Report on the Healthcare Sector and Business Opportunities in Zambia

Gustaf Engstrand
Consultant

for

SWECARE FOUNDATION

January 2013
<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EXECUTIVE SUMMARY</td>
</tr>
<tr>
<td>1.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>1.2</td>
<td>General</td>
</tr>
<tr>
<td>1.3</td>
<td>Main opportunities – institutional cooperation</td>
</tr>
<tr>
<td>1.4</td>
<td>Main opportunities – private sector suppliers</td>
</tr>
<tr>
<td>2</td>
<td>Introduction</td>
</tr>
<tr>
<td>2.1</td>
<td>Background</td>
</tr>
<tr>
<td>2.2</td>
<td>Objective of the report</td>
</tr>
<tr>
<td>2.3</td>
<td>Methodology</td>
</tr>
<tr>
<td>2.4</td>
<td>Structure of the report</td>
</tr>
<tr>
<td>3</td>
<td>Zambia – background and country facts</td>
</tr>
<tr>
<td>3.1</td>
<td>Zambia at a glance</td>
</tr>
<tr>
<td>3.2</td>
<td>Political situation</td>
</tr>
<tr>
<td>3.3</td>
<td>Financial stability</td>
</tr>
<tr>
<td>3.4</td>
<td>Asian presence</td>
</tr>
<tr>
<td>4</td>
<td>Health situation in Zambia</td>
</tr>
<tr>
<td>4.1</td>
<td>Disease burden and needs</td>
</tr>
<tr>
<td>4.2</td>
<td>Determinants of health</td>
</tr>
<tr>
<td>4.3</td>
<td>Diarrhea</td>
</tr>
<tr>
<td>4.4</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>4.5</td>
<td>Malaria</td>
</tr>
<tr>
<td>4.6</td>
<td>HIV/AIDS</td>
</tr>
<tr>
<td>4.7</td>
<td>Other communicable diseases</td>
</tr>
<tr>
<td>4.8</td>
<td>Prevention of infection disease</td>
</tr>
<tr>
<td>4.9</td>
<td>Mother and child health</td>
</tr>
<tr>
<td>4.10</td>
<td>Mental Health</td>
</tr>
<tr>
<td>4.11</td>
<td>Life style related health problems</td>
</tr>
<tr>
<td>4.12</td>
<td>Cancer</td>
</tr>
<tr>
<td>4.13</td>
<td>Disability</td>
</tr>
<tr>
<td>5</td>
<td>Overview of the health sector in Zambia</td>
</tr>
<tr>
<td>5.1</td>
<td>Policy and regulation</td>
</tr>
<tr>
<td>5.2</td>
<td>Policy documents etc</td>
</tr>
</tbody>
</table>
7.3 Incentives..................................................................................................................64
7.4 Protection of property rights..................................................................................65
7.5 Investor protection and international agreements..................................................66
7.6 CSR initiatives.........................................................................................................67
7.7 Investment climate...................................................................................................68
7.8 Investment conferences and similar initiatives.....................................................68
7.9 Business risks – corruption....................................................................................69
7.10 Business risks – political.......................................................................................71
7.11 Business risks – competition................................................................................72
7.12 Business risks – donor activities..........................................................................72
7.13 Business risks – hidden trade barriers.................................................................73
7.14 Trade Agreements.................................................................................................73
7.15 Zambia Sweden Double Taxation Agreement.....................................................74

8 References..................................................................................................................74
8.1 Documentation.........................................................................................................74
8.2 Interviews ................................................................................................................77
The Zambian government is giving priority to the health sector with the goal to ensure equitable access to healthcare services for all Zambians, i.e. better availability of adequate infrastructure, medical equipment and essential drugs. Targeted capital investments and technical support are required to strengthen the three levels of health care and improve service delivery. In order to achieve this, government has increased funding to the healthcare system and is emphasizing private sector participation in both the financing and provision of high quality health care, as well as public private partnerships (PPP) in the development and implementation of major health programs. At the same time, Zambians at large are demanding better health care and there is a growing middle class able to pay for improved health services. Zambia has also experienced a rise in diseases traditionally not known, i.e. life-style related diseases, such as cancer, cardiac diseases and diabetes, which are bringing challenges for the health sector. The health care sector is thus undergoing important changes, giving rise to potential business opportunities.

The overall objective of this study is to provide a general overview of the Zambian healthcare sector and the various segments that it consists of. In addition, the report identifies opportunities that exist for Swedish stakeholders within the Zambian healthcare segment, and aims to provide input on how to meet these opportunities (and challenges) in order to create business in Zambia for Swedish health sector enterprises and organizations.

The study has been commissioned by Swecare Foundation, as part of the Sida-funded pilot project How Networks within the Health Sector can contribute to Development Cooperation. In the role as partners to Sida, under the Business for Development (B4D) programme, Swecare Foundation’s unique platform is used to enhance and develop cooperation between Swedish actors and operators in developing markets.

Swecare Foundation was founded in 1978 by the Swedish government and the health care industry together as a semi-governmental non-profit organization. Swecare creates interest in interaction, analyzing the needs of other countries, matches this with Swedish comparative advantages and packages a Swedish offer. We create meeting places and open doors between actors in different countries. Swecare’s network consists of more than 300 Swedish companies and organizations from different parts of the health care sector. Swecare also coordinates innovative projects to improve the quality and affordability of health care.

The pilot project aims to contribute to poverty alleviation and improved living conditions for poor people through creating new platforms for activities intended to draw attention to opportunities in health care and life sciences in developing countries; strengthening trade promotion actors’ common work and creating good conditions for small and medium sized companies to enter new markets; and collaboration and engaging with agencies, research foundations and academia.

Maria Helling,
Swecare Foundation
1   EXECUTIVE SUMMARY

1.1   Introduction

This Executive Summary first highlights general issues to consider when approaching the Zambian health care system from a Swedish perspective, section 1.2. Thereafter selected opportunities for institutional cooperation and for private sector suppliers are presented, sections 1.3 – 1.4. Selection has been made based on presumed interests from Swecare’s member organizations and companies.

1.2   General

1.2.1   Why Zambia?

Zambia has borders with no fewer than eight countries and is in the long term a potential regional hub for activities in the southern African region. The safe city of Lusaka is a natural center for expansion into the surrounding countries, including the Southern African Development Community (SADC), the total of which covers an emerging market with an excess of 170,000,000 people. Zambia’s high digit economic growth and expansion within the next decades will require investment in infrastructure in both a narrow and a wider sense, leading to opportunities in all service sectors, including healthcare.

Investors or exporters looking for a last untouched region will find that Zambia has enormous potential in sectors outside of the traditional mining sector. This is also true for the Zambian healthcare sector.

1.2.2   Health a high priority

In Zambia, health is a high priority in all respects with substantive support at the highest Governmental level. The country is adapting to become a more modern society in many respects. The population is growing at high rates and the economic outlook remains strong. Zambians at large are demanding better health care and there is a growing middle class able to pay for substantially improved health services. There is an increase in need/demand for qualified high cost health services, including non-communicable diseases (NCDs), in particular cancer and cardiovascular diseases, and trauma. Ambitions are high at Government level to develop, improve and expand the public health services. However the transformation of such ambition into real development projects is lagging behind.

1.2.4   Health sector bottlenecks and needs

Some of the critical bottlenecks to improved service delivery in the health sector in Zambia include human resource shortages in provider institutions, low levels of
government funding for infrastructure investments, information systems and service provision, an inefficient pharmaceutical management system, and a policy and regulatory framework that is often not sufficient or contemporary enough to adequately address service delivery shortfalls.

There is in Zambia a general need to:

- Accelerate investments and prioritize packages of high-impact interventions in scaling up health services in respect of child mortality, maternal mortality, and HIV, non-communicable diseases (NCDs) and other epidemics in order to enable the country to significantly improve the health status of the population and human development.

- Increase the number and quality of health workers to improve service delivery entailing expanding the capacities of training institutions, extending mechanisms for motivating and retaining staff in health facilities, particularly in rural areas; and putting measures in place to improve the productivity of the current stock of health workers.

- Make available adequate infrastructure, medical equipment and essential drugs at all times as a basic prerequisite for assuring quality care. Targeted capital investments and technical support are required to strengthen the three levels of health care and improve service delivery.

1.2.4 Perception of Swedish technology and solutions

Sweden and Swedish products have built up considerable goodwill with the Zambian Government and civil society in Zambia ever since independence in 1964. Swedish companies are well known for their quality products across mining, telecom, engineering and automotive sectors. As a consequence, Swedish companies/organizations do have a momentum for starting activities in Zambia at this time. Further, there are signs that the Government, with its new confidence, is looking for new ways of institutional cooperation from the historical donor countries. In this respect, the perception in the region of the quality and usefulness of Swedish technologies and solutions is an important factor.

1.2.5 Competitive situation

The private sector health services are growing and developing but from a rather low level both in terms of scope of service and quality, leaving room for foreign investors, especially from Asia.

A special feature of the Zambian health sector is the quite remarkable dominance of Indian specialist knowledge, manufacturers of pharmaceuticals and of technology and general presence in the Zambian health services sector. There are also signs that the Chinese are making inroads, especially in respect of generic pharmaceuticals but also in respect of equipment.
1.3 Main opportunities – institutional cooperation

1.3.1 General

There are clear signs that the Government is expecting institutional cooperation from the historical donor countries, such as Sweden. At the moment there seems to be good political momentum for such initiatives and they could prove to be useful for the continued process of identifying future opportunities also for the Swedish health industry at large. See sections 4.8, 5.7 and 6.1.

1.3.2 Capacity building cancer care

Zambia has only four oncologists and all of them are working for the Cancer Diseases Hospital (CDH). The capacity of the CDH is constrained by the limited number of specialist doctors, nurses and radiotherapists. Lack of screening facilities is a factor that reduces the intake of patients. The capacity building needs are enormous. Suggestions put forward include sending doctors or students for training in Sweden for a limited time period. A national cancer control plan needs to be drafted with foreign experts. See sections 5.9 and 6.4.

1.3.3 Technical advisors

It is still interesting for Zambia to make use of technical advisors (TA), for example within hospital management, Social Health Insurance or development of national clinical programmes of care. Swedish expertise in these areas is sought after in Zambia. Further, it would contribute to the favorable perception of Swedish health sector knowledge adding to the opportunities for Swedish health sector solution providers. See sections 5.4 and 6.12.

1.3.4 Antibiotics resistance

Antibiotics resistance and infection control are areas which need the push that institutional cooperation could provide, for example through a research programme. See section 4.8.

1.3.5 Hospital management

Hospitals in Zambia would benefit from technical and managerial improvements around patient management, quality assurance and other operational systems. Hospital management in terms of partnering between a Swedish and a Zambian hospital on an institutional level is an area where long term collaboration would serve Zambia well and where the exceptional Swedish – Zambian relationship could persist in the long term. Through such collaboration, there is the possibility of identifying further areas of joint development, such as infrastructure development, needs for medical equipment and capacity building. See sections 5.7 and 6.1.
1.3.6  Pre-hospital and emergency care

Since 2011, when Zambia arranged a study tour to Sweden to explore the principles and structures applied in Swedish pre-hospital and emergency care services, there has been interest from the Zambian side in continuing this cooperation. See section 5.6.

1.4  Main opportunities – private sector suppliers

1.4.1  Hospital facilities and development

Zambia is embarking on a programme of upgrading all hospitals. Substantial funds have been set aside for infrastructure development in the health sector, in particular for the rehabilitation of the University Teaching Hospital and the Central Hospitals in Kitwe and Ndola. Further, Zambia is looking into development of specialized clinics as centers of excellence. In addition, private hospitals such as Fairview Hospital and Lusaka Trust Hospital will soon be considering development opportunities. Deployment of foreign expertise, such as Swedish hospital design specialists and other technical expertise, could be of interest in this development. See sections 5.3, 5.4, 5.6, 5.8, 5.9, 5.13 and 6.2.

1.4.2  Cancer treatment; facilities and equipment

The Government has ambitious aims for the cancer treatment development within the coming years. The development is supported at the highest Governmental level. To a large extent, the need is for simpler cancer screening and diagnostics equipment but also for treatment facilities, to some extent high end products are targeted, including particle accelerators and software for patient records and bundling the operations of the CDH and its satellites. There is a genuine interest for a (high end) cancer treatment technology provider with a broad product range. See sections 4.12, 5.9 and 6.2.

1.4.3  Specialist diagnostic and treatment facilities

Zambia lacks capacity for specialist diagnostic and treatment services to non-communicable diseases (NCDs) other than cancer, such as cardio-vascular, liver and renal. There is awareness of the growing problems with NCDs in Zambia, and a main focus for development of both public and private hospitals is cardiovascular diseases. See sections 5.7, 5.13, 6.2, 6.3 and 6.9.

1.4.4  Infection control, equipment and programme support

The University Teaching Hospital (UTH) has policies and programs for infection control in place but does not seem to be fully up to speed. On the private side, Lusaka Trust Hospital has shown interest in new solutions in respect of infection control. There is a need for programme assistance and modern affordable technology. See sections 1.3.4, 4.8, 5.13 and 6.13.
1.4.5 Public Private Partnerships (PPPs) or MoUs health care provision

Hospitals in Zambia could benefit from technical and managerial improvements around patient management, quality assurance and other operational systems in the form of a Public Private Partnership (PPP). Many hospitals, both public and private, are keen to look at cooperation on the institutional side or finding ways to enhance levels of care by entering into a PPP structure with a foreign partner. See sections 5.13, 5.17, 5.18 and 6.1.

1.4.6 Technical assistance

Consultancies would have good opportunities for providing expertise as part of an institutional program for technical advisors as described under section 2.3.2. See sections 5.4, 6.12 and 6.14.

2. Introduction

2.1 Background

Swecare Foundation (Swecare) is planning a delegation visit to Lusaka, Zambia, in February 2012. In order to provide background information and a way to prepare participants for the visit, Swecare has requested a study on the Zambian health care sector and potential opportunities for Swedish health sector stakeholders.

2.2 Objective of the report

The overall objective of this study is to provide a general overview of the Zambian health care system as well as to analyze the main trends and risks for business activities in the health sector. The report will also investigate the existing and coming business opportunities in the health sector in Zambia. The report aims to provide input on how to meet these opportunities (and challenges) in order to create business in Zambia for Swedish health sector enterprises and organizations.

2.3 Methodology

The secondary data studied has been gathered mainly from publications from the Ministry of Health (MoH), the Embassy of Sweden in Lusaka, multilateral agencies and various sources on the Internet.

In preparing the report interviews and/or discussions have been conducted with some 20 individuals with relevant knowledge of the Zambian health sector.

The consultant has experienced lack of information and difficulties in obtaining relevant information. These difficulties are prevailing on various levels. One quite severe deficit is inherent in the fact that the only comprehensive source of health information, the latest Zambia Demographic and Health Survey is from 2007 (ZDHS 2007), meaning that the information has been gathered in the years preceding 2007.
To get hold of relevant information from public sources for this report, especially from the MoH, has been a real challenge.

2.4 Structure of the report

Chapter 1 provided an executive summary of selected key opportunities for institutional cooperation between Sweden and Zambia and for Swedish health care solution providers in Zambia along with the main challenges in the Zambian health sector.

Chapters 3 and 4 will provide a background overview of Zambia in general and of the health situation in the country.

Chapter 5 presents an overview of the structure of health care in Zambia. In chapter 6 the various opportunities in the health sector in Zambia are being addressed and commented. This chapter is different from the Executive Summary (chapter 2) in the sense that it does not take into consideration the presumed key interests areas of the Swecare members. Finally, chapter 7 displays an overview of investment and business conditions in Zambia.

3. Zambia – background and country facts

3.1 Zambia at a glance

Located in south-central Africa, Zambia is generally perceived as a peaceful, safe and stable country. Zambia is popularly referred to as “land-locked”. However, this connotation has recently been interpreted to mean “land-linked” to the eight neighboring countries signaling the growing positive outlook, implying Zambia’s position as a natural hub for business activities in southern Africa. Zambia is one of the biggest copper producers in the world.

Zambia landlocked?

The capital city is Lusaka. Other main cities include Livingstone (the first capital) and the cities in the Copperbelt (Ndola, Kitwe). The country is divided into nine provinces and over 70 districts. Two provinces are predominately urban namely Lusaka and Copperbelt. The remaining provinces are Central, Eastern, Northern, Luapula, North Western, Western and Southern.
The population is presently estimated to be approximately 14 million. With an estimated population growth of 4.2, Zambia is expected to pass the 20 million mark some time during the early 2020s. The size of the country is roughly 1.5 times that of Sweden, resulting in similar population to land ratio. Adult literacy is estimated at 72 percent (2007). It is also estimated that more than 6 in 10 women (64%) and 8 in 10 men (82%) are literate. Urban areas have higher literacy levels than rural areas. 60 percent of the population still live below the poverty line. Life expectancy is 49 years.

The official language is English and is used for education, commerce and law. However, more than 80 languages are spoken in Zambia. Dominant languages are Bemba, Nyanja, Lozi, Lunda, Luvale, Kaonda and Tonga. Most people communicate in English, which is indeed the most accepted lingua franca for Zambians at large.

Almost half of the population live in the urban areas, where most economic opportunities prevail.

Zambia’s abundant natural resources include arable land, water, forest and mineral resources. There is an expectation that real economic development will soon take off in areas other than mining, especially agriculture – with the enormous potential for increased irrigated agriculture – and hydroelectric power production.

Zambia became independent from British colonial rule in 1964 and was led for 27 years by First President Kenneth Kaunda, strongly influenced by state socialism. The country saw its economy steadily deteriorate from the mid-1970s until the early
2000s, particularly as a result of the decline in copper production due foremost to decreasing demand.

GNP per capita is currently estimated at ca USD 1,400. Zambia has officially qualified as a lower middle income country according to the IMF and the World Bank. However, the improvements have not yet significantly impacted on the socio-economic well-being of the population at large, the majority of whom are poor and vulnerable. In accordance with the Government’s Vision 2030, Zambia is aiming at achieving a middle-income status by 2030.

Zambia’s ranking on the Human Development Index 2011 is 164 (out of 187) and it is categorized among countries with low human development.

The national Currency is Zambian Kwacha (ZMK). After rebasing on 1 January 2013 one new Kwacha equals 1,000 Kwacha before the rebasing. The new currency is ZMW and currently stands at ca 1 ZMW to 1.35 SEK.


3.2 Political situation

Zambia’s President, Michael Sata of the Patriotic Front, won the presidency in the September 2011 elections. This was significant for a nation which had seen the Movement for Multi-party Democracy (MMD) hold power for the last 20 years. Zambia confirmed its reputation for political stability and peaceful handover of power, a unique trait in the southern African region.

