coupled with scarce financial resources, lack of administrative health staff, and a lack of transport facilities, such as vehicles, and communication equipment, such as telephones, are the main factors blocking health policy implementation.

These general factors which have undermined the decentralization of the health system in North Darfur State have been made more complex by the ongoing conflict in the region.

6.2.2 Conflict

The conflict in North Darfur State has resulted in massive population displacement and widespread insecurity. This has consequently led to the further deterioration of the already undeveloped health system and infrastructure in the State (WHO, 2007a:64). The fragile health service system in Darfur was unprepared for the large influx of people requiring health care and the need for health services infrastructure became obvious, as only primary health care facilities were established in IDP camps and in some small towns. The State

and local rural hospitals in Darfur were unable to sustain their programmes to provide free treatment to IDP camps and the conflict-affected people (WHO, 2007b:4).

In this regard, 89% of interviewees at federal and State level, and 95% at district level disclosed that the conflict weakened the infrastructure of health services in North Darfur State. Most of them also indicated that this caused the marginalization of the Darfur region from national government, together with the civil war that started in the region in the 1980s and ended in serious conflict between rebel groups and government forces in 2003. This is confirms the FMoH Report (2007a:15), and the SMoH Survey Report (2010), which both stated that the conflict in North Darfur State has either destroyed much of health infrastructure or left it in need of maintenance and repair.

There have been reports of destruction of rural hospitals and clinics, increased absence of health care providers at these health facilities, blockades of essential drugs and other health commodities into certain health facilities, and difficulties in conducting supervision and monitoring visits by State health officers at district level (State Ministry of Health Survey Report, 2010). These factors have all impacted health policy implementation in the State. This was confirmed by 95% of interviewees at all levels of government. 89% of interviewees at State level and all interviewees at district level disclosed that health policy implementation has failed completely due to conflict.

According to an interviewee (1-3, 11 January 2011, El Fasher) in the State Ministry of Health:

> The conflict which exploded in North Darfur State has affected health policy implementation. This is because health policy is designed at federal level and needs to be monitored and implemented at district level. We don't have enough funds or enough qualified administration health staff to send them to the districts to evaluate the situation there and even if we send teams from the State level, they cannot reach the health centres and basic health units at district level, due to the insecurity.

Brinkerhoff (2008: 6), has pointed out that sustainable health service delivery capacity, and efficient management systems and policy, along with effective policy making and health governance, are necessary for conflict-affected states to establish sustainable development of their health sectors.

According to another interviewee (2-8, 05 January 2011, El Fasher) working in the State Ministry of Health:

> The conflict in North Darfur State affected every aspect of the health service delivery system in the State, such as limiting the human, material and financial resources for the implementation of health services policy. In the long-term the government should take the responsibility to improve and reform its health system and policy, so as to provide quality free medical treatment to all people in need of health services. In the short-term, quality health services delivery to the population needs strong collaboration and co-ordination between all stakeholders; the Federal Ministry of Health, the State Ministry of Health, NGOs, and the community.

According to an interviewee (2-9, 07 January 2011, El Fasher) in the State Ministry of Health:

> North Darfur State has suffered from continuous civil war since 1980, between sedentary farmers and nomads in competition for natural resources. In 2003, war broke out between rebel groups accusing the Khartoum government of marginalizing the Darfur region. This led to successive waves of massive population movement, coupled with drought and land degradation and severe loss of human resources (brain drain), especially in the health sector. All these factors have severely affected the health infrastructure and health status in the State. The conflict delayed development projects, including the health sector, most health facilities having been destroyed or affected by the conflict.

He also disclosed that health workers struggle to cope due to the conflict. For example, in October 2009 the rebels were accused of attacking the joint teams from the Ministry of Health and NGOs, who were on their way to the Kutum district, and robbing them.

6.2.2.1 Consequences of conflict on curative health service delivery

According to the interviewees, conflict in North Darfur State has had a negative impact on curative health service delivery, health system management and policy implementation. This has been through creating poor conditions for health workers and by destroying most health facilities and communications, especially in rural areas. An additional impact is the lack of financial resources, because, as was explained in the previous chapter, government revenue has increasingly been directed to control the security situation.

The consequences of conflict on curative health service delivery system management and policy implementation in the State are outlined in Table 6.2. These factors emerged from the interviews that were conducted with health personnel in the public sector.

Table 6.2 The consequences of conflict for curative health service delivery system management and policy implementation in North Darfur State.

Inadequate resource availability:

- **Financial**

1. Diversion of resources to security issues.
2. Reduced revenue for social services in general and health in particular.
3. Increased level of dependence on NGOs and donor funds.

- **Health workers:**

1. Injured and kidnapped.
2. Displaced to urban areas, capital of country and out of country.
3. Poor morale.
4. Poorly paid, if at all especially those working in government sector.
5. Disrupted training and supervision.

- **Equipment and supplies:**

1. Lack of maintenance.
2. Lack of drugs.
3. Reduced provision of modern technologies.
4. Inability to maintain cold chain due to unavailability of electricity.

- **Service Infrastructures:**

1. Destruction of clinics and basic health units.
2. Destruction of bridges.
3. Lack of electricity supplies.
4. Disrupted referral and communications in general.

Management and organization of health service delivery:

1. Diversion from development based programs to emergency care.
2. More centralized, urban-based, vertical programmes and ignorance of horizontal programs.
3. Increased dependence on simple programs and ignorance of complex programs.
4. Focus on the short term system.
5. Lack of consultation on management and organization of health services.
6. Lack of data for evaluation and decision-making.
7. Limited management training for health staff.
8. Lack of capability to monitor funds and resources.

Changes in health service delivery situation:

1. Shift from primary to secondary care, such as curative health services.
2. Decreased activity of health service delivery in remote and rural areas.
3. Increased provision of health service in urban areas.
4. Disrupted campaigns of disease control, health promotion, and population outreach.
5. Reduced access to and utilization of public health facilities by increasing the fees of health services.
6. Increased private provision of health services, especially private clinics.

Source: Interviews, December 2010.

Due to the conflict, health workers are in constant danger if they are not in the urban areas. Even so, they are poorly and irregularly paid if they are in government service. In dealing with the conflict, less government revenue has become available for the health sector, which has become increasingly reliant on assistance from NGOs and external donors.

The conflict has led to a breakdown in health infrastructure and supplies. This has affected how the health system itself is managed, with an emphasis on emergency care and centralising treatment in urban locations. The remote, rural areas consequently receive less health services, where primary health care has suffered, diseases are controlled less effectively, and training and monitoring are neglected.

6.2.3 Distance and communication

Country size in decentralized systems influences the effectiveness of health system management and policy implementation. In a large country such as Sudan, it is difficult to ensure efficient health system management from the centre. For example, the distance between Khartoum, where the Federal Ministry of Health is located, and El Fasher, where the State Health Ministry is located, is 809 km without any good roads and cheap plane travel. Equally, North Darfur State itself is very large; it covers an area of 296 420 square kilometres and it has 15 districts see figures 1.1 and 3.4. Some of these are very far from El Fasher, the State capital, such as: El Tina, 300 km to the west; El Malha, 200 km to the north; and El Liyit; 185 km to the east. Therefore 93% of interviewees at all levels stated that country size affected the effective management of health systems and policy implementation in the state. Ninety five percent of the health professionals and administrators working at district level also disclosed that due to the distance between some districts and El Fasher, they are unable to manage and implement curative health policy effectively. This is because there are sometimes no means of communication, whether phones or vehicles, and for two or three weeks they may work completely in isolation.

According to an interviewee (2-10, 28 December 2010, El Fasher) working in El Malha district:

> Due to the distance from El Fasher, from where we receive our health service supplies, in the rainy season we sometimes go a week without some health supplies and drugs. As we don't have a vehicle of our own, we have no choice but to wait until private transport delivers our supplies. Also due to the distance, no one from the State Ministry of Health visits to check on the quality of health services delivery and what problems we face. As such, we work in very bad conditions and this prohibits us from managing the health system and implementing health policy as should be the case.

According to an interviewee (1-4, 19 January 2011, El Fasher) working in El Tina rural hospital:

> Due to the distance between El Fasher and El Tina on the Chad border (300 kilometres), sometimes we run out of necessities such as trauma drugs and oxygen for two or three weeks. Due to the insecurity situation, we usually receive our health care needs through the African Union/United Nation Hybrid Operation in Darfur (UNIMED) helicopters.

Due to the long distances and poor roads between Khartoum and El Fasher, and between El Fasher and the district administration, health service delivery staff and authorities work in isolation. To some extent, means of communication can overcome the challenges of distance. But communication in the health system in North Darfur State has itself been problematic.

Effective communication between all levels of health service delivery is an important factor in the health sector. Clearly communicated channels provide direction and certainty for all actors and contribute to effective implementation of health policy. As shown in Table 6.5 below, 88% of interviewees at all levels, 83% at State level and 95% of interviewees at district level indicated that health system management and policy

implementation have been facing difficulties of poor communications tools between federal, state and district levels in North Darfur State.

Table 6.3 Interviewees' responses about effectiveness of communication tools between federal, state and district levels in North Darfur State.

Government level	The number of responses	Type of response		Percentage (%)		
		Yes	No	Yes	No	Total
Federal level	3	1	2	33%	67%	100%
North Darfur State level	18	3	15	17%	83%	100%
District level	21	1	20	5%	95%	100%
Total	42	5	37	12%	88%	100%

Source: Fieldwork Data, December 2010.

During the interviews, health practitioners in government acknowledged that the implementation process suffers from communication gaps between the levels. They also disclosed that these gaps prevent the flow of information from lower to upper levels, particularly in understanding the problems which face curative health service provision at district level. All interviewees acknowledged that they are working in semi-isolation from one another because communication facilities such as public telephones, cell phones, and internet service are not available, especially at district level. These types of communication equipment are very effective and efficient in referral systems, linking all levels. Such equipment allows feedback to the original referral point, in order that difficulties facing district levels in providing and strengthening the continuity and quality of curative health services may be known.

Such difficulties in communication were recognised earlier by the SMoH Report (2009). The FMoH has a co-ordination and communications office within the Directorate of External Assistance and Co-ordination for strengthening communication within the FMoH, the government Directorates, and the SMoH. However, there is still a lack of clarity on channels of reporting and communications, as well as a lack of a functioning communications protocol between federal, state and district levels. There are no systems in

place for regular, structured communication, either with states or with other health partners such as NGOs.

Communication between federal and state levels is itself weak and is characterized by inadequate and inconsistent reporting, information gathering and feedback. This has resulted in a lack of clarity among health staff regarding key health policies, and poor information sharing, inadequate use of evidence to support decision-making and insufficient support provided to staff.

According to an interviewee (1-5, 28 December, El Fasher) working in Kepkabiya district hospital:

> Due to the conflict, the communication situation between State and district is very difficult; because not all communications tools to communicate with State level are available. Some remote districts such as Kepkabiya, El Tina and El Malha have been using UNAMID helicopters and NGOs vehicles to communicate with El Fasher the capital of the State to receive some medicines, appliances and equipment, especially in rain seasons.

According to another interviewee (1-6 27 December, El Fasher) working in El Tina rural hospital:

> There is limited communication infrastructure (internet, telephones and computers), especially at State level and a complete absence at district level. An internet connection is being installed in the State Ministry of Health by WHO but it is not accessible all the time because of unsustainable electricity supply and service problems which have been solved by UNAMID and other organization.

For example, due to the lack of electricity supply in most health facilities, especially in rural areas, UNAMID and other international organizations try to provide electricity generators for health facilities, as shown in Figure 6. 1 below.

Figure 6.1 El Tina district hospital, generator provided by UNAMID (27/08/2011).

This lack of communication undermines health policy development, stakeholder engagement and ownership, and health policy implementation on the ground. Without adequate and timely communication, between federal, state and district levels, health management teams cannot effectively fulfill their supervisory roles, nor manage and implement health policy effectively.

6.2.4 Transfers of funds

Given the context of the decentralized system in Sudan and the desired linkages between the various levels of government, federal government should fulfill its obligations to provide financial transfers to the State level, and the State level in turn should transfer finances to the district level smoothly and without delay in order to implement health policy effectively. As shown in Table 6.4 below, 90% of interviewees at all levels and 95% of interviewees at district level suggested that the transfers of funds from the federal level to the State, and from the State to the districts, are not working effectively.

Table 6.4 Interviewees' responses about transfers of funds from federal level to state and district levels in North Darfur State.

Government level	The number of responses	Type of response		Percentage (%)		
		Yes	No	Yes	No	Total
Federal level	3	1	2	33%	67%	100%
North Darfur State level	18	2	16	11%	89%	100%
District level	21	1	20	5%	95%	100%
Total	42	4	38	10%	90%	100%

Source: Fieldwork Data, December 2010.

Public officials dealing with health services in the government of North Darfur State, as well as those in the districts, strongly indicated, as Table 6.4 shows, that in their view finances are not being transferred readily from the federal to the state and district levels. This seriously compromises the delivery of health services throughout North Darfur State.

According to an interviewee (2-11, 08 January 2011, El Fasher) working in the finance division in the State Ministry of Health:

> The fund transfers from federal government are usually delayed and we usually receive it around the 5th to the 10th of the month. The delay in health funding reaching us interrupts our health services delivery and policy implementation. With the situation of weak health financing by states, transfers from the federal level have a crucial part to play in increasing the amount of, reducing the inequality in, and enhancing the efficiency of health expenditure in North Darfur State.

According to an interviewee (2-12, 03 February 2011, Khartoum) working in the Federal Ministry of Health:

> The national government has struggled, not only with the amount of funding but also with the mechanisms transferring the funds to the State level. The problems of transfer include delays in transferring, and some funds are transferred directly for the improvement of facilities and priority programmes

for the control of specific diseases. This situation has often led to states accepting the central funds for health infrastructure but being unable to allocate additional balancing funds for delivering quality health services and managing and implementing health policy effectively, according to the NHP guidelines and objectives. The transfer of funds from State to district has not been regular and all the funds are health workers' salaries; there are no funds for developing the health sector at district level.

There is uncertainty in how the health structures at each level are playing their role in providing and supporting health services in North Darfur State, especially during a period of violent insecurity. Together with difficulties of communication and obstacles in receiving projected transfers of public funds, this has led to a breakdown in trust between the three levels of government.

6.2.5 Lack of trust between the authorities at federal, state and district levels

According to Walker and Gilson (2004:1251), the gap between policy objectives and outcomes is a demonstration of how policy is recreated through the process of implementation, rather than an implementation failure; developing inter-personal competence and trust within organizations is necessary to strengthen policy implementation. Health system management and policy implementation do not produce a good quality health service without strong relationships and high levels of trust between all levels, federal, state, and district, which are necessary in order to address health service issues and to solve problems. As shown in Table 6.7 below, 88% of interviewees at all levels and 95% of interviewees at district level pointed out that there is a lack of trust between the authorities at federal, state and district levels regarding their responsibilities in managing and implementing health systems and policy. This is clearest at district level, where all but one interviewee indicated that the authorities at federal and State level do not trust the abilities of district officials to manage and implement health systems and policy.

Table 6.5 Interviewees' responses about the lack of trust between the authorities at federal, state and district level in managing and implementing health system and policy in North Darfur State.

Government levels	The number of responses	Type of response		Percentage (%)		
		Trust	Luck of trust	Trust	Luck of trust	Total
Federal level	3	1	2	33%	67%	100%
North Darfur State level	18	3	15	17%	83%	100%
Districts level	21	1	20	5%	95%	100%
Total	42	5	37	12%	88%	100%

Source: Fieldwork Data, December 2010.

According to an interviewee (2-13, 27 January 2011, Khartoum) employed in the Federal Ministry of Health as a general manager of health policy and planning:

> The Federal Ministry of Health does not have enough qualified health administration staff to send to the State to train the state health staff in managing and implementing health systems and policy effectively, and at the same time, we don't have enough of a budget to do that. Meanwhile there is a lack of qualified health administration staff and we don't trust them to participate in the health policy design process because they don't have enough skills. Therefore health system management and policy implementation is not working properly in any of the states in Sudan, not only in North Darfur State.

According to an interviewee (2-14, 23 January 2011, El Fasher) in the State Ministry of Health:

> The central officers don't trust the State officers in their technical skills of managing and implementing health systems and policy. The FMoH officials perceive their role to be that of the initiation of guidelines for technical programmes - something that they feel can be done at the Ministry headquarters without the need to consult state health authorities, who are not

> qualified. If the latter must be consulted, state staff can be summoned to headquarters in Khartoum.

This same interviewee believes that the State has little to contribute to the health policy process at the central level. This in turn results in a lack of participation and lack of ownership of policies by the people in State government who are responsible for their actual implementation. Further, the finalized policy guidelines have not always been effectively distributed to the implementers. Many complaints were heard about extensive interference in the operation of technical programmes in the State by the central level. A main complaint concerned the lack of interaction in technical support. The weakness of the relationship between the central and State levels, particularly with regard to technical programmes on managing and implementing health policy effectively, was observed at State level. The lack of trust in the relationship blocks fruitful collaboration between the federal government and North Darfur State.

According to an interviewee (1-7, 19 January 2011, El Fasher) who is a bureaucrat in Mallit district rural hospital:

> We don't have administrative health staff but a specialist in health system management and policy implementation and he is a doctor. He knows that health system management is very important, especially at district level because the districts assumed the responsibility of health policy implementation.

The interviewee also mentioned that:

> All this doctor does about health system management and policy implementation is at the end of every month to send the State health department reports about the situation of health service delivery and the difficulties which face us. Usually when we ask them to give us some funds to manage and implement the health system and policy, they don't trust that we have skills to manage money and manage and implement health systems and policy; they think we do not understand the objectives of health policy.

The interviewee also explained that:

> They are right because they didn't consult us about health policy design and its implementation process, nor about what problems we faced to manage that effectively. By giving communities space to make their own decisions, they may well manage and implement health systems and policy and be accountable, something that could never come from a top-down strategy.

According to the interviewees, health information in North Darfur State is not produced on a regular basis. This challenge is broadly recognized by all the government sectors, not only the health sector, whether at federal, state or district level, and a major effort has been underway by the National Bureau of Statistics which began in 2008 but has yet to release final results. Therefore little progress has been made so far in improving the quality and availability of health information, expenditure patterns, and quality of curative service delivery.

Even the limited statistics on the health sector are not made publicly available. In part, this is due to the conflict situation in the State, since there is considerable reluctance to reveal information on government performance. As was discussed earlier in this chapter, insufficient information sharing across various health institutions at the three administrative levels is a fundamental weakness of the existing inter-governmental arrangements in North Darfur State in managing and implementing health system and policy. Thus information in the public health sector is limited because of a lack of trust. Yet this absence of trust prevents proper co-ordination between the levels of government in furthering curative health services in North Darfur State.

6.3 Managing co-ordination between levels of government

Without adequate communication and trust between federal, state and district levels of government, health management teams cannot effectively fulfill their oversight role.

According to most interviewees' views, intergovernmental co-ordination between federal, State and district level in managing and implementing health systems and policy in North Darfur State, currently face two general challenges. Firstly, the Federal Ministry of Health has neither the capacity nor an effective mandate to monitor and co-ordinate the State Ministry of Health's performance. It does not have practical measures to influence the State Ministry of Health's projects nor direct methods of health system management and policy implementation. Secondly, the State Health Ministry's managers perceive themselves as independent in the extreme with little interest in information sharing and in participating in joint projects with the Federal Ministry. The NHP describes the responsibilities of the state level as that of policy implementer, which means that they are supposed to work in co-ordination, not isolation. This situation is aggravated by the generally weak co-ordination of State and federal levels.

The regular supervision of health services at lower levels by higher levels is necessary in order to ensure acceptable medical and administrative standards. The supervisory visits by government officials are seen as an effective method of health system administrative control of the flow of the health policy implementation process at lower levels.

