

The Demise of the Healthcare System in Sudan

A Narrative of Corruption and Lack of Transparency

A Report by the Sudan Democracy First Group :
The Sudan Transparency Initiative



Sudan Democracy First Group (SDFG) was formed as an umbrella group of leading Sudanese independent and democratic civil society and media actors to serve as a think tank and a venue for indigenous research, analysis and advocacy on human rights, development, peace and democratic transformation in Sudan.

SDFG launched the Sudan Transparency Initiative (STI) Project in March 2015 to investigate, analyze, document and disseminate credible and reliable information about the scope and scale of corruption and lack of transparency in Sudan. The STI project consists of five tracks that collectively raise awareness, promote accountability and resistance and spur grassroots anti-corruption movements in Sudan. One of these tracks is to commission expert consultants to thoroughly research and report on corruption and lack of transparency in specific key sectors. One of the sectors that receive considerable attention and controversy is the healthcare system, governance and legal framework in Sudan.

About Sudan Democracy First Group

Sudan Democracy First Group (**SDFG**) was established by a number of Sudanese Civil Society Leaders, Activists and Academics in 2010 in Khartoum. The establishment of **SDFG** was particularly spurred by the failure to democratic transformation in Sudan, which became acutely apparent during the April 2010 national elections, as part of the Comprehensive Peace Agreement. With growing instability, caused by reoccurrence of conflict, lack of justice and accountability, and increasing exclusion and marginalization, **SDFG** emerged with the aim to provide a voice to the voiceless, as well as to promote democracy in its intersection, with peace, justice, and balanced development.

VISION

SDFG envisions a democratic inclusive society in Sudan where justice, equality, peace and development prevail.

MISSION

Sudan Democracy First Group considers its overall mission to promote inclusive democracy. **SDFG** is further committed to the raising up of marginalized groups (whether marginalization is based on culture, ethnicity, class, gender, race, region, age, political affiliation or religion) by providing platforms for inclusive and transparent engagement and promoting opportunities for participation and expression in the public sphere.

APPROACHES AND METHODS

SDFG works on addressing the problem of lack of the inclusive democracy based on complementary and multi-disciplinary approach guided by values of peace, justice and development. **SDFG** focusses on the provision of profound and independent research and analysis; campaigning for justice and contributing to lasting solution to the conflicts in Sudan. **SDFG** further works to promote civil society dialogue, collaboration and the development of a joint democratic agenda. Moreover, **SDFG** is committed to enhancing accountability and promote democratic governance structures. Lastly **SDFG** aims at facilitating the participation and engagement of a democratic and independent civil society and its leadership in the different political processes and dialogues.

AREAS OF INTERVENTIONS

SDFG introduced a number of initiatives and projects since its foundation which can be categorized into three programmatic areas;

- Governance and Accountability
- Civic Engagement in Peace and Political Processes
- Policy and Advocacy

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II. List of Abbreviations and Acronyms

AfDB	African Development Bank
AIDS	Acquired Immunodeficiency Syndrome
ART	Anti-Retroviral Therapy for HIV/AIDS
AUC	African Union Commission
BCC	Behavior Change and Communication
CBOs	Community Based Organizations
CDC	Communicable disease control
EU	European Union
FMOH	Federal Ministry of Health
GAVI	Global Alliance for Vaccines and Immunization
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDs, Tuberculosis and Malaria
HHA	Harmonization for Health in Africa
HIV	Human Immunodeficiency Virus
HSS	Health System Strengthening
ICT	Information, Communication and Technology
IEC	Information, Education and Communication
LLITNs	Long-lasting insecticide impregnated bed nets
MDGs	Millennium Development Goals
MDR-TB	Multiple Drug-Resistant Tuberculosis
M & E	Monitoring and Evaluation
NA	National Assembly (legislative body)
NCDs	Non-Communicable Diseases
NHIF	National Health Insurance Fund
NEPAD	New Partnership for Africa's Development
NGOs	Non-Governmental Organization



NTDs	Neglected Tropical Diseases
UN	United Nations
OECD	Organization for Economic Co-operation and Development
OOP	Out-Of-Pocket expenditure on health services
PHC	Primary Health Care
PLHIV	People Living with HIV
PMTCT	Prevention of Mother to Child Transmission of HIV
PPP	Public Private Partnerships
PRM	Peer Review Mechanism
PRS	Poverty Reduction Strategy
RECs	Regional Economic Communities
SDFG	Sudanese Democracy First Group
SDGs	United Nations Sustainable Development Goals for 2030
SLA	State Legislative Assembly
SMOH	State Ministry of Health
SRMNCAH	Sexual, reproductive, maternal, neonatal, child and adolescent health
STI	Sudan Transparency Initiative
TI	Transparency International
TB	Tuberculosis
TM	Traditional Medicine
UK	United Kingdom of Great Britain and Northern Ireland
UNAIDS	Jointed United Nations Program on HIV/AIDS
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USA	United States of America
USD	US Dollars
WB	World Bank
WHO	World Health Organization

III. Acknowledgements

The Sudanese Democracy First Group's Sudan Transparency Initiative wishes to thank the countless brave individuals and institutions whose vigilance, diligence and exposure of ethical and legal transgressions made this Report possible. They include Sudanese and non-Sudanese individuals along with indigenous, regional and international civil society and media groups who have courageously revealed the extent of ongoing corruption in the health sector as well as its consequences.

We also wish to acknowledge the author(s) of this report whose identity is withheld for the same reasons the oppressive regime in Sudan was able to commit the extent of corruption described in this Report. Revealing the author(s)' location and affiliation would pose a grave risk to their lives and well-being, particularly in light of the continued hypersensitivity of the Sudanese regime to any critique of its conduct and violations against the Sudanese people and their resources.

Finally, we wish to acknowledge the heroic daily sacrifices silently made by Sudanese citizens, particularly those living in the war zones of Darfur, South Kordofan/Nuba Mountains, and Blue Nile States, as they suffer and struggle against the current oppressive regime, its prejudiced policies, mismanagement and corrupt practices.

It is our sincere hope that this Report will represent a contribution to the struggle by the Sudanese people to rid the country of this regime and to usher a dawn of proper rebuilding of state institutions, policies and practices that adhere to principles of good governance.

IV. Executive Summary

Sudan's current regime came to power on 30th June 1989, health and other social services have been neglected, distorted, underfinanced and, in a sense, enabled to allow pervasive corruption through the systematic dismantling of the regulatory controls that had functioned well since Sudan's independence. Hence, since March 2015, the Sudan Democracy First Group (SDFG) had launched the Sudan Transparency Initiative (STI) Project. As part of one of STI's goals by researching and documenting on corruption and lack of transparency, this Report focuses on exposing corruption in Sudan's health sector.

The Report aims to identify and describe the extent, root causes and implications of corruption and poor governance upon Sudan's health sector performance since 1990. Aimed primarily at activists, researchers, students, academics, policy-makers and practitioners, the Report discusses Sudan's health sector corruption against the good governance requirements reflected in the Sudan's own interim constitution, prevailing national legal framework and international standards and good practices in governance for the health sector. The Report describes an illustrative list of the types of corruption common in Sudan's health sector and the systematic weaknesses in the legislative, regulatory and institutional framework for good governance which allow them.

It is well beyond the scope of this Report to precisely quantify corruption's negative impact in terms of disease burden outcomes (morbidity, mortality) or health delivery system performance (access and utilization rates for health services). Nevertheless, the Report draws on similar global experiences

which have defined such negative impact. For instance, the lower rates of preventive health service utilization theoretically attributable to corruption are evident in the lower rates of immunization coverage as well as lower rates of coverage of environmental hygiene services at the local level. Similarly, the higher rates of mortality from simple communicable and non-communicable diseases among patients presenting in public sector clinics represent evidence of negative impact of corruption on health service delivery performance.

Both poor governance structures as well as underfunding the health sector are enabling factors for corruption to become a cancerous phenomenon as it has become in Sudan. The neglect of the government's responsibilities towards the health of its citizens as well as its dismantling of the previously - existing regulatory frameworks in the health sector are both key drivers for the corruption seen in Sudan's health sector.

The other two dimensions of corruption which the Report analyses are the focus of the regime on waging wars against its citizens in Darfur, South Kordofan and Blue Nile states as well as its active policy of privatizing and selling all public assets and services. The displacement of social investments by military and security expenditure is a key factor shunting available funds away from the health and social sectors. At the same time, the manner and obvious conflicts of interests, collusive practices and outright theft of public assets in the process of privatization leave no room for imagining what might have been the motivation behind the salvation (Inqaz) government's privatization efforts. Clear examples and analyses are provided in the Report.

The Report concludes by confirming what many observers had already indicated: Sudan's health sector is among those most highly affected by high rates of corruption at many levels. While such negative impact is often multifactorial and is influenced by ineffective policies, mismanagement and poor implementation practices in Sudan's health system, the role played by corruption should not be underestimated. The Report describes the presence of constitutional and legal obligations for the government's provision of some key services in Sudan since 2005 as well as a major period of macro-economic growth achieved for a decade during Sudan's oil boom.

Along with official government statements indicating clear awareness about its obligations and ability to provide affordable or free health services, the presence of legal obligation and economic capability led the Report to conclude that the corruption in Sudan's health sector should not be seen as an incidental finding but, rather, a deliberate effort at dismantling and profiting from a sector that once had intact systems of control to limit corruption.

Rather than relying merely on just punishing corruption in the health sector, the Report recommends additional systematic measures aimed at the root causes. These include the creation of a system of checks and balances that addresses good governance within and beyond the health sector, increased involvement of communities and citizens to ensure transparency and accountability among government officials, the rehabilitation of previous and the creation of new institutionalized good governance mechanisms which can enable better oversight by the Sudanese over federal and sub-national health sector decisions.

The Report's recommendations aim at providing further agenda for investigative research to better delineate the extent of corruption, its impact and mechanisms to more effectively prevent and address it in the future. It may seem unrealistic to implement such recommendations under the current oppressive regime which has no interest in and benefits greatly from health sector corruption. However, this Report aims at holding the current regime accountable for its corrupt policies and practices based on its own existing legislative framework, while at the same time enabling the creation of a better system of governance for Sudan also after the inevitable fall of the Regime.

V. Introduction

A. Overview of the Sudan Transparency Initiative

The Sudan Democracy First Group (SDFG) launched the Sudan Transparency Initiative (STI) Project in March 2015 to document, investigate, analyze and disseminate credible and reliable information about the scope and magnitude of corruption in Sudan. The overarching objectives of the initiative are:

1. To raise awareness of Sudanese and non-Sudanese about the scale and scope of grand and petty corruption;
2. Build anti - corruption movements at local and national levels to demand accountability, transparency, assets recovery and justice;
3. Mobilize and build the capacity of youth, through specialized training, to be able to skillfully document, analyze and subvert corruption practices in their local settings;
4. Make credible information about corruption and lack of transparency available online for students, researchers, civil and political activists;
5. Provide reliable information and studies to the democratic forces of change in Sudan to help in the establishment of credible anti-corruption instruments and assets recovery mechanism.

B. Rationale and Purpose of the Report:

Since Sudan's current regime came to power on 30th June 1989, health and other social services have not just been neglected, distorted and underfinanced. They have also been subject to pervasive corruption which was largely as a result of systematic dismantling of the regulatory controls, such as accountability and lack of transparency, over the public sector and civil service which had existed since Sudan's independence in January 1956.

In the context of STI's focus on researching and documenting on corruption and lack of transparency, the health sector was selected because of the scale and impact of corruption in this sector as well as its generation of considerable attention and intense controversy.

The objective of this report is to identify and describe the extent, root causes and implications of corruption and poor governance upon the integrity and performance of the health sector in Sudan since 1990.

C. Methodology and Analytical approach:

Thus, the Report documents and analyzes the patterns of corruption and poor governance in Sudan's health sector. The Report reviews Sudan's health sector governance structure in comparison with similar countries' experiences, international norms and good practices. By exposing illicit practices that thrive in this sector and offering specific recommendations the Report also enables forces of change to demand accountability and to consider certain measures that can reduce current corruption or help rebuild better systems in the future. The Report is aimed mainly at the general public and specifically targets activists, researchers, students and academicians, but will also benefit policy-makers and practitioners who are currently developing alternative policies needed in all sectors in Sudan after the downfall of the current regime.

It is widely recognized that there is an extreme difficulty in obtaining credible data on corruption for any sector inside Sudan. Aside from the

usual difficulty in obtaining data which has incriminating legal value, Sudan's ruling elite feels particularly threatened with such exposures of their failure at a time when it is trying in vain to gain internal and international support to legitimize its 28-year hold on political power.

Accordingly, this report will be based on reviewing available literature on national policies, processes and practices as well as on international standards and experiences based on which the analysis and comparisons will be drawn. The report will not be an exhaustive effort which maps all the elements of poor governance and corruption in Sudan's health sector. That would be a task requiring full access to data, the ability to rely on legal subpoenas to obtain some information as well as the full collaboration of whistle-blowers; all of which are not available now in Sudan.

The Report's analytical approach reviews corruption through the six health sector building blocks or domains established by the World Health Organization (WHO)¹. Hence, it describes the political context of poor governance; particularly the lack of accountability, transparency and rule of law in general under Sudan's current regime. The Report also identifies systemic weaknesses in the health (and overall national and subnational) governance system, including its structures, functions, performance, degree of integrity, oversight of regulatory bodies as well as the gaps in the chain of accountability. The Report is informed by global experiences and instruments used as frameworks for good governance in the health sector.