The rise in copper production in Zambia in the last decade has at least in part helped drive a substantial increase in the real GDP growth rate, notably since 2005. This has also been accompanied by broad macroeconomic stability. However, there are concerns that this economic development is not reaching the masses. This was one argument put forward by the current president, Michael Sata, when he contested former President Rupiah Banda in the September 2011 presidential election.

With the new Government, the focus on anticorruption was re-emphasized and made into a national policy agenda.

There are however concerns over President Michael Sata’s micro-management leadership style which seems to underpin a decision-making bottleneck at State House, hampering ministerial initiatives.

The Minister of Health is Dr Joseph M Kasonde. It is interesting to note that President Sata was Minister of Health under late President Frederick Chiluba.

Source: ‘Zambia Macro View’
3.3 Financial stability

The business climate in Zambia is improving in impressive ways and there are new developments on a daily basis. The country is showing high and sustainable growth figures and reduced costs of doing business. New and existing business ventures are seeing a huge potential in the medium and long term.

IMF’s projection for growth of Zambian GDP in 2013 is estimated to 8.3 percent, placing it among the 10 fastest growing economies in the world. The very latest figures were presented by the World Bank in mid-December 2012 giving Zambia a projected growth rate of 7.3 percent for 2012. Foreign direct investments (FDI) have increased from 350 MUSD in 2009 to 990 MUSD in 2012. FDI inflows continue are directed mainly at the mining sector, with manufacturing, communications, and financial institutions also contributing to recent FDI growth. Key investors are originating from India, Canada, EU, (i.a. UK and Netherlands), Australia, South Africa, Switzerland and China. Main trading partners are China, South Africa, DR Congo, the EU and Switzerland.

The Government’s 2012 budget means a rise in overall spending. Both the IMF and the Ministry of Finance’s Medium Term Expenditure Framework (MTEF) for 2013-15 show that, despite the rising spending, increased tax revenue keeps the fiscal deficit at around 2.5 percent of GDP going forward.

The Zambian economy is heavily dependent on copper mining and agricultural production, of which the latter has seen continuously stronger performances. However, this dependency exposes the economy to external vulnerabilities such as global copper prices and seasonal weather patterns. Despite the rise in taxes on copper production introduced in the 2012 budget, Zambian copper output is likely to rise in the coming years. But, more crucially, tax revenue is set to rise even more rapidly as the tax exemptions offered to many mines start to expire.

The booming economy means there are expectations that Zambia will finally be able to capitalize on the other natural resources such as arable land, water and forest. Worrying signs for the economy are however that copper demand from China could decrease in 2013.

Domestic economic growth has long since been constrained by the limited availability of commercial credit and high fees for financial services. It is a general perception that this constraint is due to risk aversion rather than lack of liquidity in the banking sector. Recently the general perception has been that credit capital has become somewhat less expensive.

The successful launch of the first USD 750 million Eurobond in 2012 was many times over-subscribed and became a statement of how Zambia is perceived globally with its strong economic performance. It was also a sign of investor confidence in the Sata administration.

The principal parts of the proceeds from the Eurobond issue have been committed to infrastructure projects and hopes are therefore high that the Government will be able to invest wisely in infrastructure. This would enable the country as a whole to benefit
from the gains from decent energy supply and good road network, as well as the social sectors of education and health. In the 2013 Government budget, 29 MUSD of the Eurobond proceeds have been earmarked for the rehabilitation of central hospitals.

In March 2012, the credit rating agency Fitch downgraded Zambia from “stable” to “negative”. The reasons were not necessarily worsened economic performance but concerns over the new Government’s decisions to i.a. reverse the sale of Zamtel (75 percent sold to Laps Green, Libya, in 2010) and the investigations that were lodged into the sale of 49 percent in the formerly state-owned Zanaco Bank to Rabobank (based in the Netherlands).

The Medium Term Expenditure Framework 2013-15 and the 2012 Government budget outlines a significant rise in government spending in the coming years. This reflects plans to ensure that the benefits of increased growth in Zambia over the last decade are more widely distributed than what has been the case to date.

The Medium Term Expenditure Framework 2013-15 has stated that an overarching goal of the Zambian Government is that in order to ensure that economic growth is inclusive and pro-poor, Government fiscal policy will focus on the strategic areas of education, health, agriculture, local government and housing development, employment creation and improved governance, with emphasis on rural development.

The Lusaka stock exchange is small in size and rather illiquid, presently making it an unlikely destination for stock investments from abroad. The stock exchange has ca 20 listed companies, whereof a few are in fact secondary listings of foreign corporations such as Shoprite.


3.4 Asian presence

In 1964, Zambia was the first African nation to enter into diplomatic relations with China. Since that time, Chinese investors have become increasingly active players in Zambia’s key economic sectors. Many Chinese enterprises have come to Zambia in the last two decades, injecting energy into local economic and social development through aid projects and investment. It seems, these Chinese enterprises have contributed to business growth for the enterprises concerned whilst also playing a key role in driving the local economy and infrastructure. However, in the period leading up to the 2011 elections the anti-China rhetoric was strong, not least by the then opposition leader Michael Sata.

One of the reasons for the criticism of China, with bearing on the health sector, was the commissioning of nine mobile hospitals from the Chinese firm China National Aero-Technology Import and Export Corporation (CATIC) for USD 53 million. During the election campaigns the opposition leader Michael Sata charged that corruption was the motivating factor for the purchase of the mobile hospitals.
The Chinese influence is such that the close ties between Chinese officials and business men on the one hand and the administration of former President Rupiah Banda (MMD party) on the other may have been a factor in Rupiah Banda’s election loss. The official rhetoric between Zambia and China has since the election become less tense and more pragmatic. A good example is that Zambia and China signed agreements shortly after the PF take over, including provision of advanced medical equipment and supplies to the newly-constructed Levy Mwanawasa General Hospital in Lusaka. It should also be mentioned that the mobile hospitals seem to have come to good use.

Japan also has a long standing relationship with Zambia, and is contributing extensively to i.a. road infrastructure and business development. In October 2012, President Sata was on a five day working visit to Japan where he met with business people and academia and signed an infrastructure finance deal (Zambezi River border crossing between Zambia and Botswana) between Japan (JICA) on the one side and Zambia and Botswana on the other.

South Korea has recently confirmed its high ambitions for Zambia by committing to assist with the redevelopment of the Zambian rail sector. In October 2012, President Sata visited the third Korea-African Economic Cooperation (KOAFEC) meeting. In the health care sector MKP Trust Hospital is a small Korean operated private hospital in Lusaka.

In terms of health sector initiatives, India is probably the most interesting among the Asian tigers. It is a known fact that the Indian pharmaceutical industry is very dominant in providing the Zambian market with pharmaceuticals. It is a rough estimation that 80 percent of all pharmaceuticals sold in Zambia have Indian origin. Signs are also strong that Indian suppliers are gaining ground on the medical equipment side. Further, the Apollo group from India has entered into a dialogue with the Zambian Government on hospital development and diagnostics assistance. Recently, Fairview Hospital signed an MoU with the Apollo Group on closer cooperation, a development supported by the MoH.

The Indian presence is reinforced by the existence of large number of Zambians with Indian origin, dating back to the Zambian independence in 1964. The economical and political impact from the population of Indian descent has remained high over the years.

Over the last years, several Asian nations have organized forums, summits and trade delegations together with African countries to enhance mutual goals under the South-South Cooperation and Zambia is no exception, to the contrary. These new Asian-African frameworks are considered fundamental to the building of consistent bilateral and multilateral relations. China, Japan, India and South Korea are all putting considerable efforts into such initiatives. Zambia’s commitment to upholding relations is proven by President Sata’s tour of these Asian countries in October 2012.

Sources: ‘China to Restock Levy Mwanawasa Hospital’, ‘Looking Beyond China’, Dr Margaret Mambwe Siwale, Dr Kennedy Lishimpi, Timothy Kantenga
4. Health situation in Zambia

4.1 Disease burden and needs

The disease burden in Zambia varies according to climates with the most prevailing diseases being malaria, HIV/AIDS, and tuberculosis, diarrhea, skin diseases, respiratory tract infections and malnutrition. Recently Zambia has been experiencing a sudden rise in traditionally not known diseases. These are the non-communicable diseases (NCDs) such as cancer, cardiac, diabetes and renal diseases. This new pattern of diseases has brought with it numerous challenges for the health sector in Zambia, where service delivery is predominantly public.

Both incidence rates and deaths attributable to the top ten diseases has reduced in 2011 except for respiratory infection (non-pneumonia) and trauma related conditions. Total deaths attributed to the top ten diseases were 3,674 per 100,000 in 2011, a decline of 30 percent from 5,226 per 100,000 in 2010. The biggest decline has been seen in AIDS related mortality, much due to the increase in access to ARVs.

In respect of communicable diseases, HIV and AIDS is the main contributor representing around 65 percent of all deaths, while Malaria represents 12.5 percent and diarrheal diseases represent 12.9 percent. Tuberculosis represents 5.9 percent of all deaths.

This chapter is structured in such a way that section 4.2 gives an overview of the determinants of health in Zambia. Sections 4.3 to 4.8 describe the disease burden of communicable diseases (including infection control), section 4.9 reproductive health and section 4.10 to 4.12 non-communicable diseases (NCDs) respectively.

Sources: ‘Health Sector Profile’, ‘MTEF’, ‘National Health Policy 2012’

4.2 Determinants of health

Poverty and opportunities

With 60 percent of the population living below the poverty line and 42 percent considered to be in extreme poverty, income inequity among the population remains high. This has clear health implications in terms of widespread malnutrition, high fertility levels especially among the poorest and rural women.

Full immunization, exclusive breastfeeding until the child is 6 months old, and growing up through childhood without being scarred by chronic malnutrition are some opportunities critical for a healthy start to a productive life. Roughly half of Zambian children do not have these opportunities.

School attendance under age 16 is available to most Zambian children. However, roughly 20 percent of children remain excluded from basic education.
Living conditions

Poor environmental sanitation is a major source of bad public health and epidemics. There are several strategies available to improve hygiene and achieve universal access to safe and adequate water, food and acceptable sanitation, however the poor state of housing, water and sanitation services, as well as household food insecurity stand in the way. Lack of safe water and sanitation has over the years significantly contributed to the decline in public health. For example, in 2007, access to safe water and good sanitation was only 41 percent and 24 percent, respectively, with the situation worse in rural areas.

Only 34 percent of households dispose of the garbage by dumping. In 1992 access to safe drinking water was 48 percent and this had only increased to 58 percent in 2006. Poor environmental sanitation is a major source of public health problems and epidemics in Zambia. Currently, over 80 percent of the health conditions presented at health institutions in Zambia are communicable diseases related to poor environmental sanitation, with significant adverse impact on the poor, especially children.

Malnutrition

Zambia has high levels of undernutrition, mainly in the form of protein energy malnutrition and micronutrient malnutrition and the National Food and Nutrition Commission is underfunded. Malnutrition is primarily a reflection of the longstanding poverty that affects the majority of the Zambian population. Comparative analysis shows that the nutritional status of children in Zambia has continued to deteriorate over the years. Malnutrition is also consistently higher in rural than in urban areas and also higher among boys than among girls. The ZDHS 2007 indicates that chronic malnutrition stands at 43 percent, underweight at 14 percent and wasting at 5 percent of all children under five years. These are high figures by any standard.

Education

The low education and literacy levels are linked with poor health, more stress, low income and lower self-confidence.

Occupational Health

A lot still remains to be done in terms of occupational hazards. Apart from the mining industry, other areas such as exposure to pesticides in agriculture and industrial waste from industries are areas of concern.

Access to health

There is clear evidence that access to essential health care in Zambia continues to be inhibited by the inadequate provision of quality and affordable health care. In all major health concerns, there is a clear problem of under provision of health services.

4.3 Diarrhea

Diarrhea is a major contributor to ill health, hospitals occupancy and mortality in Zambia. In children under 5, it is responsible for an estimated 24,000 annual admissions from which about 1,500 die. Rotavirus infection, which is highly prevalent, is being targeted by introduction of a specific vaccine against it in the Expanded Program on Immunization.

Source: ‘National Health Policy 2012’

4.4 Tuberculosis

Tuberculosis (TB) continues to be among the major public health problems in the country, partly as a consequence of HIV. The case detection rate for TB in 2009 was 58 percent and the treatment success rate was 86 percent. The TB situation has also been exacerbated by the high HIV co-infections, currently estimated at 70 percent of TB patients and the emerging Multi-Drug Resistant (MDR) TB cases. Zambia has adopted the Stop TB Strategy for the control of tuberculosis.

Source: ‘National Health Policy 2012’

4.5 Malaria

Situation

Malaria continues to be a key driver of morbidity and mortality rates in Zambia. In 2009, 3.2 million cases of malaria (confirmed and unconfirmed) were reported countrywide with about 4,000 deaths. The annual malaria incidence was estimated at 246 cases per 1,000 populations in 2009, a drop from 252 cases per 1,000 populations in 2008. Malaria accounts for over 40 percent of all health facility visits in Zambia and 20 percent of maternal mortality. The disease poses a severe social and economic burden on the communities living in endemic areas. Zambia has made steady progress in implementing malaria control measures. The Indoor Residual Spraying (IRS) program covers 54 percent of the whole country.

64 percent of households (no difference between the rural and urban populations) have at least one Insecticide Treated Nets (ITN), with 50 percent of the children under five and 46 percent of the pregnant women reporting to be sleeping under an ITN respectively. This brings into question the availability and affordability of ITNs. The goal to achieve ‘a malaria free Zambia’ will need scaling up of evidence based targeted high impact interventions in respective epidemiological zones. As part of efforts to improve management of malaria the country has scaled up the use of rapid diagnostic tests (RDTs).

In the case that a person is suspected to have malaria, the level of access to essential treatment is also of great concern. The ZDHS 2007, which uses the proportion of febrile children as a proxy for malaria, estimates that only 38.4 percent of children with malaria received treatment. However, the Health Facility Census reports that
about 97.5 percent of health facilities have malarial services. The lower treatment rate can therefore be attributed to long distances to health facilities. The Health Facility Census reports that about half the population in Zambia live within five (5) kilometers from a health facility.

*Malaria control in Zambia*

While malaria remains a major public health and development challenge in Zambia, a unique opportunity exists to scale up malaria-related interventions, strengthen systems, and make a major effort to roll back malaria in Zambia. Malaria control is addressed, not as a separate, vertical, disease-specific intervention but as part of a health systems strengthening effort to provide holistic services in all facets of care, and as part of a larger community-development effort. Through the National Malaria Strategic Plan 2006-2010, the Government and many partners are committed to increasing coverage of key malaria control interventions and reducing the burden of malaria throughout the country.


### 4.6 HIV/AIDS

Zambia has a generalized HIV epidemic influenced by structural factors such as gender-inequality, social norms and unequal distribution of wealth. According to ZDHS 2007 of adults aged 15-49 years 14.3 percent were HIV positive which is a drop by 1.3 percent from the 15.6 percent reported in 2001, making it one of the highest among the countries in Sub-Saharan Africa. Females (16.1 percent) are more likely to be HIV positive than males (12.3 percent) due to biological, economic and social factors.

According to recent annual figures of new HIV infections in Zambia in 2011 stood at 69,000 (out of which 27,000 were young people aged between 15 and 24). The 2009 epidemiological synthesis highlighted the following as the main drivers of the epidemic: multiple concurrent sexual partners, low and inconsistent use of condoms, low rates of male circumcision in some provinces, mobility and labour migration, vulnerability and marginalized groups and vertical mother to child transmission.

The provision of free ART through the public health system since mid-2005 has fostered increased access to ARV medicines, from 33 percent of HIV positive eligible clients in 2006 to 79.4 percent in 2009. This translated into 283,771 people being on ART out of the 357,240 persons requiring it – more than 21,000 people on ART were children below the age of 15. This significant increase in access to ARV treatment has had a significant impact on life expectancy and quality of life for people living with HIV.

Among the too few health facilities in the country not all have Antiretroviral Therapy (ART) services. The Health Facility Census reports that only about 32.1 percent of level 1 and below health facilities provide ART services. This creates a patient facility ratio of about 8000 : 1.
The scaling up of prevention of mother-to-child transmission (PMTCT) services has led to an increase in the percentage of HIV-positive pregnant women who have completed prophylaxis treatment, from 29 percent in 2006 to 66.4 percent in 2009. However, we should bear in mind that this is a figure for women attending an ANC clinic ahead of delivery.

From 2005 to 2009, there were significant achievements in delivering HIV and AIDS services. As part of the strategies under prevention, the number of VCT centres increased from 450 in 2005 to 1,563 in 2008. PMTCT and post-exposure prophylaxis services were rolled out in all 72 districts, with 1,100 health facilities offering PMTCT services by end of 2009, up from 67 sites in 2005.

Donors have been the major sources of HIV/AIDS health expenditures in Zambia, followed by households and the government. The implementation of HIV and AIDS services are however not financially or institutionally sustainable. Additional financial, human and physical resources is required to scale up service delivery and in this area continued donor funding will be needed, but should be reduced in the long run.


4.7 Other communicable diseases

There is general concern over leprosy, neglected tropical diseases, other communicable diseases and global health.

Source: ‘National Health Policy 2012’

4.8 Prevention of infection disease

Infection control

Infection control in public as well as private hospitals in Zambia is based on policies for handling of materials and waste and incineration of medical waste, etc. The responsible government agency is the Environmental Council.

The issue is taken very seriously by both public and private hospitals, and progress is made in the sense that more work needs to be done to minimize the risk that the hospital is a source of infections.

The Environmental Council of Zambia (ECZ) and the MoH, with the support of partner stakeholders, have developed Minimum Specifications for Health Care Waste Incineration, issued in 2012, to be used by all health care facilities in the country. The minimum specifications provide the basis for infection prevention in Zambian hospitals.
Antibiotics resistency

At present, there is no comprehensive Zambian programme for the work on antibiotics resistance. The prescription of drugs needs to be regulated properly in order to curb the dispensing of drugs without valid prescription written by registered medical/health practitioner. There is however an awareness in the MoH that the dispensing of antibiotics by non-qualified chemists/pharmacists may have consequences.

There is an urgent need to develop a programme specifically regulating antibiotics resistance and there is potentially a real interest in participating in institutional collaboration in this field, for example where there is a programme for research on antibiotics resistance in various parts of the world.

Sources: ‘Minimum Specifications for Health Care Waste Incineration’ Dr Margaret Mambwe Siwale, Bonface Fundafunda

4.9 Mother and child health

Zambia is among the countries with the highest maternal and child health mortality levels in the world. However, over the past 10 years, significant improvements have been reported. According to the ZDHS 2007, Maternal Mortality Ratio reduced from 729 per 100,000 live births in 2002 to 591 in 2007. High maternal mortality is linked to high fertility levels (Zambia remains one of the highest in the world) poverty and low levels of education, low levels of contraceptive prevalence and unsafe abortions. Moreover, there is a weak referral system and inadequate human resources for maternal health. Poor access to quality emergency obstetrics is also a major factor in maternal mortality. Infant Mortality Rate in Zambia reduced from 95 per 1,000 live births in 2002 to 70 in 2007. Under-five Mortality Rate reduced from 168 per 1,000 live births in 2002 to 119 in 2007. Although neonatal deaths constitute approximately half of the proportion of infants who die, the reduction in neonatal mortality remains insignificant, from 37 per 1000 live births in 2002 to 34 in 2007, leading to concerns of poor peri-natal care in the country. Prevailing rates are high, and this is a major concern to the health sector.