As shown in Table 6.6 below, 90% of interviewees at all levels and 100% of interviewees at district level stated that the situation of supervision of the health service delivery situation and policy management and implementation in the state is very weak.

Table 6.6 Interviewees' responses about effectiveness of supervision of health service delivery between Federal, State and District levels in North Darfur State.

Government levels	The number of responses	Type of response		Percentage (%)		
		Yes	No	Yes	No	Total
Federal level	3	2	1	67%	33%	100%
North Darfur State level	18	2	16	11%	89%	100%
Districts level	21	0	21	0%	100%	100%
Total	42	4	38	10%	90%	100%

Source: Fieldwork Data, December 2010

The regular supervision of health institutions and administration at district level is very weak because, as all health professionals and administrators working there pointed out, officials from State government do not visit the districts regularly in order to evaluate the situation of curative health service delivery and the process of health policy implementation in local communities.

According to an interviewee (2-15, 24 December 2010, El Fasher) working in the State Ministry of Health:

> There are no regular supervisory visitors from the State Ministry of Health to the district levels to supervise the situation of curative health service delivery, because there are many problems hindering that, such as insecurity issues, the small number of administrators in the State Ministry of Health, security of financial resources, and the unavailability of vehicles to visit health facilities at district level.

According to another interviewee (2-16, 09 January 2011, El Fasher) also in the State Ministry of Health:

> The collaboration and co-ordination between federal and State levels is very weak because there are no complete teams from all departments at the Federal Ministry of Health to annually visit the State Ministry of Health to monitor and evaluate the situation of health policy implementation in the State. They usually come as individuals from departments at federal level to the equivalent department at State level but even these visits are not regular. The Federal Ministry of Health's strategy for evaluating the situation of health policy at state level is to send reports from state to federal level but these are not periodic reports, which are necessary for identifying serious problems such as idiomatic diseases.

According to an interviewee (1-8, 12 January 2011, El Fasher) working in El Towasha rural hospital:

> I have been working here for three years and the hospital is never visited by health administration teams or individuals to see our problems in curative health services provision or the problems that face us in managing health systems and in implementing policy. The authorities at State level usually promise to solve our problems soon, but after we leave the town no one cares about the district's health problems. The State Ministry of Health is not interested in the availability of curative health services at district level and how it can concern itself with health system management and policy implementation.

This view confirms findings in the SMoH Survey Report (2010), which stated that the poor health services infrastructure and insecurity issues in North Darfur State affect the curative health service delivery system. The destruction of health facilities, blockades of essential supplies such as appliances and equipment, and restrictions on drug movements by health workers, have caused serious difficulties in enabling supervisory and monitoring visits by State and district health teams to take place. Here again this has been made even more difficult by the three levels of governments not assuming their responsibilities of health system management and policy implementation. Those in federal government do not have confidence in the expertise and experience of those at the State and district levels, whereas the latter believe that the federal level has neglected them in decision-making and does not support them with enough resources and facilities.

6.4 Conclusion

Sudan has a decentralized health system. The state and district levels, especially in North Darfur State, do not have the capacity, capability, and infrastructure to implement health policy and to provide quality curative health services. Therefore effective health system management and policy implementation in a conflict affected area such as North Darfur State requires strong co-ordination between all levels of government, federal, state and district.

There are many factors that have widely affected and complicated the decentralization system and made the three levels of government unable to cooperate properly in order to manage and implement health systems and policy in North Darfur State. These factors have been worsened by the effects of violent conflict and instability since 2003 which have led to a serious breakdown in health services infrastructure and have led to a loss of medical personnel and resources.

Co-ordination between the three levels of government in North Darfur State is made more difficult by the long distances over poor roads in dangerous condition which have to be travelled between the districts and El Fasher. Communication is also weak, whether by telephone or over the internet. Furthermore, those at State and district levels note a reluctance by the federal government to disburse public financial entitlements to them fully and on a regular basis. This is indicative of the lack of trust that federal government is felt to have for the lower levels of health services and administration. Similarly, those at State and district levels do not trust the federal government to carry out its responsibilities in regard to health policy and management, as reflected in the views of officials about how the health services are supervised and monitored.

These weaknesses in co-ordination highlight even further the significance of NGOs in the health sector in North Darfur State. The next chapter analyses the effectiveness of collaboration between NGOs and the government in delivering curative health services, and in implementing and managing the health system.

Chapter 7

Collaboration between Government and NGOs in Delivering Curative Health Services in North Darfur State

7.1 Introduction

In North Darfur State, the State Ministry of Health has had considerable assistance from NGOs (both international and local) and other stakeholders involved in the financing and delivery of curative health services. NGOs are very active in providing curative health services to the poor and to people affected by conflict in the region. The range of activities carried out by NGOs extends from providing hospitals, clinics and primary health care centres, to providing free consultation and drugs. Therefore these NGOs are important in policy development, identifying needs, providing services, assisting with policy implementation, linking government and community, and in sharing their expertise. NGOs contribute to curative health service delivery by providing human and financial resources, materials and equipment, sharing information, developing joint projects with government, and developing national health policy, as well as creating joint committees with government. This chapter analyzes all these forms of collaboration between the government and NGOs to manage and implement health systems and policy. But in order to do so the way in which such collaboration is organised must first be explained.

7.2 The structure of collaboration and co-ordination between the government and NGOs in managing and implementing health systems and policy in North Darfur State

Responding to the complex health problems and strengthening the health system in Sudan in general, and in North Darfur State in particular, requires rapid and effective collaboration and co-ordination as well as communication between all actors: the Federal Ministry of Health; the State Ministry of Health; the district authorities; and NGOs. A key component of the collaboration effort is the availability of accurate and up-to-date

information to plan timely and effective responses to urgent health situations. At State level, WHO and UNICEF, with the support of donors, play a leading role in collaboration between the government sector and other NGOs working in health services. They accomplish this by collecting accurate and timely information about the situation of health service delivery in the State from the smaller NGOs working in the field. Co-ordination and information sharing operate at both central and state level, as well as between NGOs themselves, as shown in Figure 7.1 below.

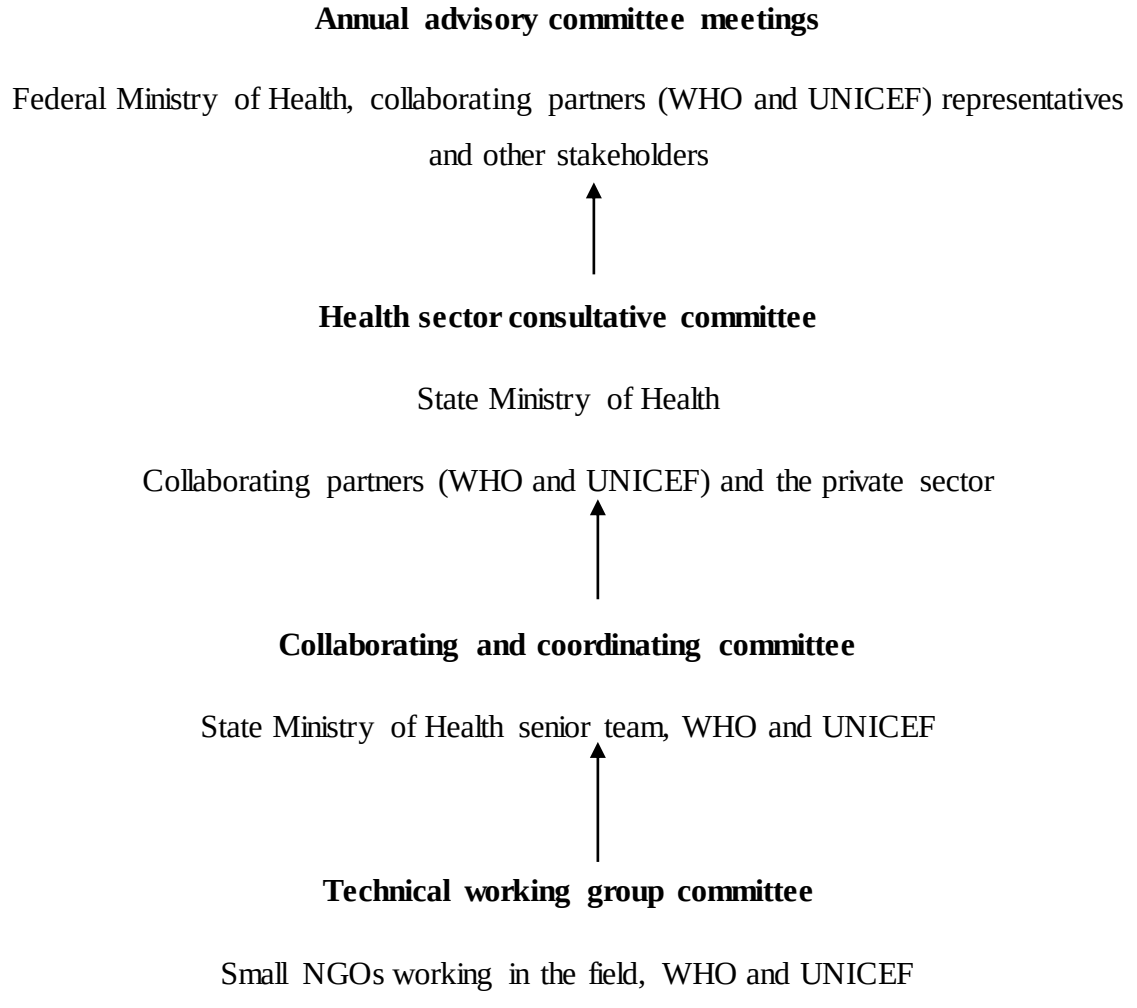

Figure 7.1 Overview of co-ordination structure between government and NGOs in North Darfur State.

Source: Fieldwork Data, December, 2010.

As can be seen, there are three levels of committee at federal and State level to manage and implement health systems and policy in North Darfur State. At national level, health partners share progress on ongoing activities in North Darfur State to ensure co-ordinated donor interventions, to make strategic policy decisions, and to agree on guidelines and advocacy strategies. These issues are discussed in the annual advisory committee meetings held in Khartoum at the end of every year (sometimes twice a year if there is any emergency situation needing urgent intervention). The annual advisory committee meetings evaluate work processes for the previous year and review action plans and support for the following year.

At State level, the health sector consultative committee reviews the performance indicators on the ground and checks the situation of funds. This committee is directed by the General Director of the State Ministry of Health and includes private sector representatives, the State Ministry co-ordinator between the Health Ministry and NGOs, and representatives from NGOs, particularly those from WHO and UNICEF. Monthly meetings discuss the major challenges facing NGO activities, such as shortages in funding which affects their work, outbreaks of epidemics among IDPs, and security issues. The committee attempts to resolve such issues, but if not, they are raised at the federal level.

NGOs, the State Ministry of Health, and other partners from the collaboration and coordination committee carry out regular and comprehensive assessments of health facilities, and encourage all partners to work in harmony to provide health services to all the conflict-affected and poor populations. There is collaboration between the State Ministry of Health and humanitarian aid commissions which are responsible for international NGOs' movements. This responsibility is enacted by collaboration with security authorities, who are mandated to make statements on behalf of NGOs working in the field, and WHO and UNICEF, who represent all small NGOs working in North Darfur State. This committee meets weekly, to keep partners informed on activities and progress, to provide a forum for joint operational decision-making, and to enhance the local ownership of programmes.

In the NGO sector, WHO and UNICEF hold a weekly technical working group committee meeting every Wednesday with all the other NGOs working in the health field, in order to discuss obstacles that face them in delivering quality health services. Collaboration among NGOs to address all determinants of poor health is an increasingly important role for WHO and UNICEF since they co-ordinate the activities of all the NGOs. In these meetings mortality and morbidity reports, fact sheets, best practice guidelines and technical documents are discussed in order to ensure their dissemination to stakeholders. The issues addressed in these documents are discussed with the State Ministry of Health to bring about harmony between the government, international agencies like the United Nations and NGOs in developing strategies and work-plans for the health sector. In addition, these meetings address particular problems that arise in assisting the poor in remote areas, especially those affected by conflict. A central concern is to avoid any needless duplication of effort.

7.3 Forms of collaboration between the State Ministry of Health and NGOs in providing curative health services in North Darfur State

How effective has collaboration been in North Darfur State between government and the NGOs? Table 7.1 indicates those who were interviewed for this purpose.

Table 7.1 Collaboration between State and district levels and NGOs in providing curative health services in North Darfur State.

Levels and sector	State level		District level		NGO sector		Total
Actors	Professionals	Managers	Professionals	Managers	Professionals	Managers	
Total of interviewees	10	10	17	8	8	7	60 (100%)
Interviewees responded	8	8	14	6	7	6	49 (82%)

Source: Fieldwork Data, December, 2010.

49 out of 60 (82%) of the interviewees, health professionals and managers were prepared to express views about such collaboration. There were 16 representatives in State government, 20 employed at district level, and 13 from the NGO sector. They were asked about human and financial resources, material and equipment, communication and exchange information, as well as about developing joint projects and policy.

7.3.1 Providing human resources

As shown in Table 7.2 below, 43 out of 49 (94%) interviewees stated that international NGOs provide qualified health staff for curative health services delivery in North Darfur State.

Table 7.2. Interviewees' responses on international NGOs providing human resources for curative health service delivery in North Darfur State.

Government levels	Number of responses	Type of response		Percentage (%)		
		Yes	No	Yes	No	Total
State level	16	13	3	81%	19%	100%
District level	20	18	2	90%	10%	100%
NGOs sector	13	12	1	92%	8%	100%
Total	49	43	6	88%	12%	100%

Source: Fieldwork Data, December 2010.

The health personnel include those working in the health facilities and community staff working in the same catchment area as the health facilities (rural areas and camps). According to a WHO report (2010:12), in North Darfur State the number of health workers managed by NGOs and who provide services to the vulnerable population (1390) is more than those of the State Ministry of Health (1164). NGOs also provide training courses for health staff in the public sector, especially for doctors, nurses and midwifes. According to the State Ministry of Health Survey Report (2010), since 2003 NGOs have provided technical assistance to hospitals, rural hospitals and health clinics in the State. As a result, more than 50 nurses have been trained to provide care and treatment; more than 23 doctors have been trained in laboratory equipment operation; and approximately six senior doctors and hospital directors have received management training.

According to an interviewee (1-1, 18 January 2011, El Fasher) working in Kepkabiya rural hospital:

> Without the NGO health staff who are well qualified and trained, the government cannot deliver curative health services to the poor and conflict affected- population in the State, because the government health institutions, whether rural hospitals, health centres or basic health units in Kepkabiya district, are facing a lack of human resources. NGO health staff help us to deliver curative health services, where population numbers increase in the rainy season when malaria spreads. Without NGO health staff, the government sector does not have the capacity and capability to deliver curative health services alone to all people in the district.

7.3.2 Providing financial resources

International NGOs have been supporting the State Ministry of Health with financial resources for delivering curative health service to the poor and conflict-affected people in North Darfur State. As shown in Table 7.3 below, 47 out of 49 (96%) interviewees stated that this is the case.

Table 7.3 Interviewees' responses on international NGOs providing financial resources for curative health service delivery in North Darfur State.

Government levels	Number of responses	Type of response		Percentage (%)		
		Yes	No	Yes	No	Total
State level	16	15	1	94%	6%	100%
District level	20	19	1	95%	5%	100%
NGOs sector	13	13	0	100%	0%	100%
Total	49	47	2	96%	4%	100%

Source: Fieldwork Data, December 2010.

The extent of this contribution was discussed previously (see Chapter 5, especially Table 5.14 in section 5.5.1).

7.3.3 Providing materials and equipment

As shown in Table 7.4 below, 63% of all the interviewees and 92% of those in NGOs indicated that NGOs provide materials and equipment to government health institutions to assist with curative health services.

Table 7.4 Interviewees' responses on international NGOs providing materials and equipment for curative health service delivery in North Darfur State.

Government levels	Number of responses	Type of response		Percentage (%)		
		Yes	No	Yes	No	Total
State level	16	8	8	50%	50%	100%
District level	20	11	9	55%	45%	100%
NGOs sector	13	12	1	92%	8%	100%
Total	49	31	18	63%	37%	100%

Source: Fieldwork Data, December 2010.

The interviewees pointed out that the materials and equipment provided include generators, some kinds of laboratory equipment, some medical machines, beds for patients, and contributions towards maintenance of health institutions. In addition, all health centres established and managed by NGOs are provided with substantial materials and equipment, whether in rural areas or in IDP camps. This is confirmed by the State Ministry of Health Survey Report (2010), which noted that the capacity of the State Ministry of Health to provide health materials and equipment is limited.

According to an interviewee (1-2, 28 January 2011, El Fasher) working in a teaching hospital in El Fasher:

> The hospital, which serves all people in the State, faces an extreme lack of modern health service appliances and equipment; 90% of health appliances and equipment in the hospital are old and some are not available. The 10% modern equipment is provided by NGOs. Therefore patients have their tests done outside the hospital in private labs. NGOs make a good effort in providing materials and equipment to

> health facilities in the public sector but what they provide is still little and does not cover all health facilities in the public sector.

According to an interviewee (1-3, 13 January 2011, El Fasher) based at the district hospital in Dar El Salam:

> The NGOs provide some materials and equipment, such as generators and other small medical equipment, but still there is a lack of appliances and equipment in the hospital and there are no private clinics. Due to the lack of modern materials and equipment in public health facilities and the expensive treatment in the private sector, the majority of patients seek health care from traditional healers. International NGOs and donors make a good effort to provide health materials and equipment to the public health facilities but still there is a need for modern materials and equipment in the public sector.

A doctor with WHO said (1-4, 13 January 2011, El Fasher) that:

> NGOs, especially WHO, provide medicines for the hospital to supply the IDP patients free of charge. In this regard, there is an agreement between the State Ministry of Health and the hospital's administration and NGOs that the NGOs supply El Fasher teaching hospital with medicines and the rural hospitals with materials and equipment, because health institutions in the public sector face a lack of these materials and equipment.

7.3.4 Communication and information exchange

As shown in Table 7.5 there is a noticeably mixed response to the issue of communication and exchange of information between government and the NGO sector.

Table 7.5 Interviewees' responses about the situation of communication and information exchange for curative health service delivery in North Darfur State.

Government levels	Number of responses	Type of response		Percentage (%)		
		Yes	No	Yes	No	Total
State level	16	7	9	44%	56%	100%
District level	20	5	15	25%	75%	100%
NGOs sector	13	10	3	77%	23%	100%
Total	49	22	27	45%	55%	100%

Source: Fieldwork Data, December 2010.

Those in government, especially at district level (75%), feel that communication does not happen, whereas 77% in the NGOs believe that it does. When asked to elaborate a variety responses emerged.

According to an interviewee (1-5, 11 January 2011, El Fasher) working in the State Ministry of Health as a co-ordinator with NGOs:

> NGOs have a good capacity in providing health information, by communicating with IDPs, the poor and conflict-affected population in the State. They are also very responsible in attending the collaboration meetings between the small NGOs as well as the collaboration meetings between the representatives of NGOs such as WHO and UNCIEF, and the State Ministry of Health, to discuss issues regarding controlling the spread of diseases and the funding-gap situation and how they can collaborate to co-manage it. However, the State Ministry of Health faces a lack of capacity in terms of human and financial resources on one side and insecurity issues on the other. Therefore it depends completely on information provided by NGOs, which mainly focus on controlling the spread of diseases and not on the situation of health system management and policy implementation.

According to an interviewee (2-1, 27 December 2010, El Fasher) in the State Ministry of Health:

> There is insufficient information to co-ordinate activities between government and NGOs, and to set guidelines for NGO performance. A weak state capacity is a primary reason for this situation; the risk of such an approach is that there is little

> mutual exchange of information between health care providers (NGOs) and health service managers in the State Ministry of Health for effective health service delivery management. There is no forum that frequently brings together NGOs and State Ministry of Health staff to discuss health sector issues. The poor collaboration with, and lack of feedback from, health sector stakeholders has affected health system management and policy implementation.