1: "Everybody's Business: Strengthening Health Systems to Improve Health Outcomes – WHO's Framework for Action". WHO Geneva (2007). The six health system blocks are Governance and Stewardship (GS), Human Resources for Health (HRH), Health Care Finance (HCF), Service Delivery (SD), Health Information Systems (HIS) as well as Health Technologies and Pharmaceuticals (HTP).

VI. Background & Context

A. Sudan's political context from 1989 to 2017:

After almost 60 years of colonial rule, Sudan gained its independence from the British-Egyptian Condominium rule in January 1956. Since then, two military dictatorships (November 1958 to October 1964 and May 1969 to April 1985) punctuated the country's otherwise multi-party parliamentary democracy. The legacy of the colonial era, along with some efforts by post-independence elite to build on it, had endowed Sudan with a civil service and systems for public sector governance which were reasonably efficient and with a good reputation for integrity.

Thus, even during the first two military dictatorship periods, the prevailing legislative frameworks, laws, codes and institutional frameworks were effective enough to minimize the occurrence of rampant corruption. While corruption did occur, the responses reflected strong interest among the increasingly influential and educated middle-class in preserving key tenets of good governance which emulate European models shielding the civil service from political interference by the government and separating executive from legislative and from judicial systems.

Until 1989, some of the good governance features of Sudan's health and public sector included an impressive degree of press freedom (at least during the two democratic periods; not during the two previous dictatorships), management systems adopting generally-accepted principles of accounting, transparent and competitive procurement for goods and services, independent oversight over public expenditures at local government and

The initial onslaught against the civil service started in August 1989; just weeks after the military coup and was a deliberate policy of controlling the state (proudly called the “Tamkeen” era, by the NIF). With most of its initial targets being in the health sector, the NIF launched systematic purge campaigns in all public-sector institutions (including regulatory ones) targeting all staff not loyal to the NIF.

national level (through legislative councils and national assemblies or parliament), independent fiduciary control by the Auditor General’s Office and Internal auditors and Inspectors in almost all civil service institutions, procedures to enforce accountability as well as laws, rules and procedures to minimize conflicts of interest among holders of public office.

At that time, the exception to this generally-positive picture was that national power-sharing, resource allocation as well as public and social policies discriminated against certain populations. These underserved and marginalized populations are the same ones whose struggles to attain equality in political power, equity in developmental investments and respect for their cultural heritage eventually culminated in the various armed uprisings and rebellions which continue to date. They include the previous southern regions of Sudan (which eventually gained independence in July 2011 and became the Republic of South Sudan), Darfur, South Kordofan, southern parts of the Blue Nile, large parts of the eastern provinces as well as Nubian areas of the northern Sudan.

During the last two years (1985-1983) of the second military dictatorship which promulgated oppressive so-called “Islamic Sharia Laws” in September 1983, the Islamist movement started gaining access to political and economic decision-making. With a keen profit-seeking motif and with no interest to maintain any regulatory control over its economic activity (focusing instead on commodity transactions, brokerage and services), the Islamist Movement organized initially under the banner of the National Islamic Front (NIF) during Sudan’s third multi-party democracy (1989-1985),

instigated a military coup in June 1989 and continues to rule to date under a so-called Salvation Government (“Inqaz” in Arabic) to advance its social and economic interests. Key milestones that affected social services and governance during the Inqaz era were as follows:

- Institutional distortion and personnel purges in the civil service (including the health sector policy, service, management and regulatory bodies);
- Funding internal wars at the expense of social services and development;
- Under-resourced decentralization of social and municipal services sector responsibilities to local government (States, Municipalities & Commissions);
- Increasing international isolation due to Inqaz’s continued terrorist attacks against other countries as it tried to export its fanatic brand of Islam;
- Commercial exploitation of oil; and
- The internal political rift between the Inqaz’s military and the more ideological factions of the NIF.

The International Crisis Group reports that “several state-run or private institutions have been linked to the operations of radical Islamic groups” in Sudan. For instance, the University of Medical Sciences and Technology (owned by influential Islamist physician and Khartoum State Minister of Health, Prof. Mamoun Hummeida) served as an incubation and indoctrination hub from which NIF exported terrorist and jihadist groups to other countries.² Further details are provided in subsequent sections of this Report to clarify UMST’s link to terrorism as well as its owner’s continuous and flagrant violation of basic ethics when he corruptly exploits his capacity as State Minister to advance the financial standing of his privately-owned institutions.

The cumulative effect of the above political milestones on health and social service governance was the destruction of almost all features of regulatory control, accountability, transparency and good governance in Sudan.

2: Sudan’s Islamists: From Salvation to Survival Crisis Group Africa Briefing N°119, 21 March 2016.

According to the Ibrahim Index of African Governance (IIAG) for the period 2016-2007,³ Sudan ranks 49th out of 54 African countries, scoring just over %30 in overall governance and showing a deteriorating trend ongoing since 2006, fueled mainly by worsening scores in Safety and Rule of Law as well as in Sustainable Economic Opportunity.

B. Overview of Sudan's Health Sector & Existing Regulatory Systems

Sudan's epidemiological profile is typical of Sub-Saharan African countries; malnutrition and communicable diseases dominate the health scene with high vulnerability to outbreaks. There are also emerging and re-emerging diseases, many of which are compounded by factors beyond the health system. The main causes of morbidity and mortality are infectious and parasitic diseases such as malaria, TB, schistosomiasis, diarrheal diseases, acute respiratory infections (ARIs) and protein-energy malnutrition. Recent data and surveys have shown that non-communicable diseases (NCDs) are emerging as a public health problem due to the change in socio-economic and lifestyle conditions. According to WHO⁴, in 2013 Sudan's under5-mortality rate was 73 deaths (per 1,000) while the maternal mortality rate was 512 deaths (per 100,000 live births)⁵.

Tabulated statistics and indicators in Annex B of this Report will provide further details on the composition of Sudan's health sector as well as the current status of key health, demographic and socio-economic indicators.

1. Sudan's macro-economic context

According to World Bank data as of 2015⁶, Sudan is a lower-middle income country with a total population of 40.2 million people, a GDP of US\$ 97.16

3: 2016 Ibrahim Index of African Governance A Decade of African Governance 2006-2015. Published in October 2016. Copyright © Mo Ibrahim Foundation. <http://mo.ibrahim.foundation/iiag/>

4: WHO, Global Health Observatory Data, 2013.

5: Sudan Federal Ministry of Health, National Health Policy, 2007.

6: World Bank Group website data on Sudan.
<http://www.worldbank.org/en/country/sudan>

billion, GDP growth of %4.9 and an annual inflation rate of %16.9. The agriculture and livestock sectors currently contribute less than %40 of Sudan's gross domestic product (GDP). The World Bank attributes the key political and socio-economic challenges to the fact that "Sudan did not use the oil windfalls to invest in human development, diversify its economy or promote private sector growth. Political instability, corruption and economic uncertainty compromise the enabling environment for growth, and employment." ⁷

"Sudan's poverty rate is estimated at 46 percent, indicating that some 15 million people are poor. The poverty rate is significantly higher in rural areas (58 percent) than in urban areas (26 percent), and varies markedly across states, from 26 percent in Khartoum state to nearly 60 percent in conflict-affected states such as North Darfur, South Kordofan. Other social indicators exhibit the same pattern."⁸

2. Organization of Sudan's health service delivery system:

Sudan's public system is structured in a three-levelled structure: primary, secondary and tertiary levels. The primary level is composed of primary health care units (PHCU) which are operated by community health workers, dressing units operated by nurses or medical assistants, dispensaries which are operated by medical assistants and health centers which are operated by medical doctors at the level of general practitioner. The secondary level is composed of rural (district) hospitals which has the admission capacity with 40 to 100 beds. Tertiary-level is composed of teaching, specialized, and general hospitals in addition to 21 tertiary-level hospitals and specialized centers. The public sector operates %90.7 of health facilities in the country and %82.9 of the health cadre.

Only %13 of the localities in Sudan have a fully-functioning health service delivery organizational structure. The lower level facilities are less functional.

7: Ibid

8: World Bank Group. Ali Siddig, El-Fatih; Hassan, Fareed M. A.. The Sudan Interim Poverty Reduction Strategy Paper Status Report: A Joint World Bank Group and Sudan's Ministry of Finance and Economic Planning Assessment. Washington, DC. November 2016.

Only %13 of the localities in Sudan have a fully-functioning health service delivery organizational structure. The lower level facilities are less functional. About %51.1 of PHCUs are not functioning, %57.4 of dressing units are not functioning, and %30 of dispensaries are not functioning.

About %51.1 of PHCUs are not functioning, %57.4 of dressing units are not functioning, and %30 of dispensaries are not functioning. The major reason behind this inactivity is the lack of human resource which is the reason stopping work of %40 of these facilities. Furthermore, the public health system is markedly skewed towards establishing hospitals and tertiary care services. There has been increased focus on establishing hospitals during the past years (their number increased from 253 in 1995 to 351 in 2004). This affects patients' pathway to care to utilize secondary and tertiary health facilities as entry points to the system instead of being referral centers.⁹

3. Sudan's human resources for health:

The existing production level is far below the needs of the community for all professions. Presently, there is shortage of qualified health professionals in the country across the board, especially pharmacists, nurses and allied health personnel.¹⁰ The gap in human resources is huge, especially for the nurses and medical assistant as projected in the -10year human resources strategic plan 2013-2004. Not only is the attrition rate of human resource high in Sudan as in many developing countries, the rate of production of human resources for the health sector is also low, especially nurses and medical assistants.¹¹

The share of primary health care (PHC) facilities in human resources is a small fraction of the total health workforce. There is immense inequitable distribution of health care providers between and within states as well as

9: Dr A. F. Eltayeb, unpublished data, 2015.

10: Sudan Federal Ministry of Health, National Health Policy, 2007.

11: Ibid.

between urban and rural areas. The main reasons are the poor working environment in the rural and remote areas. Federal institutions as well as public and private facilities in large cities (particularly Khartoum) attract the majority of the country's professional skilled health workforce. Excluding house officers, nearly two thirds (%61.4) of Sudan's doctors worked in Khartoum in 2004.¹²

In 11,487 ,2005 village midwives were working in the country (in addition to 3000 TBAs). The coverage is one village midwife for every 3,180 of the population. As of 2007, the FMOH's National Health Policy states that out of 38 total midwifery institutions, only 29 are adequately functional and that an estimated 1,400 midwives are trained every year by the 38 schools using training manuals and curricula which are not up to the standard needed for Skilled Birth Attendants (SBAs). There are 166 permanent teachers (health visitors) in these schools but most of them do not possess the required teaching skills and qualifications. Nationwide, approximately 57 % of births were delivered by skilled personnel with the percentage being highest in the Northern state at 98.2 %. Of these, midwives had assisted in %29.8, doctors assisted in %11 and nurse midwives assisted in 16 % of deliveries. Institutional deliveries account for only %19.6 nationwide.¹³

12: Ibid

13: Ibid

Table 1: Numbers, types & sector of Sudan’s health training institutions in 2006 ¹⁴

College or institute	Public	Private	Total
Medicine	21	7	28
Dentistry	4	6	10
Pharmacy	5	7	12
Medical Lab Science	9	8	17
Nursing	7	3	10
Medical Radiology	2	3	5
Public & Env. Health	7	1	8
Optics Science	1	0	1
Physiotherapy	1	3	4
Anesthesia	2	1	3
Total	59	39	98

Most training institutions in Sudan are part of public and private sector universities. Although 13 medical schools are situated in states other than Khartoum, the majority of medical and health training institutions are in Khartoum. Over %50 of health training institutions are concerned with training of high level cadres such as doctors, pharmacists and dentists. As to the entry of graduates into the health workforce pool, the situation is generally alarming with increasingly high rates of unemployment and migration. For instance, unemployment among health officers and laboratory technicians is estimated to be as high as 60 %.¹⁵

14: Dr E. Badr, Human Resources Strategic Framework for Sudan, 2007.

15: Ibid

Table 2: Total numbers and densities of Sudan’s health workforce in 2006¹⁶

Category	Total number	Density (per 1000 population)
Total physicians	11,083	0.31
House Officers	4,132	0.11
Medical Officers	3,484	0.1
Registrars	1,550	0.04
Specialists	1,910	0.05
Dentists	944	0.03
Pharmacists	1,531	0.04
Nurses	18,433	0.51
Midwives	14,921	0.41
Lab Ass, Tech, etc	21,723	0.6
Environ.& P H O	2,897	0.08
Admin staff	25,771	0.72
Total	97,303	2.7

These figures are generated by a government ruling for 28 years, whose stated aim was to purge the civil service of workers not loyal to it and replace them with (presumably competent and sufficient) Islamist cadres. But this did not happen and as an example of damage caused by the corrupt practice of firing civil servants for pure political purposes, it is important to recall that within just its first 6 months of its military coup-d’etat, Inqaz purged the public health discipline by firing 55 out of a total of 66 public health managers who literally ran Sudan’s ministry of health, health departments and district public health offices. In its failure to fulfil its own goal of

16: Ibid

Within the first 6 months of its military coup-d'etat, Inqaz purged the public health discipline by firing 55 out of a total of 66 public health managers who literally ran Sudan's ministry of health.

replacing them, Inqaz ended up appointing a cardiologist (Dr. Elamin Elnuss) with no management nor public health experience who was fresh from specializing as a cardiologist) as Director General of Public Health Services of Khartoum North and Eastern Nile Municipality (with an approximate population of about 3 million inhabitants)!