These improvements could be linked to some interventions, including the expansion of vertical programmes addressing HIV, tuberculosis, and malaria; de-worming activities; massive Vitamin A distribution; and stronger integrated management of childhood illnesses. Further reductions in child mortality would require more concerted actions, specifically in reducing paediatric HIV infection levels, investing in the prevention of mother-to-child transmission (PMTCT) and addressing cross-sectoral factors such as nutrition, access to clean water and sanitation, and improved living environments for children.

Issues of concern are children’s access to vaccinations and treatment for identified health problems. The common vaccination is Zambia are BCG (tuberculosis), DPT (diphtheria, tetanus) and the polio vaccine. In a national wide survey, it was shown that 67 percent of children took all the required vaccinations. These statistics are highly influenced by the level of education of the mother. The number increases from
59.9 percent for those with no education to 77 percent for those with more than secondary education.

As mentioned under section 4.3, a specific vaccine against rotavirus is presently being introduced.

Another major health concern in children is the Acute Respiratory Infection (ARI). This has been identified as being among the leading causes of childhood morbidity and mortality throughout the world. In Zambia, its prevalence in children under the age five is 5.2 percent, with no major difference between rural and urban populations. Though this rate looks low and perhaps marginal, the level of access to treatment is alarming. Of the total number of children with ARI symptoms, 68.2 percent reported having sought for advice or treatment from health provider but only 46.6 percent actually got treatment. Possible explanations for this large difference could be that treatment was not available at all or not affordable.


### 4.10 Mental Health

Mental health problems and mental disorders are becoming a significant disease burden within the Zambian communities. The mental health situation is driven by factors such as poverty, family systems, rising rates of urbanization, unemployment, alcohol and substance abuse (including tobacco), child abuse, HIV/AIDS, and violence against women. The common mental disorders found in Zambia are acute psychotic episodes, schizophrenia, mood disorders, alcohol and substance abuse related problems and organic brain syndromes, especially due to HIV/AIDS.

Though no comprehensive epidemiological studies have been undertaken to determine the extent of mental illnesses in the Zambian population, it is estimated that 20 – 30 percent of the general population has mental health problems. Mental illnesses also represent 19 percent of the global disease burden. Individuals with mental health problems and mental disorders are marginalised, stigmatised, and discriminated against. Against this background, the National Health Policy has taken mental health as a crucial component of Primary Health Care and the overall health service delivery strategy.

*Source: ‘National Health Policy 2012’*

### 4.11 Life style related health problems

As in many African countries, there is in Zambia an ongoing epidemiologic transition from communicable to non-communicable diseases. In addition to cancer, other NCDs according include cardiovascular problems, diabetes and chronic respiratory diseases and their risk factors. NCDs are increasingly recognized as major causes of morbidity and mortality. Naturally, the life style related health problems are not yet a major concern among the lower income groups of society.
Life style-oriented health problems in Zambia comprise heart diseases, stroke, cancers, diabetes, sickle cell anaemia, mental illnesses, alcohol/substance abuse related conditions, tobacco-smoking related illnesses, epilepsy, trauma, including gender based violence, asthma and nutritional problems. These health problems affect people of all ages and classes, and like in the rest of the world they are currently the leading cause of deaths.

In response to the challenges posed by non-communicable diseases, government has set up a NCDs Unit at the MoH and also built a cancer hospital, the Cancer Diseases Hospital (CDH), to provide specialized cancer management care (for cancer treatment, see next chapter). Currently, no comprehensive epidemiological studies have been done so far to ascertain the extent of NCDs in the Zambian population, but hospital data confirm that NCDs are an emerging problem and requires urgent attention.

Of the Zambian population, 75 percent is not involved in personal physical exercise and people are consuming little vegetables and fruits. Evidence of the health transition in sub-Saharan like intake of food, especially fat, has increased while the intake of fibre-containing foods has fallen among urban populations. Mean serum cholesterol level is almost double that of rural populations, the level of physical activity has decreased.

**Obesity**

Obesity has risen enormously according to Dr Kennedy Lishimpi, Director of the Cancer Diseases Hospital. According to a recent population based study in Lusaka, 14.2 percent (5.1% of males, and 18.6% of females) are estimated to be obese, clearly indicating that Zambian women are more at risk of being obese than men.

**Hypertension**

According to the same population based study as for obesity, 20.6 percent of males and 48.6 percent of females were overweight (or obese). The prevalence for hypertension was 34.8 percent (38.0% of males and 33.3% of females).

**Substance abuse**

The mean age at onset of tobacco smoking is approximately 20 years, with an average eight cigarettes consumed per day and 20 percent consume alcohol. Zambia needs to address risks associated with high alcohol abuse.

Recent reports describe growing abuse of illegal drugs such as marijuana and heroin, partly due to the relatively low prices. According to Zambia Drug Enforcement Commission more than 500 addicts have gone through a rehabilitation program in the past two years.

4.12 Cancer

Background

The International Agency for Research on Cancer estimates an increase in new cancer cases globally from 11 million in 2000 to 16 million in 2020 and that 70 percent of these new cases will be in developing countries. Zambia is in for an increase in cases of cancer related to the socio-demographic, lifestyle and technological transition that go with development, urbanization and industrialization. Cancer is among the major chronic NCDs treated in Zambia.

It has been shown that people with dark skin are running a higher risk of breast cancer and further that there is a connection between HIV/AIDS and cervical cancer, both high in Zambia (see below).

Situation

Zambia has some of the highest incidents of cancer in Africa. The country’s cancer indicators are negatively affected by the high prevalence of HIV/AIDS, and three out of the top five cancers are HIV related. The most common forms of cancer are cervical cancer, breast cancer and prostate cancer. Historically, cancer treatment has been carried out abroad, mainly in South Africa and Zimbabwe, at high costs for the Government. Due to the increasing numbers, a national specialist hospital to reduce treatment costs abroad and increase access to treatment to more people has been realized by the Government.

As a result, most cancer patients are aged between 25 and 45, much younger than those in high-income countries. Another contributing factor is urbanization – the more heavily populated an area, the higher rate of sexually-transmitted infections (STIs). Some STIs, such as the human papilloma virus (HPV) have been implicated to be causing cancer. Most of these patients are also infected with HIV.

A clear relationship between HIV and cervical cancer has been identified. Infection with HIV weakens the immune system and reduces the body’s ability to fight infections that may lead to cancer. As a consequence, women are more affected by cancer in the Southern African countries relative to other geographical areas due to the high HIV infection rates. Cervical cancer is 4-5 times more common among women living with HIV than women who are HIV-negative.

Recent figures in Zambia show that cervical cancer affects 53 women in every 100,000 however, but rarely occurs in women younger than 20 years.

In terms of provincial distribution of cancer case prevalence, Lusaka still tops the list, accounting for about 50 per cent of all cases with other provinces such as Copperbelt, Central and Eastern also accounting for a significant number of patient referrals.
A thorough description of the governmental response to the threat from cancer disease is found in section 5.8.


4.13 Disability

After the above description of disease burden and related issues, finally a few words on the disability situation.

The 2000 Census showed that people living with disabilities constitute at least 3 to 10 percent of the population, depending on the definitions applied. Many live in conditions of extreme poverty and find it difficult to access health services, constrained by factors such as inaccessible buildings, a lack of facilities and a lack of disability aids in the health centres. Because of poor recognition of rights in general, not much attention is paid to the issue of disability; many affected people are excluded from accessing lifesaving services. For example, information on issues such as HIV and AIDS, contraceptives, vaccinations, etc. may not be available in Braille and/or sign language.

The SNDP recognizes that persons with disabilities face numerous barriers in realizing equal opportunities and are more often the poorest of the poor. In this regard, the SNDP has as a focus to accelerate mainstreaming of disability issues in national development in order to improve the lives of persons with disabilities. The approach is to achieve this through the development and implementation of legislation, policies and programmes in line with the UN Convention of Rights for Persons with Disability (UNCRPD).

Odd as it seems, the Government has recently appealed to people living with disabilities to work in collaboration with their able-bodied counterparts to overcome challenges in their everyday lives. Community Development, Mother and Child Health Deputy Minister, Dorothy Kazunga has urged differently-abled people to interact more with other people as isolating themselves would worsen their challenges.

Government programs for the disabled seem to be very limited still.

5. **Overview of the health sector in Zambia**

5.1 **Policy and regulation**

*Background*

Zambia has a legislative and institutional framework designed to ensure good delivery of health services and the desired coordination of the various levels and actors. The legislation is inadequate, however. For example, 14 applicable acts were enacted more than 50 years ago, and some are irrelevant to current health sector dynamics. Additionally, most new policies and legislation are still in draft form. In 2005, the coordination challenge was exacerbated by the repeal (without replacement) of the 1995 National Health Services Act, which had approved the establishment of health boards. The lack of an act to provide a framework for the organization of health services has created a situation where the health sector operates in a legislative vacuum. Much activity has gone into developing specific areas of policy without the benefit of a framework to ensure consistency, harmonization, and alignment of all specific health policies and legislation. There is an apparent disconnect between policy formulation and implementation, with relatively weak attention given to the latter. Linked to that is the lack of a framework to monitor and evaluate the impacts of new policies and legislation.

In Zambia, the regulatory function of healthcare is mainly done by the following statutory bodies:

- Pharmaceutical Regulatory Authority
- Food and Drugs Laboratory
- Environmental Health and Epidemiological Trends Unit
- Radiation Protection Board
- Radiology and Medical Devices Control Unit
- Public Health Laboratory
- Health Professions Council of Zambia (formerly the Medical Council of Zambia) and the General Nursing Council.
- Environmental Council of Zambia

The authority of statutory regulatory bodies neither extends to the regulation of patient safety and quality assurance among public sector health care providers, nor does it incorporate the registration, inspection and enforcement of health care establishments owned by the mining companies.

*Regulation development under the National Health Strategic Plan (NHSP) 2011-2015*

- National Health Services Act of 1995 was repealed in 2005 and replaced by the introduction of the Health Bill, allowing for a new MoH structure
- The National Health Policy and a New Health Services Act
- The PPP Policy and the PPP Act is in place
- Through statutory Instrument 27, of 2007 Government has declared the health sector as a priority sector
Regulation development under the new Government

With the arrival of the new government, the responsibility of maternal and child health services was transferred from the MoH to the Ministry of Community Development, Mother and Child Health (MCDMCH).


5.2 Policy documents etc

Vision 2030

Vision 2030 was developed by the Government in 2006 and aims at transforming the Zambia into “a prosperous middle income nation by 2030”. Through the Vision 2030, the country has prioritized health, and is committed to the attainment of ‘equity of access to cost effective quality health services, as close to the family as possible’.

Sixth National Development Plan 2011-2015

The Sixth National Development Plan (SNDP) 2011–2015 is the successor to the Fifth National Development Plan (FNDP), and aims at actualizing the aspirations of the Vision 2030. While the FNDP set the pace for improving economic infrastructure and investing in human development, the SNDP aims to build on the gains of the FNDP in the process of attaining the Vision 2030.

The theme of the SNDP is “sustained economic growth and poverty reduction”. Main objectives are to accelerate infrastructure development, economic growth and diversification, rural investment and poverty reduction and enhance human development.

The SNDP, therefore, focuses on development strategies that address poverty, by ensuring that minimum requirements including provision of health, education, water and sanitation and access roads are in place.

National Health Policy 2012

The overall policy document for the sector had not been revised since 1992, and a revision was long overdue. The previous policy was more focused on the reform agenda of that time and not covering the sector comprehensively. The new National Health Policy for Zambia seeks to respond to those challenges. It was developed within the context of the Vision 2030 and has taken into consideration other relevant national, regional and global health related policies, protocols and strategic frameworks, including the Millennium Development Goals (MDGs). The policy shall be implemented through successive National Development Plans and National Health Strategic Plans.
National Health Strategic Plan 2011-2015 (NHSP)

The NHSP is the document that defines the scope, priorities and overall direction of the sector wide cooperation during a five-year period. All support and cooperation in the health sector shall be guided by the NHSP and, to this end, a Memorandum of Understanding (MoU) on adhering to this plan in implementing projects and programmes is to be signed between all stakeholders involved in health, including donors.

The overall aim of the NHSP is to develop a “Nation of Healthy and Productive People” and outlines the strategies in which this is hoped to be achieved. The NHSP 2011-15 seeks to outline the Zambian government’s healthcare plan over the next 5 years in order to improve the development and productivity of Zambia. The aim is that Zambia may be able to meet the MDGs by the year 2015 and the Government’s Vision 2030.

The NHSP has six themes:

1. Developing service delivery within primary care, hospital services and specialised support services.

2. Human Resource for health: The aim is to train, retain and maintain healthcare workers by improving their educational training and environment in which they work.

3. Infrastructure, Equipment and Commodities: Working on the development of logistical systems to allow medical commodities to be available to clients and service providers, improving infrastructure and ensuring the availability of equipment, transport and information technologies throughout the healthcare system.

4. Health Management Information System (HMIS): The development of information technologies is a priority within the NHSP 2011-15 allowing access to accurate information to support the development of evidence based policy and practice.

5. Health Care Financing: To encourage financial reform and promote sensible resource mobilization, allocation and tracking while researching sustainable funding opportunities.

6. Leadership and Governance: Ensuring an accountable system without corruption where the Government sees the project through to completion. The introduction of management development programmes and performance based financing is hoped to contribute to accountable, efficient and transparent management systems at all levels of the health sector.

Joint Annual Reviews (JAR)

The Joint Annual Review (JAR) is an interim assessment of the performance of the health sector. It focuses on the assessment of the underlying factors associated with
the achievement levels of the work plan of the MoH and health care providers. These include the district health management teams at the Primary Health Care level as well as the secondary and tertiary hospitals. The JAR assessment is intended to ideally include private and public sector service providers, but is currently limited to the inclusion of only MoH and the Churches Health Association of Zambia (CHAZ) affiliated facilities and programmes.

The Joint Annual Review has become a process for the furthering of the common cause of improved health systems development and performance by both MoH and its partners.

**Governance Action Plan**

The Government and cooperating partners have developed and started implementing a Governance Action Plan to address the concerns at the MoH and to strengthen fiduciary controls, systems and structures, as well as to rebuild confidence in the health sector.

The joint Government Action Plan has led to the development of a Governance and Management Capacity Strengthening Strategic Plan with clearly defined outputs. These plans have in turn resulted in an MoU for alignment purposes between all the stakeholders, including MoH, government agencies and donors and is presently being finalized.

**Governance and Management Capacity Strengthening Plan**

With the adoption of the Governance and Management Capacity Strengthening Plan in early 2012, there is currently an on-going effort to revive the sector coordination process and a focus on improving transparency, integrity and efficiency in the health sector.

The Governance and Management Capacity Strengthening Plan, suggested by the Global Fund to Fight AIDS, Tuberculosis and Malaria, aims at strengthening systems, structures, and managerial and governance capacity in Zambia’s health sector in general and fiduciary controls, systems and structures in the MoH in particular. Among others it is also targeted at rebuilding confidence in the health Sector Wide Programming (SWAp) approach. The plan will accord an opportunity to all key stakeholders in the health sector (Government, Partners and others) to respond to the findings and recommendations from various audits (undertaken by OAG, CPs such as EU, CIDA, DfID, Sida and World Bank as well as MoH) and to implement prioritized capacity strengthening initiatives. A comprehensive Governance and Management Capacity Strengthening Plan will harmonize all the existing donor-specific and GRZ capacity building plans, and which will be aligned to the National Health Strategic Plan 2011-15.

5.3 Health in terms of budget allocation

In his speech to the National Assembly opening the National Assembly on 21 September 2012, President Sata manifested the present Government’s increased focus on health, by pointing out the fact that the budget for the health sector had increased by 40.7 percent to K3.6 billion (720 million USD) since last year’s budget.

The government health budget was on average 10.4 percent of the national budget between 2000 and 2009. Zambia has not been meeting the Abuja targets, which require that 15 percent of domestic discretionary resources are spent on health. There is an unfortunate trend of increased budget allocation to the MoH headquarters, which now stands at almost half of the total health budget.

According to the MTEF, over the medium term, the allocation to the health function is projected to increase by approximately 1 percent per year from 9.3 percent in 2012 to 12.1 percent in 2015.

Released after the MTEF, the 2013 budget speaks of an even higher increase from 2012 to 2013. The allocation to the health sector for 2013 is K3.6 billion (ca 720 million USD) corresponding to 11.3 percent of the 2013 Budget. This represents an increase of K1.0 billion (ca 200 million USD) or 40.7 percent over the 2012 allocation. Finance minister Alexander Chikwanda has noted in particular the allocation of K594.1 million (ca 120 million USD) for drugs and medical supplies an increase more than doubling the 2012 allocation, and an allocation of K110.8 million (ca 22 million USD) has been provided for the procurement of varied medical equipment. A total of K186.1 million (37 million USD) has been set aside for infrastructure development in the health sector. To the University Teaching Hospital and the Central Hospitals in Kitwe and Ndola the allocation is a total of K204 million (ca 40 million USD).

Of Zambia’s annual health budget, the donor share is estimated to be in the range of approximately 40 percent.

The allocation will continue to address challenges posed by the high disease burden, inadequate medical staff, equipment and supply of essential drugs. Government has also indicated that it will place more emphasis on preventive health care as opposed to focusing only on the curative aspect.

According to the Medium Term Expenditure Framework 2013-15, efforts in the health sector will focus on the improvement of service delivery, particularly in rural areas. In this regard, the Government has ambitious plans to recruit over 5,000 additional frontline medical personnel, construct, expand and upgrade health facilities. In addition, Government will scale up the provision of essential drugs and medical equipment and other supplies. Further, there are plans for 650 prefabricated health posts to be constructed around the country. The Government will also explore alternative ways of financing health provision, such as through the social health insurance scheme.
It should be noted that a substantial part of health sector spending is done through project support directly by the donors. This set-up reduces the influence the Government may have on health sector spending in Zambia.


5.4 The main stakeholders

Main stakeholders

The main stakeholders in the health sector in Zambia are in addition to the Ministry of Health (MoH) and the Ministry of Community Development, Mother and Child Health (MCDMCH), Churches Health Association of Zambia (CHAZ), the Zambians at large, cooperating partners, namely, UNFPA, United States of America International Development (USAID), Department for International Development (DFID), Embassy of Sweden (Sida), European Union (EU), World Health Organisation (WHO), the Royal Netherlands Embassy, Canadian International Development Agency (CIDA), the World Bank, UNICEF, Clinton Foundation (CHAI); Trade Unions (Labour Movements) and Associations representing the various categories of health workers.