According to an interviewee (1-6, 21 January 2011, El Fasher) working with Medicines Sans Frontiers – Spain:

> The NGOs working in the field have been sending weekly reports to the State Ministry of Health reporting the situation of how diseases have spread, especially in IDP camps and rural areas. In this regard NGOs make a good effort of collaboration with the State Ministry of Health.

The interviewee also mentioned:

> NGOs have a great ability to establish a rapport with target populations because many of them have years of experience of working with people in their communities. They are trusted by those populations and people listen to them and accept their offers. NGOs are very co-operative and helpful. The State Ministry of Health is ineffectual in reaching some rural areas, in particular, areas which have been controlled by rebel groups. They are also not trusted by the people living there. Therefore the collaboration between the State Ministry of Health and NGOs is still weak.

These findings contrast with the impression created by the structure of the committees which meet regularly to realize co-ordination between government in North Darfur State and the NGOs. The independence of the NGOs seem evident. While those in NGOs think that communication and exchange of information at the local level take place, those in district health structures disagree.

7.3.5 Developing joint projects

As shown in Table 7.6 below, 88% of the interviewees at all levels, 90% of the interviewees at district level and all of the interviewees in the NGO sector, stated that there is collaboration between the government and NGOs in establishing and developing joint health projects, especially relating to rural hospitals and health centres.

Table 7.6 Interviewees' responses on developing and establishing joint health projects in North Darfur State.

Government levels	Number of responses	Type of response		Percentage (%)		
		Yes	No	Yes	No	Total
State level	16	12	4	75%	25%	100%
District level	20	18	2	90%	10%	100%
NGOs sector	13	13	0	100%	0%	100%
Total	49	43	6	88%	12%	100%

Source: Fieldwork Data, December 2010.

Since the conflict started in North Darfur State in 2003, NGOs have worked with State Ministry of Health in establishing, managing and running many health institutions, especially in IDP camps and rural areas (see Chapter 4, section 4.3.3, Table 4.15). NGOs currently collaborate with State Ministry of Health in administering 15 rural hospitals and 17 health centres.

In joint projects such as establishing health centres, the State Ministry of Health contributes by consulting on and determining the location of a health centre. The community contributes by providing a monitoring function and safeguards the funds for the health centre, both during implementation and after completion. In this regard, NGOs considered the involvement of the State Ministry of Health and the community to be important indicators of the likelihood of successful completion of a project because the consultants from the State are able to affect the implementation process as well as the completion. The involvement of the community is considered some guarantee of the sustainability of a health project.

In situations of collaboration between the State Ministry of Health and NGOs an interviewee (2-2, 15 January 2011, El Fasher) working for MSF–B said:

> The structure of organizations in the government negatively impacts collaboration projects in the implementation of health projects; bureaucracy on the side of the State Ministry of Health hinders successful collaboration with NGOs. The State Ministry of Health has to receive orders from higher levels such as the FMoH and security authorities to allow them to undertake health projects. This takes a long time, while the NGOs are more flexible in taking their decisions. Therefore NGOs feel that collaborating with the State Ministry of Health is an obstacle rather than a help to them in implementing health projects.

However the NGO interviewee mentioned that 'when they (NGOs) approached high- level officials, they found that they immediately welcomed their ideas. However the problems occurred when they approached lower level bureaucrats'. From this it would appear that government at both the State and district level pose challenges to NGOs. How are these issues dealt with?

According to an interviewee (1-7, 12 January 2011, El Fasher) working in the WHO sub-office in El Fasher:

> All NGOs working in the health sector in North Darfur State are sponsored by the World Bank and other donors such as WHO, UNICEF, United Nations Development Program and United States Agency for International Development. These donors don't trust the government to implement health projects. Donors are more likely to give money to the NGOs rather than government, but government requires donors to support them directly to implement health projects. Therefore the State authorities see that the NGOs take over their area of influence in the health sector. NGOs are more likely to approach the State Ministry of Health with partnerships in health projects rather than to fund them (SMoH) to do so. This reality negatively affects the collaboration between them. Involving the State at the stage of discussion makes the State more willing to participate in the

> implementation of the project. This means that the proposal for the project will include their (SMoH) views and receive their immediate acceptance for future collaboration. This agreement between them will guarantee the completion of the project, as is the case in the establishment of health centres in Mallit district. The agreement also avoids the duplication of work.

Moreover, according to an interviewee (1-8, 17 January 2011, El Fasher) working with Medicines Sans Frontiers – Spain:

> Combined teamwork between NGOs and government needs an agreement to help avoid misunderstandings in the project implementation process. In joint projects, sharing information creates greater trust and prevents duplication of the work in establishing health projects. However, the NGOs complain of health staff turnover in the State Ministry of Health, in terms of developing stable collaboration in implementing join health projects.

The NGO interviewee also mentioned that:

> On the NGOs' side, there is also too much turnover of health staff from one position to another. The turnover from both sides tends to wear away the sense of trust and consequently increases the misunderstanding between the two sides, weakening the level of collaboration needed to implement health projects.

According to an interviewee (1-9, 12 January 2011, El Fasher) in Mellit rural hospital:

> The NGOs have been particularly successful in establishing health centres and basic health units in Mellit district, and share their expertise with the community there. The communities specify the location of health centres or basic health care units, and provide the labour and food. The Ministry of Health provides the health staff, such as doctors and nurses. NGOs provide the equipment, building materials and the money for operating the health centre or basic health care units.

According to an interviewee (1-10, 13 January 2011, El Fasher) who has been working with NGOs in Abu Shock camp:

> The NGOs have established good health facilities in IDP camps and in the districts, but they have pointed out that a future problem is how the government will run these health facilities after a peaceful settlement has been achieved in the State, and after the NGOs have left. This is especially a concern in the districts, because most IDPs will return to their home areas, and that the need is for health facilities there, and not in the camps which will be empty after stability returns to the rural areas.

The success of joint projects seems to depend on building trust. Where local communities are able to participate in making decisions, or at least are consulted, NGOs have succeeded with health projects. But where collaboration with government is made difficult, for example, by a turnover in staffing, NGOs have to be sensitive to protocol and to maintain relations within government institutions.

7.3.6 Developing national health policy

The issues raised here reveal that government health authorities and the NGOs experience some difficulties in working together, partly due to problem of communication and trust. Do NGOs play a role in developing national health policy in collaboration with the Ministry of Health in North Darfur State? The views on this are presented in Table 7.7.

Table 7.7 Interviewees' responses on NGOs participation in developing national health policy in North Darfur State.

Government levels	Number of responses	Type of response		Percentage (%)		
		Yes	No	Yes	No	Total
State level	16	7	9	44%	56%	100%
District level	20	6	14	30%	70%	100%
NGOs sector	13	4	9	31%	69%	100%
Total	49	17	32	35%	65%	100%

Source: Fieldwork Data, December 2010.

Those in NGOs largely thought (69%) that they did not contribute to national health policy, as did 70% of interviewees at district level. Those in state government had more mixed views, 44% indicated yes, and 56% no.

According to the views of the interviewees, the NGOs deliver curative health services according to their own policies, not according to government policy. This is confirmed by an interviewee (2-3, 17 January 2011, El Fasher) working in the State Ministry of Health:

> When the NHP was adopted in 2007, there were many NGOs working in the State but they were not given the opportunity to participate in health policy formulation nor to develop legal frameworks. Therefore NGOs are now implementing their own policies, due to restrictions by donors who support them financially. Thus the State Ministry of Health and NGOs' collaboration in terms of health policy implementation has not yet been developed.

In this regard, one of the NGO interviewees (1-11, 18 January 2011, El Fasher) working in Relief international Organization stated:

> We strongly depend on donor support and maybe this support stops. Therefore we are working by contract with the State Ministry of Health and the contract is renewed annually because we are not guaranteed donor support for a long time. Therefore we do not need to be involved in NHP issues, which we see purely as the responsibility of the government. However, if the government needs to involve the NGOs in participate in developing NHP, it needs to design a new framework that considers the opportunity for NGO participating because the old national health policy does not have any opportunity for NGO participation.

According to another interviewee (1-12, 15 January 2011, El Fasher), with Medicines Sans Frontiers – Belgium:

> Due to the conflict in North Darfur State, the government has been unable to supply adequate health services. The role of government is mainly limited to policy design and it leaves the implementation of policy to NGOs and the private sector.

> Government's share of health service provision has significantly decreased after the conflict started in North Darfur State in 2003.

He also stated that:

> Donors support international NGOs financially and they are unwilling to support the Federal and State Ministries of Health directly to develop their NHP because they fear corruption and inefficiency. Many NGOs have implemented their own policies which are adopted from WHO policy. WHO policy is not far from that of the NHP which has been applied in the state: 95% of the objectives are the same.

The government does not want to involve NGOs in the health system and policy because it sees these as political issues and does not wish NGOs to participate in them. NGOs view their involvement in health systems and policy from a socioeconomic development perspective, because they provide 70% of curative health services in North Darfur State. Therefore NGOs want to be part of the health system and policy design, not only as implementers. However, the government regards NGOs as global players and any criticism of health systems and policy by them is treated as a move to destabilize the government. NGOs want to participate in the health system and in policy, so as to avoid government regulation of NGOs, on the grounds that it would curtail their freedom and prevent them from performing their work as they wish. Therefore all these barriers need to be removed in order to strengthen government and NGO collaboration in the State.

From these comments it is apparent that NGOs see themselves mainly concerned with practical programs and projects in the health sector, whereas policy matters are viewed as government's responsibility even if it calls on the assistance of international agencies.

7.4 Barriers affecting collaboration between government and NGOs to deliver curative health services in North Darfur State

According to interviewees in the government and NGO sectors, many barriers have affected the collaboration between the government and NGOs to deliver curative health services and to

manage the health system successfully. These include the difficulties that NGOs face gaining access to conflict-affected areas.

7.4.1 The barriers of NGOs gaining access to the conflict- affected areas

Table 7.8 Interviewees' responses about the difficulties that NGOs face in accessing conflict-affected areas in North Darfur State.

Government levels	Number of responses	Type of response		Percentage (%)		
		Yes	No	Yes	No	Total
State level	16	10	6	62%	38%	100%
District level	20	20	0	100%	0%	100%
NGOs sector	13	13	0	100%	0%	100%
Total	49	43	6	88%	12%	100%

Source: Fieldwork Data, December 2010.

As shown in Table 7.8 above, 88% of the interviewees at all levels, and noticeably 100% at the local level in district government and in the NGO sector, stated that NGOs have encountered many difficulties in accessing conflict-affected areas to deliver curative health services to vulnerable people there. This is not only because of security issues due to the control of areas by rebel groups, but also because of the complicated process of obtaining government permission to travel to and offer health services in such areas. The activities of NGOs are concentrated in remote areas and IDP camps, which the government has not served for political reasons, thus potentially bringing NGOs into conflict with the government.

According to an interviewee (2-4, 10 January 2011, El Fasher) working in the State Ministry of Health:

> Good collaboration between the government and NGOs eases the possibility of accessing areas seriously affected by conflict and the people in need of health services. However, in North Darfur State, the security authorities remain the gatekeepers to the populations in conflict-affected areas. NGOs face difficulties in accessing these areas. The government does not believe that NGOs provide health services to the people in these areas. However, besides that, NGOs have a political agenda that serves their countries of origin, especially most international NGOs

> from Western countries with which the government differs politically and ideologically.

The government is skeptical of international NGOs' intentions; therefore government expelled 13 of them from Darfur in early March 2009. Most of them had worked in the health field in North Darfur State which left a huge gap in health service delivery for conflict-affected people. Some of the expelled NGOs operated in rebel-held areas which were then left without health services at all. The government compels NGOs to undergo a legal process to gain access to IDP camps and remote rural areas in order to ensure that NGOs do not have any political or intelligence agenda and that their purpose is really to deliver health services to people in these areas.

According to an interviewee (1-13, 15 December 2010, El Fasher) working with Medicines Sans Frontiers – Spain:

> All NGOs working in the curative health service delivery field complained that the government did not provide the time and flexibility of access to the remote areas where people affected by conflict are badly in need of health services. The process of getting permission to access the conflict- affected areas took four to six days, especially in those areas controlled by rebel groups.

According to an interviewee (2-5, 17 January 2011, El Fasher) working with Mercy Malaysian Organization:

> Improving access to essential health services remains one of the main problems facing NGOs. The relationship between NGOs and government is primarily political but financial issues also tend to be problematic. The government is often jealous of resources being channelled to NGOs and is wary of their oppositionist potential, while NGOs often live in fear of government intervention in their activities.

Most interviewees stated that in districts such as Kepkabiya and Dar El Salam, where health services were delivered by means of collaboration between the government and NGOs, the care

provided is more efficient and equitable than in those which remained under government control, such as El Towasha and El Malha districts. For example, according to an interviewee (1-14, 12 January 2011, El Fasher) working in Kepkabiya district hospital:

> The NGOs are very active and have been providing quality health services to the people of the district, whether in their health centres or in government facilities, which are co-ordinated by the health sector in the district. Therefore people get curative health services easily because the health network in the district consists of 13 health facilities, out of which 8 are run by NGOs.

By contrast, according to an interviewee (1-15, 17 January 2011, El Fasher) in El Towasha district hospital:

> The people in this district struggle to get curative health services because there are no NGOs working in this district and all 15 health facilities are run by the government. Government capacity and capability are very weak in terms of human and financial resources and equipment. This encourages promotion of the collaboration and coordination approach between the government and NGOs in the weaker health systems in North Darfur State.

7.4.2 The barriers to collaborate between government and NGOs

There are many barriers affecting the level of collaboration between the government and NGOs to deliver curative health services to poor and vulnerable people in North Darfur State. In terms of organizational roles the following are indicated.

Firstly, NGOs see government as putting many obstacles in front of them which limits their freedom through authoritarian control, which in turn prevents them from doing their work properly. Government, on the other hand, see NGOs as: more verbal and less active; opposed to any move to ensure transparency, especially in financial matters, which are driven by donors; obsessed with sectoral issues; over-critical of government policies; and blind to macro-challenges of development. In this respect the government requests donors to support it directly to deliver health services to its citizens, not through NGOs.

Secondly, NGOs focus their work mostly on delivering health services as humanitarian aid, while the government wants NGOs to build health institutions and to deliver health services as a form of social development in the State. This is especially so in rural areas, which are crowded by people in the post-conflict period and which require rehabilitation. However there is no future plan for co-operative work between government and NGOs, as most NGOs work by contract for one-year periods only, for health delivery and not for reconstruction.

Thirdly, NGOs make a considerable effort to involve the community in health service delivery issues, by consulting them and representing them in their teams to manage health institutions which are established as joint health projects. However, the government wants to manage such health institutions, and therefore they see the NGOs as undermining their authority and thus presenting themselves as an alternative to government.

7.4.3 The barriers of experience and capacity

Both those in NGOs and government believe that there is no balance between NGOs and government in terms of experience and capacity and that this constitutes the biggest barrier affecting collaboration between them. The government has a lack of experience among its employees, whether doctors or managers, in dealing with NGO employees who are far more experienced in delivering curative health services in North Darfur State.

A lack of knowledge, skills and capacity of government personnel prevents successful engagement between government and NGOs in collaborative initiatives. Although continuous interaction with NGOs needs a high level of skill and capacity among government health staff, without concrete steps to prepare a stronger database on the human resources, skills and capacities of the government sector, it is not possible for the government to benefit from the NGOs' large human and financial capacities in order to strengthen the health system and enhance policy implementation.

All international NGOs talk about the importance of collaboration with government but few of them make a conscious effort to share information and to engage with the State Ministry of

Health and other related institutions. Most NGOs prefer to work in isolation, as they feel that the lack of experience among the government employees as well as the lack of government communication facilities affect their work. Government, on the other hand, feels that NGOs have hidden political agendas which are the main purpose of their work, rather than being humanitarian aid providers, and so they do not wish to collaborate closely with government to deliver curative health services to the people in North Darfur State.

7.5 Conclusion

Given the current situation of collaboration between the State Ministry of Health and NGOs delivering health services in North Darfur State, it is essential to consider the level of understanding between all sectors involved in health service delivery, that is, government and NGOs. Any kind of misunderstanding affects the level of collaboration between them.

The challenges of a lack of financial and qualified health personnel in the government sector hinder joint committee meetings and cause weak collaboration between the government and international NGOs to deliver curative health services. But NGOs contribute positively to curative health service delivery as follows: in providing human resources and financial resources; materials and equipment; changing health information; and in developing joint projects with government. They are, however, unwilling to develop national health policy, because they work for a short-time in providing curative health services as part of humanitarian aid.

International NGOs have accused the government in Sudan of putting in front of them many barriers that have hampered their work. One such barrier is the difficulty facing NGOs in gaining access to conflict-affected areas, because they are supposed to seek permission to do so from security authorities and the humanitarian affairs commission. This is a lengthy and complex procedure.

Finally, a lack of trust can undermine collaboration between government and the NGOs, largely because they have different interests. The government does not wish to lose control to the NGOs, but public officials are at a disadvantage in having less capacity and experience in delivering and managing curative health services than the international agencies. NGOs wish to pursue

humanitarian programmes and projects, and in doing so often have difficulty in arriving at effective working relationships with government. The issue is how to improve such matters. This is the subject of the next chapter.

Chapter 8

Improving the Effectiveness of the Curative Health Services in North Darfur

8.1 Introduction

Having identified and analysed the issues which affect the performance of the health system in North Darfur State, it is now possible to consider how the system could be improved. This chapter concentrates on presenting the views expressed by the interviewees themselves. Because it is important to take seriously the opinions of these health officials and practitioners who deal with such matters on a daily basis, and to understand their perspectives, a substantial number of lengthy quotations have been used throughout this chapter. The findings have been organised in the order in which they were discussed in the previous chapters. Accordingly, consideration of the structure of the health system is followed by the provision of curative health services, human and financial resources, and then co-ordination between the levels of government and, finally, collaboration between NGOs and government.

8.2 The structure of the health system in Sudan and North Darfur State

In Sudan, the decentralised system which consists of three levels, federal, state and district, where each level has certain specific responsibilities to manage the health system and to deliver health services. The federal level is responsible for health policy formulation, whereas the districts implement health programmes locally. At each level there is a health structure and administrative committee but, as has been reported, they are not as active as they should be and need to be developed. This requires adequate health financial resources, appropriate staffing and modern communication facilities in order to enable the health committees to hold their meetings properly. The views, opinions and experiences of health workers at lower levels regarding health system management and policy implementation needed to be forwarded regularly to the policy makers and planners at higher levels as feedback in order to improve curative health service delivery and the health policy process as whole.

Due to the lack of human and financial resources, especially at district level, these health committees are not able to hold their meetings to discuss the problems and obstacles that face the

provision of health services, management of the health system and policy implementation. Therefore there is weak capacity at all levels of governance in the health sector in North Darfur State. In addition to the lack of resources, the managerial capacity is not adequate to cope with the requirements of a decentralized health system. Such a situation impacts not only on the overall management but also on the delivery of curative health services.

Consequently, the structure of the health system has turned out to be weak in practice because the health committees at all three levels are not able to fulfil their responsibilities, which leads to failure in policy implementation and health system management. As a result, many of the objectives of NHP 2007 have not been achieved. (see Chapter 3, section 3.6, Tables 3.2-3.7.) How can the structure of the health system be strengthened?