The majority of Sudan's health workforce is employed by the public sector, mainly the ministry of health. Health workers who work exclusively in the private health sector constitute only %9.3. However, dual practice is very

common among health professionals. Nearly 70 % of health personnel work in urban settings serving about %30 of the total country population. More than third of the overall health workforce in Sudan is located in Khartoum state (the capital) as opposed to the other 24 states. This maldistribution is best illustrated among physicians; where %65 of specialists are currently practicing in Khartoum. Thus the rural-urban imbalance is further distorted by the high concentration of the health workforce in Khartoum. For example there are 21 specialists for every 100.000 people in Khartoum compared to a ratio of only 0.8 per 100.000 in West Darfur state. Following on the geographical pattern of health services distribution, around 67 % of health workers work at the secondary and tertiary facilities as opposed to only 33 percent in PHC settings.¹⁷

The private sector's main focus is on curative services, although it is increasingly seen in prevention services related to residential environmental sanitation which was privatized with their previous implementers (state and local municipal bodies) now merely regulating and presumably supervising private sector companies which collect household waste, spray insecticides, etc. Private health facilities at present contribute %17 of bed capacity, %36 of x- ray units and %54 of ultrasound units in Khartoum state. The systems and regulations that govern the private sector are poorly enforced.

17: Ibid.

Sudan Household Health Survey, 2006 showed that %19 of the health services users chose the private sector. The same result (%18) was reported by the Utilization of Health Services Survey, 2006. Issues and challenges concerning the private sector include; quality assurance, competition policies, price moderation, regulation and public private partnership. Public employees are allowed to practice in the private sector outside official government working hours.

4. Sudan's health sector financing situation:

According to the official government budget approved by Sudan's National Assembly (partially appointed parliament) for the fiscal year 2016, the share of the national government budget allocated to the health and education sectors combined was less than %2 while the share of government budget allocated to the presidential palace, military expenditures and security was %71. This comes to demonstrate how little the current military dictatorship in Sudan is keen to invest in human development, while also indicating the proportion of the country's resources wasted in waging internal wars against its own citizens. The following table illustrates the share of the health sector in this context.

Table 3: Health Care Finance in Sudan as of 2013¹⁸

GHE % GDP	1.4
GHE % GoS Exp	10.6
GDP per capita (US\$)	771
GHE per capita (US\$)	24
External health sector funding as % Total HE	2.6
HE per capita if GoS spent %5 of GDP on health (US\$)	38.6
Additional spending required to reach US90\$	65.6

18: World Bank Forum on Financing Universal Health Coverage 2016 (p. 56; Annex 5): Priority to health in LICs and LMICs 2013. Sudan estimates (2013)

Abbreviations: GHE = Government health expenditure; GDP = Gross Domestic Product; GoS=Government of Sudan. Sources: For GDP pc (US\$) (WB, 2016), for health expenditure data (WHO, 2016), for columns 8-7 author's calculation.

The financing of the health services has passed through successive reforms. From the colonial period till the beginning of the 1990, the health services were offered free of charge. User fees were introduced in the early nineties, as part of the economic sector reforms and adjustment. The impact of the introduction of user fees in public health facilities is not well-documented, however anecdotal evidence suggests that the introduction of user fees has significantly affected access and utilization of health services with little or no significant improvement on the availability and quality of care. To ameliorate the negative impact of the introduction of user fees on accessing health services, emergency cases at hospitals are exempted from user fees. Other exemptions include renal dialysis, immune suppressant drugs for renal implantation, chemotherapy, radiotherapy and treatment of hemophilia. The annual expenditure on free treatment amounts to 3.5 billion SD (US\$13.6\$ million) in 2005 (increased to US\$19.4\$million in 2006 budget) equivalent to %22-15 of total federal health budget.

Spending at the federal level is through the FMOH budget (4-3 US\$ per capita and social security funds (health insurance, Zakat fund, etc) which is equivalent to 2-1 US\$ per capita. National Insurance Fund, covering around 15 percent of the population – predominantly civil servants and their families – is reported to spend up to \$ 34 million in 2005 (US\$ 1 per-capita/year). The magnitude of private out-of-pocket (OOP) expenditure is estimated to be as high as 21-19 USD per capita which is equivalent to %70 of the total health expenditure (THE); the second highest in the world. Health spending at the state level varies from as low as 3.5 US\$ per-capita annually in war zones such as South Kordofan to as high as US\$ 7.5 in Khartoum state with an overall average per-capita spending at the state levels of around US\$ 5 per-capita for the northern States. Spending at locality level is not known but it is estimated to be in the range of US\$ 2-1 per capita; signifying a very low level of public spending on PHC and key interventions.

5. Sudan's social protection system:

The 2005 Interim Constitution of Sudan as well as the 2008 Health Law issued by the current government both assure the Sudanese citizens of their right to free health care for a basic set of primary health care package of illnesses, maternal and child health conditions as well as accidents and emergency care. However, and after gradually starving the social sectors and social welfare of funding, none of these are currently provided for free at the point of service. As of 2006, the government had half-heartedly introduced a national health insurance fund (NHIF) which was presumably meant to cover to social protection gap for most vulnerable segments as well as certain categories of health care services in Sudan. Yet, the NHIF's very low coverage and inequitable enrollment has left the vast majority of Sudanese citizens with no adequate financial cover for any type of health services.

According to the FMOH's National Health Policy of 2007, the covered content of the primary health care package had included as a minimum: the promotion of child health (immunization against vaccine-preventable diseases, nutrition counselling and growth-monitoring and implementation of the Integrated Management of Childhood Illness package); the promotion of school health; the promotion of reproductive health (safe motherhood, including safe pregnancy and family planning); the control of endemic diseases (malaria, tuberculosis, HIV/AIDS, schistosomiasis, etc); the protection and promotion of environmental health and sanitation; and treatment of simple diseases and injuries and mental health.¹⁹

6. Regulatory systems affecting Sudan's health sector:

This consists of the body of legislation and laws governing health issues, institutions responsible for enforcing such laws and the broader cross-sectorial judiciary and law enforcement mechanisms often used in applying

19: Sudan Federal Ministry of Health, National Health Policy, 2007.

such legislation. Although a reasonable structure for such a regulatory framework used to exist, it is now weakened or dismantled.

Currently, the Federal Ministry of Health (FMOH) has the symbolic authority (but no capacity) to establish standards of care and service in the health sector. The Sudanese Medical Council (for medical doctors) and other human resource regulatory bodies for allied health workers are mainly responsible for the certification and licensing of health workers. In parallel, the Sudanese Board of Medical Specialties is responsible for specialized training standards and certification for specialists. However, only tenuous lines of authority link these bodies to FMOH and even weaker role definitions exist in the ability of these bodies to exercise their human resource regulatory authority over public sector health workers employed under the State Ministries of Health (SMOHs).

In terms of medical commodities, the regulatory framework exists in the form of legislation, laws and standards for the importation, manufacturing, distribution or use of medical drugs, supplies and equipment. However, the division of roles and responsibilities to enforce these laws is distributed between customs authorities (in the case of imports), central medical supplies units of FMOH, a national council for pharmaceuticals and toxins and SMOHs. Yet weaker assignment of roles and capacity for enforcing them exists when it comes to the regulatory control over standards of care for services (both preventative and curative) delivered by private sector operators.

Regarding postgraduate studies, there are two training institutes for postgraduate medical specializations; the Postgraduate Board of Medical Studies of the University of Khartoum (PBMS was established in 1976) and the Sudan Medical Specializations Board (SMSB; established in 1995). The SMSB is currently the sole body responsible for postgraduate medical specializations in the country. The rate of annual intake is 97 doctors while its annual production is 48, which is far below the required numbers (500/year) estimated in the FMOH's-10year HRH strategic plan 2013-2004

Aside from legal disempowerment amidst the confusing and often conflicting or vague definitions of authority and responsibility, all these bodies are

also underfunded, uninformed, understaffed and lacking in basic skill sets needed to apply whatever regulatory role they seek. Lack of information is also a systematic weakness whereby basic health service performance data (input, process, output or outcome level) is not routinely collected, analyzed nor used in decision-making. At a very basic level, health commodity consumption patterns are not tracked at facility, local, state nor national level to determine procurement requirements, forecasts or analyze utilization patterns.

In Sudan, the current laws and regulations governing pesticides use were promulgated by the Pesticides Act of 1994 which confused, rather than built upon, the Pharmaceuticals and Poisons Act of 1974.

In the preventative health domains, regulatory systems that impact on health are often located outside any sectoral control by health authorities at federal, state or local level. Tragic examples of this is the weak regulatory authority existing in a dichotomous manner that is uncoordinated with health authorities are the national council on pesticides, the agricultural authorities in charge of regulating fertilizers, local authorities in charge of enforcing food safety standards, industrial authorities regulating industrial waste or responsible for establishing safe manufacturing practices, among numerous others.

In Sudan, the current laws and regulations governing pesticides use were promulgated by the Pesticides Act of 1994 which confused, rather than built upon, the Pharmaceuticals and Poisons Act of 1974. Normally, at the registration phase of importing, producing or utilizing pesticides, companies should apply for registration of any product using Form I (17 copies) stamped with the National Pesticides Council Stamp. This form includes all technical information about the chemical (properties, toxicity, environmental impact, source, etc.). A technical committee of the Council then reviews this form and the Council has the right to accept or reject the product based on the recommendation of this technical committee²⁰. However, the Council is not

20: Assad, Y.O.H, and Bashir, N.H.B. (2002). Persistent Toxic Substances (PTS) in Sudan. The Priority Setting Meeting of Region V (sub-Saharan Africa), UNEP Nairobi & Geneva, 2002.

sufficiently empowered to enforce its work, with various cases of dangerous substances being imported by influential members of the ruling dictatorship government in collusion with unscrupulous businessmen and women.

Additionally, the underfunding of the public sector has meant that the skills, warehousing capacity, procedures and equipment with which occupational health, local government or even federal government regulators do not have the means with which to safely and properly utilize, administer, store and dispose of substances such as pesticides, industrial, medical and utility chemicals which then end up entering the food, water, soil, plant and animal supply chains posing great risks to Sudanese citizens. More details on the specific features of this kind of pollution are presented in the sections below. The natural results of such a dysfunctional regulatory system are outlined in the sections below in terms of the permissive environment they create for corruption and, ultimately the impact of the regulatory dysfunction and corruption on health.

C. Global Health Sector Frameworks for Good Governance:

Several definitions of good governance exist in the literature and one of these is the comprehensive definition adopted by the Mo Ibrahim Foundation (MIF). MIF defines governance as “the provision of the political, social and economic goods that a citizen has the right to expect from his or her state, and that a state has the responsibility to deliver to its citizens”²¹. In every African country, four main conceptual categories are measured annually in MIF’s Ibrahim Index of African Governance (IIAG); namely: Safety & Rule of Law, Participation & Human Rights, Sustainable Economic Opportunity and Human Development. IIAG consists of more than 90 indicators built up into 14 sub-categories, four categories and one overall measurement of governance performance. These indicators include official data, expert assessments and citizen surveys, provided by more than 30 independent global data institutions.

21: African Governance A Decade of African Governance 2006-2015. Published October 2016. Copyright © Mo Ibrahim Foundation. <http://mo.ibrahim.foundation/iiag/>

Similarly, numerous metrics, composite indicators and performance measurement frameworks have also been developed for analyzing governance of the health sector. An annotated summary of some of these tools is included in Annex A of this Report. It is hoped that such an annotated description could help achieve a common understanding of the definitions, terminology and metrics needed to detect, describe, monitor and address corruption based on comparable global experience.

One of the more comprehensive of the health system governance (HSG) frameworks is the one developed by WHO's Sameen Siddiqi et al in 2009²². Their HSG is mainly value-driven (and not normative), relying more on qualitative and subject data rather than scoring systems. It consolidated principles and features of four existing frameworks, namely: World Health Organization's (WHO) domains of stewardship; Pan American Health Organization's (PAHO) essential public health functions; World Bank's six basic aspects of governance; and United Nations Development Program (UNDP) principles of good governance. The HSG assessment framework includes 10 principles:

- Strategic Vision
- Participation and Consensus Orientation
- Rule of law
- Transparency
- Responsiveness
- Equity and Inclusiveness
- Effectiveness and Efficiency
- Accountability
- Intelligence and Information,
- Ethics

22: Framework for assessing governance of the health system in developing countries: Gateway to good governance. Journal of Health Policy Volume 90, Issue 1. Published April 2009, Pages 13–25. S Siddiqi, T I Masud, S Nishtar, D H Peters, B Sabri, K M Bile, M A Jama.

VII. Analysis of Sudan's Health Sector Corruption

A. Causes, Features and & Impact of Corruption in Sudan's Health Sector

1. Enabling corruption through health sector privatization and neglect of statutory commitments:

The analysis of Sudan's health sector corruption needs to start with the contextual factors and political strategies used by the Inqaz regime to maximize its profit-seeking hold onto power and its innate aversion to participatory governance.

In this connection, two policy tools used by Inqaz seem to create the enabling environment for corruption. The first is the government's preference for funding security & military expenditure (to continue waging wars & suppressing dissent) at the expense of funding health, education, municipal and social expenditure. Second, Inqaz continues to implement its publicly-announced policy of privatization of health service delivery (preventative and curative, alike).

The decentralization of health services in itself is not the issue as decentralized health service delivery had been a hallmark of Sudan and many other country's efforts to deepen the reach of its positive impact on citizens. However, decentralizing health services without giving the states/local governments the funds, capacity or skills with which to manage public health services remains a key failure by the Inqaz government.