As mentioned above, the responsibility of maternal and child health services has been transferred from the MoH to the Ministry of Community Development, Mother and Child Health (MCDMCH).

Donor situation

Nearly all cooperating partners require the MoH to develop separate plans and budgets for efforts to tackle the major public health diseases (HIV and AIDS, tuberculosis and malaria), even though the NHSP has clearly articulated all public health priorities. Currently, the health sector has more than five separate plans and budgets for the major global partners contributing to the fight against HIV and AIDS, tuberculosis, malaria and child health illnesses. This has exacerbated administrative inefficiencies as MoH staff devote excessive time to developing plans and reporting instead of implementing programmes.

The lack of awareness and coordination among different partnerships and inefficiencies, at the institutional, regional and national levels has lead to fragmentation and duplication in the health sector.

The implementation of the sector wide approach to programming (SWAp) has aimed at aligning and coordinating most health sector cooperating partners’ external assistance towards implementation of Government-led national strategic health plans. However, it is questionable at what level alignment and coordination has been kept following the corruption scandal in 2009. It remains a challenge to make the SWAp work properly and to work towards a common goal.

The joint Government Action Plan has led to the development of the Governance and Management Capacity Strengthening Strategic Plan with clearly defined outputs.
These plans have in turn resulted in an MoU for alignment purposes to be signed between all the stakeholders, including MoH, government agencies and donors is presently being finalized.

Cooperating Partners – Division of Labor Matrix

(JASZ II Signatories)

<table>
<thead>
<tr>
<th>SNBP Cluster</th>
<th>Lead Ministry</th>
<th>ADB</th>
<th>EU</th>
<th>UK &amp; EU</th>
<th>World Bank</th>
<th>Canada</th>
<th>Sweden</th>
<th>Germany</th>
<th>Jpn</th>
<th>Ital</th>
<th>AUS</th>
<th>NL</th>
<th>Swd</th>
<th>USA</th>
<th>Total Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>MEWO</td>
<td>A</td>
<td>B</td>
<td>B</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>B/P</td>
<td>B/N</td>
<td>L</td>
<td>3L1A</td>
<td>2L4A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td>MWS/MCT</td>
<td>A</td>
<td>L</td>
<td>L</td>
<td>A/P</td>
<td>A/P</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>3L5A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Development</td>
<td>MOE/MDTVT</td>
<td>A</td>
<td>L</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>L</td>
<td>A</td>
<td>P/B</td>
<td>B/P</td>
<td>A</td>
<td>3L4A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>MoH</td>
<td>A</td>
<td>L</td>
<td>A</td>
<td>A</td>
<td>B</td>
<td>A</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>3L1A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV &amp; AIDS</td>
<td>MoH</td>
<td>B</td>
<td>L</td>
<td>A</td>
<td>B/P</td>
<td>A/P</td>
<td>B</td>
<td>L</td>
<td>A</td>
<td>P</td>
<td>B/P</td>
<td>A/A</td>
<td>A/A</td>
<td>3L5A</td>
<td></td>
</tr>
</tbody>
</table>

The cooperating partners has had limited confidence in the financial management and accountability mechanisms of the MoH, a problem fanned by a 2009 corruption scandal. After some key cooperating partners subsequently withheld funding, funding has now resumed.

Sida’s (Government of Sweden) work

Sweden is a very active cooperating partner in the health sector in Zambia. One of the main programmes of support is the health sector support to the MoH’s National Health Strategic Plans 2006 – 2011 and 2011 – 2015. Support is aimed at such areas as child health and nutrition, integrated reproductive health, to halt and begin to reduce the spread of HIV, tuberculosis (TB) and sexually transmitted infections (STIs) through effective interventions, to reduce the incidence and mortality due to malaria, to improve public health surveillance and control of epidemics, to ensure availability of essential drugs and medical supplies at all levels, to ensure availability of appropriate infrastructure and equipment at all the levels, including the availability of basic services such as water, electricity and telecommunication at all health facilities, to strengthen existing integrated operational systems, financing mechanisms and governance arrangements for effective policy implementation and delivery of health services, to train, recruit and retain appropriate and adequate staff at all levels, etc.

Other programmes are support to the implementation the National HIV/AIDS/STI/TB Council strategic plan 2011-2015, support for the distribution of drugs through Medical Stores Limited, to Clinton Health Access Initiative (CHAI) for research in respect of human resources for health and financing strategies, and to Oxfam to keep the government officials accountable for health care.
A quite important contribution and source of knowledge from a Swedish perspective are the technical advisors (TAs) for which support is provided. Sweden supports four TAs as follows:

**Bonface Fundafunda**, MoH, Office of the Permanent Secretary, management advice through the innovative Drug Supply Budget Line (DSBL)

**Dick Jonsson**, University of Zambia, School of Humanities & Social Sciences

**Dolors Castello**, Advisor Chainama College

**Adam Lagerstedt**, Policy Advisor to the Permanent Secretary of the Ministry of Health (until August 2012, no replacement yet)

The total annual Swedish bilateral support to the development of health in Zambia in 2013 is forecasted to approximately 30 million USD.

It is notable that from July 2013, Sweden will be chairing the “troika” of key donors in development support to Zambia.

**UK and DfID**

The Swedish initiatives could be mirrored by examples involving the UK. DfID is an active cooperating partner in health, however in general more project oriented than Sweden One interesting initiative is the Zambia UK Health Workforce Alliance (ZUHWA), since 2008 reaching out to Zambian and UK organisations working together to support health initiatives in Zambia. The ZUHWA aims at creating databases for “health partnerships” with individuals, departments, organisations or NGOs in Europe or North-America. So, in spite of the name, the ZUHWA is not restricted to UK – Zambian cooperation.

The ZUHWA addresses requests by some African health and education leaders for contributions to train and educate the extra 1.5 million more health workers needed to achieve the health related Millennium Development Goals and the overwhelming willingness within the UK health sector to contribute towards health workforce training in Africa, by focussing in Zambia in the first instance.

The MoH leadership had over the last few years explored how UK support could be used to help Zambian health institutions deliver the national health plan. The training and education of more health workers is a national priority and the Government wishes to make use of the strong links between Zambia and the UK in health and other areas.

The management agent, the Tropical Health & Education Trust (THET), a UK based NGO, is very active on the ground in Zambia.

5.5 Health care systems

There are three categories of health service providers in Zambia:
Public/state facilities, including the MoH, military and other government health facilities;

1. Faith based institutions under the coordination of the Churches Health Association of Zambia
2. Private sector, including private and nongovernmental organizations.

Public health providers are organized in a referral system comprising health posts, health centres, first level (district), second level (provincial/general) and third level (tertiary).

First Level
The first level comprises of Health Posts, Rural Health Centre and District Hospitals, where primary health care and preventive health services are provided. Health posts (the first points of contact for the vital promotional and preventive health care) provide the lowest level of health care and are meant to cater for catchment populations of 3500 persons within a 5 km radius in rural areas. Any complicated cases that they are not able to handle are referred to higher level facilities. Health centres are divided into two types depending on their geographical location. Urban clinics cater for catchment populations of between 30,000 and 50,000 people, while Rural Health Centres cater for catchment populations of 10,000 people within a 29 km radius. Any cases too complicated for health centres are referred to first level/district hospitals. District hospitals serve as the focal points for health care provision at district level. They cater for a catchment population of between 80,000 and 200,000 people. The first level hospitals including all District Hospitals provide medical, surgical, obstetric, diagnostic and clinical services for health centre referrals. After the separation of Ministry of Community Development, Mother and Child Health (MCDMCH) from the MoH, the first level hospitals will be sorting under MCDMCH.

Second Level
The Second Level comprises the provincial and general hospitals, which provide curative care. Cases deemed too complex for district hospitals are referred to General (provincial) Hospitals. Provincial hospitals serve catchment populations of between 200,000 to 800,000 people and serve as the provincial focal point for health care provision with services in internal medicine, general surgery, paediatrics, obstetrics and gynaecology, dental, psychiatry and intensive care. There are currently 21 second level hospitals.

Tertiary level
Finally, at the apex of the Zambian health care system, are the tertiary hospitals which serve as referrals for all cases deemed too complex for provincial hospitals because they require specialized medical equipment and personnel. The tertiary level comprises the National University Teaching Hospital (UTH) and the central hospitals. They are responsible for a catchment area with population of 800,000 and above. These hospitals are UTH, Ndola Central Hospital, Kitwe Central hospital and the specialized hospitals – Chainama College Hospital (psychiatry), Arthur Davidson Children's Hospital (paediatrics) and Cancer Diseases Hospital.
Referrals abroad
The Government has been sending patients for specialized treatment abroad since the early 1990s. Due to limited capacities at the national referral hospital, UTH, referral of patients from Zambia to India, South Africa, the United Kingdom, the United States and Zimbabwe are made for complicated cases that require specialized treatment. The early phases of this referral system experienced substantial challenges. A differentiated patients pricing system in the private health care industry in South Africa meant that foreign patients were charged rates as high as 200 percent of those for local South African patients. Huge administration costs were incurred for cases involving various service providers over a long period of time, and there were difficulties in reconciling invoices due to complex billing systems. Other issues were the lack of a system for medical case management, and apparent abuse of referral abroad by patients.

As the population of Zambia increases, so do the incidences of complicated cases requiring specialized treatment. Patients needing cardiac, neurology and renal services are referred for specialized treatment in India and South Africa at great cost to the Government. Records at the Ministry of Health show that it costs on average US $30,000 (ZMW 150,000) to send a patient with a minor cardiac issue for treatment in India, while a severe case requiring ventilation in intensive care costs up to USD 100,000 (ZMW 500,000). Every year, from 2005 to 2008, about 350 patients were put on the waiting list for treatment abroad against an annual budget allocation averaging USD 1.5 million (ZMW 7.5 million). Due to the limited resources available, only a tenth of the patients were referred abroad.

Given exorbitant costs and equity concerns, many experts have proposed that the Government put in place specialized local health infrastructure. According to the WHO, a population of 2 million needs to have a radiotherapy facility, and cardiac and renal units; Zambia would need six of these configurations to cover its population. While it recently constructed a radiotherapy facility and has 15 renal dialysis machines, it does not have fully functional cardiac and neurology units to manage complicated cases.

Private Sector Providers
Prior to 2000 the major industry enterprise active in the health sector was the Zambia Consolidated Copper Mines (ZCCM) which operated a number of health facilities for its employees.

The MoH defines the private sector as comprising all providers who exist outside the public sector whether their aim is charitable or commercial, and whose aim is to treat illness or prevent disease. They are made up of private clinics, hospitals and private not-for-profit organisations, such as Churches Health Association of Zambia (CHAZ) and NGOs that operate at community level. See also under section 5.11.

Traditional Medicines and Healers
The role of traditional and alternative health care to the Zambian people is significant. It is estimated that about 80 percent of the population use traditional and alternative services for their day-to-day health care. Traditional and alternative health services and conventional health services shall complement each other. Despite the wide use of traditional medicines and the long history of complaints of malpractices in the use
of traditional medicines, there has been no legal framework to control the Traditional Health Practices

In accordance with the NHP, the Government has expressed its ambitions to (i) provide the necessary legal framework for the traditional health practitioners, (ii) promote certification, registration and regulation of traditional and alternative health practitioners by an approved authority, and (iii) strengthen and expand capacity for traditional and alternative health practitioners in the identification and management of health conditions requiring referral.

**Health Management Information System (HMIS)**

The Health Management Information System (HMIS) is used to monitor and evaluate the performance of public healthcare providers at health centre, district and provincial levels. Health centres submit their activity data to their district offices, which in turn aggregate the data within their catchment areas and submit their monthly returns to their respective provincial offices. Data sets from the nine provinces are submitted to the MoH on quarterly basis but the data itself is not of good quality due to discrepancies between the data registers and the HMIS.

In 2005, the Government, with support from the European Union, carried out a review of HMIS, which showed that information at facility and district levels, was not analyzed in order to inform further service improvement activities. The review showed that there was undue delay in data flow from the districts to the MoH due to lack of IT infrastructure and the quality of the data was poor due to high staff turnover and lack of staff training. Work on key healthcare indicators commenced in 2006, included the redesign of the HMIS and data collection tools, which is now progressing with the assessment of the community information system (CIS), Hospital information system (HIS) and Financial Administrative Management system (FAMS).

Parallel information systems exist which compliment HMIS to aid performance management activities, including systems for malaria (malaria information system), TB (TB information system), HIV/AIDS (continuous care for patients tracking system), disease outbreaks (integrated disease support and response information system) and the FAMS. Additional data sources include Central Statistics Office, Auditor General’ Office, National Aids Council, WHO and UN agencies.


## 5.6 Health care infrastructure

**General**

In general, the health care infrastructure in Zambia is in a desperate state of refurbishment and development needs. The Government however has ambitious plans. The basic aim of the Government is aiming to bring each level of health service provider to the next level and to ensure that the referral process is working appropriately. There are high expectations that modern technology will contribute to enabling the lower levels of health services to use the knowledge, competence and
technology of the service level above. For example, some 20 general hospitals will need to be refurbished, developed and equipped adequately.

In 2007, only 50 percent of the Zambian population lived within 5 km of a health facility, while 69 percent lived within a radius of 8 km. Investments in infrastructure development have not followed population growth.

*Table 5.6: Existing distribution of health facilities in Zambia (November 2010):*

<table>
<thead>
<tr>
<th>Type</th>
<th>Ownership</th>
<th>Copperbelt</th>
<th>Eastern</th>
<th>Luapula</th>
<th>Lusaka</th>
<th>Northern</th>
<th>N/Western</th>
<th>Southern</th>
<th>Western</th>
<th>Central</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Post</td>
<td>GRZ</td>
<td>22</td>
<td>36</td>
<td>9</td>
<td>26</td>
<td>37</td>
<td>14</td>
<td>22</td>
<td>11</td>
<td>18</td>
<td>195</td>
</tr>
<tr>
<td>Mission/CHAZ</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Defence</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Private</td>
<td>3</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>26</td>
<td>38</td>
<td>9</td>
<td>31</td>
<td>38</td>
<td>14</td>
<td>24</td>
<td>11</td>
<td>21</td>
<td>212</td>
</tr>
<tr>
<td>Rural HCs</td>
<td>GRZ</td>
<td>44</td>
<td>140</td>
<td>116</td>
<td>37</td>
<td>120</td>
<td>101</td>
<td>150</td>
<td>118</td>
<td>84</td>
<td>910</td>
</tr>
<tr>
<td>Mission/CHAZ</td>
<td>7</td>
<td>11</td>
<td>3</td>
<td>3</td>
<td>11</td>
<td>12</td>
<td>16</td>
<td>5</td>
<td>9</td>
<td>77</td>
<td></td>
</tr>
<tr>
<td>Defence</td>
<td>4</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>10</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>9</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>53</td>
<td>155</td>
<td>122</td>
<td>47</td>
<td>143</td>
<td>116</td>
<td>169</td>
<td>126</td>
<td>101</td>
<td>1032</td>
</tr>
<tr>
<td>Urban HCs</td>
<td>GRZ</td>
<td>81</td>
<td>7</td>
<td>1</td>
<td>32</td>
<td>13</td>
<td>7</td>
<td>23</td>
<td>10</td>
<td>18</td>
<td>192</td>
</tr>
<tr>
<td>Mission/CHAZ</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Defence</td>
<td>7</td>
<td>1</td>
<td></td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Private</td>
<td>49</td>
<td>149</td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>205</td>
<td></td>
<td></td>
<td>205</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>137</td>
<td>7</td>
<td>1</td>
<td>182</td>
<td>15</td>
<td>13</td>
<td>28</td>
<td>10</td>
<td>23</td>
<td>416</td>
</tr>
<tr>
<td>Level 1 Hosp</td>
<td>GRZ</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>6</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td>Mission/CHAZ</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Defence</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Private</td>
<td>4</td>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>9</td>
<td>14</td>
<td>12</td>
<td>7</td>
<td>75</td>
</tr>
<tr>
<td>Level 2 Hosp</td>
<td>GRZ</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Mission/CHAZ</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Private</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>5</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Level 3 Hosp</td>
<td>GRZ</td>
<td>3</td>
<td>2</td>
<td></td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>3</td>
<td>2</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>236</td>
<td>210</td>
<td>138</td>
<td>268</td>
<td>204</td>
<td>154</td>
<td>237</td>
<td>160</td>
<td>154</td>
<td>1761</td>
</tr>
</tbody>
</table>
Emergency care services

The situation of the emergency health service system is considered to be inefficient. However, the MoH has recently stated that it will prioritize the enhancement of emergency health care services in 2013 aiming to prevent unnecessary deaths in the country. Health personnel are being trained in critical care nursing to improve the current inefficient emergency health service system in the country. Plans are to create clear structures of emergency teams at National, Provincial and District levels to respond to trauma cases.

Mobile health services

Zambia has a long history of implementing mobile health services which are an integral part of the health care delivery system. The Ministry in 2010 established the Directorate of Mobile and Emergency Services in order to strengthen the provision of health care through this mode of delivery. The Mobile and Emergency Health Services face a number of challenges including inadequate human resources and the lack of a national level coordinating mechanism. The Mobile and Emergency Health Services has recently initiated a programme to come to terms with these challenges. In 2011, a Chinese supplier delivered 9 mobile hospitals to Zambia (see under section 3.4). By January 2013, approximately 192,000 people had accessed treatment from the mobile hospital units countrywide since the services were rolled out in 2011.

Recent developments

Notwithstanding Zambia’s increasing urbanization rate, most of its population and the majority of the poor live in rural areas, where there is an undeniable need to expand health services. Over the last five years noticeable achievements have been improvements in infrastructure, especially in rural areas. However, an abundance remains to be done.

Significant efforts have been directed towards renovation of the existing health infrastructure and expansion of health training institutions. These efforts are also being supplemented with the private sector initiatives, which have led to the renovation and construction of a few private health facilities. By January 2011, a total of twenty-eight new district hospitals were being constructed. In addition to this, a total of 356 health posts were under construction.

Other works undertaken include the upgrading of five Health Centres into Mini Hospitals in Lusaka and construction of 200 housing units for doctors, nurses and paramedics at the University Teaching Hospital (UTH), and at the Chipata, Solwezi and Mansa General Hospitals, Ndola and Kitwe Central Hospitals.

Intensive Care Unit Equipment has been procured for all provincial hospitals. The equipment is currently being installed.

The Government has projected a total of 650 prefabricated health posts to be built around the country. For this purpose a memorandum of understanding (MoU) has been signed between the Ministry of Finance and Exim Bank of India. These are
small units intended to be used as health posts for a catchment of 5,000 people. Focus will be on preventive care and the units will typically be staffed by community assistants. According to news media where it seems Indian low interest loans will be used as financing and a supplier of Indian origin has already been identified as supplier of these prefabricated health posts.