According to an interviewee (2-1, 17 December 2010, El Fasher) in the State Ministry of Health:

> In order to develop and strengthen the health system structure, the government should focus on building the capacity of health institutions with qualified personnel, more adequate materials and equipment, drugs and health infrastructure, which includes electricity supply, good roads, and modern communications facilities. Another area that needs to be addressed is a data collection system. The availability of reliable data on the quality of health service delivery is very important in the developing health system structure. To do this, the government and its partners such as NGOs and UN agencies need to provide a database of health records. There needs to be personal interest by the State Minster of Health in reviewing data on particular health priorities, such as demanding to see monthly figures on the number of children who die with malaria. I think that the development of the health system structure depends on the approaches that the government follows to adapt the health system and policy and to consider the problems that face the health administrations at lower levels.

According to another interviewee (2-2, 23 December, El Fasher) in the State Ministry of Health:

> Currently the government designs health policy by applying top-down approaches which is very complex for us working at state level, because we have not been consulted in health system and policy design to know exactly what the health policy objectives are although we are the implementers of the policy. Therefore we need the government to change the model of health policy design. In a large country like Sudan each state has it is own problems and this needs to be considered in national health policy. The best way of health policy design and successful implementation in my view is a bottom-up approach which lets the authorities at district and state levels as well as communities participate in health policy design, because we know our health service problems. To participate effectively in health policy design according to local conditions and to implement it successfully, we need from government two main things: first give us more freedom to adapt the health programs to local conditions and needs which means full of trusting us. Secondly, provide us with more resources.

According to an interviewee (1-1, 15 December, 2010) working in Dar El Salam Rural Hospital:

> In terms of the health policy process we are not part of it and usually the authorities at federal level ignore us even though we are the actual implementer of health policy. This has led to the failure of health policy implementation. In my view to design proper health policy and to implement it successfully and achieve its objectives, the district health office should initiate the formation of partnerships in health, as well as to plan, encourage, and motivate stakeholders and supervise implementation activities.

The interviewee also said that:

> The federal level ignores those at lower levels, especially those at district level by implementing a top-down approach, which is, in my view, a key obstacle that delays, and possibly worse, undermines the implementation of health policy. These problems can be solved through applying bottom-up approaches which narrow the gap between perceptions of policy makers and those who know the conditions of local areas and provide and receive health related services. In the case of North Darfur State, which is affected by conflict, the government needs to involve the international NGOs in the

> health policy process, including national health policy design, because they have been providing more health services than government itself, which means they have been implementing health policy. Therefore, the national health system should avoid the rapid establishment of performance management systems that do not take stock or build on local decision-making powers and capabilities.

According to this interviewee, in order to develop the structure of the health system the government should focus on building the capacity of health institutions by supplying medical schools with qualified staff and materials, creating jobs opportunities and stopping the migration of qualified health staff. The health infrastructure needs more health facilities, electricity and water supplies, better roads and modern communications facilities. A health information database also needs to be created, especially at district level. How to do this? Government does not have the ability to do this on its own. It needs major assistance and support from donors and international NGOs to develop the structures of the health system.

Policy implementation is more important than its statement and formulation: what happens on the ground, not simply what is stated in the media or on paper, needs to be the measure of policy content and commitment (Zwi and Mills, 1995: 320). In a large country like Sudan, and in a large state like North Darfur State, the best way to implement health policy effectively, according to the views of the interviewees, is a bottom-up approach which empowers health staff who are working at lower levels such as districts to participate in policy formulation process. District health officials were critical that they were not formally represented on the committees that developed health policy, arguing that those who developed the policy did not understand the priority of health issues in local areas, and that they need to be included in health policy design.

Only by listening to, and learning from, health practitioners and officials, can the structures of the health system be adapted according to the particular needs of North Darfur State. This also implies attending to the issues of communication, as well as to the need to accumulate evidence for analysis by building adequate database for health services.

8.3 Curative health services provision

In North Darfur State curative health services are provided by a combination of public and private sectors as well as by international agencies and NGOs, especially international NGOs, which have played a significant role since civil conflict began in 2003.

8.3.1 The role of the public sector

8.3.1.1 Health facilities

This study has shown that the various health facilities in North Darfur - State hospitals, Primary Health Care Centres and Basic Health Units – fall short of the government's official norms for Sudan, and below the standards recommended by WHO. More than 40% of the health facilities are now concentrated in El Fasher (see Table 4.10). Consequently, people in other districts are forced to travel considerable distances in unsafe conditions in order to receive treatment. Phillips (2008:16) found that on average residents in Darfur undertook journeys of 35-50 kms, often on foot, in search of health services. Health facilities are supposed to be distributed, according to the Sudan Health Service Standard of 2004, so that they are approximately five kilometers apart. How can these facilities be made more accessible?

According to an interviewee (2-3, 22 December, 2010, El Fasher) in the State Ministry of Health:

> The availability of functional and easily accessible health facilities is important for people. Since the conflict which started in 2003 in North Darfur State health facilities have been destroyed and looted. Therefore there is a need for rehabilitation or renovation and to equip the existing health infrastructure to improve their functionality. At the moment, some people in rural areas travel approximately 120 kms to access the nearest health facility. The health sector should develop standard building designs and lists of medical equipment for all levels of health facilities and undertake building and equipping new facilities at different levels in order to improve the geographical accessibility of the population to health facilities.

Also the interviewee said:

> Priority needs to be given to geographical areas where no health services exist and where the population live in underserved areas. The health facilities and their equipment must be regularly maintained so as to minimize the negative impact on the cost of renovation and repair and delivery of health services. Due to long distances and bad roads between the district headquarters and El Fasher, we need one ambulance in each district headquarter. The government needs to provide guidelines and procedures regarding the routine maintenance of plant and equipment. Donors and NGOs need to assist the government to do so.

According to an interviewee (2-4, 25 December 2010, El Fasher) in El Fasher Teaching Hospital:

> The existing health facilities and infrastructure are extremely inadequate and need to be developed. In my view to do this the State Ministry of Health should undertake a mapping exercise and make an accurate assessment of the physical structures of the existing health facilities in rural areas. About 85% of them require major renovation, 15% require minor renovation and we definitely require new facilities according to the population size and the distances that have to be walked.

To do this the interviewee said:

> The government needs to benefit from existing NGOs resources and mobilize them to renovate and build new health facilities, because if the NGOs go the government does not have financial resources to do that and the situation of the health infrastructure will become even worse. Other health infrastructure issues which are need to be considered are the existing health facilities which include inadequate or a complete lack of medical equipment, communication equipment, clean water and energy supplies, and transport issues, all of which the government and its partners are required to address for health infrastructure to be fully functional. To do so the government and its partners need to hold an international conference for financial assistance from developed countries and donors and NGOs and UN agencies to support them to rebuild health infrastructure.

The inadequacy of the public health facilities is very evident. Both the statistical data already presented, together with the views from a range of informants in government and in hospitals, indicate this. Here, too, they suggest that the problem is not only with the facilities themselves but with the infrastructure in general, for instance, water, and electricity supply, which are essential for health services. The solution, the interviewees say, is for government to rely on international donors and to further partnerships with foreign agencies and NGOs.

8.3.1.2 Equipment and technical services

In Chapter Four, the necessity to supply the health facilities with enough proper medical equipment, appliances, drugs and technical services was identified. Beyond El Fasher little is available (see Table 4.10). Vehicles and ambulances are also needed to transport patients and supplies. How can these shortages be addressed?

According to an interviewee (1-2, 13 January 2011, El Fasher) in the State Ministry of Health:

> Public health facilities in North Darfur State especially in the rural areas are in need of materials and equipment. To provide modern and adequate health materials, including hospital beds and equipment for laboratories, as well as free drugs for poor people, the government should make an agreement with international NGOs which are working in the State. In my view there is a need for strong and active agreement between the State Ministry of Health and the hospital's administration and NGOs so that NGOs supply public health facilities with modern technical services such as diagnostic equipment, X-ray units and dialysis. The government should take the opportunity of the existence of international NGOs for support. If the government loses this chance and the international NGOs leave the country the shortages of health materials and equipment will still exist and poor people will suffer.

According to an interviewee (1-3, 2 January 2011, El Fasher) in El Fasher Teaching Hospital:

> The issue of facilities and equipment in the public sector has become a major source of concern for government and various stakeholders. Therefore the government and its partners should provide modern laboratories, equipment, X-ray and other diagnostic equipment and services in public hospitals which are only available in private clinics

which are owned by individuals. In my view the government and its partners should address the position of poor infrastructure of health facilities and equipment through massive renovation of these facilities and replace outdated equipment. Also, they should supply public health facilities in remote areas which are underserved with secondary health care facilities as well as hospital beds according to the WHO norms.

The interviewee also mentioned that:

> The issue of power generation and constant power supply should be promptly looked into to make equipment functional. Also broken down equipment should be repaired or replaced promptly. There should be adequate motivation and incentives for all categories of medical assistance staff who are charged with the responsibility for maintaining these facilities and equipment. Also the issues of funding should be addressed to replace the old equipment with new when they appear on the market.

Medical practitioners and health officials are in agreement. They all identify the need to supply, maintain and replace technical equipment for diagnosis and treatment. Without this quality curative health services cannot be provided. The answer, they suggest, is to search for financial and technical support from donors in the developed countries and from international agencies and NGOs. Thus far, the private sector has not been mentioned as a source of assistance.

8.3.2 The role of the private sector

In North Darfur State the private sector plays a limited role in in-patient care, but it is most important for pharmaceutical sales, outpatient care, and informal health services. The private health sector's role is limited because relatively few people can afford to pay for such services and because many are unable to gain access to them since they are mainly located in El Fasher (see Table 4.7). According to the State Ministry of Health Survey Report (2010) 80% of the State's population is not able to access private health facilities. Private health facilities have increased in number since 2003, but mainly in El Fasher.

According to an interviewee (1-4, 23 December 2010, El Fasher) at El Fasher Teaching Hospital who has his own private clinic:

> Private health facilities are available and their numbers have grown since the conflict started in the State in 2003. They have been providing curative health services but only for rich people because these services are very expensive for poor people and concentrated only in El Fasher. To access private health services and get medication a patient needs to pay 90 Sudanese pounds (US$ 30) which is not affordable for the most people. Due to the expensive treatment in private health facilities and the unavailability of treatment in public health facilities, 90% of poor people access the NGOs' health facilities. The private health facilities in a poor state such as North Darfur State do not play any role in providing curative health services to the poor people and do not fill the gap of public health facilities. Therefore, the government should not count on private health facilities, because they are not accessible for people.

Although the private sector is not seen as a solution to meeting the need for curative health services, it was noted earlier that most practitioners who offer private health care are already employed by the public sector (see Table 5.7).

8.3.3 The role of NGOs

NGOs have made an important contribution to curative health service delivery in North Darfur State. They provide 70% of curative health services to the IDPs, to the poor and vulnerable people of the State, and have established 24 health centres (SMoH Survey Report, 2010). Also, as reported previously, they have provided 52.9% of funds for health care (State Ministry of Health Financial 2009), and 1390 health cadres (WHO, 2010:12). NGOs offer certain advantages in working in curative health service delivery in the State. They have motivated staff, community based structures, they are willing to work in remote areas, they are efficient and they are able to collaborate with government. But due to the conflict and difficult political circumstances, NGOs do not make information about their activities available to the public, which makes it hard to evaluate their activities or to build on their experiences.

According to an interviewee (2-5, 04 January 2011, El Fasher) in the State Ministry of Health:

> NGOs in North Darfur State have been making a good effort in curative health service delivery to the poor and conflict-affected people. But the government should remove the obstacles that it puts in front of the NGOs to access the remote areas, and try to benefit from their resources and experiences to build its capacity of the health system. Without the NGOs' assistance the government is not able to deliver curative health services to its population. The challenge that is facing the government in the near future is the sustainability of curative health services delivery after the NGOs leave the country. Therefore, the government should consider now the sustainability of health service delivery issues and try to get help from donors and existing international NGOs to build and improve the capacity of health facilities and infrastructure so as to at least minimize the gap that will happen when the NGOs leave the country. 2

This study has documented the extensive role that NGOs have played in providing curative health services during the period of civil conflict, especially to the remote areas, where government services have not reached communities, and the IDP camps. The main concern is what will happen if and when the international NGOs leave. The interviewees are well aware of this issue and mainly suggest that the government seek to maintain partnerships with the international community.

8.4 Human resources

North Darfur State suffers from a lack of human resources in the public sector for curative health service delivery. According to Logie *et al* (2008:257), WHO suggested that a minimum of ten doctors serve 100 000 people. In North Darfur State, one deputy specialist, two specialists, and five general doctors serve 100 000 people (see Table: 5.3). WHO recommended twelve nurses for the same population size and the World Bank nine, as cited previously (Bateman, 2007:1022 and WHO, 2006a:36). 65% of general doctors and 75% of nurses have not received further training after graduation, as was reported in Table 5.10. How can improvements be made?

According to an interviewee (1-5, 09 January 2011, El Fasher) in the State Ministry of Health:

> We have a shortage of front-line health workers, a high level of absenteeism and low productivity. Long-term investment in the State health work force will be required to achieve adequate staffing levels. The number of health workers should be increased according to the WHO's recommendation and also there is a need to orientate health worker training and develop career incentives to encourage service in rural and disadvantaged areas to counteract the tendency of health workers to work in cities. There should be health worker management strategies through supportive supervision, improved supply of essential goods and integrated on the job training.

Also the interviewee said that:

> The government should stop the migration of health staff by providing a good work environment, which includes raising their salaries. Therefore the government needs to identify the push factors that make the health staff migrate from the public sector to the private sector, including to NGOs and abroad and, solve them. These factors include, low wages, lack of additional training opportunities, poor working and living conditions, and lack of social and retirement benefits.

According to another interviewee (2-6, 23 December 2010, El Fasher) in the State Ministry of Health:

> Even when there is a lack of health staff numbers compared with the size of population, the government needs to improve the productivity and performance of existing staff. The main strategies for doing so include training, supervision, performance appraisal, changes to the way in which services are delivered, and implementation of modern quality-improvement methodologies. Every person has a right to access skilled health personnel. An important ingredient of this commitment is the need for scaling up health worker education and training, not only in terms of technical skills but also in sustainable, continuous quality improvement and capacities.

The interviewee also mentioned that:

> The effective way to stabilize the existing health staff and bring more of them to rural and remote areas is by the government offering higher salaries and travel benefits to persuade medical staff to work in the remote areas. To improve the standards of health services they provide, the government needs to integrate these workers more fully into the health system, to motivate them by providing better living and work conditions as well as offering training programs.

The movement of health personnel from the public to the private sector was revealed in Tables 5.7 and 5.9. Added to this, though, as the quotations above indicate, is the tendency for health personnel to be concentrated in urban areas, especially in El Fasher (see Table 5.6).

According to an interviewee (2-7, 17 December 2010, El Fasher) in the State Ministry of Health:

> There are considerable regional disparities concerning the availability of health personnel. The rural areas are somewhat deprived in this regard. Therefore, human resource development is needed and should be accompanied by a fair distribution of health personnel among rural areas. There is a need to equip the referral hospitals with qualified health personnel and address shortages of administrative personnel at all levels. There is a need for effective human resource management policy to solve the problem of lack of staff at health posts and other primary health structures. Improving access to quality health services can be possible through increasing the coverage of health facilities, especially in rural areas, addressing the human resources shortness problem and strengthening community based services and community participation.

The interviewees, medical practitioners and public health officials alike, identify much the same range of problems. According to them, North Darfur State has insufficient numbers of health personnel. Their working conditions are inadequate and many cannot be persuaded to serve in remote areas. The interviewees believe that government should take the responsibility to improve matters. Those in the public sector need more incentives through better pay, improved working conditions and opportunities for additional training. This requires financial resources.

8.5 Financial resources

8.5.1 Government expenditure on health

North Darfur State has been suffering from inadequate financial resources to deliver quality curative health services to the population. 52.9% of the health services' budget comes from NGOs, and only 33.9% comes from the Federal and State Ministries of Health and 13.2% comes from other forms of external support (see Table 5.14). Curative health service delivery is dependent on funding by NGOs, but these funds are usually given for specific projects or areas and the sustainability of the funding cannot be guaranteed. Otherwise the only option for people to get curative health services is from the private sector which is very expensive for most people in North Darfur State, as has been explained.

Increasing government expenditure on the health sector to 15% of the government's overall budget, as recommended by OAU and WHO (OAU, 2001: 5, and WHO, 2008b:15), would assist the State Ministry of Health to deliver quality curative health services and avoid uncertainties regarding the amount and flow of finances, risks to the health system and policy management, and implementation failure. This, however, is a long-term objective. What specific financial measures could be undertaken now in North Darfur State?

According to an interviewee (2-8, 11 January 2011, El Fasher) in the State Ministry of Health Finance Division:

> The problems of local government health care financing are becoming increasingly important in the light of efforts to create a functioning health system. In current national health policy the district level implements health policy and takes the responsibility of financing health services from their revenue. When the government realized that the districts are not able to finance health services from their own revenue the government started supplementing them through lump sum allocations from the national level, although until recently this have been relatively small and not enough. My view is that the funding of local government should be further rationalized and integrated by

> including municipal health services in the equitable share for basic services grant, replacing provincial health department payments with direct transfers from the national budget. By applying this system the district authorities would be able to have full autonomy in deciding on service provision within the parameters of national policy guidelines.

According to an interviewee (1-6, 23 December, 2010, El Fasher) in El Fasher Teaching Hospital:

> The federal level should provide adequate financial resources, especially for poor states such as North Darfur State, and the State health administration should put in place a good plan and strategy within national health policy to improve health services. Also the State level should address the issues of corruption which has become normal in health administration, because we have experienced that even small funding which come from the federal level does not goes on the provision of health services and there is no effective accountability system in place.

In general, what emerges from the interviews is a call for more efficiency in the disbursement of public funds for curative health services. One mechanism would be to transfer financial resources directly from the federal to the district level. Better measures of accountability and improved public management are recognised as needed to counter corruption. Such a revised financial system would also have to take into account the management of user fees.

8.5.2 User fees

In Table 5.11 it was shown that 92% of the expenditure on health services in the public sector in Sudan comes from user fees. These charges mean that the poor and the vulnerable cannot afford them. In North Darfur State, this affects in particular the 47% of people in urban areas and 80% of those in rural areas who earn less than US$ 1 per day (UN Report, 2011: 32-33). This is a difficult issue. Without the revenue from user fees, public health services would deliver even less. Yet user fees exclude from treatment those who need it most.

According to an interviewee (2-9, 19 January 2011, El Fasher) in Millet District Hospital Finance Division:

> If the government wishes to improve curative health service delivery in this district and other districts, it must shift financing from user fee payments, which equal about 80% of health expenditure in the hospitals, excluding health workers' salaries, toward reliance on public financing and donor support. In this regard external assistance from donors and international NGOs can help but its effectiveness depends on better pooling and integration with domestic sources of financing and better control. Also, user fees for health interventions whose coverage needs to increase should be removed or reduced where possible so as to improve access to the health service by the poor. Therefore more money is necessary but improving the way of controlling the spending to finance health service provision is also crucial.

According to an interviewee (2-10, 28 December 2010, El Fasher) in State Ministry of Health:

> User fee spending as a share of total health spending in North Darfur very high. It is above 80 percent which indicates that the population faces a financial barrier to accessing health services. I suggest that the government spending on finance health care needs to be increased and that user fees and fees for related medicines and tests should be free or reduced from their current levels in the public sector. The government should create other sources of funds from sources like taxation, social health insurance and user fee payments from rich people, as well as asking donors and international NGOs contribute to finance public health facilities.

All interviewees argue that the charges for user fees for public health facilities in North Darfur State are very high and either need to be abolished or reduced to a minimum. They suggest that the alternative to user fees is that the government should create other sources of funds such as taxation, social health insurance, as well as seeking support from donors and international NGOs, to finance public health facilities and to make curative health services free, especially for poor people, children and people with disabilities. But even if further sources of revenue were made

available, this could lead to another set of issues. The experience of countries that have removed fees is that this has led an increase in the utilization of health services, especially for the poor. This means an increase both in the workload of health staff and in drug consumption, which highlights an even greater need for more human and financial resources.