The danger of this concomitant privatization of health care is that it carries

a huge potential to push the middle class into poverty in Sudan²³. Under presumed rubric of privatization whereby influential Inqaz officials collude with public sector decision makers and business men to ensure that the motivation behind privatization, its timing, its targets and the manner in which it is done are all sources of personal enrichment for the Inqaz officials.

Another pathway in which privatization in Sudan has invariably led to corruption is when public health facilities are starved of public funds and instructed officially in writing to raise their own revenue without specifying how & within what legal, administrative & accountability parameters. Thus, patients are charged arbitrarily above and below the table for everything from gate fees, patient registration fees, surgery fees, drug & medical supply fees, lab fees and bed occupancy fees. This is now the case in every public tertiary, secondary and primary health care facility. Moreover, all preventive services are either totally abandoned & neglected or privatized with no parameters for accountability nor logic to the exorbitant & fluctuating fees they charge to citizens. A good example in the prevention domain is how private environmental sanitation companies tendered in a non-competitive manner to relatives, business partners & political affiliates of the ruling Islamist officials are charging for services that used to (& should continue to be) the responsibility of local government such as residential waste disposal & garbage collection, house & neighborhood spraying with insecticides against flies & mosquitoes etc. These public goods are normally the responsibility of government and it is only by paying attention to basics such as environmental health, prevention, promotion, sanitation, water supply, hygiene and sanitation that countries have advanced their socio-economic situation.

Nor is the entitlement to health an issue that requires additional legislation in Sudan. For access to health services is a right while upholding and protecting & enabling that right is an obligation of the state as per Sudan's 2005 constitution and the 2008 Health Law.

In comparable and global contexts, certain normative health system

23: Dr. Abdel Rahman Elfaki Omer (Former Health Economist at the Federal Ministry of Health in Sudan). Presentation at Seminar on "The future direction of health and health care planning in Sudan", 18th February 2017, University Square Stratford – Stratford, London, United Kingdom.

analyses have established that performance is best attained when the state's public sector takes the lead in setting policy direction & strategic planning, adds value to the system through provision of public goods & services (eg establishing the strategic information base for health services, organizing health service delivery models, implements preventive services such as EPI, CDC & environmental sanitation, food, air & water supply safety), mandates & enforces adequate social protection (eg risk pooling, disaster response, care of disabled, orphans , elderly etc) & administers an effective governance & oversight system (regulatory control over commodity, human resources & service delivery standards).

Thus the countries with the best performing health systems globally are dominated by those which operate based on a social democratic model (eg. Scandinavian countries, Canada and New Zealand, etc). While Cuba performs outstandingly and very efficiently, there are concerns about the ability of researchers to independently verify the data which points to such outcomes as well as the extent of personal control and choice which Cubans have over their health. Even the World Bank has encouraged the Sudanese Inqaz government to adopt the social policy models of its neighbors such as Ethiopia and Rwanda, specifically demanding that Sudan increases its investments in the health sector, improves its social protection system to make it more transparent and effective in targeting vulnerable groups and curb corruption.

As clarified by Transparency International²⁴ , corruption comes in many forms, and there are many ways to challenge it. What is notable, is that Sudan ranked as the 6th most corrupt country in the world (170th out of 176 countries assessed by TI in the Corruption Perception Index Report for 2016), stagnating at almost the same score between 2012 and %13) 2014 and %14, respectively). The types of corruption reported in Sudan's health sector range from bribery, collusion, conflicts of interests, embezzlement, fraudulent advertising, fraud, extortion, nepotism, tax evasion and others.

24: Transparency International (TI), 2016 Corruption Perceptions Index Report.

2. Illustrative examples of the features of corruption in Sudan's health sector:

The first impression commonly held is its link to personal or institutional financial gain. However, this is not always the case and there are numerous instances in Sudan's health sector under Inqaz where corruption has taken the form of denial of rights, forgery, falsification of official records, violation of data confidentiality and lying under oath.

One dramatic example of this kind of corruption occurred one night in late April 1990 when two doctors belonging to the Islamist Inqaz regime (Pathologist Dr Bashir Ibrahim Mukthar and Cardiac Surgeon Dr. Ahmed Sidahmed Sayid). Both were working at the Medical Corps Hospital in Omdurman when the corpse of one of the leading activists supporting the Sudanese Doctors Union's (SDU) strike against the regime in November 1989 (the first successful show of defiance against the regime and among the strongest to date), Dr. Ali Fadl Ahmed, was brought to that hospital's casualty department by agents of Sudan Security. Dr. Ali Fadl Ahmed was detained without charge and tortured to death for three weeks at Sudan Security's infamous Ghost Houses. Those who tortured him also included medical doctors leading Inqaz's then-nascent regime, such as Minister for Cabinet Affairs Dr. Eltayib Ibrahim Mohamed Kheir (nicknamed "Sikha" or Iron Rod; for his wielding of iron rods to terrorize and beat up students during his medical school years).

Needless to say, Sikha's culpability in Dr. Ali's torture and murder certainly falls under more sinister titles than just corruption. However, the corrupt and unethical practice by Dr. Bashir Ibrahim Mukhtar and Dr Ahmed Sidahmed is that they signed the death certificate and the forensic Form Number 8 by stating the cause of death was "cerebral malaria"! Unconvinced about this farcical autopsy conclusion, Dr. Ali Fadl's family and colleagues obtained a court order from Omdurman for a repeat autopsy to be performed by the two professional and leading Sudanese forensic specialists at that time; Dr. Abdelmuttalib Ibrahim and Dr. Ali Kobani who, concluded that the cause of death was consistent with torture and blows to the head with a sharp instrument. Thanks to the indomitable quest for justice by Dr. Ali Fadl's

family and SDU colleagues, the legal case remains open against Sudan Security.

Other than this very direct and start example of falsifying death certificate records to protect the ruling regime, there are other examples of corruption still ongoing in Sudan.

Three domains clearly illustrate how lack of political will to ensure good governance and sufficient resourcing have led to a health sector rife with corruption in Sudan.

The first is the National Health Insurance Fund (NHIF) as an example of a broken system created for protecting the neediest and poorest segments from catastrophic health expenditures but (through corruption) failing to reach its own targets and creating a regular source of private enrichment for health sector officials and the government in Sudan. Second, and as an example of how the collusion between influential Inqaz politicians helps them gain direct benefit from their official positions, the case of the Khartoum State Minister of Health, Prof. Mamoun Hummeida is presented. The third and final example shows how poor regulation and corruption are posing a direct danger to health from environmental pollution, the unregulated importation, handling, use, storage and disposal of industrial, agricultural and utility by products is elaborated.

- Failing to protect resources: The case of Sudan's National Health Insurance Fund (NHIF):

According to the FMOH, a prepaid scheme was introduced by Inqaz as part of the health financing reform in the mid-nineties with the establishment of Sudan's National Health Insurance Fund (NHIF). The FMOH claims that about 5.4 million people are covered (15.3 % of the total population as of 2005, while the Director General NHIF (Dr. Tilal Elfadil) claimed in December 2015 that 14 million Sudanese citizens (approximately %30 of the total population) had been covered. Aside from the inaccuracy of these statements, there are major failures admitted by the FMOH and NHIF itself in these public statements. For instance, according to the FMOH's own statements as of %76 ,2002 of people covered by NHIF were government

In 2015, NHIF failed to cover %60 of poor families and that NHIF-funded medicines are smuggled by officials in Darfur state for sale elsewhere at market prices

employees, %4.2 were poor families, %2.8 were families of Inqaz's jihadist soldiers who were killed during the ongoing wars while %2.4 were students and %5.9 were members of the informal sector.

Teething challenges during the formative years of any national social protection system are common in the global experience. Yet, 10 years later the situation has worsened instead of improving. Indeed, the Director General of NHIF officially stated in a press conference held on

27th December 2015 that the NHIF failed to cover %60 of poor families and that NHIF-funded medicines are smuggled by officials in Darfur state for sale elsewhere at market prices. The statements by the NHIF were supported by the regime's Minister of Social Welfare and Solidarity, Ms. Mashair Eldawlab who supervises the DG of NHIF. Thus, and while NHIF over a decade old and benefited in its inception from Sudan's oil boom, its coverage is dismally low, it failed its pro-poor rationale and its subsidized medicines (intended for war-torn and poverty-stricken regions such as Darfur) are stolen and sold in the open market. Low and inequitable coverage is not just a medical problem but, also, a driver of corruption since destitute uncovered families whom NHIF failed to cover will most likely bribe service providers in order to help them waive some of the official costs of care charged by the Inqaz government in public facilities.

There are also other structural flaws in how the NHIF is meant to operate. The system is based on premiums deducted from participants and these premiums had to be increased from 48 Sudanese Pounds to 116 Sudanese Pounds in late 2015 to accommodate the deteriorating value of the Sudanese Pound against the US Dollar (the latter being the currency used to import medicines, after the deliberate collapse of the Sudanese local drug manufacturing capacity since the early 1990's). With the drastic deterioration and subsequent "floating" of the Sudanese Pound in late 2016, the devalued premium could neither be increased sufficiently to meet

the US-dollar-based drug importation prices nor could it cover the adequate equivalent of foreign currency with which to buy new drugs for the NHIF. Such a basic pricing and costing problem is usually analyzed scientifically and addressed in the initial design of such health insurance funds; the type of preparedness and foresight which health authorities under Inqaz have known to ignore.

Nor are the NHIF's problems limited to poor coverage, lack of equitable targeting and structural design flaws. The system as it stands represents a lucrative source of corrupt practices such as price-fixing, overcharging, over-reporting and over-prescription benefiting NHIF, influential Inqaz officials who own medical laboratories, clinics and health facilities participating as exclusive service providers in the NHIF's scheme. A glaring example is how NHIF official standards of reimbursable costs from its colluding medical partners require that nine ultrasonography examinations be performed on every woman even those going through a normal, uncomplicated pregnancy. While few of these are actually done, receipts requesting reimbursement by NHIF to the participating radiology clinics routinely charge the NHIF for these nine ultrasound tests. The standard of requiring nine such tests is unheard of in any global or regional medical practice. None of Sudan's medical regulatory bodies are involved in overseeing NHIF's medical service standards and no competent oversight can be expected when the NHIF is subsumed administratively under the Ministry of Social Welfare and Solidarity with little or no relationship to competent health authorities who can detect and address such flaws.

- Conflicts of interests enabling Inqaz officials to profit from the health sector: The case of UMST and Zaytouna Hospital Owner, Khartoum State Minister of Health and influential Islamist Prof. Mamoun Hummeida:

Professor Mamoun Hummeida is a well-known internal medicine specialist, university lecturer and influential member of the Sudanese Islamist movement. After the last military dictatorship of General Nimeiri adopted

an Islamist agenda with the promulgation of so-called Sharia Laws in September 1983, Prof. Hummeida led Islamist doctors to break the strikes by the Sudanese Doctors Union who had battled Nimeiri's government in order to increase the percent of government budget allocated to health as well as to increase wages.

More recently, Prof. Hummeida had led the Inqaz government's efforts to purge the University of Khartoum of teaching staff, administrators and students who are opposed to Inqaz. His reign as Vice-Chancellor of the University of Khartoum saw the first public efforts to Arabize and Islamize teaching curricula, promote loyalist Islamists, withdraw tuition and educational cost subsidies from students and attempts to prohibit political discourse on campus.

However, Prof. Hummeida's influence did not stop at destroying what was once one of Africa's leading higher educational institutions. He also established a private medical school (University of Medical Sciences & Technology; or UMST) along with a private hospital (Zaytouna Hospital) in central Khartoum city. UMST became infamous since 2014 as a brainwashing, training and recruitment ground for Islamist terrorists fighting alongside the Islamic State in Iraq & Syria (ISIS) after over 35 of its students were assisted by some officials in the university and Inqaz government to travel to join ISIS. Zaytouna's location was conveniently just two blocks from Sudan's only tertiary referral hospital and the leading teaching hospital; Khartoum Teaching Hospital (functioning since 1907).

The Inqaz president, Omar Elbashir, personally-appointed Prof. Hummeida as the Khartoum State Minister of Health. His appointment by the president himself was rumored to be against the wishes of the Governor of Khartoum and the Legislative Assembly of Khartoum State. Instead of recusing himself from the glaring conflict of interest in being minister while also owning assets that could be affected by his decisions, Prof. Hummeida launched his attack on public sector institutions which enabled him to enrich himself through collusion and corruption.

Two key battles were center to his strategy of increasing profits at his two properties; UMST and Zaytouna. The first was to destroy any competing

public or private sector secondary and tertiary facility in the vicinity of Zaytouna. He accomplished that by dismantling the Prof. Jaafar Abnaof Children's Hospital (built and renovated by a charity sponsored by Princess Anne of the UK) and Khartoum Teaching Hospital. His second battle was to absolve UMST from paying any training fees for its students who do their clinical work at various hospitals in the state (the only medical school which is exempted in that way) and to try to monopolize all national post-graduate and specialist medical training so that it falls under him as State Minister of Health and he is able to preposition UMST to monopolize that national role. The latter battle is still ongoing to ensure that only the Sudan Medical Specialization Board provides, invigilates and regulates the specialist training for doctors who reach the level of registrars before they become consultant specialists.