5.7 Lusaka University Teaching Hospital (UTH)

With its more than 1,600 beds the UTH is Zambia’s largest hospital. It is a sprawling facility containing all major departments and is used for teaching purposes by the Medical College of the University of Zambia.

The inflow of patients is however very unsteady and the UTH is overwhelmed by referral patients. At times the UTH is jammed up and other times it is not as crowded. There is a huge lack of manpower, in particular of various specialists, infrastructure and equipment. There has been a backlog generated over many years of general preventive maintenance of the buildings, however the UTH seems to be on the right track to have the situation under control. The UTH has an ambitious infrastructure development and maintenance plan aiming at preserving the confidence in the institution. Utilities such as water, electricity and waste handling are problem areas. For example there was a shortage of water for about a week in October 2012. There is an apparent need for a design overhaul of the UTH premises and installations.

Due to the high number of patients and limited resources, hospital equipment is used all the time (“24/7”), and there is limited time for maintenance activities etc. As a consequence, equipment is often idle awaiting repair works. There is a huge shortage of funding. According to the Managing Director, Dr Lackson Kasonka, budgetary plans of the Government promise a lot, but do not really deliver.

The UTH has performed a few open heart surgeries, building up its own capacity in this area. A lot of work in planned for 2013 in enhancing this area of treatment. The cost of referring patients for open heart surgery to India with the Apollo Group is not less than 80,000 USD according to Dr Kasonka. However, according to Dr Kasonka, there is the risk that the Apollo Group is rather engaging in bringing patients for treatment in India than assisting with capacity building at the UTH.

Already some 15 years ago there was a tendency to separate patients who are in a position to pay for health services (via insurance, employer or privately) from those who do not have this ability. The most recent development in this respect, with bearing on the entire health care system is the categorization of patients according to funding available. The UTH has introduced a three tier system, as follows:
- **Standard** (earlier this was referred to as the “low cost” alternative): In this category the care is given according to available resources at the hospital meeting WHO standards.

- **Premium** (earlier this was referred to as the “high cost” alternative): Private funds enable the patient to get more than the standard level of care.

- **Private** (fast track VIP alternative): This category enables the patient to get a direct line to the specialist who will be able to provide care in wards of high standard. The category has been created in order to meet the competition from private actors such as Fairview, who otherwise entice the UTH specialists to provide health services on hourly basis out of reach for the UTH.

The UTH Premium and Private categories are planned to be enhanced further and similar programs are being implemented at other general hospitals in Zambia.

In terms of equipment and knowledge, needs are particularly high in areas of cardiovascular diseases (surgery, management, etc), diabetes treatment, diagnostics and laboratories. Based on the needs of the UTH, there are a lot of opportunities including the areas of institutional partnerships, infrastructure development, medical equipment and capacity building. Many such activities will be initiated during 2013.

*Source: Dr Lackson Kasonka*

### 5.8 Hospital development plans – Ministry of Health

The Zambian Government has expressed its recognition of the fact that most referrals to foreign health facilities are originating from inadequate diagnostic and laboratory equipment. The Government health facilities have a total of three computed tomography scanners (CT scanners) and one magnetic resonance imaging scanner (MRI scanner). The MoH has plans to set up at least three modern diagnostic centres in Livingstone, Lusaka and Ndola.

According to President Sata’s budget speech on 21 September 2012, Zambia will embark on an ambitious programme of upgrading all hospitals starting with the three referral hospitals – University Teaching Hospital and the Central Hospitals in Ndola and Kitwe. As noted above under 5.3 substantial funds have been set aside for infrastructure development in the health sector, in particular for the rehabilitation of the University Teaching Hospital and the Central Hospitals in Kitwe and Ndola.

Development plans for the Cancer Diseases Hospital has been summarized below under section 5.9. The MoH annually presents a Procurement Plan. According to the 2012 Procurement Plan the planned procurement of pharmaceuticals and medical equipment was in the range of 86 million USD. The 2013 MoH Procurement Plan is presently being developed (January 2013) and it is possible that the plan will be available by February 2013.

Key players in design have historically been predominantly local or South African or a combination. Foreign construction contractors have been predominantly Chinese (cf CDH and Levy Mwanawasa (Lusaka) General Hospital) or Indian (cf health posts)
with varying degree of local participation. Development of health facilities has been significant and is very likely to continue with the present budgets and plans.

Sources: ‘President Michael Sata’s speech to the National Assembly on 21 September 2012’, ‘2012 Procurement Plan’, Peter Mwaba

5.9 Cancer Diseases Hospital (CDH)

CDH Phase I

The opening of the Cancer Diseases Hospital (CDH), a dedicated radiation oncology hospital, in 2006 has provided the opportunity for Zambians to access radiotherapy services locally.

The CDH is an effect of a collaboration between the Government of Zambia and International Atomic Energy Agency (IAEA), where the IAEA provides funds for equipment and the training of staff. To this effect, four medical doctors were sponsored to specialize in radiation oncology, while seven radiation therapists were also trained in parallel to the construction of the CDH. The funding is provided by the OPEC Fund for International Development (OFID) as a loan, funds are to be paid directly to service providers identified through tender processes carried out by the Zambia Public Procurement Agency.

CDH recorded a total of 35 patients in 2006, to a rapid high of 719 in 2007, 1,204 in 2008, 1,285 in 2009, 1,282 in 2010 and 1,302 in 2012. As of December 2012, the total number of patients attended at the CDH will be more than 7,000.

The CDH handles a wide range of cancers diseases which include cervical (ca 35 % during 2006-2011), breast (ca 8 %), lymphomas (7 %), kaposis sarcoma (5 %), prostate (4 %), head and neck, intestinal tract, bladder, sarcoma, melanoma, vulva, lung, myeloma among other cancers.

Services offered at CDH include consultation, chemotherapy and hormonal therapy, radiotherapy, palliative care and diagnostics. Zambia is exceptional among neighboring countries in that is has established a target for cervical cancer screening, which is set to 20 percent of all women. So far 5 percent have been screened.

The CDH is equipped with such equipment as including a cobalt-60 machine, a linear accelerator, a high dose rate brachytherapy unit, mould room, workshop and dosimetry equipment, a simulator and a treatment planning system for both brachytherapy and external beam therapy. SMEC (formerly Vela VKE) provided engineering design and construction supervision services for the CDH Phase I project. In Appendix 2 the equipment presently used by the CDH has been listed.

CDH serves as a national referral hospital with a catchment population of all the Country’s nine provinces. Current data indicate that cancer patients from North-Western, Northern, Muchinga, Luapula and Western provinces have negligible access to the CDH.
The services offered by the centre have also been extended to include referrals from neighbouring countries such as Malawi, South Africa, Angola and the Democratic Republic of Congo DR.

The Managing Director of the CDH, Dr. Kennedy Lishimpi, is a board member of the IAEA Advisory Group on increasing access to Radiation Therapy (AGaRT) aiming at increasing access of radiation therapy in developing countries.

The CDH is said to have a cooperation in respect of joint cancer programmes with the Apollo Group in Hyderabad.

**CDH Phase II**

Presently, the CDH is in the process of scaling up its services through the CDH Phase II project. Tender processes and approvals from the Zambia Public Procurement Authority (ZPPA) and OFID have been done for the main parts of the CDH Phase II expansion project. However, some limited equipment still remain to be sourced, details will be made available in 2013.

The funds for Phase II are again provided by OFID as a loan. The ongoing Phase II will build additional infrastructure, including inpatient wards, new treatment wards and patient hostels. Additional radiotherapy and other medical equipment will also be purchased and details of this procurement will be presented soon. Another component will provide training for an extra 40 specialists to meet the present and forecasted patient loads.

The CDH Phase II expansion project is scheduled for completion by September 2013, with the creation of about 200 bed spaces, allowing for 160 inpatient beds, and the remaining beds being used for outpatient chemotherapy administration. The MoH has confirmed that total investments for the Phase II project will amount to approximately 5,000,000 USD. Equipment to be installed include additional Cobalt 60 and High Dose Rate Brachytherapy units.

**CDH Phase III**

According to the Managing Director of the CDH, Dr Kennedy Lishimpi, CDH Phase III will be initiated very soon with public procurement of construction and equipment for 6 – 10 satellite cancer centers in order to increase access to radiotherapy. Once again funding will come from OFID and Zambia Public Procurement Authority (ZPPA) will carry out the procurement. Procurement is planned for 2014 and the construction phase is expected to commence later in that year.

Dr Lishimpi has expressed that achievement of Phase III will also allow for coordination of cancer programmes in provinces and districts with supervision from the CDH. Dr Lishimpi stated that the CDH, through government support, wishes to extend its services by ensuring that provincial centres are provided with equipment that is able to detect and screen cancer at an early stage.
Equipment that will come into question for Phase III will be announced in the MoH 2014 Procurement Plan. However, from Dr Lishimpi’s statements each satellite center shall have (i) either one linear accelerator or one Cobalt 60, (ii) one brachytherapy unit, (iii) CT scanner and (iv) planning units various software (including electronic patient records software). In addition, the CDH will source one PET/CT scanner, one particle accelerator and one advanced linear accelerator (IMRT). In the coming years there will be a substantial need for capacity building and training.

According to Dr Lishimpi, because Siemens has pulled out of this market segment it is likely that other suppliers will have a good chance to come into question. According to Dr Lishimpi, aspects to consider in the pre-procurement phase are to link up with Siemens, in order for a recommendation on compatibility of another supplier’s equipment (Siemens existing at CDH), and with IAEA in order to have IAEA recommend a specific company as a supplier. Pricing levels and ways of financing should also be considered.

High level engagement

First Lady Dr Christine Kaseba, an MD and gynecologist, has been very active in promoting health care issues, and especially cancer care since the new Government took office in 2011. As a result of these activities, there is great focus from the media on cancer in general and on cervical cancer in particular.

Integrating HIV and cervical cancer screening and treatment services is an effective and efficient method of responding to the diseases. This also means that many of the same techniques and entry points that are mobilized for HIV prevention, treatment, care and support can be successfully combined to screen and treat cervical cancer.

Many initiatives are being pursued in the area, such as First Ladies Forum Cervical Cancer Conference that was held in Lusaka in July 2012.

Further, as an outcome of the Pink Ribbon / Red Ribbon initiative, President George W. Bush and the First Lady of Zambia Dr. Christine Kaseba have jointly designated the African Center of Excellence for Women’s Cancer Control. Corporate participants are Merck Vaccines and GlaxoSmithKline (GSK). President George W. Bush has visited Zambia twice in the last 18 months to promote the initiative.


5.10 Laboratory Services

In Zambia Medical Laboratory Services are provided by Government, missions, industry (mines), military and private institutions at the various levels of care. They provide a range of services including clinical, public health and research activities. These services are governed by a National Medical Laboratory Policy. There are
currently 260 medical laboratories in the public sector and over 50 in the private sector. Zambia has a four tier laboratory system starting at the lowest Health Centre level (HC), District level (H1), Provincial level (H2) and the highest tertiary level (H3). While the majority of hospitals have laboratories attached to them, this is not true for health centres as only a small number has laboratories. Some health posts have established point of care testing provided by non-laboratory professionals using simple rapid technology. Low funding, poor laboratory infrastructure and low staffing levels continue to affect laboratory services in Zambia.

One of the largest NGOs active in the health sector, Centre for Infectious Disease Research in Zambia (CIDRZ), is said dispose over the best laboratory in the country, however the laboratory is not always available for the Zambian health care system. UTH hosts a laboratory and a well reputed laboratory is Professor Nkanza Lacet Laboratories. Lusaka Trust Hospital and Fairview Hospital also have laboratory facilities of some standard. Lusaka Trust Hospital expresses that its laboratory service is used by various hospitals, at times even UTH, around Lusaka.

Sources: ‘National Health Policy 2012’, Laura Beres, Dr Margaret Mambwe Siwale, Björn von Hofsten 12 December 2012

5.11 eHealth, Telemedicine

General

Telemedicine provides an interesting development for a country like Zambia and has been identified as an innovation for bridging the gap in many areas of intervention. Aim is to establish telemedicine services in the country by linking district health facilities to specialized centres. Impacts will be to receive specialized services from a distance and reduced travel to referral centres, improved doctor to doctor contact between rural and urban health facilities, reduced professional isolation, improvement on patient management through enhanced clinical diagnosis patient care and evidence based referral pattern, reduced unnecessary patient referral, reduction in sending patients abroad due to telemedicine technology and improved access to information among health practitioners.

In general, the eHealth, mHealth and telemedicine area is dominated by specific initiatives from various NGOs and UN agencies. There is still a huge lack of coordination of initiatives.

Below follows descriptions of three projects with recent success.

Telemedicine pilot – The Virtual Doctor Project

An interesting pilot initiative driven by The Virtual Doctor Project working directly with the MoH provides a pilot for telemedicine services to rural clinics in Zambia. The aim is to provide reliable patient diagnosis to clinical officers by way of broadband internet and a desktop PC. The connectivity is provided via the mobile broadband network with improved technical solutions for connectivity. The project
uses software developed in India and is at present fine tuning the software to best suit the needs and environment of rural Africa.

The project includes training and connects clinical officers in rural areas to a network of medical practitioners and specialists around the world. The aim is to prevent unnecessary referrals to far off hospitals and health centers by diagnosing patients and treating them onsite.

The plan is to expand the pilot to three clinics in February/March and to ten by the end of 2013.

The project prioritizes child and maternal health, and aims to make a difference to the health of communities severely affected by HIV/AIDS and Malaria.

*mHealth*

One area for intervention by mHealth technology is reporting systems. Malaria Control and Evaluation Partnership in Africa (MACEPA) has supported gathering, analyzing, and disseminating data, assisting Zambia to identify successes and challenges in the response to malaria and to focus resources and interventions for greater effectiveness and efficiency. The program supports the MoH in designing and introducing a rapid SMS reporting system that records specific points of malaria data each week and sends the data to a central server by mobile phone. The information is immediately available to program managers at district, provincial, and national levels, allowing them to focus interventions on specific needs. Zambia has conducted three national malaria surveys with MACEPA’s support. To compile the Malaria Indicator Surveys, teams of trained workers go to every corner of the country. They record household and malaria information using handheld computers and test children for the disease. During a six weeks survey, workers typically reach more than 5,000 households. The data gathered in the surveys help the National Malaria Control Program and its partners plan interventions and allocate resources.

Project Mwana is another project where rapid sms has been deployed on a pilot basis for the national Early Infant Diagnosis (EID) initiative implemented by the MoH with the support of UNICEF and its cooperating partners. In 2010 Zambia started a pilot to use a rapid SMS based mobile health system to deliver the results from reference labs back to the facility using SMS. The project delivers test results for diagnosis of HIV in infants in real time to rural clinics and facilitates communications between clinics and community health workers. The community health worker then informs the mother that the results are ready for their collection. The project began as a pilot in 13 districts of Zambia in June 2010 and has shown a reduction in turnaround time – from sample collection to laboratory to the return of test results to the originating health facility – of more than 50 per cent in the country’s rural and underserved communities. Thirty additional facilities were added to the system in 2011 and the aim is to achieve national scale during 2013.

Sources: ‘Position Paper – Road Map to Telemedicine in Zambia’, ‘Project Mwana website’, Huw Jones,
5.12 Private Hospitals

General

Zambia has a Private Hospitals Association which was formed quite recently. One could safely say the association is still under formation and preparing to scale up activities. A total of 5 – 10 hospitals are paying members. Chairman of Private Hospitals Association is Dr Margaret Mambwe Siwale, who is also the Managing Director of Lusaka Trust Hospital. Eligible for membership are private health care providers, including the one-doctor-clinics and the largest private hospitals in the country. Lusaka has some 10 private hospitals of some size, excluding one-doctor-clinics. A sample of private hospitals in Zambia have been attached to this report as Appendix 1.

In general, the needs are great among the private hospitals for new medical technology and hospital refurbishment. It is the funding that is lacking.

Some of the private hospitals may have a potential for partnering with a foreign institution. The main needs of the private sector hospitals are equipment (scanners, diagnostics, radiology, etc), maintenance, hospital design, etc.

Lusaka Trust Hospital

Lusaka Trust Hospital (LTH) is one of Lusakas largest private hospital with its ca 40 beds, 10-15 medical doctors and a monthly patient inflow of ca 5,000 (200 inpatients). LTH was originally a hospital run by the former state owned copper mine in Lusaka (as opposed to most mining hospitals, which were found in the Copperbelt). It has grown substantially since it was turned into a Government trust (under Ministry of Finance) partnering 50/50 in 2006 with insurance company Madison. LTH prides itself in providing healthcare without restrictions. However, there are limitations in providing care in specialist disciplines, such as oncology and cardiology.

Expansion plans are still on a visionary level but very ambitious in terms of wish list for modernized and expanded facilities (approximately double present size) and modern equipment. Concrete plans will be available early 2013 after funding has been committed. Potentially there will be need for a comprehensive redesign of the premises. Expansion plans are expected to be initiated in 2013.

According to the hospital management, LTH has a well equipped laboratory, which is used extensively by the smaller private hospitals, private clinics and also UTH.

LTH has ambitious plans for infection control and the management would be keen to get further insights on how to enhance this work. The ownership structure (part Government) may contribute in this respect.

LTH is a very clear example of an institution Zambia that is considered to be an interesting MoU partner for a joint venture with a foreign hospital where interests are matching.
**Fairview Hospital**

Fairview Hospital (Fairview) is a 40 million USD investment by Medicare International Ltd, owned by Andronikos Antonopoulos, a private investor who has interests also in the mining and construction sectors. Fairview opened to patients in early 2011.

Fairview is Lusaka’s largest private hospital in terms of size of facilities and investment, and will soon be expanding from 63 to 80 beds. Ten specialist doctors work in house and another 10-15 medical doctors work on a visiting basis. Daily outpatients number between 50 and 70. Further, Fairview is deploying two mobile units used for diagnostics purposes (mammography and CT scanner).

Fairview aims to be a top notch hospital, and is indeed far the most modern healthcare facility in Lusaka. The main driver for Fairview is to address the deficit in local healthcare to Zambian citizens, who are otherwise seeking specialist treatment abroad. The business model is aimed at substantially reducing the cost spent on treatment abroad and to be able to perform all diagnostics activities in house. Specialist care provided among others are cardiology, urology, hematology, pathology and orthopedic surgery.

The ambitions of Fairview are supported by the Government, and Fairview has expressed it has a very good relationship with the Government. The Fairview set-up is supported by the fact that Government has expressed that it does not necessarily see any problem using private services where the Government hospitals are unable to perform the treatment a patient is eligible for.