The distribution of public funding for curative health services depends on how co-ordination is practised between three levels of government.

8.6 Co-ordination between the federal, State and district levels of government

The Federal Ministry of Health in Sudan is responsible for policy formulation and human resources. The State Ministry of Health is responsible for financing the health services. The district level is responsible for policy implementation. (see Chapter 3 section 3.3 and Figure 3.1). In North Darfur State, due to the lack of resource capacity at all levels of government, this decentralised system of health management and administration has not been able to function as planned.

There are many factors that have affected the co-ordination between the federal, state and district governments to provide curative health services. These include a weak decentralization system, difficulties in travel and communication, all of which have been seriously affected by the violence in the region. A lack of trust has undermined co-ordination too. Such factors were discussed in detail in Chapter Seven. Interviewees considered how problems in co-ordination could be addressed.

According to an interviewee (1-7, 03 January 2011, El Fasher) working in El Malha Rural Hospital:

> To strengthen the mechanism of health system management in a decentralization system, the federal, state and district levels should strengthen the existing co-ordination mechanisms and promote an incremental integration process, guided by a concern for attaining systemic efficiencies without disrupting the delivery of health services. Particular priority should be given to providing resources, especially financial resources, and make the transfer of funds from federal to state and district faster and easier and to

> integrate information, planning, and management systems to facilitate this process. To address this, the government needs to build the capacity of the State Ministry of Health, as well as that of the district health authorities. It is planned to provide electricity, internet, and software, for supporting the design of a standardized and integrated database, and to link all health facilities in the districts with the State and with the Federal Ministries of Health to exchange health information, and to monitor health system management and policy implementation. The public sector needs to involve the private sector, including international NGOs, as the health sector requires technical, economic, managerial, and political partnerships.

According to an interviewee (2-11, 22 December 2011, El Fasher) in the State Ministry of Health:

> To address the problems that face health system management and policy implementation in a decentralization system, the government at all levels should remove the constraints that hinder the provision of quality curative health services. Constraints include: lack of financial resources, non-availability of health infrastructure, especially at district levels; and a lack of competent personnel in adequate numbers to serve in numerous health facilities, especially in remote rural areas. There are poor communication facilities to obtain health information, and there is a lack of adequate transport facilities to transport medical supplies. All these factors affect scaling up health services, effective health system management, and policy implementation.

Both the health administrators above show a clear overall understanding of what is required in general terms in order to achieve a much improved degree of co-ordination between the levels of government. Others spoke of more specific aspects of co-ordination.

The consequences of conflict on managing curative health service delivery system and policy implementation include the issues of financial and human resources, equipment and supplies, service infrastructure, and the organization of health service delivery (see Chapter Six, section 6.3 and Table: 6.2).

Conflict in the region has badly affected transport and communication. Because of road blocks and the destruction of bridges and communication towers, supplies of commodities, equipment and drugs throughout North Darfur State have become difficult and uncertain.

According to an interviewee (1-8, 11 December 2010, El Fasher) in Mellit Rural Hospital:

> We are supposed to visit each facility on a monthly basis to supply commodities, review health system management data and support front-line staff. But due to the insecurity and lack of vehicles such supervisory visits were infrequent and not always supportive. To do this we need security and more vehicles and fuel, because we experienced breakdown of vehicles and unavailability of fuel, compound the situation.

How could communication be improved in these circumstances? According to an interviewee (2-12, 16 January 2011, El Fasher) in the State Ministry of Health:

> For a better and an active communication system between the three levels of government, the government should organize for the federal, State and district levels to indicate the lines or channels of reporting and communication. There is a demand for clarity on channels of reporting and communication and for functioning communication facilities to coordinate the district, State, and federal levels.

Also the interviewee said:

> The system should put in place regular, structured communication which needs effective communication infrastructure which includes internet communication, telephones and computers, especially at the district and State levels. Internet connection needs to be installed in all levels, which will enable all departments and administrative offices to access the internet, but the government needs to provide electricity supplies first. Also the health councils for information sharing at district and State level must meet monthly to evaluate the situation of health service delivery and health system management because sometimes they meet only once a year for feedback. Without adequate and timely communication between the three levels, district, State and federal, health management teams cannot effectively fulfill their oversight role.

More effective co-ordination therefore requires infrastructure and equipment to make communication easier, but it also requires more active management to ensure that officials meet regularly to deal with issues regarding the delivery of health services. Co-ordination also entails the transfer of resources and information between the levels of government.

According to an interviewee (2-13, 23 December 2010, El Fasher) working in Kutum Rural Hospital:

> We who are working at district level suffer from a lack of resources and delays in transferring them from El Fasher. We need co-ordination between State and district in terms of transferring the funds to be stronger. Due to the bad security situation we need the district authorities to supply us with money which is collected locally from taxes and so on, instead of first transferring this to El Fasher. The State authorities took our funds from Millet district. We need funding to be guaranteed on time so that we can deliver health services.

According to an interviewee (2-14, 25 December 20101, El Fasher) in the State Ministry of Health Finance Division:

> We receive very few funds from the federal level except the health workers' salaries, but the authorities at federal level usually delay in transferring the funds to us. Although the transfer takes place through the Bank we don't know why they delay. Their justification is that they didn't receive the funds on time from the Ministry of Finance which means that there is a complicated bureaucracy of transfer. In my view I suggest that the federal authorities should put one month's funds in reserve so that transfers can happen on time at the end of each month to poor states such as North Darfur State.

Two mechanisms in improving the flow of public revenue to the districts are suggested above. One is essentially for the districts to collect the revenue themselves that is due to North Darfur State from federal government. Again, this is a call to simplify processes by avoiding the State level altogether. Secondly, there is the view that the federal government should maintain a

constant reserve of revenue so that there need not be any delay in regular transfers to lower levels of government.

Curative health services require co-ordination in relation to accurate data and information (see section 6.4.2 and Table 6.5). This was seen as a widespread problem by 88% of the interviewees.

According to an interviewee (1-9, 27 December 2010, El Fasher) working in El Towasha Rural Hospital:

> For a good data collection system there is a need for standard data collection tools for the routine data collection procedures. To do this there is a need to develop unified system registers for collecting information from patients in health facilities. The facilities administration should send a mortality and morbidity report to the State Ministry of Health; and the government must fund vertical programmes to obtain reports by virtue of programme data collectors or contracts for services providers that link funds to performance and monitoring. Also there is a need for improvement of the capacity for data collection and analysis, and monitoring and evaluation knowledge at district and State levels. Data collection and basic aggregation and analysis must happen in health facilities. Without operational district health departments' data collection and data flow reports feedback of the routine health information system does not follow the management lines of the health system. Data flows from health facilities to the State level and from State level to the federal level is really necessary and needs to be over the internet to get feedback quickly from the lower level to the high level and vice versa.

The interview also disclosed that:

> Districts and the State are bypassed on the assumption of their low capacity, but feedback to lower levels is mostly needed. In addition to that, the monitoring and evaluation system has challenges which need to be solved by government and its partners. These challenges include: poor coverage of information technology equipment to analyze and process data at state level; limited power sources in district areas; communication and transportation problems for data to be transmitted from the collection to the processing points and no effective delegation for decision making and action.

According to an interviewee (2-15, 14 January 2011, El Fasher) in the State Ministry of Health:

> In co-ordination between the three levels of government to manage and implement health system and policy, in my view we face the problem of real data collection which needs to be changed from a paper-based system to an electronic system. The data that are now presented on paper will have to be translated and modified to fit the electronic system, which requires training employees and physicians, and also requires the establishment and adoption of standard terminology, that is, a common language for the description and exchange of data.

The interviewee also said that:

> The government should give an opportunity for health workers, especially for those who work in hospitals and other health facilities, to gather information about health service delivery and analyse them, just they should be supported by an electronic medical record which should be available in digital form, at least in bigger hospitals. By investing a relatively small amount of time and money, they've collected it all in one database and designed an easy-to-use interface that allows nurses, doctors, medical researchers, and finance staff to organize it in almost any way they want. Also the important thing in this regard is that the information that is collected from health institutions must be considered and relied on at a high level and become the source of the health service database for effective health system and policy, and not be ignored as usual by those at a high level. In this respect the concerns of health services providers should be respected by the managers at high levels because they have experience in gathering data from their daily practice.

According to an interviewee (2-16, 13 January 2011, El Fasher) in the State Ministry of Health:

> To address the issues of monitoring and reforms health systems, the government should establish a national electronic resource centre that would include a national database on selected indicators. Based on these, State and district levels profiles should be developed on a standardized template using relevant information about the health system. There is a need to develop management capacity with a view to strengthening the monitoring and

> supervision mechanisms of field workers. This is a very high priority, as it has been identified as one of the reasons for health service performance gaps in underserved areas. Additionally, there is a need for professionalism and dedication in the health service.

The above set of substantial quotations from health practitioners and officials raise a common concern. Improving curative health services, in their view, depends on gathering vital information, data and evidence in local health settings and incorporating all this in integrated, electronic databases that can be made widely available for monitoring and evaluation, and diagnosis. These would be technical improvements to existing services. But in order for this to be successful those in senior positions of authority would have to value and respect contributions that could be made by those at lower levels of government. This is the issue of trust.

It was reported earlier that 88% of interviewees stated that there is a lack of trust between the authorities in the three levels of government (see section 6.4.4 and Table 6.7).

According to an interviewee (2-17, 12 January 2011, El Fasher) in the State Ministry of Health:

> One of the factors that weakens the co-ordination between the federal, state and district levels to deliver curative health services and manage the health system and implement policy is a lack of trust between State and local government officials. To build trust between government officials in these levels, especially between State and district levels, the government should increase the funds for district levels because currently they depend on donors and funds from NGOs and they do not need to trust the high government officials. Mistrust between district and State actors has led to resistance at the district level to implement government health policy. Also the government needs to train health officials at State and district levels because health officials at the federal level do not recognize those at lower levels, especially those at district levels because they are not qualified and most of them don't know the national health objectives. Therefore, the government, when planning new policies, should make efforts to consult with and engage all actors, especially those who are responsible for implementation at the district level.

According to an interviewee (2-18, 22 December, El Fasher) in State Ministry of Health:

> To improve health service delivery, overall management at the central level needs to be changed because it is not active due to the existence of many co-ordination and management structures, and regional, departmental and local development committees which has led to the mistrust between health committees at the three levels. To build trust between health officials at the three levels the government should train health administrators in the best practices of health system management and policy implementation and supply them with modern communications tools. Also there a need to ensure that the health committees between the three levels meet regularly and often, especially committees of State and district, so that their meeting together can build trust between them. To do this, the government should support the health authorities at State and district level with additional financial resources to activate their health committees and train health administration staff.

Improvements that could be made in raising the degree of trust between the three levels of government can be understood as human and as organisational. The human element of trust identified by the interviewees can be understood as a concern for respect. Thus it was said that health officials at the federal level do not have respect for those at lower levels who are seen to have less expertise and experience. More training and more contact between those in the health services at the different levels of government were seen as ways of building trust. The organisational aspect of trust was viewed as a consequence of the system of public health committees being complex and dysfunctional, which has led to poor communication.

8.7 Collaboration between the government and NGOs

In North Darfur State the NGOs have collaborated with State and district levels of government and provided 70% of curative health services (State Ministry of Health Survey Report, 2010). The areas of collaboration include: providing human and financial resources; providing materials and equipment; exchanging information; developing joint projects. This was discussed in Chapter Seven. There are many hindrances and obstacles which affect this collaboration. The interviewees expressed views about the best way to remove them. International agencies and

NGOs provide a good number of health staff (see section 7.3.1 and Table 7.2), and are also involved in training government health staff.

According to an interviewee (2-19, 12 January 2011, El Fasher) in the State Ministry of Health:

> The NGOs have taken the lead from government in providing curative health services, whether by financial support or human resources. Currently the number of NGO's health staff working in the field is more than the government health staff. Because of low salaries and the bad work environment, government health staff left the public sector to work in private sector, especially with NGOs, and this will become a serious problem facing the government in the near future. To address this, the government should increase the salaries of health staff, improve working conditions for them and train them to stay in the public sector, because after the NGOs leave the State those who work with NGOs will not come back to work in the public sector if the salaries and work condition remain as now. Definitely they will migrate to work in the private sector or migrate abroad.

The interviewee's comments imply several issues relating to collaboration. The necessity to improve the opportunities and working conditions for health personnel in the public sector is an issue that already been discussed. A possible form of collaboration would be for the NGOs to be given some responsibility to carry out additional training in order to build the capacity of health personnel in government. But this would need an even greater commitment of resources by international NGOs and agencies.

The interviewees stated that the NGOs provide more financial resources to finance curative health services than the government (see section 5.5.1 and Table 5.13). Collaboration with government in this respect has been problematic. According to an interviewee (2-20, 25 December, El Fasher) in the State Ministry of Health who is a coordinator of NGOs:

> There are many problems that affect the level of collaboration between the government and NGOs. These problems include financial issues. The government wants the NGOs to support the State Ministry of Health directly to finance health services. In my view there is no justifiable reason that the NGOs support State Ministry of Health in providing health services, because of corruption in government. Therefore the NGOs should

> provide health services by themselves. But I think if they put their focus on developing health infrastructure rather than providing health services alone, it would be better for government so that when they leave the country the government can benefit from that health infrastructure. Also each international NGO has its own interest in providing health services. These different interests of NGOs make it difficult for government to coordinate with them. Therefore the NGOs should integrate their interests so that government can easily coordinate with them. The NGOs need to be effectively coordinated to serve national interests.

These are serious issues that the interviewee raises since they are central to the nature of collaboration between the government of Sudan and North Darfur State and international NGOs. Their interests are seen as very different, with government concerned about the health system itself, while the NGOs concentrate on humanitarian relief in the region. Here again difficulties in communication and trust seem to be present. This is revealed as well in the disbursement of financial resources. Government, it is said, would prefer to receive direct transfers from NGOs, while NGOs prefer to control their own funds and spend them on their own services. These obstacles to collaboration also happened with materials and equipment.

63% of interviewees stated that NGOs have been providing materials and equipment to government health institutions, especially in the rural areas and even to the main teaching hospitals and the specialist hospital in El Fasher town (see section 7.3.3 and Table 7.4).

According to an interviewee (2-21, 26 December, 2010 El Fasher) working in the State Ministry of Health as a general manager:

> International NGOs have been providing materials, equipment and drugs to the State Hospitals, especially El Fasher teaching hospital, and without the NGOs' support we are unable to run public hospitals. For example, even with the support of NGOs we have shortages even in oxygen, ambulances, hospital beds, unsustainable electricity and other materials and equipment. Therefore we need NGOs and donors to assist and build us new specialized hospitals and supply them with materials and equipment. Also beside that we need support from NGOs to continue providing materials and equipment for our old

> health facilities. But the problem facing the government in the near future is how to keep the materials and equipment that have been provided and maintained by the NGOs working after the NGOs leave the country.

What is significant is the role that NGOs play in North Darfur State in helping to support current public health facilities. The question is how sustainable this collaboration can remain, or even be extended, if the government is unable to provide basic infrastructure like electricity.

Collaboration between the levels of government and the NGOs depends on communication and trust. In terms of communication and information exchange between government and NGOs, 92% of interviewees working with NGOs stated that NGOs provide good information about curative health service delivery, especially regarding controlling diseases and epidemics in IDP camps and rural areas (see section 7.3.4 and Table 7.5).

According to an interviewee (2-22, 27 December 2010, El Fasher) in the State Ministry of Health:

> The best way of better collaboration between the government and NGOs to deliver quality health services is through transparency and sharing information which establishes trust and sustains collaboration between them. We felt that the larger international NGOs such as WHO and UNICEF are more transparent and willing to share information than the smaller NGOs.

Also the interviewee said that:

> The lack of transparency by some NGOs is real and that is why they avoid collaborating with government because they are reluctant to open themselves up for scrutiny. For government to build trust with the NGOs and make sure that they don't have a political agenda they should invite them to accompany them in the field. Currently, a lot of effort needs to be done by both government and NGOs to a ensure regular and transparent flow of quality information regarding health service delivery activities. This would then contribute to building mutual confidence and trust between them.

From the interviews the suggestion emerged that a means of overcoming the suspicion between government and the NGOs and improving communication between them would be for them to work together on joint projects as practical forms of collaboration.

88% of interviewees indicated that there is good collaboration between the government and NGOs in establishing and developing joint health projects, such as building health centres and some rooms in rural hospitals (see section 7.3.5 and Table 7.6). A positive aspect of joint projects between government and NGOs is when NGOs involve the government and community in establishing health facilities, so that the community can maintain them on an on-going basis.

According to an interviewee (1-10, 13 December, 2010, El Fasher) working in El Towasha Rural Hospital:

> International NGOs have established health centres as joint projects with government and communities and supplied them with materials, equipment, drugs and staff, especially in rural areas and IDPs camps, and also support rural hospitals with health materials, equipment and drugs. But the problems facing NGOs is that the government does not give them access to the remote areas where people need the health services and this needs to be solved by government by ignoring the political issues. Also the NGOs involved with the community in these health projects need to be monitored by the community, but the government does not want the community to be involved in health projects. Therefore it puts obstacles in front of the NGOs to establish these health projects in rural areas and wants them to be established in urban areas so that they can be monitored by the government. This needs to be solved.

According to an interviewee (2-23, 27 December 2010, El Fasher) in the State Ministry of Health who is a coordinator of NGOs:

> The State Ministry of Health must establish effective links and coordination procedures with external partners and NGOs that include the signing of agreements of understanding with external partners on how to deliver curative health services. Currently the State Ministry of Health complains that NGOs implement activities, such as establishing health

projects and providing health services, that are not informed by agreement by both parties. This has resulted in poor collaboration at State level and a feeling by State authorities of being bypassed. This need to be s`olved by discussion.

In this regard the interviewee said:

> The NGOs really need to seek permission from one authority, not like what is going on now where they have to get permission from three or more government authorities. I think it is best to get permission from the State Ministry of Health only and not from the security authorities.

Trust is the common theme in the above set of quotations. Channels of communication between government and the NGOs are seen as the essential means of helping to build trust. Collaboration which is based on formal agreement and then pursued by observing protocol would help to improve the situation, interviewers indicate.

In terms of developing national health policy, NGOs in North Darfur State do not participate effectively in developing national health policy; only 35% of interviewees in all sectors stated that NGOs contribute to developing national health policy (see section 7.3.6 and Table 7.7).

According to an interviewee (2-24, 24 December 2010, El Fasher) working with Medicines Sans Frontiers – Spain:

> The government didn't give NGOs the opportunity to participate in the formulation of National Health Policy of 2007. Therefore NGOs don't have any commitment to develop national health policy because they are not part of its design. NGOs implemented their own policies which are adapted from WHO policy, 95% of its objectives being the same as those of the National Health Policy. Donors who support the NGOs were not willing to support the Federal and State Ministries of Health directly to develop national health policy because they fear corruption. Currently the government needs NGOs and donors to assist in developing its national health policy by involving them from the beginning in health policy formulation because the NGOs have been providing more curative health services than the government.

According to an interviewee (2-25, 12 January 2011) who is the Deputy Co-ordinator of NGOs:

> The partnerships and collaboration with stakeholders such as NGOs need to be stronger. This can be through improvement of government capacity, especially at district level, the area where the NGOs are doing a great job and providing health service to the poor and vulnerable people, to supervise and follow up on the partners and NGOs' implementing activities. NGOs must be given a format or template for reporting on progress in implementing their activities. There is a need for a forum that brings together NGOs, the State Ministry of Health and other partners to discuss health service delivery issues, like the situation of health system management and policy implementation and other relevant issues in the health sector. In my view, stewardship should be with the government; whereas the implementation of health service delivery should stay with the NGOs, because the government is not able to do this task; and the monitoring of activities should be done jointly.