Fearing public exposure in a country setting where he cannot control the media, Prof. Mamoun cancelled a working trip and lecture he was invited to deliver at Queen's College, London (UK) regarding the rationale behind what he calls reforms and decentralization of health services. In declining that invitation in March 2016, Prof. Hummeida probably also feared questioning by UK intelligence authorities for his role in facilitating UMST's service to terrorist organizations in sending medical students and doctors (some of whom were British citizens) to ISIS.

What is clear in the transgressions by Prof. Hummeida is that he is fully aware of his actions, their implications, the alternative better way to run a local health system or medical specialization. Prof. Hummeida continues to violate Sudan's conflict of interest and anti-trust laws with impunity, for as long as Inqaz's president Elbashir's support him, he shall remain immune to accountability by authorities or citizens. Professionally too, Prof. Hummeida knows better than to dismantle the country's only referral hospital and tertiary care facilities without creating sufficient primary and secondary capacity at the peripheral level of care in Khartoum State. He certainly knows that national specialist training is almost never implemented by local governments.

Prof. Hummeida (Khartoum State Minister of Health) continues to violate Sudan's conflict of interest and anti-trust laws with impunity, for as long as Inqaz's president Elbashir's support him, he shall remain immune to accountability by authorities or citizens.

- Corruption and poor regulatory control affecting health: The unfolding environmental disaster of pesticide pollution:

Poisonous and toxic substances are usually manufactured or arise as a by-product of industrial processes. They include pesticides, insecticides, fertilizers, industrial waste, waste from power (notably thermal energy) and water utilities, chemicals used in the extraction industries (notably oil, gold and other minerals in the case of Sudan), by-products of or expired medicines and medical products, heavy metals contained in computers, electric cells (batteries) and other sources. The regulatory framework

for Sudan's ability to import, manufacture, utilize, produce, store or dispose of such poisons and toxic substances was limited to a few laws which used to be strictly followed and enforced by a range of national and local government departments. The best example is in Sudan's extensive use of pesticides and fertilizers to increase productivity in its agricultural sector.

Sudan is one of the first countries in Africa and Middle East to use the pesticides, although it does not currently produce them. Dioxins and furans are among the toxic substances involved in pesticide application in Sudan. Other substances used as pesticides such as DDT, dieldrin aldrin, heptachlor, chlordane, endrin and isodrin have been banned since 1981. In Sudan, the only suspected industry that could be releasing polychlorinated biphenyls (PCBs) in the environment is the power-generating industry. Open burning, whether of crops, residues, garbage and burning of plastics, plastic-containers of the pharmaceuticals, hospital without having proper incinerators represent another source of dioxins and furans.²⁵

25: Assad, Y.O.H, and Bashir, N.H.B. (2002). Persistent Toxic Substances (PTS) in Sudan. The Priority Setting Meeting of

Eltigani (1998) reported that as is the case in many developing countries, the Sudan is facing the nagging problem of obsolete pesticides which are mainly found in the major irrigated schemes, as well as in the stores of the government's Central Plant Protection Directorate. These stores are scattered in 30 locations in the country and a comprehensive survey conducted in 1996 had revealed the presence of large quantities of these dangerous obsolete products in these government storage sites.²⁶

There are a number of major factors leading to the accumulation of obsolete pesticides in the Sudan. The ones associated with poor management, poor policy and weak technical and administrative capacity are quite common in Sudan. These include carry-over stock from previous seasons of cotton and wheat cultivation (stocked in irrigated schemes for fear of delays in the arrival of fresh stocks for the next season), changing crop policies (eg sudden decision to plant rice in the irrigated Gezira scheme led to importation of herbicides specific to rice weeds while stocks of other chemicals remained in storage), changing legislation and rules about which pesticides are banned and which are allowed (which results in overstocking in poorly-managed storage conditions), pest forecast failure (eg pesticide stocks repositioned against expected locust attacks remain stored in large quantities when the locust attack does not materialize).²⁷

There continues to be an enduring negative environmental effect of such poor regulatory control along with corruption and lack of transparency by the government. For instance,

large quantities of obsolete pesticides were disposed-off in 1995 by the government of Northern Darfur State in a soil ditch 27 km east of Elfasher town. Analysis by researchers revealed the presence of relatively high concentrations of poisonous substances. Several accidents of livestock, goats & sheep death cases were reported in almost all the States. Inhabitants of the villages near the pesticides stores of the irrigated schemes, and the Crop Protection Directorate, are complaining of several diseases, ranging

Region V (sub-Saharan Africa), UNEP Nairobi & Geneva, 2002.

26: Ibid.

27: Ibid

from headache to abortion. Chest pain, nausea, fatigue are a few of the common complaints. Most of these cases are misdiagnosed as malaria or typhoid.²⁸

A study by Elbashir (1998) collected 195 human blood samples from 11 locations experiencing limited and intensive pesticide use in Sudan during May-August 1994. The regions surveyed included, the riverain region of northern Sudan (Dongola & Elgolid), mechanized rain-fed area of eastern Sudan (Gedarif), traditional rain-fed area of western Sudan (Elobeid & Umrawaba), irrigated cotton (Medani, Hasahisa, Elmanagil & Elfau), and sugarcane schemes (Kenana & Elgunaid) in central Sudan. The study's alarming results showed that samples collected from residents and farmers in the irrigated cotton schemes showed the highest level of all detected pesticides, followed by sugarcane schemes, traditional rain-fed areas and areas close to the Nile River and its tributaries. The highest concentration of some of these pesticide-related toxins was observed in blood samples collected from Medani, Hasahisa, and Kenana, respectively.²⁹

Management capacity and weak regulatory systems are just one part of the equation that leads to Sudan's environmental pollution. The more sinister factor is corruption where by government officials collude with corrupt businesses (who include international manufacturers, importers, distributors or local agents) to allow the presence of banned or otherwise inappropriate pesticides into Sudan³⁰.

Some of the more obvious examples of such crimes include the illegal importation by Sudanese officials and business of dangerous poisons and toxic substances. For instance, in November 1998, the substance gamma BHC (Lindane) entered the country through Port Sudan illegally shipped from Agadir (Morocco) via Amsterdam (Netherlands) & Jeddah (Saudi Arabia) in 17 containers (342 tons). In a decision taken in March 1999, the National Pesticides Council insisted that this amount must be re-exported. Another example is the illegal importation of 64 tons of Calaitox-Lantous in 1998

28: Ibid

29: Assad, Y.O.H, and Bashir, N.H.B. (2002). Persistent Toxic Substances (PTS) in Sudan. The Priority Setting Meeting of Region V (sub-Sahara Africa), UNEP Nairobi & Geneva, 2002.

30: Ibid.

which the Council also tried to re-export but failed. This latter shipment of the chemical is still in Port Sudan in completely damaged containers with the material leaking into the soil causing significant environmental damage. A third example is the pesticides of Alaque Company which was imported from Syria. Some of it remains in Khartoum Airport while some was smuggled into the market. Emboldened, the Syrian Company is now planning to establish a formulation plant in the Sudan.³¹

3. Impact of poor health sector governance on public safety and health in Sudan:

The impact from the above-mentioned specific examples of corruption and poor governance has already been clarified. The overall impact of the weak system of health sector governance could be summarized as follows:

- a. Impact on increased out-of-pocket expenditure to pay for marginal increase in cost of accessing health care,
- b. Increased opportunity cost of underfunded preventive services (higher disease burden at population and individual level), leading to absent or weak communicable and non-communicable disease surveillance, control of environmental safety, residential sanitation, workplace & occupational safety, safety of food chain & water supply, industrial product and by-product and waste regulation, etc.
- c. Increased direct costs of care due to corrupt procurement practices (eg single sourcing of medical commodities and equipment by foregoing competitive bidding or buying lower-priced generic medicines or foregoing opportunities for volume discount through participating in bulk purchases with other countries).
- d. Increased disease burden when publicly-purchased medical commodities & equipment are embezzled & sold in private market causing stock outs at public sector facilities

31: Ibid.

- e. Decreased access to health care (particularly primary, but also secondary and tertiary health care) caused by systematic and official dismantling of public sector health facilities leaving patients with only the option of resorting to private health facilities owned by government officials (eg KTH).
- f. Reduced efficacy of preventive and curative services caused by replacing competent health workers with those who are loyal to government policies, including distortion of health worker training which favors training facilities owned by government officials (by exempting them from training costs)
- g. Substandard medical commodities and equipment being allowed into health care system causing decreased efficiency of health prevention, treatment and care interventions, increased morbidity & mortality due to fake, substandard, expired or otherwise dangerous medication or equipment.
- h. This impact of corruption as a causal factor is also compounded by policy failures whereby constitutionally-guaranteed & legally/required subsidies for certain health conditions and population groups are not provided to those who are entitled to them.
- i. Monopolistic collusion between NHIF and certain health facilities & laboratories owned by government officials or supporters necessarily increases the per capita cost of care for those covered by NHIF thereby decreasing its coverage extent for other citizens.
- j. Politically-protected lack of enforcement of applicable regulations by FMOH towards National Assembly and by SMOHs to state legislative assemblies and lack of accountability by health facility managers to the established symbolic boards of trustees of the facilities or to their respective surrounding communities.
- k. Lack of public accountability as a result of devolving public health services financing responsibility from central to peripheral level without adequate devolution of technical, managerial or fiscal capacity to assume such a responsibility. While this is more a case of gross mismanagement

rather than corruption per se, the accountability gap is a main driver for the lack of financing at SMOH & peripheral levels as well as a convenient excuse for SMOH and local government to deflect blame away from them in the face of underfunded, poor quality or absent services experienced by local citizens in their jurisdictions.

B. Systemic Challenges in Sudan's Health Sector: The case for Good Governance & Higher Investments for the Health Sector:

When considering corruption in the health sector, it is important to consider five key defining characteristics which help in gaining a better understanding and, hence, a better response to the phenomenon in all its dimensions.

The first element is distinguishing corruption from financial mismanagement. Every instance of corruption constitutes financial mismanagement but not all financial mismanagement should be considered as corrupt practice. Second, it is important to look at systemic weaknesses across the full range of key components in a governance system (legislative framework, laws, codes, policies, risk-management, strategies, accountabilities, standard operating procedures and actions which enforce anti-corruption measures). In other words, the mere vigilance and discovery, however well-intentioned and energetic of instances of corruption may help sensational advocacy which mobilizes popular and official action. But it hardly touches or addresses the root of the corruption problem. Third, the degree of institutional capacity to address corruption needs to be seen as a key element. Fourth, even when there is full clarity and consideration of the above necessary elements, the absence of political will (from top-level, national political interest of a regime to the system of incentives and disincentives for the junior-most actor in the chain of command to expose or participate in corrupt practices) must be taken into account. Fifth and finally, not all corruption is necessarily for financial gain. For instance, the fact that Islamist doctors committed perjury and gave false medico-legal testimony to absolve the Inqaz from the

accusation of torturing Dr. Ali Fadl Ahmed's to death represents a punishable crime even in today's Sudan.

In light of the above, two key themes are important to emphasize in this Report. The first relates to the governance challenges faced in Sudan's health and other sectors. The second is the importance of demonstrating and advocating for increased investments in the health sector; investments which not only stem the tide of corruption but, importantly, have been proven to advance socio-economic development.

1. Key governance challenges affecting Sudan's health sector:

In the governance theme, the following summarizes the systemic challenges in Sudan's health sector governance and regulatory systems:

- a. Governmental neglect of the constitutional right to health;³²
- b. Governmental neglect of its fiduciary requirement of good governance;
- c. Lack of participatory approaches to decision-making at service delivery, local & national government levels; in particular the exclusion of key social and community actors, NGOs, donors, UN agencies and partners;
- d. Narrow range of sectorial representation in platforms deciding on health matters; exclusion of education, finance, social affairs, justice and other entities;
- e. Lack of accountability mechanisms to monitor, guide and verify health-related resource allocation, budget planning, disbursement and costs at all levels of health sector management;
- f. Lack of health system performance benchmarks that are scientifically-established, rigorously-monitored and transparently reported for the health sector;

g. Absence of effective coordination mechanisms between the different

32: Sudan Interim Constitution 2005.

health authorities and bodies.

- h. Defective/confused accountability pathways and /or fragmentation of the locus of responsibility in key health sector governance areas, including in health infrastructure development, HTP procurement standards, health service delivery standards, regulatory control over non-state actors (private sector delivery, NGOs, etc);
- i. Rampant corruption and mismanagement in the health sector;
- j. Lack of enforcement of existing legislation and laws
- k. Absence of the political will to overhaul health sector governance, primarily due to the personal gain among government officials and colluding private sector actors. There is no political nor economic nor social incentive for any government politicians to improve health actor governance, to better regulate it nor to confront the pervasive corruption.
- l. In light of the lack of true citizen representation by those whose legislative seats were not obtained through free & fair elections, the chain of public accountability is also distorted enough against any incentive for real change.
- m. Systematic and heavy oppression of dissenting civic voices or efforts to hold corrupt officials to account for their actions (including suppression of media, civil society or popular actions aimed at fighting corruption in the health sector).
- n. Lack of enforcement of established standard mechanisms for commodity procurement, importation, distribution and custody
- o. Lack of capacity and absent or contradictory legal and administrative authority by existing regulatory mechanisms in exercising any of their existing institutional mandates;
- p. Lack of enforcement of existing anti-collusion», anti-trust and other good governance regulations which prevent or mitigate conflicts of interest affecting Sudan's health sector

- q. Failure of existing mechanisms for public accountability to hold federal, state or health facility management responsible for poor performance
- r. Lack of information systems linked to decision making to assess and respond to performance issues at federal, state, local government or health facilities
- s. Lack of clarity in legislative framework and weak capacity in the regulatory bodies which should monitor, inspect and take corrective action towards private health service delivery companies or facilities or manufacturers or practitioners.