Fairview’s focus has been on high quality equipment in order to substantially enhance the level of healthcare in Zambia, also by enticing specialists to work there. Patient target groups are government employees and private sector employees interested in a higher level of healthcare. Short term expansion plans include construction of at least one more hospital in Kitwe with some 30-40 beds, with the same diagnostics facilities as the main facility in Lusaka.

In the long term, Fairview’s vision includes expansion into surrounding markets such as Malawi, Tanzania and southern Congo (Lubumbashi). Furthermore, cancer treatment facilities (and financing thereof) will be considered as well as blood storage equipment.

Also in the long term, however pending agreement (PPP or MoU) with the MoH, Fairview is considering to open clinics, mostly for diagnostics purposes, in or near existing Government hospitals in several districts. Such investments would be in the range of 12-15 million USD.

Fairview is in the process of making public a management agreement signed with Apollo Hospitals from India. The present managing director, Dr Aditya Pratap Singh, is provided by Apollo Hospitals in Hyderabad, presumably in accordance with the management agreement.
The main remaining challenge is to actually get the patients eligible for care under employee and insurance schemes to start to use the services from Fairview Hospital.

Sources: Dr Margaret Mambwe Siwale, Dr Aditya Pratap Singh, Timothy Kantenga, Andronikos Antonopoulos

5.13 Health workers in Zambia

Zambia, like many low income countries in the Sub-Saharan African region, faces a critical shortage of health workers, a situation that was described as “a disaster” in 2004. Zambia currently operates with less than half the required and the WHO recommended human resources for health workforce in all categories.

The unequal distribution of health personnel between rural and urban areas coupled with lack of training programmes and re-orientation towards integrated health services, especially primary health care is a major problem perpetuating low retention and motivation of existing health workers. This leads to low productivity and low outputs of health workers at health training institutions.

Human resource shortages are caused by a number of factors but the MoH has observed that the most prominent ones are:

- unattractive conditions of service (pay, allowances and incentives);
- poor working conditions (facilities, supplies and equipment);
- weak human resource management systems;
- and inadequate education and training systems, including inconsistencies in implementing training policies for continuing medical education.

Health workers are a critical component in the delivery of quality health services to the population of any country and Zambia is no exception. The Zambian health sector comprises a number of categories of health workers. These health workers are employed in various types of organizations. While there is a mandatory retirement age of fifty-five (55) year for civil servants, allowing such employees to join the private sector upon retirement, the private sector sets no such limit. It should be noted here that the Government under President Sata is planning to raise the retirement age for civil servants to 65 years, through amendment in the Pensions Act.

The country faces a critical shortage of skilled health manpower in virtually all categories of health workers. The severity of this situation has been described as “a human resource crisis”. The primary causes of this situation include the severe loss of substantial numbers of health workers to foreign countries that offer better conditions of service, to private institutions and NGOs all of which offer much more attractive conditions of service and more attractive opportunities. This critical shortage of skilled manpower has negatively affected the provision of quality health services in the country. The information on staff in the health sector is shown in table 5.13a below.
Table 5.13a: Numbers of Health Workers in Zambia by category 2010

<table>
<thead>
<tr>
<th>Category of Health Workers</th>
<th>Number in 2010</th>
<th>Recommended</th>
<th>Variance</th>
<th>Number as percent of Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Doctors</td>
<td>836</td>
<td>2,300</td>
<td>(1464)</td>
<td>36.3</td>
</tr>
<tr>
<td>Nurses</td>
<td>7461</td>
<td>16,732</td>
<td>(9271)</td>
<td>44.6</td>
</tr>
<tr>
<td>Midwives</td>
<td>2471</td>
<td>5,600</td>
<td>(3129)</td>
<td>44.1</td>
</tr>
<tr>
<td>Paramedical personnel</td>
<td>1462</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Practitioners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dentists</td>
<td>246</td>
<td>633</td>
<td>(387)</td>
<td>38.9</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>317</td>
<td>347</td>
<td>(30)</td>
<td>91.4</td>
</tr>
<tr>
<td>EHT</td>
<td>1130</td>
<td>1640</td>
<td>(510)</td>
<td>68.9</td>
</tr>
<tr>
<td>Physiotherapists</td>
<td>206</td>
<td>300</td>
<td>(94)</td>
<td>68.7</td>
</tr>
<tr>
<td>Radiographers</td>
<td>228</td>
<td>233</td>
<td>(5)</td>
<td>97.9</td>
</tr>
<tr>
<td>Laboratory technicians</td>
<td>546</td>
<td>1560</td>
<td>(1014)</td>
<td>35.0</td>
</tr>
</tbody>
</table>

Source: NHSP and HRHCP

The table above shows the number of various categories of health staff as well as the recommended numbers by WHO. The same table shows the shortfall, the number of staff as a percentage of the recommended number (which can be understood as required numbers). As can be seen, for most critical staff, this proportion is consistently below 45 percent. For instance, the country’s health care system has only 36.3 percent of the required medical doctors and about 44 percent of required Nurses and Midwives. There is no doubt that the staffing levels have bearings on the quality as well as availability of health service.

Inadequate staffing levels mean that many health facilities are understaffed, with the situation being more acute in rural areas. Some rural health centres are run by unqualified people, such as classified daily employees. Staff in-post for all clinical and other health workers was estimated at 39 percent by the end of December 2009, leaving a 61 percent gap against the recommended staffing level.

Total annual output of graduated medical doctors in Zambia is slightly more than 50.

The main employer of health workers in Zambia is the government through MoH. Other employers include faith based organizations affiliated to the Churches Health Association of Zambia (CHAZ) and private health facilities. The below table displays proportional distribution of key health workers by employer. In addition, the proportions of health facilities owned by the three categories of employers are given. This demonstrates the different levels of staffing, driven by ability to attract and retain health staff.
### 5.14 Health care financing – general

Until the early 1990s, the Zambian Government provided free health services to all its citizens. User fees were introduced in 1993 to foster ownership of the health system through community participation, improve staff motivation and accountability through performance bonuses, and raise additional income to improve the quality of services at the point of collection. An exemption mechanism was introduced as part of the user fees policy to assist needy and vulnerable members of society, children under five years old, adults above 65 years old and pregnant women. After 13 years, Zambia in 2006 discontinued charging fees in all rural health facilities in 54 rural districts. Anecdotal evidence at that time showed that fees were inhibiting access to health services by vulnerable groups as appropriate waivers and exemptions were not well applied.

Government annulled user fees in rural areas with effect from April 1, 2006. Zambia’s health care financing policy espouses a rights based approach to health care provision. Under this approach, basic health care is treated as a basic human right that should be availed to all citizens and equally accessible to all. The policy assumes the existence of a well-defined and systematically implemented Basic Health Care Package.

To provide for the adequate and sustainable financing of the health sector, the health financing policy seeks to ensure that revenues collected through general taxes constitute the dominant source of financing and that Government allocates a minimum of 15 percent of the national budget to the health sector in line with the Abuja and Maputo Declarations. The main sources for funds in the Zambian Health sector are the Ministry of Finance and National Planning, the cooperating partners, multilateral and bilateral, households, and employers.

Health sector financing in Zambia would typically fall into three main categories:

(i) mobilization of resources to finance health services
(ii) protection of the individual from high costs due to poor health, and
(iii) effective and efficient use of resources in the health sector.

However, the MoH has had a more selective focus, i.e. solely on introducing Social Health Insurance. According to the SNDP, Social Health Insurance is to be implemented during the plan period. As a result the development of a Social Health
Insurance scheme has been at the core of activities instead of coming to terms with national health accounts. A number of activities have been carried out such as workshops and study trips (including for example to Ghana) as part of fact-finding activities. This process has been speeded up in the last months due to political pressure. A description of the present status of the Social Health Insurance scheme follows under section 5.18 below.

The focus on actually introducing a Social Health Insurance scheme has unfortunately reduced the ambitions to build a more solid foundation for the same. In terms of resource mobilization, the first step would typically be to carry out an assessment of the existing resource envelope (i. a. available resources in monetary value for the Zambian health system) and the prospects for its development as a basis for actions to be taken. In this respect, the most notable progress has been the onset of the development of the National Health Accounts for the period 2007-2010.

In terms of finance protection and equity issues, among other things a Health Household Expenditure Survey should be conducted with a view to estimate how much and for what reasons people are spending money on health, and what impact the health expenditures have on their lives.

In terms of efficient and effective use of resources, at district level discussions have focused on the appropriateness and the usefulness of the current allocation mechanisms based on the poverty index. Further, work on-going within University of Zambia (UNZA) on resource allocation mechanisms for hospitals have basically centred around the concepts of diagnosis-related groups and mechanisms to assess costs per patient.


5.15 Public procurement

All Government expenditures above 500,000 ZMW (ca USD 100,000), as well as all Government loan and credit agreements, must go through the Zambia Public Procurement Authority (ZPPA). Government purchases below 500,000 ZMW are handled by institutional tender committees, and these are open to any company that meets the terms and conditions.

The ZPPA advertises tenders for procurement of goods and services through the print media and tenders are posted on the website: www.promis-zm.comesa.int/welcome Complete bidding documents are available against a non-refundable fee, normally 200 USD.

In order to be able to compete in Zambian procurements, price will always be an issue. For local companies, perceived thresholds to participate are the requirement in terms of turnover and historical turnover, bid bond and performance bond (typically bank guarantees are accepted).
As for selection criteria, according to the Standard Bidding Documents of the ZPPA, there are possibilities for ZPPA to focus on quality aspects such as "life cycle cost" and not only on price. It needs to be emphasized that the capacity to handle selection criteria such as quality is limited. It might be considered to find ways to contribute to raised awareness about such issues, for example through a discussion with the ZPPA and MoH.

For bid comparison purposes, imported products may receive a 15 percent addition to the price in comparison to pharmaceuticals manufactured in Zambia. However, this preferential treatment of Zambian based suppliers is very seldom put into use by the ZPPA in practice.

One aspect to consider in respect of public procurement are that in practice it would be prove to be useful to have a consultant or agent representing the bidder locally.

It should be noted that there is an established practice of granting waivers from terms of the Public Procurement Act to preferred bidders before and after awards. This practice makes the public procurement process unforeseeable.

Sources: ‘ZPPA website’, Bonface Fundafunda, Björn von Hofsten

5.16 Health care financing – PPPs

General

The National Health Strategic Plan 2011-2015 recognizes that in order to ensure optimal availability, appropriateness, distribution and conditions of essential infrastructure, facilitating equity of access to essential health services, there is need inter alia to promote private sector participation, including PPPs. And further, to mobilize adequate financial resources, through sustainable means, and ensure efficient and effective utilization of such resources, to facilitate provision of equitable quality health services to the population, there is need among others to promote private sector participation and PPPs.

At the same time, the MoH also recognizes that the private sector (in health care provision) in Zambia is still developing and pledges to put up measures that promote sector participation including PPPs. For instance, as a resource mobilization strategy, the ministry considers institutionalizing high cost wings in public hospitals and explore co-opting the private sector to run private wings (under PPPs) as well as specialized services.

According to a Government source, there has been substantial investment in trying to establish knowledge in PPPs, through regional trainings, etc. Accordingly, the knowledge and capacity should be available, however due to the lack of concrete projects it could be assumed that this knowledge has not come to practical use.

From table 5.6, it should be noted that the predominantly urban Lusaka and Copperbelt provinces have a large share of private health facilities. These urbanized provinces offer a good market for services with their relatively higher income levels.
This calls for new initiatives in the health sector aimed at increasing access to life saving health services.

It is with these factors in mind that the MoH has placed an emphasis on private sector participation in the financing and provision of high quality health care as well as public private partnerships (PPP).

Example: HealthStore Foundation / One Family Health

Among the stakeholders looking at addressing the described needs is HealthStore Foundation, a United States non-profit corporation. In this case, One Family Health (an affiliate of The HealthStore Foundation) franchises to local nurses and community health workers operating under the CFW brand clinics called Child and Family Wellness (CFW) clinics. The CFW clinics will be owned and run by local nurses and community health workers. The CFW franchise aims to maintain standards and achieve economies of scale. The clinics targets specifically a short list of the main diseases causing approximately 70 percent of illness and 40 percent of deaths, including respiratory infections, malaria and dysentery.

Drawing on experience from the CFW network in Kenya, One Family Health aims to roll out a network of 100 CFW clinics within four years of the business starting, with each CFW outlet serving an estimated 7,500 people per year.

The main commercial driver for this venture is to establish a network of micro-sized clinics exhibiting robust unit economic performance and fulfilling the CFW brand promise in Zambia to patients and franchisees. The project will benefit healthcare workers and franchisees through support from CFW personnel, access to start-up loans, training, and negotiation assistance with suppliers and regulators.

It is estimated that a typical CFW clinic will be profitable within 9-12 months of opening. Projections suggest that approximately 750,000 patients per year will benefit from the project, through access to affordable, high-quality basic healthcare.

The project is supported by DfID through the Business Innovation Facility (BIF) and the support will go towards completing an assessment of the Zambian market, a willingness to pay survey and an analysis to identify reliable and sufficient subsidy streams – such as fee-for-service reimbursements – all part of developing a business plan to launch a successful CFW network in the Zambian market.

PPP Guidelines

On the basis that the Government faces challenges in the delivery of public infrastructure and services, it has facilitated the introduction of Public-Private Partnerships (PPPs). There is both an ongoing need for provision of new infrastructure and services, including hospitals and health care, rehabilitation and maintenance of existing infrastructure and services as well as an increase in population that has not been matched by increased capacity in infrastructure delivery and services provision.
The PPP Guidelines recognize the inherent conflict of interest between the perspectives of the public authority and the private sector, possibly the main reason why it has been so difficult to implement PPPs in a setting where the PPP concept appears to be new.

It is the ambition of the Government that PPPs in Zambia will primarily focus on the long term physical infrastructure projects developed on the assumption of minimizing reliance on public sector funding.

According to the guidelines there are certain key pre-conditions critical to PPPs such as:

- Feasibility
- Affordability
- Contract regulation
- Contract transparency
- PPP’s should provide value for money and this should be manifested through among other things – minimizing total project costs throughout the entire project life cycle (capital investment + maintenance + operations).
- PPPs should provide for optimal risk allocation between the public and private sectors.
- PPPs should always be evaluated for economic and social benefits rather than focus only on the financial considerations.
- Citizen’s Empowerment -- The implementation of PPP projects shall have due consideration for the empowerment of Zambian citizens as a strategy for economic growth and sustainability. As such, PPP undertakings need to provide for the participation of local investors in line with the Citizens Economic Empowerment Act.
- Corporate Social Responsibility

Unsolicited Bids

Potential PPP projects will not always be known and tendered to the public for submission of bids. It is possible that a PPP project could be initiated by individual enterprises in the private sector where no bids have been requested. Such a proposal from a developer or investor will be treated as an unsolicited bid. The Zambian PPP policy allows for unsolicited bids in line with relevant legislation. It is important to note that unsolicited bids should encourage creativity and innovation on the private sector and lead to quality bids being submitted. Even in situations where an unsolicited bid is an adequate project under the Zambian PPP legislation, there will be a competitive (but potentially limited) process practiced by the authorities.
One example of a successful unsolicited bid that was considered for the Zambian border crossing at the Kasumbalesa Border Post was proposed by a company which was considered to have the substance, merit and necessary finance to deliver to the Government. The unusual bid never went to open tender as the project was deemed too specialist and unique. Instead, the company was awarded the contract by adhering to procurement stipulations outlined in Zambia’s new PPP legislative framework. As a consequence of the successful unsolicited bid, the company has won subsequent competitive tenders to build a further six border posts along Zambia’s different borders.

*Examples of PPPs in the health sector*

In the health sector, there is an example of a PPP between Sky Pharmaceuticals in Zambia (in collaboration with Fresenius Kabi Switzerland), a private medical / pharmaceuticals company and the MoH for providing services and goods to the Renal Dialysis unit at UTH. The MoU basically provides that Sky/Fresenius can open up services across Zambia, by jointly investing in the services per hospital. The MoH pays Sky for the goods, maintenance costs, etc, but Sky Pharmaceuticals also invests in the service through providing technical support, etc, to the unit. However, the practice has been challenged by insufficient funding from the MoH (UTH) to the service, etc.

During the process of developing the Sky Pharmaceuticals MoU, the UTH also came up with an idea to set up a kidney replacement unit (nephrology unit) through a similar arrangement, this time with institutions in Egypt and Saudi Arabia. However, the recent developments in the Arab region has contributed to these plans not yet being materialized.

The MoH has approached the Apollo group in India. The aim was to set up a joint venture PPP with UTH for specialist services, thereby reducing Government expenditure for sending patients to India for specialist care. So far the project has not become a reality.

*Merging of PPP unit and ZDA*

Quite recently, President Michael Sata has suggested merging the Zambia Development Agency (ZDA) and Public Private Partnership Unit in the Ministry of Finance to establish an Industrial Development Commission, a move that is expected to enhance capacity for the Zambia’s economic development.


5.17 **MoUs and other similar opportunities**

In addition to the mentioned PPP initiatives, there are other types of MoUs that have been signed between smaller private sector operations (eg, Colalife and the MoH for supply of medicines to the rural areas). Further, other developments are in the
pipeline, such as setting up private pharmaceutical and private clinical service outlets in the districts that shall have a private-driven health insurance scheme as a basis. Potential partners are working on such plans, for example Barclays Bank in collaboration with GlaxoSmithKline and the Novartis Group, etc.

A very interesting trend of late has been that Government has made various approaches towards private hospitals in Zambia to make use of the PPP policy aiming to create joint investment arrangements with external institutions. A representative of the MoH has stated that there is no present case of firm external investments in Zambian private hospitals that would enable the Government to enter into PPPs with such private hospitals (such as Lusaka Trust Hospital, Care for Business, Pearl of Health, etc). The conceptual idea at the MoH is that if private hospitals could have their services enhanced to a level where they are able to provide quality / high cost specialist services, then the MoH could enter into PPPs with the local private institution. Bearing this in mind there is an obvious opportunity that via this kind of investment in the private sector, it could be possible to provide services within the public sector system.

As mentioned earlier, 650 prefabricated health posts are to be constructed around the country. For this there has been a special arrangement between the Ministry of Finance and Exim Bank of India. The Indian government has approved a USD 50 million (about K260 billion) loan to Zambia to finance the construction of prefabricated health centres in all provinces.

A specific initiative with bearing on the health sector is an investment facility called the Triangle of Hope (TOH). The Government of Zambia and the Government of Japan (JICA) has set up TOH to support PPP arrangements in all sectors. JICA was the provider of technical assistance services for the TOH, however the facility has not been fully utilized. According to ZDA and Ministry of Commerce, Trade and Industry, TOH is still “alive”, however to what degree activities are still carried out is uncertain. Obviously, this facility presented incentives to the investor serious to invest in Zambia, particularly when entering into a PPP. According to a Government source, the playing field for accessing TOH support is neutral in and TOH should not be favoring service providers of any specific origin. When considering activities in Zambia on a larger scale, there are good reasons to explore what a set-up with TOH may include, for example for specialized hospitals.