Also the interviewee said that:

> The NGOs bring in substantial resources for the delivery of health services. They don't want to be involved in other health issues such as development of the health system and government policy. This needs to be solved through sitting both parties down and deciding the priorities for spending such resources, since for us as State Ministry of Health we need the NGOs and donors to build government capacity in terms of improving the health system and policy, and to provide the health facilities with modern equipment, communications tools, sustainable electricity supply and so on rather than just providing health services to the poor and vulnerable people in North Darfur State.

According to an interviewee (1-11, 23 December 2010, El Fasher) working in Kabkabeiya Rural Hospital:

> The government seems to concentrate on collaboration with NGOs for health service delivery rather than on policy development or advocacy. In my view this is not the right way for government to develop the national health system. It should direct the NGOs to

> contribute to health policy development and their collaboration on health service delivery should be with the State Ministry of Health and not at district level where the health policy is implemented. The best examples of such collaboration are more likely to be found at the district and lower levels. The NGOs make a good effort to include the community in their activity of health service delivery, especially in join health projects.

Health officials in North Darfur State believe that the form of collaboration with international NGOs in the area of health should be extended, or better integrated. The NGOs apparently prefer to concentrate on their own projects to deliver health services in local areas and leave national policy to government. However, a representative from a NGO argued differently, suggesting that NGOs were never asked to play such a role. At a local level there is agreement that government and NGOs could collaborate more effectively, for example, to produce common information and an integrated system of monitoring and evaluations health projects in local communities.

8.8 Conclusion

This chapter moved from identifying issues and problems relating to curative health services in North Darfur State to examining how they can be addressed. Health practitioners and public officials expressed their views on how improvements could be made to the health system and to providing health services. Health facilities, equipment and technical services, as well as general infrastructure, was one area of concentration. A second was human and financial resources. The third focused on co-ordination between the three levels of government, followed by collaboration between government and NGOs. The next and final chapter concludes the analysis by putting all the findings of the study into perspective.

Chapter 9

Prospects for Delivering and Managing Curative Health Services in North Darfur State

9.1 Introduction

What improvements can be made to the curative health system in North Darfur State? The previous chapters have explained the structure of the system, which emerged from the National Health Policy 2007-2011, how health services are delivered, and the facilities and resources that have been available. The health system depends on co-ordination between the federal, state and district levels of government. Increasingly, over the past decade health services have been provided by international NGOs. The last chapter investigated how improvements could be made to managing the health system and to delivering health services. This chapter examines the prospects for such improvements, both the opportunities and the constraints, in order to make a realistic assessment of what is feasible.

The greatest challenge is that the conflict in North Darfur State has destroyed health facilities, displaced people, made delivering services unsafe in the remote areas and led to poverty and disease. Those affected by conflict are 1.6 million people, 81% of the population of North Darfur State, with 37% classified as IDPs (United Nations Report, 2011:58). Therefore the geographical distribution of the State's population has changed, with 90% of the people concentrated since 2003 in urban areas and in IDP camps around the towns, and especially around El Fasher, the State capital.

As noted earlier, 80% of the people in rural areas and 47% in urban areas have to live on less than US$ 1 per day (State Ministry of Finance Report, 2009). The outbreak of disease among the people is very high. The most prevalent diseases are diarrhoea and malaria (see Figure 1.2). According to UNICEF, the infant mortality rate in North Darfur State in the early years of the conflict was given as 61/1000 live births and the maternal mortality rate was 700/100,000 of live births, which was well above the national rate of 509/100,000 in Sudan (Michael and Gary, 2005:14).

Given the context, this chapter will be organised into three themes: the system of delivering and managing curative health services; the continuing role of NGOs; and the implementation of recent political developments.

9.2 The system of delivering and managing curative health services

A federal system of government is a common arrangement worldwide, especially in large countries with scattered and diverse populations as in Sudan. Accordingly, Sudan's health system is structured on a federal basis. The National Health Policy of 2007 specifies that the Federal Ministry of Health is responsible for formulating national policy and setting national priorities, while a State Ministry of Health is responsible for financing the public health services and the district level implements health programs by providing, managing and assessing health services.

Makinde (2005: 63-69) has investigated federal health systems in developing countries. In his view, links are critical between federal, state, and district and community levels in order to facilitate the implementation of health policy by, for example, information flowing upwards from communities to federal government, and resources downwards to where they are needed. Those at the federal level should involve, integrate and coordinate inputs from the lower levels so as to result in a comprehensive, systematic approach to policy implementation and health system management. Typically, though, according to Makinde, in most developing countries health policy is planned at the top level without consulting or allowing participation by those who deliver health services or by those in the communities who receive them. The findings of this study on curative health services in North Darfur State are consistent with Makinde's general interpretation.

Islam (2007:4) suggests that an assessment of a health system should take account of the degree to which government is decentralised and of the levels of authority in decision-making. Which administrative levels have authority over planning, budgeting, human resources and capital development? Is the health sector represented at the local level? Does a local authority have a role in developing policies, allocating resources and planning human resources?

These considerations turned out to be important in investigating the curative health system in North Darfur State. In principle, NHP 2007 makes provision for health officials to participate in deliberations with those at a higher level than themselves, but, as was related, the intergovernmental committees for this purpose had proved to be dysfunctional, because of failures in management, poor means of communication and difficulties in travelling to meetings in unsafe conditions. In broad terms, the health system experienced in North Darfur State lacks the capacity to succeed in achieving the aims of decentralisation as envisaged in terms of NHP 2007.

According to Khaleghian and Gupta (2005: 1088), many developing countries which introduced decentralization found that local officials did not have the basic administrative capacity to carry out their responsibilities, which led to failures in service delivery. As was reported, federal officials in the public health sector in Sudan, as well as those in the North Darfur State government, argued that there was inadequate expertise in the districts to be able to cope with additional authority. Local officials, by contrast, argued that unsafe and ill-equipped working conditions, and low and irregularly paid salaries, undermined their performance, apart from giving them little opportunity to advance their careers through additional training.

The result of all these factors is that the curative health system in North Darfur State has led in practice to a characteristic form of decentralization in which the federal government has centralized control, leaving little autonomy to government in North Darfur State, and even less to the districts. El Saharty *et al* (2009: 41) found that a key constraint to implementing a decentralized system successfully is when local health officials have only limited opportunity to make decisions and to act on them. This was shown to be true in North Darfur State as well. Therefore, the curative health system in North Darfur State is hierarchical, which is managed in a top-down manner. Responsibility for implementing curative health services has been transferred to the district level, but without granting it the necessary facilities and resources in order for them to be able to carry out whatever is required.

Furthermore, without adequate information systems, mechanisms for monitoring and evaluating, forms of communication, as well as trust, throughout the public health sector in Sudan, accountability for performance has been reduced to each level of government blaming the others, as was revealed in the interviews, for failures in delivering curative health services.

According to Khaleghian and Gupta (2005: 1093- 1094), the effectiveness of health service delivery depends upon the extent to which those who deliver it are held accountable for their performance. Health officials at all levels in the public system should be made accountable by monitoring their performance, rewarding them for good performance and punishing them when it is not. This study did not discover any such formal mechanisms of accountability in North Darfur State.

The link between the public health system in North Darfur State and the services provided has been complicated by the serious conflict in the region since 2003. The remote areas became insecure, with many forced to flee to IDP camps. People moved to urban centres too, especially to El Fasher, which is also surrounded by IDP camps. Curative health services, and health facilities more generally, are now concentrated in El Fasher. The dysfunctionality or inadequacies of the Basic Health Units and Primary Health Care Centres has meant that people travel a considerable distance in dangerous conditions to seek more specialised health treatment and facilities in El Fasher. A health system which has been structured in order to become decentralized has become centralized within North Darfur State, leading to an imbalance in the region which does not meet the needs of curative health in the rural, remote districts. The actual flow of health services in the public sector, from the federal level to North Darfur State and to its districts, and the movement of people in search of medical treatment from rural districts to El Fasher is illustrated in Figure 9.1.

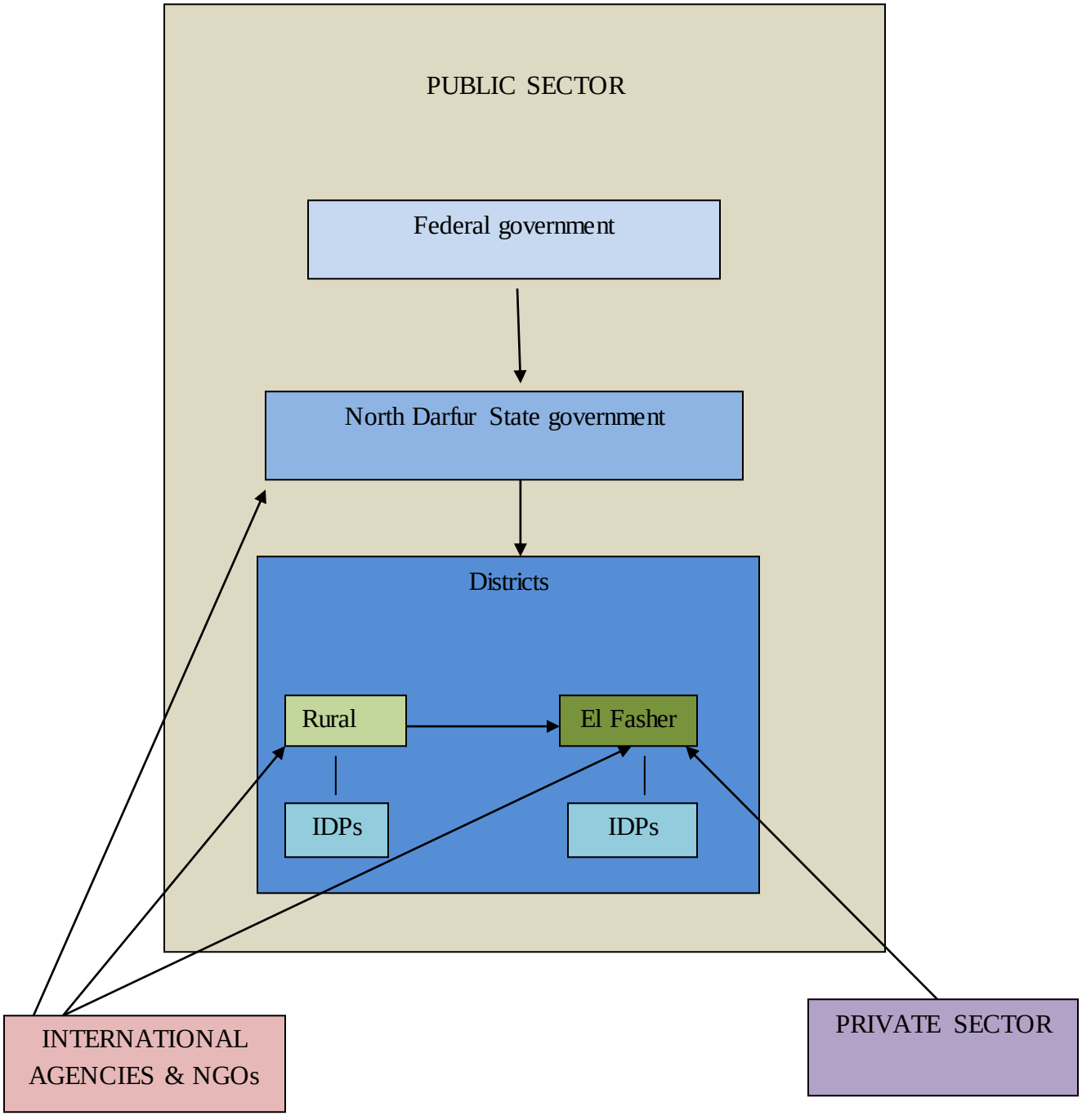

Figure 9.1 Delivery of curative health services in North Darfur State.

While, as was discussed, curative health services are much better in El Fasher than elsewhere, the public health sector in North Darfur State falls short of the government of Sudan's as well as international norms and standards. This is so on a wide range of measures: the facilities, equipment, services, and the number and quality of medical practitioners, assistants and nurses are all inadequate to address the needs of the State's population. Organization, management, training and communication were found to be lacking. This is not entirely due to the consequences of the conflict in the region, although this has been a major factor since, for example, a considerable proportion of the Sudanese government's budget is allocated for security purposes.

A very significant aspect of health revenue in North Darfur State is the increasing reliance on user fees over the past several years in order to support the public health sector. To recall, the first consultation with a health worker is free, but all subsequent treatment and medication is paid by patients. For most in North Darfur State this is unaffordable, especially when this is added to the cost of travelling to health facilities. The cost of accommodation and payment of an entry fee to visit a patient in hospital are further burdens. Therefore, the poor and vulnerable opt for traditional medicine or relief from a NGO, if available.

Most who were interviewed suggested that user fees be reduced or abolished. While this would make health services more accessible to the poor, a reduction in revenue would probably result in a reduction in health services. Furthermore, cheaper or free services would lead to an increased demand for them at the same time as the supply decreases.

Another significant feature is that 98.8% of public expenditure on health in 2009 (see section 5.8 and Table 5.15) in North Darfur State was spent on salaries. This left very little available for health services themselves. But even this very high proportion did not seem to be translated into sufficiently high salaries, according to the medical personnel who were interviewed. Consequently, the public sector found it difficult to attract and to retain medical staff. One means of doing so was to allow medical practitioners to have a private practice while remaining in the public sector. Some interviewees remarked that doctors then tended to neglect their responsibilities in public service, preferring to concentrate on the rewards of private practice.

Very few in North Darfur State can afford private care. But it could be argued that without allowing medical personnel to combine private practice with government service, the public health sector would be in an even worse situation than it is. (The relation between the public and private sectors has also been illustrated in Figure 9.1, together with the role of international agencies and NGOs.)

9.3 Continuing role of NGOs

Because the capacity of government at all levels to provide curative health services in North Darfur State is limited, as has been shown in this study, much of what is needed has come from the efforts of international agencies and NGOs, especially WHO and UNICEF. The NGO sector in the State has more staff for health services than government has (WHO, 2010: 12). As was also noted earlier, the NGOs provide more funds for health services than the government (see Table 7.3), as well as most of the materials and equipment (see Table 7.4).

According to Brinkerhoff and Crosby (2002: 86-87), a leading health agency's responsibility is to co-ordinate all the activities of agencies working in the health sector and to help ensure the alignment of activities and strategies with the host government's policies. There have been difficulties in achieving this in North Darfur State. The Sudanese government's decision to expel thirteen NGOs from the region in March 2009 is one such example. The political instability in the region and the ongoing conflict causes the government to control access to areas under threat and to be suspicious about the motives of the NGOs. Consequently, the NGOs have had to be careful in how they have undertaken health services as humanitarian relief.

In these circumstances, information is not easy to obtain. Those in NGOs are reluctant to speak for fear of compromising the work of their agencies and they do not publish data about their health services. This lack of trust, which is understandable, is a hindrance to collaboration with government. Commenting generally about NGOs, Hopkins (2004:63) suggested that the weakness of their services is that 'they are often poorly co-ordinated, act in parallel with the state systems, have a different vision of the system, which they are seeking to bolster or re-establish; and compete for partners, resources and publicity'. This happens, Brinkerhoff and Crosby

(2002: 86-87) argue, because national governments, international donors, international and local NGOs all have conflicting agendas. In North Darfur State, the international NGOs have concentrated their efforts on providing health services to those who have been affected by the conflict in the region, whereas some in government would also prefer them to contribute to the National Health Policy and to building the capacity of the health system more generally. This has led, in some respects, to the NGOs operating in parallel with the system of public health. But there has been collaboration between government and the NGOs.

As was discussed, the NGOs support the public health system. Those in the private health sector who were interviewed called for NGOs to help introduce and implement integrated databases and programs in monitoring and evaluation in order to deal with curative diseases. Furthermore, the NGOs and international donors are regarded by public health practitioners and administrators as sources of expertise, experience and resources, which are needed to overcome challenges relating to infrastructure, facilities, equipment, supplies and services. To this can be added further training and education of medical personnel. In summary, curative health in North Darfur State has become increasingly reliant on NGOs ever since conflict arose in 2003 and throughout the past several years when the government has been implementing the National Health Policy.

All the interviewees commented on this reliance on NGOs and were concerned about the future of the health system when the NGOs decide, or are forced, to leave. The assumption is that the role of the NGOs would be over once peace returns to North Darfur State. The issue, then, is how to sustain and develop the health system in the absence of NGOs. It may well be that some major agencies, like WHO and UNICEF, remain committed to North Darfur State for quite some years. In any event, what is feasible now, many interviewees indicated, was for government to assume responsibility to establish partnerships with NGOs to build capacity and to invest in the health system itself.

Such partnerships would require a different level of collaboration between government authorities and NGOs. Their agendas would have to converge to some degree. As emerged in previous chapters, such collaboration is only possible if government and the NGOs communicate fully, openly and regularly with one another, and in so doing learn to respect and trust each other.

Then collaboration would turn from the current set of working arrangements into a full partnership. But is this likely? The political circumstances over the past decade have made the government of Sudan suspicious of NGOs, as has already been said, and NGOs, which are mainly focused on relief efforts to the poor and vulnerable, are wary of falling under government control.

A study by Chand and Coffman (WHO, 2008a:6) concluded that in an optimal scenario, donors can successfully disengage some 15-27 years after political conflict has ended. An earlier report by United States Agency for International Development (UNAID) (2005) recommended at least ten years. By such measures, North Darfur State could contemplate a further decade, perhaps two decades, of assistance from international agencies and NGOs. Were this the case, and assuming that the political climate allowed for collaboration as partnership between government and NGOs, what should be on the common agenda to addresses needs in curative health? Four main areas were identified in the course of this study.

The fundamental requirement is to repair, restore and develop the infrastructure on which a health system depends. Electricity, water, roads, transport and communication systems are all necessary throughout North Darfur State. Secondly, health practitioners and officials urged that government incorporate NGOs in public policy processes, in helping to design policies and in improving the capacity for planning. This leads to the third and fourth areas. The third is to assist in developing human resources. This should include physicians, nurses, medical assistants and administrators, furthering their education and training to address the challenges in the health system. The final area is to introduce or enhance integrated systems to implement health policies, and to manage and administer the health system, its structures, its facilities and its services, from the federal level to North Darfur State and all of its districts.

However, the potential to strengthen the health system and improve curative health services in North Darfur State has lessened since the fieldwork for this research was completed in December 2010.

9.4 Recent political developments

Sudan has been in conflict since independence in 1956. The first conflict in Sudan was initiated by a southern-based rebel group called Anya Nya, which fought for the independence of the South. This conflict ended in 1972 through the Addis Ababa agreement. In 1983 the second North -South war broke out when the Sudan People's Liberation Movement/Army (SPLM/A) initiated a rebellion. The conflict between SPLM/A and the government ended in 2005 when the parties signed the Comprehensive Peace Agreement (CPA) granting the South autonomy for six years (Brosché, 2008:4). Following this, a referendum for independence was held in January 2011 which led to the south seceding, and the declaration of two separate countries, Sudan and South Sudan, on 9 July 2011.

However, peace is not yet guaranteed. As South Sudan gains statehood, crucial issues such as border demarcation, sharing of debt, and oil revenues and the use of Sudan's pipeline remain unresolved. Fighting in South Kordofan, Blue Nile, and Abyei threatens the stability of the peace, and there is ongoing tensions and violence on both sides of the border (Insight on Conflict, 2012:1).