2. Rationale for health-related investments in Sudan:

A. Economic returns on investments in health and in its social determinants:

There is increasing recognition that investing in health creates wealth and increases economic growth; while there is gradual recognition about the importance of reducing health care expenditure by investing in social determinants of health and in disease prevention. A strong body of global literature has evidenced how countries can achieve high returns when they invest in women's, children's and adolescents' health. Investment cases have provided compelling evidence on the benefits for investing in the fight against Human Immunodeficiency Virus (HIV) & Acquired Immunodeficiency Syndrome (AIDS) (UNAIDS, 2012), health systems (Harmonization for Health in Africa, 2011) as well as reproductive, maternal, neonatal, adolescent and child health (PMNCH, 2013). The following illustrate some of these investment cases:

- Modern contraception and good quality care for pregnant women and newborns: If all women who want to avoid a pregnancy used modern contraceptives and all pregnant women and newborns received care at the standards recommended by the World Health Organization (WHO), the benefits would be dramatic. Compared with the situation in 2014, there would be a %70 reduction in unintended pregnancies , %67 reduction in abortions, %67 reduction in maternal deaths %77

reduction in newborn deaths and HIV transmission from mothers to newborns would be nearly eliminated. The return on investment would be an estimated US120\$ for every US1\$ spent. Population stability would enhance economic sustainability and reduce the risks of climate change (UN, EWEC 2015).

- Good quality care at child birth: This produces a triple return on investment, saving mothers and newborns and preventing stillbirths. The provision of effective care for all women and babies at the time of birth in facilities could prevent an estimated 113,000 maternal deaths, 531,000 stillbirths and 1.3 million neonatal deaths annually by 2020 at an estimated running cost of US4.5\$ billion per year (US0.9\$ per person). (UN, EWEC 2015).

D.

- Immunization: This is among the most cost-effective of health interventions. Ten vaccines, representing an estimated cost of US42\$ billion between 2011 and 2020, have the potential to avert between 24 and 26 million future deaths as compared with a hypothetical scenario under which these vaccines have zero coverage during this time. (UN, EWEC 2015).

E.

- Breastfeeding and nutrition: Promoting and supporting breastfeeding in the first two years of life could avert almost 12 per cent of deaths in children under five, prevent undernutrition and ensure a good start for every child. Scaling up nutrition interventions has a benefit-cost ratio of 16. Eliminating undernutrition in Asia and Africa would increase gross domestic product (GDP) by 11 per cent.(UN, EWEC 2015).

F.

- Early childhood development: Enabling children to develop their physical, cognitive, language and socioemotional potential, particularly in the three first years of life, yields rates of return of 10-7 per cent across the life course through better education, health, social skills, economic outcomes and reduced crime.(UN, EWEC 2015).

- Adolescents and young people: If countries in demographic transition make the right human capital investments and adopt policies that expand opportunities for young people, their combined demographic dividends could be enormous. In Africa (except North Africa), for example, they would be at least US500\$ billion a year, equal to about one third of the region's current GDP, for as many as 30 years.(UN, EWEC 2015).

- Health systems and workforce investments: With enhanced investments to scale up existing and new health interventions and the systems and people to deliver them, most low-income and lower-middle-income countries could reduce rates of deaths from infectious diseases, as well as child and maternal deaths to levels seen in the best-performing middle-income countries in 2014. It is estimated that worldwide, investing in strengthening health systems as well as in high-impact health interventions for reproductive, maternal, newborn and child health, at a cost of US5\$ per person per year up to 2035 in 74 high-burden countries, could yield up to nine times that value in economic and social benefits. These returns include greater GDP growth through improved productivity and preventing 32 million stillbirths and the deaths of 147 million children and 5 million women by 2035. The health workforce is a critical area for such an investment. In terms of the worldwide required health workforce numbers, these ambitious global scale-up would require at least an additional 675,000 nurses, doctors and midwives by 2035, along with at least 544,000 community health workers and other cadres of health professionals globally. Other key health systems investments include: program management; human resources; infrastructure, equipment and transport; logistics; health information systems; governance; and health financing. (UN, EWEC 2015).

G.

- Education: Investments to ensure girls complete secondary school yield a high average rate of return (around 10 per cent) in low- and middle-income countries (UN, EWEC 2015). The health and social benefits include, among others, delayed pregnancies and reduced fertility rates, improved nutrition for pregnant and lactating mothers and their infants, improved infant mortality rates and greater participation in the political process.

School curricula should include elements to strengthen the self-esteem of girls and increase respect for girls among boys.

H

- Gender equality: Closing the gender gap in workforce participation by guaranteeing and protecting women's equal rights to decent, productive work and equal pay for equal work would reduce poverty and increase global GDP by nearly 12 per cent by 2030 (UN, EWEC 2015).

I.

- Preventing child marriage: A 10 per cent reduction in child marriage could contribute to a 70 per cent reduction in a country's maternal mortality rates and a 3 per cent decrease in infant mortality rates in countries with high child marriage prevalence (UN, EWEC 2015). High rates of child marriage are linked to lower use of family planning, higher fertility, unwanted pregnancies, higher risk for complications during childbirth, limited educational advancement, and reduced economic earnings potential.

J.

- Water, sanitation and hygiene: Investments in these sectors return US4\$ for every US1\$ invested and result in US260\$ billion being returned to the global economy annually if universal access were achieved (UN, EWEC 2015).

B. Importance of equity when targeting and investing in health services:

The importance of investing in health in order to foster social cohesion (as a social policy end goal as well as a means by which Sudan can achieve other developmental goals) is also well documented. Gender-based discrimination leads to economic, social and health disadvantages for women, affecting their own and their families' well-being in complex ways throughout the life course and into the next generation. Gender equality is vital to health and to development. Health outcomes among women, children and adolescents

are worse when people are marginalized or excluded from society, affected by discrimination, or live in underserved communities - especially among the poorest and least educated and in the most remote areas.

In low- and middle-income countries there can be:

- Up to three times more pregnancies among teenage girls in rural and indigenous populations than in urban populations
- Up to an 80 percentage point difference in the proportion of births attended by skilled health personnel between the richest and poorest groups within countries
- At least a 25 percentage point difference in antenatal care coverage (at least four visits) between the most and least educated and the richest and poorest groups within countries
- At least an 18 percentage point gap in care-seeking for children with pneumonia symptoms between the poorest and richest groups within countries, with low care-seeking rates overall
- Up to 39 percentage points higher stunting prevalence in children of mothers with no formal education compared with those children whose mothers completed secondary school or higher education.

Thus, the importance of investing equitably to achieve better results for all and children in particular cannot be over emphasized. It is more cost-effective to invest with a deliberate focus on equity. The benefits achieved will be consistent with, both a rights-based as well as pragmatic economic returns on the investments (UNICEF, 2010).

Various surveys (e.g. Sudan Household Survey 2006, National Health Accounts 2008, etc) have demonstrated the socially and economically disruptive effects of attempts by underserved populations to access health care. Other assessments by the UN (WHO, EHA 2011) continue to demonstrate that the high morbidity and mortality in conflict affected populations is not just the portion directly attributable to the immediate armed hostilities and attacks, but that such populations suffer from the longer-term lack of access to preventive and treatment services long after military attacks

have ceased. Factors for the persistent morbidity and mortality include the destruction of health facilities, disruption of medical supply lines, absence of health workers and dislocation to geographic locations where new types of health risks exist (e.g. IDPs living in peri-urban camps and other informal settlements).

Investing in adolescent and youth health is of paramount importance in a country with the demographic composition of Sudan. The period of demographic transition between high fertility and mortality rates and low ones will happen at some point in virtually every country. But only countries which make the appropriate choices and investments will reap a demographic dividend. They would do this by taking full advantage of the point where there are fewer dependents and more people in their productive years.

Moreover, investing in young people is not only more equitable and morally correct. It is also, a smart pragmatic economic intervention with a high return on investment. The returns include greater economic productivity, more resources for better quality infrastructure and services as fertility rates decline, increased political stability and transmission of achievements to coming generations.

By contrast, shortsighted thinking that fails to recognize and grasp these benefits will result in the loss of an already-closing window of opportunity for investing in the next generation. The current waste of human potential that young people experience, given the lack of protection, respect and targeted investments in them, is crucial especially at times of decreasing resources, growing threats from conflict, climate change and diseases. These factors should be an incentive and policy impetus for investing in adolescents and youth; not an excuse for denying them their right.

Adolescents and youth are better equipped to reach their full potential when they are healthy and well-educated, and when they have opportunities to thrive and fulfil their aspirations. With appropriate support to achieve their potential, defined by decisions rooted in their participation, they can be an immense source of productivity, innovation and creative dynamism that accelerates development. Young people with jobs, for example, propel



flourishing economies. A voice in decisions that affect them can lead to decisions that reflect their realities and leave them less likely to turn to alternative routes for expressing themselves through, for example, civil unrest. Full access to reproductive and sexual health means they can make informed choices about their lives and those of their families, and contribute to healthier societies overall.

VIII. Conclusions & Recommendations

A. Conclusions:

While further work is needed to expose the full extent of corruption in Sudan's health sector as well as its impact, it is important to take note of some key conclusions.

1. Analytical framework to capture all dimensions of corruption

the degree of institutional capacity to address corruption needs to be seen as a key element whereby policies and actions which weaken institutional capacity of regulatory bodies are indirectly complicit in paving the way for corruption.

When considering corruption in the health sector, it is important to see its four key elements which help better understand and, hence, respond to the phenomenon in all its dimensions. The first element is distinguishing corruption from financial mismanagement. Second, it is important to look at systemic weaknesses across the full range of key components in a governance system (legislative framework, laws, codes, policies, risk-management, strategies, accountabilities, standard operating procedures and actions which enforce anti-corruption measures). The mere vigilance and discovery, however well-intentioned and energetic of instances of corruption may help sensational advocacy which

mobilizes popular and official action. But it hardly touches or addresses the root of the corruption problem. Third, the degree of institutional capacity to address corruption needs to be seen as a key element whereby policies and actions which weaken institutional capacity of regulatory bodies are indirectly complicit in paving the way for corruption. Finally, even when there is full clarity and consideration of the above necessary elements, the absence of political will (from top-level, national political interest of a regime to the system of incentives and disincentives for the junior-most actor in the chain of command to expose or participate in corrupt practices) must be taken into account.

2. Health sector corruption as part of Sudan's pervasive corruption

Sudan's health sector corruption is not an isolated sectoral phenomenon. Rather, it is consistent with the deliberate dismantlement and elimination by the regime of its obligation to provide adequate public goods and services across all sectors. This point has implications on the entry points through which Sudan's health sector corruption can begin to be addressed. Unless such remedial efforts are broadened to increase citizen participation in demanding accountability across a broad range of sectors in Sudan, they will likely have limited effect.

3. Impact of Sudan's health sector corruption:

In terms of impact, the impact of Sudan's health sector corruption as a direct element as it exacts a significant toll on the country's human capital in the form of increased disease burden, increased mortality rates and an increased cost of care. At the same time, the indirect costs of Sudan's health sector corruption include the establishment of inefficiencies in the costs of health care, reduced quality of care, promotion of a culture of tolerance and impunity for corruption and disempowering citizens from their ability to control their health situation.

4. Anticipated trends in Sudan's health sector corruption and its effects:

The most likely trajectory of the corruption phenomenon in Sudan's health sector is that it will become deeper, wider and with increasingly negative impact on people's lives. This is based on the trends in at least four of corruption's strongest drivers in Sudan; namely: The almost total lack of effective accountability mechanisms to monitor, expose or address corruption at any of Sudan's federal, state, local or health facility levels, the increasing gap between civil service salaries and the cost of living, exhaustion of economic coping mechanisms that had until now helped citizens cover costs of their catastrophic health care by seeking wider options to access critical care as well as the consistent practice of granting immunity and impunity for corrupt officials in the sector.

5. Information and research gaps:

There is a clear gap in information sources and data with which to better describe and address corruption in Sudan's health sector. Aside from rumors and sensational journalism, very few credible sources of data exist that can paint a complete picture of the situation. Nevertheless, two factors can help mitigate this data gap. The first is the willingness of normal citizens, civil society groups, health workers and even some government officials to publicly criticize and investigate corrupt practices. Second, and despite the understandably secretive nature of corrupt practices worldwide, the current degree of impunity and recklessness of corrupt officials in Sudan may often reveal important information and data which would otherwise not be public. Examples of such information which is already in the public domain include the exposures of corrupt practices by Sudan's Auditor General's Annual Report to the National Assembly, Sudanese court decisions that dealt with corruption cases, the information made public by various whistle-blowers about lack of competitive bidding practices for state contracts (eg construction, supply and operation of health facilities or preventive services) and the evident absence of proper accounting for the

state-sanctioned fees levied on various health services. Thus, documenting, canvassing and systematically analyzing and exposing corruption using these information sources is an important ongoing duty for citizens, activists and health workers in Sudan.

B. Recommendations:

In addressing Sudan's health sector corruption based on the above conclusions, it is important to consider multifaceted and multilevel interventions. It is easy for corruption to insidiously establish itself in a country but it will take a lot longer to recreate the conditions and implement sufficient measures to eliminate it systematically. The burden of combatting corruption falls upon every Sudanese citizen and the methods of combatting it lend themselves to actions in different ways.