Sources: ‘650 Health Posts Coming’; Bonface Fundafunda

5.18 Health insurance in Zambia

General

The concept of health insurance is fairly recent on the Zambian market. Before the 1990’s (pre liberalization of the Zambian economy), health services were mainly provided by the government free of charge to all citizens. This was done through Government funding to the MoH, which in turn funded Government health providers. Accordingly, social health insurance was virtually nonexistent and this largely remains the case today.
Mandatory social health insurance has been discussed in Zambia for over ten years. Government is now in the latest stages of the process to develop a National Health Fund/Social Health Insurance Scheme mainly aiming at achieving universal access to health care and improving the quality of service delivery. The present status and aims of mandatory social health insurance will be described towards the end of this chapter.

So far, health insurance has been an underutilized area of health care financing in Zambia. Health insurance policies seem to be mainly targeted at companies and their employees, and as a consequence limiting health insurance to the formal sector employees. Insurance companies seem to be generally averse towards the provision of health insurance on the individual level. This is attributable to the novelty of the concept of private health insurance in Zambia, which is partly a result of the history of free health care services and some aspects of fraud prevalent from both providers and the insured. This limits the extent to which private health insurance may be relied upon as a source of health care financing in the country. However, there have been massive sensitization and education programs, and as a consequence there may be some room to rely on health insurance in the future provision of health care in Zambia.

**Private health insurance**

In March 2012, according to the regulator of insurance companies in Zambia, Pensions and Insurance Authority (PIA), there were 22 licensed insurance companies in the country. Of the 22 companies, PIA listed seven as providing health insurance policies. These are:

- Hollard Life Assurance Zambia Limited
- Zambia State Insurance Corporation (ZSIC) Life Insurance Limited
- Madison Life Insurance Zambia Limited
- Barclays Life Zambia Limited, Professional Life Assurance Limited
- African Life Assurance Company Limited
- Metropolitan (Momentum) Insurance Zambia Limited
- Professional Life Assurance Zambia Limited

In reality however, of these 7 insurance companies, only 4 were actually offering health insurance policies as of 1 May 2012. These are:

- Madison Life Insurance Zambia Limited
- Professional Life Assurance Limited
- African Life Assurance Company Limited
- Momentum Insurance Zambia Limited

An overview of the policies provided by the four insurance companies above is available.

The recent introduction of the concept of private insurance on the Zambian market implies that it is still an underappreciated and underutilized tool. This is especially the case with low income earners in rural and peri-urban areas of Zambia. These individuals would see little need to spend their meagre resources to simply insure against an eventuality that may or may not occur.
Mandatory Social Health Insurance

Steps have been taken to implement a mandatory Social Health Insurance starting on 1 January 2013. The planned scheme does not guarantee universal coverage. Further, it is a phased scheme, meaning that in 2013 only government employees will be included (with benefits to be offered from May 2013) and in 2014 private sector employees. It is the intention that a National Social Health Insurance Authority shall be created to run the scheme. The authority shall manage a National Health Insurance Fund to fund the scheme from pay roll contributions and Government. The ambition is to include informal sector employees in 2015. However, before that, a Household Health Expenditure Survey is projected. At present, a design and actuarial assessment has been concluded and work is being done to finalize the benefits package. Many challenges, such as how to complement the “free primary health care” that is already in place and the aggressive time plans for introducing the scheme, etc.

Challenges naturally include organizational consequences. One of the key components of such a scheme is that a reimbursement system has to be implemented in order to compensate providers (be it public or private) for services rendered according to the insurance. Without such a reimbursement system there is a risk that revenues from fees become effectively just another tax. This has organizational implications, as there has to be an agency – usually independent – that both collects fees and pays providers. On the provider side, entities will need to document services rendered per individual, charge for these services and collect their payment.

Technical advisors in the MoH has advocated a more evidence-based-approach and one that has more focus on the purchasing side rather than on resource mobilization. Such an approach would assist in addressing issues of efficiency prior to any resource mobilization issues.

The issue with Social Health Insurance in Zambia is that the decision to commence a scheme seems to have been taken without properly reflecting on its rationale. It seems therefore as though some difficult policy decisions lie ahead. Another key challenge in this respect is the limited capacity within the MoH to implement whatever financing reforms are required. Even if the discussion has been on-going for a number of years, the internal capacity within the MoH to manage these issues has not been strengthened. On the partner side, a number of donors are interested in supporting health financing issues, most active is the Clinton Health Access Initiative (CHAI). However the alternatives are limited as the introduction of a social health insurance has been presented as an irreversible policy decision.

It follows from the above description, that there is clear need for contributions on an institutional level to assist the MoH in achieving an adequate set-up of a Social Health Insurance in Zambia.

6. **Opportunities in the health sector**

In this chapter a general description of key opportunities in the Zambian health sector are presented.

6.1 **Hospital management**

Hospitals in Zambia could benefit from technical and managerial improvements around patient management, quality assurance and other operational systems. Many hospitals, both public and private, are keen to look at cooperation on the institutional side or finding ways to enhance levels of care by entering into a PPP structure or similar with a foreign partner.

6.2 **Establishment of Specialist Hospitals (Centres of Excellence)**

*General*

Zambia lacks capacity for specialist diagnostic and treatment services to treat cardiovascular, liver, renal and cancer diseases.

The rise in non-communicable diseases requires specialist treatment and hi-tech medical equipment, to meet the demand considering the state of medical equipment in some public health institutions.

Many patients require and seek for treatment of these diseases in health facilities in South Africa, United Kingdom, India and the US, where the Government of Zambia and private Zambian individuals spend not less than USD 10,000 per treatment. For example, there are currently 120 cancer patients per year seeking overseas treatment (ca USD 20,000 per case). Further, approximately 110 Zambians are seeking open heart surgery per year at ca USD 30,000 per case. South Africa, with the best medical / health facilities / services in the region, is considered an expensive provider.

To cut on the costs related to treatment in foreign health facilities, Zambia offers opportunities for the private sector to develop health facilities that could provide specialist medical diagnostic and treatment in the following areas:

- Cardiology
- Radiotherapy
- Neurology
- Urology
- Traumatology
- Nephrology & Dialysis
- Diabetology
- Dermatology
- Physiotherapy
- Key hole surgery
- Stem Cell Therapy
- Other surgical interventions

The UTH is overburdened with problems, overcrowded and is poorly funded. However it has the potential to become a Center of Excellence in certain areas.

_Cancer treatment_

As has been shown under section 5.8, the Government has expressed ambitious aims for cancer treatment facilities in the coming years. The development is supported on the highest possible Governmental level. To a large extent, the need is for simpler cancer screening and diagnostics equipment but also for treatment facilities. And to some extent high end products are on the wish list, including linear accelerators and software for patient records and bundling the operations of the CDH and its satellites. There is a genuine interest for the product range and for knowledge from Sweden in terms of establishing and financing a modern cancer center.

The CDH is looking for relatively simple but efficient cancer treatment technology but also some upscale equipment. It might make sense at this stage to meet the demand of relatively simple technology with an affordable price strategy.

*Sources: ‘Health Sector Profile’, ‘International Launch of the Zambian National Health Strategic Plan, 2011-2015’*

### 6.3 Establishment of Hi-Tech Diagnostic Centres

As has been shown in this report, there is a lack of diagnostics and laboratory facilities in Zambia.

The Government has expressed its recognition of the fact that most referrals to foreign health facilities are originating from inadequate diagnostic and laboratory equipment. The Government health facilities have a total of three computed tomography scanners (CT scanners) and one Magnetic resonance imaging scanner (MRI scanner).

The MoH has plans to set up at least three modern diagnostic centres in Livingstone, Lusaka and Ndola.

*Source: ‘International Launch of the Zambian National Health Strategic Plan, 2011-2015’*

### 6.4 Education (Training of Health Personnel)

The public health sector in Zambia has for a number of decades been experiencing a human resource for health crisis. Public health facilities in Zambia are functioning at a capacity of 50 percent of qualified health personnel.

Currently Zambia has only two public medical schools (one just started in 2011) and just over twenty nursing and paramedical schools. There are more than 30,000
qualified candidates aspiring to be enrolled in health training institutions whose absorption capacity can only take 1,300 students throughout the country.

Government views private sector investment in human resources development in the health sector as an added value that will significantly contribute to increasing numbers of qualified health personnel in the health institutions and offset the effects of the brain drain in the health sector.

Government has prioritized scaling up of output of human resources and the construction of a national training center. Two medical schools have been set up by the private sector in the recent past. However, a lot remains to be done in these areas.

Zambia has only four oncologists and all of them are working for the Cancer Diseases Hospital (CDH). The capacity of the CDH is constrained by the limited number of specialist doctors, nurses and radiotherapists. Lack of screening facilities is a factor that reduces the intake of patients. The capacity building needs are enormous. Suggestions put forward include sending doctors or students for training in Sweden for a limited time period. A national cancer control plan needs to be drafted with foreign experts.

Source: ‘International Launch of the Zambian National Health Strategic Plan, 2011-2015’

6.5 Telemedicine, eHealth, mHealth

There has been a lot of focus on establishing general systems for telemedicine and mHealth solutions for specific diseases and it is indeed an area of development at this stage. Due to the lack of coordination in this area of intervention from the MoH side, it is difficult to get a good overview of opportunities. However, seen as just another area of products and needs there are most certainly needs for off-the-shelf mHealth niche products.

6.6 Mobile and Emergency Health Services

The Mobile and Emergency Health Services has inadequate human resources and is lacking a national level coordinating mechanism. In 2010 the MoH established the Directorate of Mobile and Emergency Services in order to strengthen the provision of health care through this mode of delivery. Issues arise as to what services could and should be performed in the mobile health services. Various types of expertise service providers could be relevant.

6.7 Pharmaceuticals – general

Infectious diseases, including HIV/AIDS, malaria and tuberculosis continue to be the main drivers of needs in the pharmaceuticals in Zambia. There will however also be a growing need for niche, or new, products for cancer, diabetes, cardiovascular and other lifestyle diseases. Obviously, the development of cancer treatment facilities will reinforce the needs for oncology pharmaceuticals.
The annual value of the pharmaceuticals market in Zambia is roughly estimated to be ca 100 million USD in 2012, whereof approximately 30 percent are branded products.

There are approximately seven pharmaceuticals manufacturing companies in Zambia, most of which are engaged in the manufacturing of basic pharmaceutical formulations. As a result ca 5 percent of the essential drugs are manufactured locally, mostly generic pharmaceuticals. Approximately 50 trading companies import 95 percent of the consumption. Most of the essential drugs, approximately 80 percent, are imported from India. However, Chinese former suppliers to the Chinese state have recently started to provide a competitive alternative leading to fierce competition in the generic market in Zambia.

Branded pharmaceuticals are typically supplied by international manufacturers acting through subsidiaries and local distributors.

The fierce market has led to some interesting, but less encouraging, developments. An example of the price situation for pharmaceuticals is Novonordisk, who in supplying insulin to the Zambian market, is selling its products at only 20 percent of its corresponding sales price in Europe. Similar pricing is applicable for prostate cancer drugs.

For a high cost supplier it could be relevant to identify niche pharmaceutical products to meet the needs in areas where there are only limited numbers of suppliers with relevant treatment products. It should be remembered that Zambians still have very high thoughts of the European manufacturers of pharmaceuticals.

One way to influence development of cheap generics and fierce price competition would be a Government initiative to more closely monitor the generics sold. It is often that the quality of generic drugs from local, Chinese or Indian sources does not live up to standard, and therefore become a health hazard. In order not to compromise on health, there may be good reasons for brand manufacturers to find ways to influence the decisions makers based on pure health concerns. Another way is to develop second brands (one example is German pharmaceutical company Novartis) and/or find ways to sell specific products aimed only at specific markets and in those markets sell pharmaceuticals at a lower price than in Europe.

Further, there is the option available to contribute long term to activities in transparency forums such as MeTA (Medicines Transparency Alliance), which has as its goal to increase access to essential quality assured medicines, especially for the poor and vulnerable through increased transparency in the pharmaceutical sector.

**6.8 Pharmaceuticals – manufacturing plants**

In its quest to provide affordable good quality, safe and efficacious drugs, the Zambian Government has identified a number of areas that require investment. These include:

- Financing the procurement of essential drugs and equipment
- Storage and distribution of drugs
- Development of community pharmacies i.e. contracting/franchising out pharmaceutical services
- Supply/local production of cheap but quality essential drugs and raw materials e.g. ARVs and malaria drugs which are on huge demand in both Zambia and the region
- Drug research and development i.e. research in medicinal materials used in home remedies and by traditional healers

To this effect Government has announced a 5 year tax holiday for existing and future manufacturers and waived import duties and taxes on all raw materials, printing and packaging material for the pharmaceutical manufacturing Industry.

Government also has waived all Import duties and taxes on capital expenditure for the Pharmaceutical Manufacturing and Printing Industry.

Zambia Development Agency recommends investment by foreign pharmaceutical companies in pharmaceuticals production plants in the MFEZ zones, once these have been implemented.

*Sources: ‘Health Sector Profile’, Moses Mwanakatwe*

**6.9 Equipment**

There are good opportunities in Zambia for affordable medical equipment, supplies, and medicine. Further, there is no established maintenance industry to service medical and health equipment. Over 90 percent of MoH equipment are lying idle in health institutions due to lack of maintenance and repair facilities.

High potential for growth can be seen in the market for imaging devices and infectious disease diagnostics. Supported by equipment modernization projects in the public sector, the annual value of the medical imaging market in Zambia is roughly estimated to be 10 million USD in 2012. The infectious disease diagnostics market is roughly estimated to be 7 million USD.

As has been described under sections 6.2 and 6.3 there are good opportunities for provision of (high end) medical equipment in specialist areas.

*Sources: ‘Health Sector Profile’, ‘Strategic Analysis of the Healthcare Industry in Zambia, Executive Summary’*
6.10 Laboratories

In Zambia, there is a very limited availability of medical, health and dental lab equipment and spare parts.

Laboratories are pivotal in epidemiological surveillance and in the control of infectious diseases and epidemics. However, Zambia has a very limited number of laboratories dotted around the country in hospital premises. However these fail to meet national and international standards due to lack of basic inputs and maintenance.

Existing investment opportunities in the laboratory industry are:

- Construction and rehabilitation of medical laboratories.
- Procurement of standard laboratory equipment and in house maintenance of existing equipment.
- Promotion of research in laboratory services
- Need for pharmaceutical products

Source: ‘Health Sector Profile’

6.11 Health insurance

Social Health Insurance

In this area where there is substantial development right now, provision of technical assistance seems to be the best opportunity in this area, where a lot of focus is at present, see below.

Private Health Insurance

Given the unclear situation of social health insurance and the expanding needs of a growing middle class, there is clearly need for private health insurance. The trends of development of private health facilities in the urban areas and the categorization of care into standard/premium/private in the public institutions are contributing factors. These recent developments necessitates private insurance arrangements. As shown above there are still only a few companies providing private medical insurance in Zambia.

The private health insurance market is emerging but small. The lack of regulatory framework prevent any real development. One potential area, not large but substantial, is an insurance/managed care schemes for expatriates and people working for international companies/missions.

Sources: ‘Health Sector Profile’, ‘Health Care Development and Business Opportunities in Zambia’, ‘An assessment of the Zambian healthcare market’
6.12 Technical Assistance

Long term needs for technical assistance could be relevant in the following areas:

Development of national clinical programmes of care: Development of national clinical care programmes and prioritize packages of high-impact interventions in scaling up health services. In accordance with the NHSP, Zambia has decided to strengthen its efforts to address non-communicable diseases. Perhaps especially for life-style oriented diseases, it is pertinent to plan for all three of the types of interventions possible to address health problems:

- Prevention, both primary and secondary level.
- Treatment and care of the disease.
- Rehabilitation of functions as and when the acute problem has been addressed but with negative consequences on the health status.

In a resources constrained setting, the prudent planning and balancing of resources is even more accentuated. It is likely that early prevention and addressing life-style patterns at an early age will save both years of life and money for the individual and the society.

Therefore, the NHSP suggests that clinical programmes (guidelines) of care are developed to guide on what interventions that will be implemented in the Zambian health services. The guidelines should be based on evidence on the efficacy and cost-effectiveness of different interventions and should ideally be agreed upon in consensus by the professions involved in the preventions, treatment and rehabilitation of these conditions.

As a model for such an arrangement, methods to be used and the process for development of national guidelines, the Swedish National guidelines and could serve as support.

Sector coordination: Sector coordination of MoH, Government agencies and cooperating partners requires significant attention and effort. The integration of a technical assistant to the proposed SWAp secretariat would signal that the responsibility to make sector coordination work is a joint one and not only a MoH responsibility. It would also limit the resources required by the organizations charged with being lead partners in the sector.

Management Development: The management development programme will require significant effort to be implemented. Information on international best-practices will be essential in order to establish adequate organizational set-up for the health sector.

Internal Audit: Many of the activities to be implemented in the Governance and Management Capacity Strengthening Strategic Plan are focused on fiduciary issues. Strengthening the internal audit function could assist in both adopting a risk-based approach and introducing performance auditing.

Health financing: For the contemplated Social Health Insurance Scheme, support is currently being provided both through the Clinton Health Access Initiative and
through UNZA. Other Cooperating Partners such as the World Bank and the EU have also indicated interest to support the efforts, which could be capitalized upon.

Pre-hospital and emergency care specialists: In 2011, Zambia arranged a study tour to Sweden to explore the principles and structures applied in Swedish pre-hospital and emergency care services. The study tour has been documented in a separate report. Zambia may be looking for continued exchanges between the Swedish organizations that were visited and their Zambian counterparts.

IT Solutions cancer care: IT solutions in all areas and telemedicine are desperately sought after, not least a system for referring efficiently between future district screening centers.

Sources: ‘Final Report, Policy Advisor to the Permanent Secretary, Government of Zambia’, “Draft Concept Note, Clinical Programmes of Care”, Adam Lagerstedt

6.13 Need for innovation in treatment

There is an accentuated need for innovation in many areas of care. Highlighted in this report are however the following:

Oncology – the CDH is looking to enhance, not only the availability of standard care in regional hospitals, but also level of cancer treatment by introducing more advanced equipment such as a linear accelerator.

Cardiovascular – there is awareness of the growing problems with NCDs in Zambia, and a main focus for development of both public and private hospitals is cardiovascular diseases.

Infection control – the UTH has policies and programs in place but does not seem to be fully up to speed, for example Lusaka Trust Hospital has shown interest in new solutions in respect of infection control.

6.14 Private hospitals development

Lusaka Trust Hospital has visions for developing its premises, both in respect of new partners and in terms of comprehensive design overview. Fairview Hospital is seemingly embarking on a long term development plan, however details remain to be confirmed. Clearly, once financing is in place, private hospitals may have a less bureaucratic way to find its ways to new investments in facilities and equipment.