A similar referendum was to be held in Abyei to decide whether it joined Sudan or South Sudan, but this was postponed due to complications. Abyei is an oil-rich region that falls along the border between Sudan and the South Sudan. Although it was a stronghold for rebel forces during the civil war, Sudan refused to define Abyei as part of the South during peace talks. Sudanese forces took control of the area in 2011. Since then military clashes have occurred along the border (McConnell, 2012:1). The failure to resolve these matters continues to exacerbate tensions between the two countries, as evidenced by South Sudan's shutdown of its oil production, recurring violence along the Sudan-South Sudan border and the presence of security forces from Sudan and South Sudan in Abyei. The fighting took place along the shared border around the oil town of Heglig, which South Sudanese troops captured in April 2012, but it was returned to Sudan ten days later. The Heglig field is vital to Sudan's economy as it accounts for half the 115,000 barrels per day output that remained in its control when South Sudan seceded in July 2011. In turn, the landlocked South lost its output of 350,000 barrels of oil per day after

failing to agree on how much it should pay to export via Sudan's pipelines, a Red Sea port and other facilities (AlertNet, 2012, 2).

Both Sudan and South Sudan are heavily dependent on oil revenues, and the division of oil wealth is still under discussion. Seventy five percent of the oil reserve is in South Sudan, but the entire infrastructure to export it (pipelines, refineries and Red Sea port) is in Sudan. Sudan has lost a lot of revenue from oil since the split in July 2011. In January 2012, the dispute over oil reached a crisis point. South Sudan shut down its oil production in protest after Sudan started to seize some southern crude to compensate for what it called unpaid transit fees. The shutdown affected the economies of the two countries and led to the collapse of their local currencies against the US dollar. The deterioration of the economy and the local currency in Sudan as well as the large expense for the conflict which is going on currently in South Kordofan, Blue Nile and Darfur is having a negative effect on socioeconomic development.

After the United Nations threatened to impose sanctions on both Sudan and South Sudan they entered into negotiations in Addis Ababa. The negotiations, which are being mediated by the African Union, aim to draw up a safe demilitarized zone along the border. This could be seen as a prerequisite for progress in other areas such as Abyei (McConnell, 2012:1). On 27 September 2012, Sudan and South Sudan signed an agreement in a deal that paves the way for South Sudan to resume sale of its oil using the Sudan pipelines. But the agreement did not address the status of the disputed areas along the border and the fate of Abyei, critical security issues that must be resolved if the two countries are to have lasting peace. These issues may be addressed in upcoming talks. Oil exports have yet to resume. The agreement between the two countries remains fragile and there is the possibility for conflict again.

These recent developments have two main consequences for curative health services in North Darfur State. Firstly, the independence of South Sudan reduces the public revenue available to Sudan because it no longer has total control over the oil reserves in the region. Secondly, the government of Sudan continues to divert effort and resources into dealing with internal conflict and disputes along its borders. This continuing insecurity, which is furthering the deterioration of the economy, will affect overall government revenue. In these circumstances, it is probable that

public revenue for health in Sudan, and for health services in North Darfur State, could decline. If so, North Darfur State could come to depend even more on the efforts of international agencies and NGOs to attend to the State's needs in curative health.

Appendix 1

Interview Questions for Health Administrators and Professionals in the Federal Ministry of Health, Khartoum

a) Basic information

1. Sex: Male ……Female ……..
2. What is your position in this institution? ……..
3. How long you have been working here: …….Year …….. Months?
4. Do you receive any training course in health system management and policy implementation during your work in this position? Yes …….. No…….. If yes, please specify……

b) Financial resources

5. Did the government provide enough budgets for ministry of health?
6. Do you think that the available budget is enough to finance curative health expenditure in the states? If no, specify the consequence of this deficit in curative health service delivery?
7. Is there any external financial support to the Federal Ministry of Health? If yes, specify how.
8. Are there any strict mechanisms for tracking financial management to support state ministries of health to deliver quality curative health services to their population? If so, please specify.

c) Human resources

9. Do you have enough, and well- trained, administration health staff to manage and evaluate national health policy (2007-2011)? If not, please specify your needs from qualified health administration staff to manage the policy effectively.
10. What is your plan to train enough health administration staff to manage and control health system and national health policy and train the administration's health staff at state and district levels?
11. Did you send the administration health staff to the state levels to explain the seven objectives of national health policy to the state and district health departments and the purpose of national health policy and how it is managed, implemented and evaluated?

12. Did you have the stability of health administrations health staff especially the experts? If No please specify the main problems facing you.

d) Health system management and policy implementation at state levels

13. How did you formulate National Health Policy, did all state and district representatives participate in health policy design? If yes please specify.
14. What is the kind of co-ordination and relationship between the Federal Ministry of Health and the State Ministry of Health in managing and implementing the national health policy?
15. How are you monitoring the national health policy implementation at the state and district level, did you send the teams to visit the states and districts or waiting the reports comes from the states levels? If yes, please specify the time duration.
16. Is there any co-ordination and collaboration between the Federal Ministry of Health and other health partners, such as WHO and UNICEF, to develop national health policy monitoring and evaluation? If yes, please specify their efforts in this area.
17. In your view, what are the difficulties and challenges that affect co-ordination and collaboration between federal, state and district levels to manage and implement health systems and policy effectively and to deliver quality curative health services to the people at districts levels?
18. To what extent does the political instability in some states such as North Darfur State, affected by conflict since 2003, affect the management and implementation of health systems and policy?
19. Is there anything more you would like to say about the corroboration and coordination between the Federal Ministry of Health, State Ministry of Health and district authorities in managing and implementing the national health policy effectively to achieve its seven objectives?

Appendix 2

Interview Questions for Health Administrators and Professionals in North Darfur State

a) Basic information

1. Sex: Male ……Female ……..
2. What is your position in this institution? ……..
3. How long you have been working here: …….Years …….. Months?
4. Do you receive any training courses in health system management and policy implementation during your work in this position? Yes …….. No…….. If yes, please specify.

b) The role of curative health policy to control diseases.

5. What are the common diseases in North Darfur State?
6. Is the state able to manage the outbreaks of common diseases such as malaria and diarrhoea among vulnerable populations affected by the conflict?
7. Technically, are the quantities and types of equipment appropriate for providing the quality of curative health services delivery necessary to control outbreaks of malaria and diarrhoea? If no, specify.
8. What has actually been implemented in North Darfur State with regard to controlling the common diseases?
9. What do you think are the limitations of current curative health policy to meet the needs of health services in the state and to control common diseases?

c) Financial resources

10. Do you think that the available budget is enough to finance the curative health expenditure in the state? If no, specify the consequence of this deficit in curative health service delivery.
11. Is there any financial support from state government to the Ministry of Health? If yes, specify how.
12. Are there any strict mechanisms for tracking financial management and is there strong capacity for accounting on curative health services? If so, please specify.

d) Human resources

13. Do you have enough and well-trained health staff in North Darfur State to meet the current curative health policy? If not, please specify your needs for better and effective curative health service.
14. What is the policy to improve the work environment for human resources in the government sector?

e) Curative health policy management and implementation situation in the state

15. Did you know national health policy objectives? Yes …… No ……if yes, please identify the challenges that affect the achievement of national health objectives.
16. How does the state manage and organize the current curative health service system?
17. What is the kind of co-ordination and relationship between the Federal Ministry of Health and the State Ministry of Health in managing and implementing the curative system?
18. Does the Federal Ministry of Health monitor and evaluate the processes of curative health policy management and implementation? If yes, please specify.
19. Is there any co-ordination and collaboration between the State Ministry of Health and NGOs in managing and implementing curative health policy and systems? If yes, please explain based on the following:

a) The distribution of NGOs in North Darfur State.
b) The nature of the collaboration and co-ordination.
c) The duration and contract period.
d) The effectiveness of this collaboration for improving the curative health service system.

20. In your view, what are the difficulties and challenges that affect co-ordination and collaboration with NGOs to deliver curative health services?
21. To what extent does the current conflict affect managing and implementing curative health service system and policy in North Darfur State?
22. Is there anything more you would like to say about the corroboration and co-ordination between the Federal Ministry of Health, State Ministry of Health, and NGOs in managing and implementing curative health policy effectively in North Darfur State?

Appendix 3

Interview Questions for Health Administrators and Professionals at District levels in North Darfur Sate

1. Sex: Male ……Female ……..
2. What is your position in this institution? ……..
3. For how long you have been working here: …….Years …….. Months?
4. What is the effect/impact of conflict on the health of the local community in terms of:

a) The overall trends in morbidity from outbreak of common diseases such as malaria and diarrhoea?

b) The level of access to health services, especially from common diseases such as malaria and diarrhoea, and emergency health services?

c) The kind of health services that is available for internally displaced persons and other vulnerable groups?

5. Do curative health services facilities cover all areas of the province and district?
6. Do existing curative health services facilities have enough equipment and drug supplies? If no please specify the major gaps.
7. Do you have sufficient human resources?
8. Are human resources supported by good training and adequate salaries in district areas?
9. Did you know national health policy objectives? Yes …… No …… if yes, please identify the challenges that affect the achievement of national health objectives.
10. Do you receive any training in health system management and policy implementation during your work in this position? Yes …….. No…….. If yes, please specify.
11. Is the province and district authority participating in designing the curative national health policy? Yes …… No ……. If yes, please explain how.
12. What is the co-ordination between the province, district and NGOs working in the province and district levels in managing and implementing curative health systems and policy?
13. Explore issues regarding co-ordination with the NGO sector and existing intersectoral and communication structures in managing and implementing curative health policy in terms of:

a) Providing materials and equipment for health facilities.

b) Support for health facilities by staff and finance.

14. How does the State Ministry of Health supervise the curative health services facilities at district levels?
15. What are the main challenges in providing a sufficient quality of curative health services at district levels in terms of:

a) Availability of equipment, materials, clinical standards, staff.
b) Existence of clinical supervision by a state level supervisor.
c) Frequency of supervision visits.

16. In general, to what extent does the conflict affect the managing and implementing of the curative health policy and health system in the province and at district level?
17. Is there anything more you would like to say about the co-ordination between district, province, and state levels and NGOs for managing and implementing the curative health system?

Appendix 4

Interview Questions for NGO Officials Working in Curative Health Services in North Darfur State

1. Sex: Male ……Female ……..
2. Name of the organization……
3. What is your position in this organization? ……..
4. Date of starting work in the curative health field in the state? …….
5. What is the mission of your organization? Give a brief historical account.
6. What concrete activities do you undertake in curative health services provision? Describe your projects.
7. How do you participate in curative health policy implementation in terms of, e.g., hospitals, health personnel, expenditure and other health facilities? Describe processes and institutional dynamics.
8. Does the organization participate in the health services according to its own policy or does it take into account the government's curative health policy and objectives?
9. How does your organization collaborate with the State Ministry of Health in managing and implementing the curative health policy in terms of:

a) What government agencies or programmes/projects do you co-ordinate?

b) What is the nature of the relationship and co-ordination between your organization and North Darfur State? (Contracting, type of grants, etc…).

c) How long have you had this collaboration?

d) What is the outcome of this collaboration?

10. How does your organization find co-ordination and collaboration with the State Ministry of Health in achieving curative health policy goals?
11. What are the challenges in co-ordination and collaboration with the Ministry of Health?
12. What would be the best way for collaborating with Ministry of Health?
13. In aspects of co-ordination and collaboration in implementing and managing curative health policy, what changes would you recommend for improving the curative health service delivery?

14. According to your organization, what are the main shortcomings regarding the implementing of the current curative health policy in North Darfur State?
15. Is there anything more you would like to say about the co-ordination with the State Ministry of Health to manage and implement curative health policy effectively?

References

Anderson, E. J. 1997. *Public Policy Making: An Introduction*. Third Edition. Boston and New York: Houghton Mifflin Company.

Badr, E. 2007. Human Resources for Health (HRH) Strategic Work Plan for Sudan (2008-2012), A Report for the World Health Organization (WHO) and the Federal Ministry of Health (FMOH)/Sudan. [Online] Available at http://www.hrhresourcecenter.org/node/2542. Accessed on 23/02/2011.

Barnabas, G. and Zwi, A. 1997. Health Policy Development in Wartime: Establishing the Baito Health System in Tigray, Ethiopia. *Health Policy and Planning,* 12 (1): 38-49.

Bateman, C. 2007. Slim Pickings As 2008 Health Staff Crisis Looms, *South African Medical Journal*, 97(11): 1020-1034.

Bhatia, M. and Mossialos, E. 2004. Health Systems in Developing Countries. In Hall, A. and Midgley, J. (eds.) *Social Policy for Development*. London: Sage Publications, pp, 168-204.

Bornemisza, O. Ranson, K. M and Poletti, M. T. and Sondorp, E. 2010. Promoting Health Equity in Conflict-affected Fragile States. *Social Science and Medicine,* 70: 80–88.

Brinkerhoff, D. and Crosby, B. 2002. *Managing Policy Reform, Concepts and Tools for Decision-makers in Developing and Transitioning Countries*. Bloomfield, CT: Kumarian Press.

Brinkerhoff, W. D. 1996. Coordination Issues in Policy Implementation Networks: An Illustration from Madagascar's Environmental Action Plan. *World Development*, 24 (9): 1497-1510.

Brinkerhoff, W. D. 2008. From Humanitarian and Post-conflict Assistance to Health System Strengthening in Fragile States: Clarifying the Transition and the Role of NGOs, USAID, HealthSystems20/20. [Online] Available at http://www.oecd.org/dataoecd/32/40/43915584.pdf. Accessed on 23/09/2010.

Brosché, J. 2008. Darfur– Dimensions and Dilemmas of a Complex Situation. UCDP Paper No. 2. Department of Peace and Conflict Research, Uppsala University, Sweden. [Online] Available at http://www.humansecuritygateway.com/documents/UPPSALA_Sudan_Darfurdimensionsdilemmas.pdf. Accessed on 24/10/2010.

Brynard, P. 2005. Policy Implementation: Lesson for Service Delivery. African Association for Public Administration and Management. 27th AAPAM Annual Roundtable Conference. Zambia 5th – 9th December 2005. [Online] Available at http://unpan1.un.org/intradoc/groups/public/documents/AAPAM/UNPAN025756.pdf. Accessed on 12/05/2010.

Burgess, G. 2007. Application Form for: Republic of Sudan (Northern States), Global Alliance for Vaccines and Immunizations (GAVI), Alliance Health System Strengthening (HSS) Applications. [Online] Available at www.gavialliance.org. Accessed on 21/03/2011.

Central Bureau of Statistics, Fifth Sudan Population and Housing Census-2008. Khartoum, Sudan. [Online] Available at http://www.cbs.gov.sd/Tiedadat/Tiedadat%205th%20E.htm. Accessed on 11/04/2009.

Chopra, M., Munro, S., Lavis, J., Vist, G. and Bennett, S. 2008. Effects of Policy Options for Human Resources for Health: An Analysis of Systematic Reviews, Lancet. Health Systems Research Unit. Medical Research Council of South Africa. Cape Town: South Africa, 371: 668-674. [Online] Available at www.scienceDirect.com. Accessed on 23/05/2010.

Collins, T. 2005. Health Policy Analysis: A Simple Tool for Policy Makers. *Public Health*, 119: 192–196.

Davies, P. 2004. Policy Evaluation in the United Kingdom. Paper Presented at the KDI International Policy Evaluation Forum. Seoul, Korea May 19-21, 2004. [Online] Available at http://www.nationalschool.gov.uk/policyhub/docs/policy_evaluation_uk.pdf. Accessed on 18/05/2010.

Dodd, J. D. and Boyd, M. H. 2000. Capacity Building: Linking Community Esperance to Public Policy. Population and Public Health Branch, Atlantic Regional Office Health. Canada. [Online] Available at http://www.phacaspc.gc.ca/canada/regions/atlantic/pdf/capacity_building_e.pdf. Accessed on 18/09/2010.

Dye, R. T. 2005. *Understanding Public Policy*. Eleventh Edition. Upper Saddle River, New Jersey: Pearson.

El Sakka, H. 2005. Malaria Preparedness Plan, Greater Darfur Region, Federal Ministry of Health in Collaboration with World Health Organization, Khartoum, Sudan. [Online] Available at http://reliefweb.int/sites/reliefweb.int/files/resources/F83924C37145F6A3492570650011204C-who-sdn-16aug.pdf. Accessed on 12/03/2011.

El-Saharty, S. Kebede, S. Dubusho, P. and Siadat, B. 2009. Ethiopia: Improving Health Service Delivery. Health, Nutrition and Population Discussion Paper. World Bank. [Online] Available at http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/EthiopiaHealthSystemDelivery.pdf. Accessed on 23/08/2009.

Exworthy, M. and Powell, M. 2004. Big Windows and Little Windows: Implementation in the 'Congested State'. *Public Administration*, 82 (2): 263-281.

Fadul, A. 2004. Natural Resources Management for Sustainable Peace in Darfur: in Environmental Degradation as A cause of Conflict in Darfur, Conference Proceedings, University for Peace, Africa Programme, Addis Ababa, Ethiopia. Held in Khartoum, December 2004. [Online] Available at http://www.upeace.org/library/documents/darfur_cp.pdf. Accessed on 23/03/2010

Federal Ministry of Health, Sudan. 2007b .5-Years Health Sector Strategy: Investing in Health and Achieving the MDGs, 2007–2011. [Online] Available at http://www.fmoh.gov.sd/English/St_Plan/doc/Health%20Five-year-strategy%201.5.2007.pdf . Accessed on 15/06/2010.

Federal Ministry of Health, Sudan. 2006. Final Report about Health Facilities and Human Resources in Sudan, Khartoum, Sudan.

Federal Ministry of Health, Sudan. 2007a: National Health Policy, 2007. [Online] available at http://www.fmoh.gov.sd/English/Health-policy/doc/Sudan%20National%20%20Health%20Policy%2011.6.07.pdf. Accessed on 15/02/2010.

Fox, W. and Meyer, I. H. 1995. *Public Administration Dictionary*. Cape Town: Juta.

Frenk, J. 1994. Dimensions of Health System Reform. *Health Policy*, 27 (1):19-34.

Fulop, N., Allen, P., Clarke, A. and Black, N. 2003. From Health Technology Assessment to Research on the Organization and Delivery of Health Services: Addressing the Balance. *Health Policy*, 63: 155 -165.

Gilson, L. 2007. Literature Review: Health Policy Analyses in Lower and Middle Income or Transitional Countries (LMIC/TC), Consortium for Research an Equitable Health System (CREHS) [Online] Available at http://www.crehs.lshtm.ac.uk/downloads/publications/PA_table_oct07_webversion_final.pdf. Accessed on 26/12/2010.

Gilson, L., Buse, K., Murray, S. F. Dickinson, C. 2008. Directions for Health Policy Analysis: a Tribute to the Work of Professor Gill Walt. *Health Policy and Planning*, 23:291–293.

Hamed, M. Z. 2004. Darfur: Apologies and Reconciliation Are Better than Bombs, Working Paper. [Online] Available at http://www.alhewar.net/Basket/Darfur_Moh_Hamad.htm#_ftn5. Accessed on 22/05/2009.

Hanekom, S. 1987. *Public Policy Framework and Instrument for Action*. Pretoria: Southern Book Publishers.

Harrington, C. and Estes, C. 2004. *Health Policy: Crisis and Reform in the U.S. Health care Delivery System*. Fourth Edition. Ontario and London: Jones and Bartlett Publishers.

Health and Fragile States Network Report, 2009. Health Systems Strengthening in Fragile Contexts: A Report on Good Practices and New Approaches. [Online] Available at www.healthandfragilestates.org. Accessed on 13/07/2011.

High-level Forum on the Health Millennium Development Goals. 2004. Achieving the Health Millennium Development Goals (AMDG) in Fragile States, by the Health and Fragile States Network, December 2004, Abuja [Online] Available at http://www.hlfhealthmdgs.org/Documents/FragileStates.pdf. Accessed on 02/23/2009.