It is important that health sector corruption and general multi-sectorial government-wide remedies for Sudan's pervasive corruption be developed in more detail than is currently being considered. For instance, the current efforts to develop alternative policies for the health sector (part of the opposition's efforts to envision reforms that will be needed after the downfall of the Inqaz regime) should go beyond demanding accountability by corrupt officials. Such policies should develop holistic systems of good governance, where transparency and accountability are institutionalized and where all branches of the state (legislative, executive, judiciary, law enforcement, civil society) play their part.

1. Political measures:

- 1.1 Stopping all wars and immediately reallocating the excessive military and security expenditures to reinvest them in health may at first seem to rhetorical or irrelevant to the fight against health sector corruption in Sudan. However, Inqaz's continuing wars have not just led to underfinanced health services; they have also produced corrupt practices which have affected the health sector.

- 1.2 Beyond just mentioning corruption, it is crucial that opposition groups, civil society, citizen/consumer/patient action groups continue to highlight, expose and demand redress of corruption in Sudan's health sector. This effort should be consistently maintained and proceed systematically to the level of legal challenge of such practices against the regime's own existing laws. Even if the effort does not achieve its goal of stemming corruption, it will at least maintain the pressure on the regime, increase documentation on corruption and serve as a mobilization tool towards regime change.
- 1.3 One concrete action needed to create the basis for this consistent advocacy effort is the creation of an anti-corruption clearing-house managed by a conglomerate of suitable Sudanese civil society groups, tracking and documenting corruption across many sectors, monitoring and recording the legal and practical responses and counter-measures undertaken, mapping community and civil society's anti-corruption efforts, providing expert resources, networking and linkages with similar groups in Africa and globally. The platform should best be secure electronic one to enable broader access.

2. Legislative Measures

- 2.1 One would be forgiven to think that the extent of corruption practiced in Sudan's health sector today is indicative of some type of gap in legislation or absence of certain laws to enforce. However, that is generally not the case. There are sufficient constitutional, legal and law enforcement tools to criminalize all types of corruption currently being practiced in Sudan's health sector. The problem is in the political will to enforce such measures. It is therefore critical that the Sudanese citizens, civil society groups, activists and opposition bodies actively pursue litigation measures against corrupt practices and to follow them through their entire course of appeals and enforcement.
- 2.2 The few areas where a new or strengthened legislative framework is

needed to combat corruption are in the empowerment of citizen action to hold the government accountable at local and national level. Thus, there is a need for legalizing the actions of groups such as the Sudanese Consumer Protection Association, a need to legally empower civil society groups to represent communities and the public interest in front of the law when litigating corruption incidents at the local neighborhood, local government, state and federal levels.

- 2.3 Review and develop new or strengthen existing legislative frameworks and laws relevant to health while prioritizing those regulating food supply, medical commodity importation and manufacturing standards, medical practice, environmental hygiene & sanitation, communicable disease control and patient rights;

3. Policy-level Measures

- 3.1 Establish a national participatory multi-disciplinary council to oversee development of policies, planning and setting the overall objectives of health system.
- 3.2 Develop mechanisms to effectively and transparently regulate and monitor the quality and standards of delivery in the private sector, with strong accountability parameters to the state, the professional bodies, the patient and the community; consider establishing reasonable costing parameters and guidelines which enable the private sector to profit while maintaining the affordability of access by the population. Empower such bodies by law and assist in enforcing their work to hold service providers accountable for the quality and extent of health service delivery coverage;
- 3.3 Dramatically increase the proportion of governmental budget spent on the health and social protection sectors, including reforming the current national health insurance to ensure it increases its coverage and it meets the social protection needs of the most vulnerable Sudanese citizens; while ensuring sufficient investments in women, youth, adolescent, child, disability support and support to victims of Sudan's wars.

4. Institutional and Management-level Measures

- 4.1 Establish regular (preferably annual) public multi-disciplinary, multi-sectorial and multi-stakeholder joint health sector review events which must include elected officials, other ministries, national and local officials, professional unions, Sudanese civil society groups as well as key UN and donor partners;
- 4.2 Create corruption tracking metrics within the formal health sector's health information management systems by adapting experiences such as Uganda's Data Tracking System.³³

5. Local and Health Service-level Measures:

- 5.1 Establish local accountability at service delivery points, municipal, state and at national-level FMOH to comprise elected health worker unions, patient/consumer group representatives, parliamentary/formal legislative branch and service providers.
- 5.2 Develop a mechanism to assure the formal accountability of health service delivery institutions (both preventative such as environmental health, water/sanitation, vaccination, etc; as well as health care curative services) to local communities and to seek its active participation;
- 5.3 Develop & implement performance-based funding by the FMOH towards sub-national elements of the health system, using models implemented successfully in Rwanda, Ethiopia and elsewhere; including features that enable local health facilities to benefit from tax and other revenue raised by the local government in which they are located.

33: Uganda Data Tracking Mechanism to Monitor Anti-Corruption. Government of Uganda Inspector General and Economic Policy Research Center (EPRC)–Makerere University, Kampala, Uganda. 2011.

IX. List of References

1. Framework for assessing governance of the health system in developing countries: Gateway to good governance. Journal of Health Policy Volume 90, Issue 1. Published April 2009, Pages 25–13. S Siddiqi, T I Masud, S Nishtar, D H Peters, B Sabri, K M Bile, M A Jama. <http://dx.doi.org/10.1016/j.healthpol.2008.08.005>
2. Governance and Corruption in Public Health Care Systems. Working Paper Number 78. M Lewis, Senior Fellow, Center for Global Development. Published January 2006. www1.worldbank.org/publicsector/anticorrupt/Corruption20%WP_78.pdf
3. Tackling Healthcare Corruption and Governance Woes in Developing Countries. CGDEV Brief. M Lewis, Senior Fellow, Center for Global Development. Published May 2006. www.cgdev.org/files/7732_file_GovernanceCorruption.pdf
4. Good governance and corruption in the health sector: lessons from the Karnataka experience. R Huss, A Green, H Sudarshan, SS Karpagam, KV Ramani, G Tomson and N Gerein. Health Policy & Planning (26 (2011) 484-471):(6). Published 17 December 2010. <https://doi.org/10.1093/heapol/czq080>
5. Combating healthcare corruption and fraud with improved global health governance. T K Mackey & B A Liang. Published 22 October 2012. BMC International Health and Human Rights 201212:23. DOI: -1472/10.1186/698X23-12-.
6. Challenges in Multi-Level Health Governance: Corruption in the Global Fund's Operations in Uganda and Zambia. Sekalala, S.R. & Kirya, M.T.

- Hague Journal on the Rule of Law. Published in September 2015, Volume 7, Issue 1, pp 151–141. doi:10.1007/s-0010-015-40803x.
7. British Medical Journal. Review of corruption in health sector with focus on India. Summary with links to various BMJ coverage articles of the subject. Available at <http://www.bmj.com/campaign/corruption-healthcare>
 8. Measuring Governance, Corruption, and State Capture: How Firms and Bureaucrats Shape the Business Environment in Transition Economies. World Bank Policy Research Working Paper No. 2312. D Kaufmann , J S Hellman , G Jones , M A Schankerman . Posted: 5 Jun 2001.
 9. Review of corruption in the health sector: theory, methods and interventions. T Vian Published 1 March 2008. Health Policy Plan ((2008 94-83 : (2) 23. <https://doi.org/10.1093/heapol/czm048>
 10. Corruption and the provision of health care and education services. IMF Working Paper WP/116/00. S Gupta, H Davoodi & E Tiongson. IMF. June 2000. <https://www.imf.org/external/pubs/ft/wp/2000/wp00116.pdf>
 11. A Health Insurance System: Is it the solution for Sudan. Unpublished presentation by Dr H H Mohamed. 2012.
 12. A Roadmap to Achieve Social Justice in Health Care in Egypt. A Pande, A Hamed & A Elshalakani. World Bank. Published January 2015.
 13. Health Information System in Sudan – problems and solutions. Unpublished presentation by M Abdel Aziz. Public Health Institute & Federal Ministry of Health of Sudan. July 2012.
 14. India National Health Policy 2015. Ministry of Health. 2015.
 15. Ethiopia Health Sector Development Program IV 2014 to 15. Federal Democratic Republic of Ethiopia. Ministry of Health. FINAL DRAFT. October 2010.
 16. Sudan -5year Health Sector Strategy 2011-2007: Investing in Health and Achieving the MDGs. Federal Ministry of Health. Republic of Sudan.

2007.

17. Sudan Country Brief 2014-2012. African Development Bank Group. October 2012.
18. Attempts to Outline a National Health Strategy. M M A Ali. Unpublished presentation. Sudanese Doctors Union UK & Ireland Conference. June 2012.
19. Summary of Press Conference on 26 December 2015 held by Sudan Minister of Social Affairs Mrs Mashair Eldalwlab and Sudan National Health Insurance Fund Director Dr Tilal Elfadil. El-Seyha Arabic Daily newspaper. 27 December 2015.
20. Sudan National Health Policy 2007. Government of National Unity, Federal Ministry of Health. 2007.
21. Inequalities in Public Services in the Sudan. N Crowther, K Okamura, C Raja, D Rinnert & E Spencer. London School of Economics & United Kingdom Department for International Development. March 2014.
22. Sudan Interim Constitution 2005.
23. Sudan Interim Strategy Note 9FY 2015-2014). World Bank. International Development Association (IDA). Report No: -80051SD. August 2013.
24. World Health Statistics 2015. World Health Organization (WHO).
25. Investing in Health for Africa: The Case for Strengthening Systems for Better Health Outcomes. Harmonization for Health in Africa. WHO African Regional Office. 2011.
26. Health Governance and Finance project. Health Governance, Human Resources for Health and Health Care Finance Indicator definitions. USAID. 2015.
27. Towards an Effective Health System in Khartoum State. M. Hommeida. State Minister of Health, Khartoum State. Unpublished paper. 4th May 2013.
28. Everybody's Business: Strengthening Health Systems to Improve

- Health Outcomes – WHO’s Framework for Action. WHO Geneva (2007).
- 2016 .29 Ibrahim Index of African Governance: A Decade of African Governance 2015-2006. Published October 2016. Copyright © Mo Ibrahim Foundation
30. Sudan’s Islamists: From Salvation to Survival Crisis Group Africa Briefing N21 ,119° March 2016.
31. Proceedings of Sudan Knowledge Seminar on “The future direction of health and health care planning in Sudan”, 18th February 2017, University Square Stratford – Stratford, London, United Kingdom. Available at <http://www.sudanknowledge.org/the-future-direction-of-health-and-health-care-planning-in-sudan/>
32. Sudan: The World Bank Group Country Opinion Survey FY15: Report of Findings. June 2015. <http://microdata.worldbank.org/index.php/catalog/2650>
33. World Bank. 2015. Measuring regulatory quality and efficiency - Sudan. Doing business 2016. Washington, DC: World Bank Group. <http://documents.worldbank.org/curated/en/770491468185956367/Doing-business-2016-measuring-regulatory-quality-and-efficiency-Sudan>
34. Ali Siddig, El-Fatih; Hassan, Fareed M. A. 2016. The Sudan Interim Poverty Reduction Strategy Paper Status Report: A Joint World Bank Group and Sudan’s Ministry of Finance and Economic Planning Assessment. Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/980991479985933855/The-Sudan-Interim-Poverty-Reduction-Strategy-Paper-Status-Report-a-joint-World-Bank-Group-and-Sudan-s-ministry-of-finance-and-economic-planning-assessment>
35. Recommended Health Policy Reform Directions for Sudan. H H Mohamed, M M A Ali & A A Eltom. Paper developed for and presented at Sudanese Doctors Union United Kingdom & Ireland (SDU-UK/Ireland), Annual Meeting, 2nd May 2015, London, United Kingdom.
36. Transparency International (TI), 2016 Corruption Perceptions Index Report.

http://www.transparency.org/news/feature/corruption_perceptions_index_#2016table

37. Uganda Data Tracking Mechanism to Monitor Anti-Corruption. Government of Uganda Inspector General and Economic Policy Research Center (EPRC)– Makerere University, Kampala, Uganda. 2011.
38. Corruption in Ghanaian healthcare system: the consequences. P Agbenorku. Journal of Medicine and Medical Sciences Vol. 10(3) pp. 630-622. Published October 2012 Available online <http://www.interestjournals.org/JMMS>
39. Bashir, N H H and Ali, M A (2007). Survey of the Persistent Organic Pollutants pesticides in the Sudan and the possibility of their disposal. Proceeding of the Workshop on Pesticides & Fertilizers Importation, use, storage, transport and handling, Sudanese Standards & Metrology Organization (SSMO), Friendship Hall, Khartoum, Sudan, 5-4 September 65-50 :2007.
40. Assad, Y.O.H, and Bashir, N.H.B. (2002). Persistent Toxic Substances (PTS) in Sudan. The Priority Setting Meeting of Region V (sub-Sahara Africa), Nairobi, UNEP Headquarters, October -29Nov 2nd 2002 and UNEP-Chemicals Division, Geneva, Switzerland, pp:18.
41. Medani S. O. “Inqaz’s Corruption File: So that we do not forget” – Part I. Unpublished series of press and online articles exposing corruption in various sectors in Sudan from early 1990’s until 2011.
42. World Bank Africa Development Indicators 2010 “Silent and lethal: How quiet corruption undermines Africa’s development efforts”. Available at: siteresources.worldbank.org/AFRICAEXT/Resources/english_essay_adi2010.pdf
43. World Health Statistics Report 2017. World Health Organization, 2017, Geneva. Available at http://www.who.int/gho/publications/world_health_statistics/2017/en/

X Annexes

K. Annex A: Summary of health sector corruption experiences and lessons learned from other countries

Various frameworks and measures have been used to measure and compare health sector governance globally and between countries. Although such frameworks are not defined by law or normative standards, they are informed by persuasive theoretical frameworks which characterize good governance.

Illustrative examples of some of these frameworks include the one mentioned in the body of this Report, developed by Siddiqi et al (Siddiqi et al, 2009), the theoretical frameworks described by Vian's review (Vian, 2008), the World Bank's Working Paper clarifying some of the metrics used to define and monitor corruption (Kaufmann et al, 2001) and the useful review by the Center for Global Development's Working Paper (Lewis, 2006) on the linkages between good governance and corruption in the public health care systems globally. The United States Agency for International Development (USAID) has established and is utilizing indicators to measure its investments in various health system strengthening areas, including health care finance, health governance and human resources for health (USAID, 2015).

Good governance is a fundamental building block for health sector performance. Its constituent elements are effective accountability, full transparency and formal institutionalized policies, systems and processes which can enable it to function. As part of WHO's six building blocks for any

health system, governance is also accompanied by stewardship of resources; a notion which assumes that governing a sector is invariably done on behalf of resources which belong to the public. In the context of the government of a country being the primary responsible steward for its resources, the obligation for that government to be transparent, accountable and, hence, to govern the sector in good faith is evident.

Public accountability of elected officials or civil servants is a key cornerstone for expecting accountability within a particular sector's governance framework. In countries ruled by military dictatorships which do not even pretend to be participatory, it would seem futile to expect their health sector to benefit from principles of accountability to the public, citizen participation in governance, etc. Yet, it is important in any critique of such dictatorships to hold them accountable at least to their own constitution and promulgated policies and laws.

As has been analyzed in the main body of this Report, Sudan's constitution, laws and decentralized local government structure not only commits the ruling regime to good governance but also describes the rudimentary elements of public accountability in the form of regulatory bodies, by laws and legislative bodies at the State and municipal levels. Regardless of whether these are functional or effective, it is important therefore to also hold the current dictatorship in Sudan to this corpus of policies, legislative requirements and structures.

In addition, it is also important to see how Sudan compares with countries which, although not yet functioning as mature and effective democracies, are nevertheless at least attempting to hold themselves to some sort of framework or expectation of good governance in their health sector.

In determining how corruption affects service delivery, the World Bank (World Bank Africa Development Indicators 2010) states that "... one of the main reasons Africa is lagging behind is the poor service delivery that is a consequence of quiet corruption". The same Report goes on to define that a key prerequisite to good governance in all sectors and at national level is "... a government's determination to deal with quiet corruption...., for example, by increasing the availability of information on finances, inputs,

and expected outputs..."in order to achieve measurable improvements in service delivery...". According to the World Bank, the cornerstones of such determination can only be realized by establishing the following:

- "strong and highly motivated leadership in the fight against corruption,
- commitment to and capacity of the national anti-corruption units to pursue operationally effective responses at the sector level, and
- adequate policies and institutions."

as well as two other pillars; namely:

- Increasing transparency in policy formulation and implementation that empowers citizens to raise the accountability of service providers—bolstering the "demand side" for good governance" and ..
- "...the preferences and interests of all those involved be aligned with achieving the objectives of the reform. This often involves better working conditions. "

At first, some of the lessons in the health sector performance may seem to contradict the above link between health sector governance on one hand and a country's overall level political participation, democracy and the rule of law. An important evaluation study of India's Karnataka State's health sector corruption (Huss et al, 2010) yielded some very interesting insights. In conclusion, and although India is the world's largest democracy and Karnataka is a state well-known for its major health and social achievements, political will and complex collusion between central and state officials, prevented a well-conceived, well-resourced independent anti-corruption body from doing its job. This was despite a very good degree of citizen and media engagement, full transparency in terms of the independent body's ability to publish data and incidents of corruption. At the end, the cycle of accountability was not completed and the experiment did not achieve its objectives.

Other examples of how overall political governance at the national level often interacts with health sector governance can be found in Africa, albeit with slightly different outcomes compared to India. Ethiopia and Rwanda are

highly-regarded in terms of their health sector performance, the equitable nature of their health service provision and their visionary link between the right to health and the socio-economic development rights of their people. Yet, these two countries can be described as managed democracies, at best, if not fully-fledged oligarchies. The instructive element in these countries is that when there is an overall political will (however inappropriately or undemocratically pursued), it is indeed possible to see good governance in specific sectors such as health, education and social services even as governments continue to violate freedom of speech, freedom of association, freedom of movement and other human rights. While the inherent paradox in these examples is certainly not useful for Sudan's current rule by a full military dictatorship, it is possible to disassemble what specific good governance elements have made Ethiopia and Rwanda's health sector a resounding success and what would be the limitations imposed by the restrictive overall system of rule for these countries.

In Ethiopia, health sector governance is strictly and strongly under the coordination of the Ministry of Health (MOH) and the MOH develops pro-poor, equitable health policies, strategies and plans with full participation of its decentralized regional health bureaus (although not with any input from civil society, media nor citizens at any level). It holds itself to such frameworks, implements them transparently and is not ashamed to admit failure or accept criticisms. Ethiopia's regulatory systems are supported by an extremely strong state (some would say a police state) which enforces all manufacture, importation, distribution, storage and consumption of medical services and commodities. Its civil service (though very highly politicized based on party affiliations) is amongst the more disciplined in sub-Saharan Africa while its salary scales are reasonable in relation to the cost of living, inflation and similar parameters. The country is very supportive of its health workers, rewards them in non-monetary and monetary terms, attempts to retain and train them as well as provide them with the means with which they can do their work. Health facilities are strongly supervised based on a regular schedule through what is called "supportive supervision" visits where both technical and administrative challenges are sorted out.

Similarly, a key feature in Rwanda's health sector performance is its involvement of citizens and communities in measuring the performance and even to have a say in the recruitment of local health workers at the district and village level. Combined with Rwanda's pro-poor health and social sector policies, the improvements in maternal and child health as well as in communicable disease control have become a shining example of how things should be done in Africa.

Both Ethiopia and Rwanda allocate very high proportions of their governmental expenditure to health, education and social protection. They have a vision to move to a different tier of countries by investing in their human capital to reach that vision; this being the main driver of their poverty reduction programs and social spending. As such, there is vision, enlightened and egalitarian-oriented social policy and pro-poor strategies which are strongly supported to deliver equitable services of reasonable quality.

Botswana, Mauritius, Mauritania, Cape Verde and other African countries are also standing out as good health sector performance whose achievement have been build on minimizing corruption and establishing good governance frameworks for their health sector. Hence, a growing number of African countries are moving towards systematic elimination of corruption in their health sectors, while Sudan is heading fast in the other direction.

Among the failures in Africa are countries which (quite mistakenly) presumed that international aid in the health sector is more loosely monitored and, hence, more inviting to corruption. For instance, countries such as Zambia and Uganda have had health sector corruption repeatedly making headlines such as the 2011 cases of embezzlement from Global Fund finances among some of the grantees.

Egypt's ailing social protection system dates from the socialist orientations of its first republic established under Jamal Abdel-Nasser's regime in 1952. Today, rampant corruption is seen across all sectors and at all levels, with the public health sector being notorious for pervasive corruption and poor quality of services. Efforts by the Egyptian government and its main donors (eg World Bank, European Union, US Government) have only now started

to rationalize the social protection system to provide more targeted and meaningful service delivery, municipal utility and other subsidies. However, the historic roots and massive scale of corruption as well as the overall lack of citizen participation in policy, legislative or governance of the country are almost certain to delay the time when health sector corruption begins to decline.

However, even countries with chronic issues of corruption in their health sector in Africa are making efforts to rid their system of this cancer. Since 2009, Uganda has established a Data Tracking Mechanism to Monitor Anti-Corruption, in close collaboration between the Government of Uganda Inspector General and the Economic Policy Research Center of Makerere University in Kampala. The key lesson in Uganda's experience is two-fold. First, it is important to acknowledge corruption in order to mobilize the willpower and resources to fight it. Second, it is crucial that corruption does not just become the subject of sensationalized media articles and political altercations or legal battles, as it must be defined, with appropriate measurable and transparent indicators, tracked over time (including establishing a baseline before starting to monitor progress).

A study conducted in Ghana in 2012 (Agbenorku, 2012) obtained the views of a wide segment of society regarding how they see corruption in their country. The results were a tragically damning statement of how Ghanaian citizens perceive those governing their life and health workers were seen by respondents to be the third most corrupt group in the country (after politicians and law enforcement officials). The instructive aspect of this study is that it engages citizens to elicit their views about good governance and corruption while it also defines a range of types of corruption affecting the health sector and attempts to measure them at least subjectively by surveying a sample of citizens. The study recommends public education and involving Ghana's citizens in the fight against corruption until it is no longer seen as the norm. Public demand and strong citizen advocacy and involvement in fighting corruption is therefore a key message.

L. Annex B: Key socio-economic, demographic & health statistics for Sudan

	Indicator Definition	Value for Sudan (male/female)	Year	WHO EMRO average (*)
1	Total population	40.24 Million	2015	
2	Life expectation at birth	64.1 years (6 5 . 9 / 6 2 . 4)	2015	68.8 70.4/67.4))
3	Healthy life expectancy at birth	55.9 years	2015	60.1
4	Maternal mortality ratio	311 per 100,000 lb (**)	2015	166
5	Births attended by skilled health personnel	78 %	-2005 2 0 1 6	71
6	Mortality rate of children under 5 years of age	70.1 per 1000 lb	2015	52
7	Neonatal mortality rate	29.8 per 1000 lb	2015	26.6
8	New HIV infections among adults 49-15 years	N/A (***)	2015	0.13
9	Incidence of tuberculosis (TB)	88 per 100,000 pop (****)	2015	116
10	Incidence of malaria	36.6 per 1000 pop at risk	2015	19
11	Infants receiving 3 doses of hepatitis B vaccine	93 %	2015	80
12	Reported number of people requiring interventions against neglected tropical diseases	26,533,962	2015	86,152,675

13	Probability of dying from any cardiovascular disease, cancer, diabetes or chronic respiratory disease between age 30 and exact age 70 years	25.7 %	2015	21.8
14	Suicide mortality rate	10.2 per 100,000 pop	2015	3.8
15	Total alcohol consumption per capita among those 15 years or older (projected estimate)	3.3 liters of pure alcohol	2016	0.7
16	Road traffic mortality rate	24.3 per 100,000 pop	2013	19.9
17	Proportion of married or in-union women of reproductive age who have their family planning needs satisfied with modern methods	30.2 %	-2005 2 0 1 5	61.1
18	Adolescent birth rate	87 per 1000 women aged -15 49 years	-2005 2 0 1 4	46.1
19	Mortality rate attributed to household ambient air pollution	64.5 per 100,000 pop	2012	58.8
20	Mortality rate attributed to exposure to unsafe water, sanitation and hygiene services	34.6 per 100,000 pop	2012	13.1
21	Mortality rate attributed to unintentional poisoning	4.2 per 100,000 pop	2015	1.4

22	Age-standardized tobacco smoking among persons 15 years of age or older	N/A	2015	N/A
23	Diphtheria, tetanus and pertussis (DPT3) immunization coverage among 1-year-olds	93 %	2015	80
24	Total net official development assistance (ODA) for medical research and basic health per capita	2.47 US Dollars (at constant 2014 US Dollar)	2014	1.46
25	Skilled health professional density	42.2 per 10,000 pop	-2005 2 0 1 5	26.3
26	Average of 13 International Health Regulations (IHR) Core Capacity scores	71	-2010 2 0 1 6	72
27	General government health expenditure as a % of general government expenditure	11.6 %	2014	8.8
28	Prevalence of stunting in children under 5 years	38.2 %	-2005 2 0 1 6	25.1
29	Prevalence of wasting in children under 5 years	16.3 %	-2005 2 0 1 6	9.1
30	Prevalence of overweight children under 5 years	3 %	-2005 2 0 1 6	6.7
31	Proportion of the population using improved drinking water sources	N/A	2015	91
32	Proportion of the population using improved sanitation facilities	N/A	2015	78

33	Proportion of population with primary reliance on clean fuels	23 %	2014	71
34	Average death rate due to natural disasters	0.1 per 100,000 pop	-2011 2 0 1 5	0.2
35	Mortality rate due to homicide	6.5 per 100,000 pop	2015	6.5
36	Estimated direct death rate due to major conflicts	7 per 100,000 pop	-2011 2 0 1 5	19.5

Notes:

Data source: World Health Statistics Report 2017. World Health Organization, 2017, Geneva. Available at http://www.who.int/gho/publications/world_health_statistics/2017/en/

(*) WHO Eastern Mediterranean Region (EMRO) includes the following countries: Sudan, Somalia, Djibouti, Egypt, Libya, Tunisia, Morocco, Saudi Arabia, Yemen, Oman, United Arab Emirates, Qatar, Bahrain, Iraq, Kuwait, Iran, Afghanistan, Pakistan, Syria, Lebanon, Jordan and Palestine.

(**) lb = live births

(***) N/A = Data not available

(****) pop = population

Pink-highlighted indicators are the ones where Sudan's situation is worse than the WHO EMRO regional average of the 22 countries listed above.