Hopkins, J. 2004. Health Systems and Infrastructure, No 2. Public Health Guide for Emergencies. The International Federation of Red Cross and Red Crescent Societies. [Online] Available at http://www.jhsph.edu/refugee/publications_tools/publications/_CRDR_ICRC_Public_Health_Guide_Book/Chapter_2__Health_Systems_and_Infrastructure.pdf. Accessed on 22/02/2010.

Islam, M., ed. 2007. Health Systems Assessment Approach: A How-To Manual. Submitted to the U.S. Agency for International Development in collaboration with Health Systems 20/20, Partners for Health Reform plus, Quality Assurance Project, and Rational Pharmaceutical Management Plus. Arlington, VA: Management Sciences for Health. [Online] Available at http://www.healthsystems2020.org/content/resource/detail/528/. Accessed on 13/07/2010.

Kaul, M. 2000. *An Outsider's Inside View: Management Reforms in Government: a Review of International Practices and Strategies*, Bruxelles, Commonwealth Association for Public Administration (CAPAM).

Keen, S. 2006. Non-government Organizations in Policy. In Colebatch, H.K. (ed.) *Beyond the Policy Cycle: The policy process in Australia*. Sydney: Allen and Unwin, pp, 27-41.

Kennedy, P. 2009. How to Combine Multiple Research Methods: Practical Triangulation, *Johnny Holland*, August 20, 2009. [Online] Available at http://johnnyholland.org/2009/08/practical-triangulation/. Accessed on 19/02/2013.

Khaleghian, P. 2003. Decentralization and Public Services: The Case of Immunization. Policy Research Working Paper, Development Research Group, World Bank, Washington, D.C. [Online] Available at http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2003/04/11/000094946_03040104075222/Rendered/PDF/multi0page.pdf. Accessed on 15/06/2010.

Khaleghian, P. and Gupta, M. 2005. Public Management and the Essential Public Health Functions. *World Development*, 33 (7): 1083–1099.

Khan, M. M. 2006. Health Policy Analysis: The Case of Pakistan. PhD Thesis. Pakistan: University of Groningen. [Online] Available at http://dissertations.ub.rug.nl/FILES/faculties/medicine/2006/m.m.khan/thesis.pdf. Accessed on 23/04/2010.

Kickert, W., Klijn, E. and Koppenjan, J. 1997. *Management Perspective on Policy Networks: Strategies for the Public Sector*. London: Sage Publications.

Kruk, E. M., Freedman, P. L., Anglin, A. G. and Waldman, J. R. 2010. Rebuilding Health Systems to Improve Health and Promote State Building in Post-conflict Countries: A Theoretical Framework and Research Agenda. *Social Science and Medicine*, 70: 89–97.

Kruk, M. E., and Freedman, L. P. 2008. Assessing Health System Performance in Developing Countries: A review of the Literature. *Health Policy*, 85: 263-276.

Logie, D., Rowson, M., and Ndagije, F. 2008. Innovations in Rwanda's Health System: Looking to the Future. *Public Health*, 372: 256–261.

Lopez, A. 2008. What Do We Mean by Rigorous Health-systems Research? School of Population Health. University of Queensland, Brisbane, QLD, Australia, 372. [Online] Available at www.thelancet.com. Accessed on 25/06/2009.

Mahmoud, B. 2010. Bridging the Healthcare Gap in Darfur: The Role of Community Aid Organizations. Paper Presented in London International Conference to Start the Process for a Health Development Plan for Darfur, Sudan. Held in London on 1st – 3rd March 2010. [Online] Available at www.DarFurmedicalconference2010.yolasite.com. Accessed on 15/5/2010.

Makinde, T. 2005. Problems of Policy Implementation in Developing Nations: The Nigerian Experience. *Journal of Social Science*, 11(1): 63-69.

Mamdani, M. 2009. *Saviors and Survivors, Darfur, Politics, and War in Terror*. Cape Town: HSRC Press.

Matland, R. E. 1995. Synthesizing the Implementation Literature: The Ambiguity-Conflict Model of Policy Implementation. *Journal of Public Administration Research and Theory*: J-PART, 5 (2): 145-174.

Mays, P. G., Smith, A.S., Ingram C. R., Racster, J. L., Lamberth D. C. and Lovely S. E. 2009. Public Health Delivery Systems, Evidence, Uncertainty, and Emerging Research Needs. *Public Health System and Services Research*, 36 (3):256-265.

McConnell, L. 2012. What can the international community do to halt the growing Sudanese conflict? Acumen Third Sector, Peace Direct, [Online] Available at http://www.insightonconflict.org/2012/07/international-community-halt-sudanese-conflict/. Accessed on 23/08/2012.

Michael, M. and Gary, K. 2005. Evaluation of ECHO Funded/UNICEF Managed Emergency Health/Nutrition and Water and Environmental Sanitation Action for Conflict Affected Populations in North Darfur, Blue Nile and Unity States of Sudan, Khartoum. [Online] Available at http://www.unsudanig.org/workplan/mande/reports/docs/evaluations/ECHO%20Blue%20Nile-Unity-North%20Darfur%20Health-WES%20Evaluation%20%20_1_.pdf. Accessed on 15/03/2011.

Mills, A. 1998. Health Policy Reforms and their Impact on the Practice of Tropical Medicine. *British Medical Bulletin*, 54 (2): 503-513.

Ministry of Cabinet Affairs Secretariat General. 2008. The Republic of Sudan. [Online] Available at http://www.sudan.gov.sd/en/index.php?option=com_content&view=article&id=80:2008-07-22-21-57-13&catid=43:2008-06-06-15-24-59&Itemid=71. Accessed on 23/03/2011.

Mohamed, G. 2007. Financing Health Care in Sudan: Is it a time for the Abolishing of User Charges? *Sudanese Journal of Public Health*, 2 (1): 38-47.

Morse, K. and Struyk, R. 2006. *Policy Analysis for Effective Development: Strengthening Transition Economics*. Boulder, London: Lynne Rienner.

Murray, L. C. 1995. Towards An analytical Approach to Health Sector Reform. *Health Policy*, 32: 93-109.

Newbrander, W. 2007. Rebuilding Health Systems and Providing Health Services in Fragile States. Management Sciences for Health. Occasional Papers. No 7, USAID. [Online] Available at http://www.basics.org/indexpre_docs/Executive_Summary_ Rebuilding _Health_Systems_in_Fragile_States_Newbrander.pdf. Accessed on 22/04/2010.

Newbrander, W., Yoder, R. and Debevoise, B. A. 2007. Rebuilding Health Systems in Post-conflict Countries: Estimating the Costs of Basic Services. *International Journal of Health Planning and Management*, 22: 319–336.

Official Home Page of AlertNet, Crisis Centre, Background and Resources. 2012. [Online] Available at http://www.trust.org/alertnet/crisis-centre/crisis/sudan-conflicts?gclid=CJmJp5PU_rECFWchtAodsiMA4A. Accessed on 02/09/ 2012

Official Home Page of Insight on Conflict. 2012. [Online] Available at http://www.insightonconflict.org/. Accessed on 03/09/ 2012.

Organization of African Unity. 2001. Abuja Declaration on HIV/AIDS, Tuberculosis and other Related Infectious Diseases, Decision OAU/SPS/Abuja/3. Meeting Held in Abuja, Nigeria from 24-27 April 2001. [Online] Available at http://www.un.org/ga/aids/pdf/abuja_declaration.pdf. Accessed on 23/02/2011.

Panday, K. P. 2006. Central-Local Relations, Inter-Organizational Coordination and Policy Implementation in Urban Bangladesh. *The Asia Pacific Journal of Public Administration*, 28 (1): 41-58.

Parsons, W. 1995. *Public Policy: An Introduction to the Theory and Practice of Policy Analysis*. Aldershot: Edward Elgar.

Pearson, M. 1986. Health Policies and Population in Third World. In Gould, W. and Lawton, R. (eds.) *Planning for Population Change*, London: Croom Helm Ltd.

Phillips, D. 2008. Darfur Early Recovery and Development Dossier. Columbia University Center for Study of Human Rights. [Online] Available at http://hrcolumbia.org/darfur/dossier.pdf. Accessed on 30/03/2009.

Pope, C. and Mays, N. 1995. Qualitative Research: Reaching the Parts Other Methods Cannot Reach: An Introduction to Qualitative Methods in Health and Health Services Research. BMJ, 311:42-45. [Online] Available at http://www.bmj.com/cgi/content/full/bmj;311/6996/42#R14. Accessed on 09/03/2010

Rubenstein, L. S. 2009. Post-Conflict Health Reconstruction: New Foundations for U.S. Policy. United State Institute of Peace Working Paper. [Online] Available at http://www.usip.org/files/post-conflict_health_reconstruction.pdf. Accessed on 25/08/2010.

Sadler, K and Taylor, A. 2004. Community Therapeutic Care (CTC) in North Darfur, North Sudan: challenges of implementation (Special Supplement 2), Field Exchange, Issue No 102, November 2004. [Online] Available at http://fex.ennonline.net/102/3-3.aspx. Accessed on 24/04/2011.

Samb, B. 2009. An Assessment of Interactions between Global Health Initiatives and Country Health Systems, World Health Organization Maximizing Positive Synergies Collaborative Group. *Health Policy*, 373: 2137–2169.

Schneider, H., Gilson, L., Ogden, J., Lush, L. and Walt, G. 2006. Health Systems and the Implementation of Disease Programmes: Case Studies from South Africa. *Global Public Health*, 1(1):49- 64.

Siddiqi, S., Masud, I.T., Nishtar, S., Peters, H.D., Sabri, B., Bile, M.K. and Jama, A. M. 2009. Framework for Assessing Governance of the Health System in Developing Countries: Gateway to Good Governance. *Health Policy*, 90: 13–25

Spiegel, P., Checchi, F., Colombo, S. and Paik, E. 2010. Health-care Needs of People Affected by Conflict: Future Trends and Changing Frameworks. Public Health and HIV Section United Nations High Commissioner for Refugees. Geneva: Switzerland. *The Lancet*, 375: 341–45.

State Ministry of Finance and Economy Report. 2006. The Final Report of Ministry of Finance and Economy, El Fasher, North Darfur State.

State Ministry of Finance and Economy Report. 2009. The Final Report of Ministry of Finance and Economy, El Fasher, North Darfur State.

State Ministry of Health Financial Report. 2006. The Final Financial Report of Ministry of Health, El Fasher, North Darfur State.

State Ministry of Health Financial Report. 2009. The Final Financial Report of Ministry of Health, El Fasher, North Darfur State.

State Ministry of Health Survey Report. 2008. The Finial Survey Report for Health Facilities in the State and District, May-August 2008, El Fasher, North Darfur State.

State Ministry of Health Survey Report. 2009. The Final Survey Report about Spreads of Diseases in the State, El Fasher, North Darfur State.

State Ministry of Health Survey Report. 2010. The Final Health Facilities and Human Resources Survey Report in the State and Distracts, Dismember 2010, El Fasher, North Darfur State.

Stone, C. 1993. Urban Regimes and the Capacity to Govern: A Political Economy Approach. *Journal of Urban Affairs*, 15(1): 1-28.

Sudan Health Service Standard, 2004. Series Documents the Restructuring of the Health Sector, Document Describe Health Units and Functional Connectivity, Federal Ministry of Health, Khartoum, Sudan.

Suliman, M. 2008. The War of Darfur: The Resources Dimension. Respect, Sudanese Journal for Human Rights, Culture and of Cultural Diversity. [Online] Available at

http://www.sudan-forall.org/sections/ihtiram/pages/ihtiram_issue8/pdf_files/Dr-Mohamed-Suliman.pdf. Accessed on 23/12/2010.

Sundewall, J. 2009. Health Sector Aid Coordination in Zambia from Global Policy to Local Practice. Published PhD Thesis. Karolinska Institutet. Stockholm, Sweden.

United Nations Population Fund (UNFPA). 2006. Multi-Sector, Multi-Partner, Multi-Disciplinary Approach to Gender-Based Violence Prevention and Response in Darfur 2005-2006, Gender-Based Violence Strategy Workshop 14-15 February 2006, United Nations Population Fund Sudan Country Office. [Online] Available at http://countryoffice.unfpa.org/sudan/drive/UNFPAGBVStrategyforDarfur_06.pdf. Accessed on 23/09/2010.

United Nations. 2008. Darfur Humanitarian Profile No 33, Office of UN Deputy Special Representative of the UN Secretary-General for Sudan UN Resident and Humanitarian coordinator. [Online] Available at http://www.unsudanig.org/docs/DHP33_narrative_1%20October%202008.pdf. Accessed on 15/03/2010.

United Nations. 2011. Sudan Work Plan 2011. [Online] Available at http://ochadms.unog.ch/quickplace/cap/main.nsf/h_Index/2011_Sudan_Workplan/$FILE/2011_Sudan_Workplan_SCREEN.pdf?openElement. Accessed on 16/03/2011.

University of Cape Town, Centre for Health Policy, EQUINET. 2009. 'Policy Analysis Workshop,' EQUINET Workshop Report, 22 September 2009, Munyonyo, Kampala, Uganda. EQUINET: Harare. [Online] Available at http://www.equinetafrica.org/bibl/docs/REPpolicy220909.pdf. Accessed on 23/03/2010.

University of Witwatersrand and Health Economics Unit and University of Cape Town, policy, EQUINET. 2008. Tackling Implementation Gaps through Health Policy Analysis, Equine and Centre for Health Policy. Series No 21. [Online] Available at http://web.wits.ac.za/NR/rdonlyres/B28A089C-B561-42AF-9AED-F287AA8D3795/0/B76GilsonTacklingimplementationgaps.pdf. Accessed on 13/02/2010.

Walker, L. and Gilson, L. 2004. We Are Bitter But We Are Satisfied: Nurses as Street-level Bureaucrats in South Africa. *Social Science and Medicine*, 59:1251–1261.

Walt, G., Shiffman, J., Schneider, H., Murray, S., Brugha, R. and Gilson, L. 2008. 'Doing' Health Policy Analysis: Methodological and Conceptual Reflections and Challenges, *Health Policy Plan*, 23 (5): 308-317.

Wamai, R. G. 2004. Recent International Trends in NGO Health System Organization, Development and Collaborations with Government in Transforming Health Care Systems: The Case of Finland and Kenya, PhD Thesis. Department of Social Policy/Institute of Development Studies, University of Helsinki, Finland. [Online] Available at http://ethesis.helsinki.fi/julkaisut/val/sospo/vk/wamai/recentin.pdf. Accessed on 22/05/2010.

Wasabi, W. 2009. Aid Expulsions Leave Huge Gap in Darfur's Health Service, World Report, and Vol 373. [Online] Available at www.thelancet.com. Accessed on 12/04/2011.

WikiAnswers. Answers Corporation, 2013.What is the Curative Health Care. [Online] Available at http://wiki.answers.com/Q/What_is_curative_health_care. Accessed on 28/02/2013.

World Bank. 2003. Sudan Health Status Report, World Bank/AFTH3. Draft Version 1. [Online] Available at http://www.emro.who.int/sudan/pdf/Sudan%20Health%20Status%20Report%20August%202003.pdf. Accessed on 27/04/2010.

World Bank. 2010. People, World Development Indictors. [Online] Available at http://data.worldbank.org/sites/default/files/section2.pdf. Accessed on 18/01/2012.

World Health Organization and Federal Ministry of Health in Sudan. 2004. Joint Annual Report –Sudan. Khartoum. [Online] Available at http://www.emro.who.int/sudan/media/pdf/Joint%202004%20report.pdf. Accessed on 9/05/2010.

World Health Organization. 2000. The World Health Report 2000: Health Systems: Improving Performance. World Health Organization: Geneva. [Online] Available at www.who.int. Accessed on 13/01/2010.

World Health Organization. 2001. Background Paper for the Technical Consultation on Effective Coverage of Health Systems 27-29 August 2001. Rio de Janeiro, Brazil. [Online] Available at http://www.who.int/health-systems-performance/technical_consultations/effcov_background.pdf. Accessed on 15/09/2011.

World Health Organization. 2003. Strategic Framework for Recovery in Sudan. [Online] Available at http://www.who.int/disasters/repo/10383.pdf. Accessed on 23/09/2010.

World Health Organization. 2004a. Darfur One Year On, Who's Work to Save Live and Reduce Suffering. [Online] Available at www.emro.who.int/sudan/pdf/annualreport_07. pdf. Accessed on 9/05/2009.

World Health Organization. 2004b. Retrospective Mortality Survey among the Internally Displaced Population, Greater Darfur, Sudan. European Programme for Intervention Epidemiology Training. [Online] Available at http://www.who.int/disasters/repo/14656.pdf. Accessed on 15/05/2010.

World Health Organization. 2006a. Health Systems Profile- Sudan, Regional Health Systems Observatory, Egypt. [Online] Available at http://gis.emro.who.int/HealthSystemObservatory/PDF/Sudan/Full%20Profile.pdf. Accessed on 18/05/2009.

World Health Organization. 2006b. Working Together for Health, World Health Report 2006, Geneva [Online] Available at http://www.who.int/whr/2006/whr06_en.pdf. Accessed on 23/08/2010. Accessed on 22/05/2010.

World Health Organization. 2007a. Together for Better Health. A Report on World Health Organization Collaborative Programmes with the Government of Sudan and Partners 2006 – 2007. [Online] Available at http://www.emro.who.int/sudan/pdf/annualreport_07.pdf. Accessed on 9/05/2010.

World Health Organization. 2007b. Federal Ministry of Health and WHO Emphasize Commitment to Advance Health Services, RD Visits Sudan, a quarterly Newsletter of the WHO Representative Office in Sudan, Vol1, No 2. [Online] Available at

http://www.emro.who.int/Sudan/pdf/newsletter_vol1_2_07. pdf. Accessed on 05/05/2010.

World Health Organization. 2008a. Health Cluster Guidance Note on Health Recovery, Report Prepared by the Department of Recovery and Transition Programmes, Health Action in Crisis. [Online] Available at http://www.who.int/hac/global_health_cluster/guide/117_iasc_global_health_cluster_recovery_strategy_guidelines.pdf. Accessed on 13/05 /2011.

World Health Organization. 2008b. The Ouagadougou Declaration on Primary Health Care and Health Systems in Africa: Achieving Better Health for Africa in the New Millennium. [Online] Available at http://ahm.afro.who.int/issue12/pdf/AHM12Pages10to21.pdf. Accessed on 23/04/2011.

World Health Organization. 2009a. Country Cooperation Strategy for WHO and Sudan 2008-2013. Regional Office for Eastern Mediterranean. Sudan. [Online] Available at http://www.who.int/countryfocus/cooperation_strategy/ccs_sdn_en.pdf. Accessed on 14/07/2010.

World Health Organization. 2009b. World Health Statistics 2009, Health Workforce, Infrastructure, Essential Medicines, Table 6. [Online] Available at http://www.who.int/whosis/whostat/EN_WHS09_Table6.pdf. Accessed on 18/09/2012.

World Health Organization. 2010. Health Resources Availability Mapping System, Greater Darfur Report 2nd Quarter 2010. [Online] Available at http://www.emro.who.int/sudan/pdf/HeRAMS_2Q_2010.pdf. Accessed on 15/03/2010.

World Health Organization. 2011. Global Health Observatory Data Repository, [Online] Available at http://apps.who.int/ghodata/. Accessed on 12/05/2011.

Xu, H. and Bayoum, A. 2009. Evolution of UNICEF-GOS 2002-2006, Country Health and Nutrition Programme Final Report, [Online] Available at http://www.alnap.org/pool/files/evaluation-of-gos-unicef-2002-2006-health-and-nutrition-prog.pdf . Accessed on 23/02/2010.

Zwi, A. B. and Mills, A. 1995. Health Policy in Less Developed Countries: Past Trends and Future Directions. *Journal of International Development*, 7 (3): 299-328.