6.15 Medicinal plants

The Government welcome investors for the growing of medicinal plants (Quinine, Artemisian derivatives etc.).

Source: ‘Health Sector Profile’
6.16 Medical Tourism / Health Tourism

Medical tourism or health tourism refers to the increasing tendency among people to travel abroad in search of health options packaged with tourist attraction. ZDA and MoH are actively promoting Livingstone and the Victoria Falls, Lumangwe/Kabwe Lume Falls and others sites as special opportunities for the private sector to develop medical tourism.

Sources: ‘Health Sector Profile’, Amadeus Mukobe

6.17 Other

Elderly care does not yet seem to be an area of opportunities in Zambia, due to the demographic situation with few older people and existing extended family system. Naturally, however, with changes in lifestyles (urbanization) and with an enhanced health situation there will of course be opportunities in this area in the future.

Eye care has not been covered by this report, but could – if relevant – be addressed at a later stage.

7. Investment conditions

7.1 Health industry drivers and restraints

<table>
<thead>
<tr>
<th>Industry challenges:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- High price sensitivity</td>
</tr>
<tr>
<td>- Cultural differences</td>
</tr>
<tr>
<td>- Lack of transparency in general and in public tendering processes in particular</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Market drivers:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Growing private sector investment in the last five years</td>
</tr>
<tr>
<td>- High burden of infectious disease</td>
</tr>
<tr>
<td>- Entry lifestyle diseases</td>
</tr>
<tr>
<td>- Cancer treatment investments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Market restraints:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Lack of transparency and limited accessibility to ministries and agencies</td>
</tr>
<tr>
<td>- Lack of funding</td>
</tr>
<tr>
<td>- No adequate social health insurance, limited private insurance</td>
</tr>
<tr>
<td>- Poor infrastructure</td>
</tr>
</tbody>
</table>
7.2 Recent reforms

Zambia has undertaken reforms that have made it easier for enterprises to do business. Reforms have included among other things:

- abolition of price controls,
- liberalization of interest rates,
- abolition of exchange rate controls,
- 100 percent repatriation of profits,
- free entry investment in many sectors of the economy, including the health sector,
- trade reforms aimed at simplifying and harmonizing the tariff structure,
- and removal of quantitative restrictions on imports.

Further, for example the time for business name registration and company incorporation has been shortened from 21 days to 3 days. Typically, a foreign investor would however use local service providers to set up a local legal entity. The myriad of license requirements has made substantial reform within the Business Licensing Reform Programme a necessity.

A foreign investor can acquire and obtain land titles as long as the investor has been granted investor status under the Lands Act or any other law pertaining to investment in Zambia. Industrial land has been specifically identified for the establishment of multi facility economic zones (MFEZs) and industrial parks for investment purposes. Five MFEZs with special features for investors are under creation, including the Lusaka South MFEZ and the Lusaka East MFEZ.

Source: ‘‘Highlights of the Policy Framework for Investment in Zambia of April 2011’’

7.3 Incentives

A foreign investor can own a company limited by shares. Zambia has no foreign exchange controls and foreign investors are free to repatriate 100 percent of profits and dividends, management fees, interest, profit, technical fees, etc after settlement of all local obligations.

The ZDA Act provides for additional incentives for investments of USD 10 million in priority sectors involved in value addition, including the health sector.

*Multi Facility Economic Zones (MFEZ) Incentives*

Multi-Facility Economic Zones (MFEZ) are designed in order to promote and facilitate domestic and export oriented business in Zambia for the country’s industrial and economic development.

At present there are five MFEZ areas planned in Zambia, whereof two are to be situated in Lusaka.

MFEZ Priority Sectors within the health sector are:
(i) Manufacture of pharmaceutical products;
(ii) Repair and maintenance of medical equipment;
(iii) Provision of laundry services to medical institutions;
(iv) Ambulance services;
(v) Medical laboratory services;
(vi) Diagnostic services; and
(vii) Other medical services.

The following incentives have been provided for investments in the health sector under the Zambia Development Agency Act:

- Zero percent tax rate on dividends for a period of five years from the year of first declaration of dividends.
- Zero percent tax rate on profits for the first five years for years six to eight, only 50 percent of the profits will be taxed and for years nine to ten, only 75 percent of the profits will be taxed.
- Zero percent import duty rate on raw materials and capital goods for five years.
- Deferment of value added tax (VAT) on machinery and equipment including trucks and specialized motor vehicles imported for purposes of the investment.

The main objective of the MFEZ programme in Zambia is to catalyze industrial and economic development through increased activity in the manufacturing sector where value addition to the numerous natural and agricultural raw materials hitherto exported in raw form will be processed for purposes of enhancing both domestic and export oriented business. The MFEZ should enhance the expansion of the industrial base of the country and increase the competitive stance of Zambian firms in the region.

Source: ‘‘Highlights of the Policy Framework for Investment in Zambia of April 2011’’

7.4 Protection of property rights

The Ministry of Commerce Trade and Industry (MCTI) and the Patents and Company Registration Agency (PACRA) are the leading institutions with regards to the design and implementation of intellectual property laws. Considerable effort has been made to modernize and align Zambia’s intellectual property legislation to international standards. Consequently, the Intellectual Property Rights Policy and its implementation plan, aimed at merging Intellectual Property and Copyrights Laws, were launched in 2010. These measures are expected to improve the environment required by the private sector to encourage creativity and innovation.

Zambia is also a signatory to a number of international agreements on patents and intellectual property such as the World Intellectual Property Organization (WIPO), Paris Union, Bern Union, African Regional Industrial Property Organization
(ARIPO), and the Universal Copyright Convention of UNESCO. Enforcement procedures governing intellectual property are coordinated by the Intellectual Property Unit (IPU) of the Zambia Police Service.

The courts in Zambia are considered to be reasonably independent, however contractual and property rights enforcement is weak and final court decisions can take a long time.

Source: ‘Highlights of the Policy Framework for Investment in Zambia of April 2011’

7.5 Investor protection and international agreements

The Zambian Constitution and Zambia Development Agency Act provide protection for property rights of investors. Property may only be expropriated by an Act of Parliament. Moreover, the law states that compensation must be at a fair market value and convertible at the prevailing exchange rate.

Land, which is held under 99-year leases, may revert to the Government if it is deemed to be undeveloped. So far, no privately held land has been reverted. Also, the investment code stipulates the Zambian High Court as the first resort for internal dispute settlement. Failing that, the parties may go to international arbitration, which the state recognizes as binding. Zambia is also a party to the World Bank’s Multilateral Investment Guarantee Agreement and the African Trade Insurance Agency, and is a member of the International Center for the Settlement of Investment Disputes (ICSID) and the United Nations Commission of International Trade Law (UNCITRAL).

Furthermore, the Government signs Investment Protection and Promotion Agreements (IPPAs) with private companies and states as one of the measures aimed at promoting and facilitating large and impactful investments. Since 2008, the Government has signed IPPAs with 36 private companies.

IPPAs are bound to existing national laws and do not provide further guarantees. Zambia has signed eleven (11) IPPAs with other countries since 1966 and just two of them have been ratified (with Germany and Switzerland).

More efforts have been put in place to sign agreements with Zambia’s priority countries. According to information received, no IPPA has been entered into between the government of Sweden or a Swedish enterprise and the government of Zambia.

Source: ‘Highlights of the Policy Framework for Investment in Zambia of April 2011’, Martinet Songuile Maloyo
7.6 CSR initiatives

Introduction
In accordance with the Vision 2030, one challenge for Zambia in achieving middle-income status is to ensure that investors and the private sector are expected to provide a degree of CSR in parallel to business activities.

The concept of corporate social responsibility (CRS) has recently gained ground in Zambia. Some local and foreign enterprises tend to follow generally accepted CSR principles while other foreign firms ignore complex issues such as labor rights, environmental protection, bribery, corruption and human rights. The firms who conduct themselves within the framework of CSR are viewed favorably by the government and the communities.

The Kansanshi example
One good example of CSR initiatives with bearing on the health sector are the CSR activities carried out by the Canadian mining company First Quantum Minerals (FQM) through an initiative in the Copperbelt mining town of Solwezi.

The Kansanshi Foundation was established by FQM in 2007 and has since changed the economic landscape of Solwezi, the provincial capital and beyond. Kansanshi Foundation is a non-profit making organization funded by the Kansanshi mine board to upgrade physical and social infrastructure, Kansanshi Foundation had a budget of USD 6.1 million for the year 2010/2011.

The Kansanshi Foundation has prioritized various projects which include i.a. the construction of the foundation’s Trust School in the new development area at a cost of USD 4.9 million and a Community Livelihood Project to cover fish and poultry farming and irrigated vegetable farming; purchase and installation of kitchen equipment at Solwezi Technical High School, construction of a health post and staff houses at Israel Resettlement, and a range of other projects.

One of the latest projects include an investment of USD 1.5 million in Solwezi General Hospital renovations and upgrade funded and managed in collaboration with the provincial health office.

A comment from a local influential, a Council of Elders’ chairperson, in respect of the Kansanshi CSR initiatives was: “This is what we expect from the mines. Kansanshi has approved a K30 billion budget and Lumwana mine is also putting in a lot and if they continue like this, we will have no quarrels with them”.

Conclusion
The above description shows that there is a high expectation on private investors to contribute in terms of CSR activities in the country. In parallel to the increased focus on receiving expected tax revenues (such as the Extractive Industries Transparency Initiative) by the new Government and there are currently calls for making CSR programmes mandatory.

Source: ‘Kansanshi foundation CSR Agenda’, ‘Van Wyk urges mandatory corporate social responsibility programmes’
Investment climate

Zambia has moved down a few notches from the 2012 to the 2013 Doing Business Report. For 2013 Zambia ranks 94th in the world for the relative ease of doing business as presented by the World Bank, however ahead of most countries in Southern Africa except for South Africa (39), Botswana (59) and Namibia (87). The criteria measured are among others ease of starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency.

The fact that Zambia actually has a lower ranking for 2013 than for 2012 (and for 2011) has given rise to questioning within the Zambian establishment as to whether the reports are really able to reflect the most recent developments. One plausible explanation is however that very little reform in fact took place over the period when data was collected due to the elections in 2011 as well as subsequent concerns about stability.

When measuring such trends in investment climate, it is important to keep in mind that the new Government has reversed the sale of Zamtel (reversal of 75 percent stake sale to Laps Green, Libya, in 2010) and Finance Bank (reversal of sale to South African investors in 2011). The concession rights, held by a foreign investor, to operate Zambia Railways were reversed by a compulsory acquisition by the Government in September 2012. Immediately after the elections in 2011, investigations were lodged into the terms of the sale of 49 percent in the formerly state-owned Zanaco Bank to Rabobank (based in the Netherlands). These are all actions that may result in investors being nervous about investment in Zambia. However, at the same time the Government is strongly encouraging foreign investment.

These actions by the Government were the main reasons for credit rating agency Fitch to downgrade Zambia from “stable” to “negative” in March 2012.

Other recent developments that have created some worry are the following:

- Unclear direction on mining tax reform
- Sudden introduction of a law doubling minimum wage requirement
- Restriction on foreign currency transactions have some investors concerned, in practice a ban on dollar-denominated transactions for domestic transactions (international sales are excluded from the restriction).

Source: ‘Fitch downgrades Zambia's economic outlook’, ‘Investors Rattled by Zambian reforms’

Investment conferences and similar initiatives

With the high growth figures for the countries in the southern African region, Zambia has seen a growing interest from foreign investors from Asia, Europe and the Americas. Investment forums and trade delegations are common.
A substantial interest has been seen from the US side. In November 2012, a US trade delegation led with some 14 American firms by the US Minister of Commerce and Trade visited Zambia and South Africa. Zambia is eligible for trade benefits under the African Growth and Opportunity Act (AGOA), which provides duty-free/quota-free access to the U.S. market for most goods, including textile and apparel.

As mentioned earlier under section 3.6 there are various Asian initiatives in this respect.

Source: ‘US chamber of commerce website’

### 7.9 Business risks – corruption

**General**

Zambia ranks 88 out of 176 countries on the annual Corruption Perceptions Index (CPI) 2012 published by Transparency International. This is a slight improvement since 2011 when the ranking was 91. The CPI measures perceived level of public-sector corruption in countries and territories around the world. Zambia is ranked 11 in Africa with the score 37, and is ranking behind for example Botswana score 65, Rwanda score 53, Namibia score 48, Ghana score 45, South Africa score 43 and Liberia score 41.

The general perception in the Zambian society is however that the levels of corruption have gone down with President Sata’s new Government, which has expressed a zero tolerance for corrupt practices. Mass media, both government and private, is reporting on various corruption issues on a daily basis. After the CPI 2012 was launched in early December 2012, there has been sharper criticism that the Government performance in the fight against corruption is in contradiction with the pronouncements made by President Sata. Transparency International Zambia has stated that it is concerned that the fight against corruption has not been translated into appropriate, visible and tangible action by the public service and law enforcement agencies that seem to be going on a business as-usual approach.

Positive signs are that the Government is planning to make the Anti-Corruption Commission (ACC) more independent, that the ACC will receive more funding and that new legislation in the form of an Access to Information Bill is planned to enter into force in 2013.

Cynically, we might refer to corrupt practices as “aggressive marketing”. However, naturally, when doing business in the less mature markets, one needs to be aware that there may be room for more aggressive marketing in its true sense than we are used to in Sweden or Europe.

**Good examples**

It should be noted that there are several good examples of consistent sound business conduct over time resulting not only in good development of the business but also in
an outstanding reputation in the market. One example of this is Engen Petroleum Zambia (filling stations). Engen started its operations in Zambia in 1998 and has grown tremendously during the last 15 years. The official position is "uncompromising commitment to the highest levels of corporate governance and ethics, which we believe to be critical components of our long term profitability in Zambia". The position has been well received and respected by all stakeholders, including the Government.

Corruption scandal at MoH 2009

In May 2009, based on the Procurement and Systems Audit (CYMA Chartered Public Accountants and Management Consultants: Final Report Procurement and Systems Audit of the Ministry of Health, Ministry of Health February 2011) and anecdotes from a number of sources, misappropriation of funds was carried out by a number of officers. The scheme worked in such a way that workshops were planned and payments were made, however the planned workshop was never implemented. As the workshop was cancelled, the venue was contacted and some of the funding was returned in cash to those officers that arranged the workshop. At the discovery, former President Banda issued a statement indicating that no effort would be spared in going to the bottom of this scandal.

The disclosure had significant effects on areas such as staffing at the MoH. As part of the set of activities to prevent the destruction of evidence and to secure that staff was available for questioning, a total of 22 officers were either arrested or sent on forced leave. Even after the investigative process was finalized and some staff had been cleared, a number of staff never returned to the MoH. As a consequence, the MoH lost key technical competence which has not been fully restored to date.

Other consequences were financial. Funding mechanisms affected by the scam were basically Government funding and pooled-funding through the so called expanded basket. After the disclosure of the scam however, Sweden and all other cooperating partners stopped funding flows through Government systems. Further, other cooperating partners not directly contributing to the basket decided to at least withhold financing, awaiting a clearer picture of fiduciary arrangements. As a consequence, practically all external funding was stopped within two weeks from the disclosure. The consequences on the financing of health services were dramatic, especially at the local level. In the longer run, the effect was that operational funding at the district-level was cut back significantly and never restored.

Reactions from the donor side were not slow: "Sida will not accept any abuse of development money," Charlotta Norrbry, head of Swedish Development Coopretation in Zambia, told local media in May 2009.

On 11 June 2012, Ambassador Lena Nordström stated that that Sweden has decided to renew its partnership with Zambia following improved accountability and transparency made by the Ministry of Health and that Sweden was satisfied with the governance action plan which was established in response to the misappropriation of funds at the MoH in 2009.
Later on, the issue on mobile health clinics, which were tendered and procured from Chinese companies outside all agreed upon frameworks and without a clear analysis on how they supported the achievement of agreed-upon priorities in the NHSP 2006-11, further compounded the situation and made dialogue even more restricted between the Government and the cooperation partners.

It should be noted in this instance that the Global Fund to Fight AIDS, Tuberculosis and Malaria has had its own similar issues with the Government.

*Governance development in the MoH after the corruption scandal*

The disclosure of the MoH corruption scheme led to immediate efforts to strengthen in particular fiduciary systems through a number of activities in an agreed upon Governance Action Plan.

Since 2009, significant progress has been made in the area of governance, especially in the area of strengthening fiduciary systems. As an entry-point for continued governance strengthening, a Governance Action Plan was developed. The plan, which was developed in collaboration between Government and cooperating partners, outlined the pertinent steps to restore the fiduciary systems and the confidence in them. The plan was also linked to release of funding, especially from cooperating partners contributing to the expanded basket (fundamentally the Netherlands and Sweden), and defined three phases to be achieved, where each phase would trigger the release of a tranche (portion) of the funds. An additional requirement for the release of funds, however, was that progress made in relation to the Governance Action Plan was validated in an “Interim Verification Exercise” prior to any release of funds (requirement from Sweden). Further, Terms of Reference for a Procurement and Systems Audit and implementation thereof was carried out. While improvements in fiduciary systems were implemented concurrently, a Procurement and Systems Audit was also one of the fundamental activities to identify problems in the fiduciary systems and thus to restore confidence. The Procurement and Systems Audit was implemented by a team of independent consultants between September 2010 and February 2011. The audit gave observations and recommendations, but did not provide an action plan to directly react upon. However, the Governance and Management Capacity Strengthening Plan may be considered to be an outcome thereof.


### 7.10 Business risks – political

In a politicized setting like Zambia, the political risks are present on a daily basis, and they are closely linked to the risks for corrupt practices. Government agency decision making is often hampered by officials who are not ready to make decisions that would normally seem to be straightforward. Many decisions made on lower levels in a country like Sweden are made at the highest level in Zambia, due to personal risk aversion among Government agency officers.
In fact, just to get hold of relevant information from public sources for this report has been a challenge. There is a practice of keeping information confidential, which has historical reasons dating back to the failings of the one-party state of the 1970s and 1980s. The present elevated level of risk aversion is likely to be a result of the constant reorganizations and dismissals/appointments of key public servants since the new Government came into office.

7.11 Business risks – competition

It does not fall within the scope of this report assignment to deliver any competitor analysis. There may be reasons to consider such an option in case one of Swecare’s members decides to enter the Zambian market more actively. However, a short summary of a few matters related to competition would be the following.

Clearly, as touched upon earlier, the pharmaceuticals market is dominated by low cost providers, foremost from Asia. To some extent this is true also for medical equipment.

In respect of the market for health care equipment, it is worth mentioning one competitor as this competitor clearly has a certain grip on the market. Royal Philips Electronics along with local partner Specialised Systems Ltd has been able to secure a maintenance type contract with the MoH since 2010, a contract to cover the upgrade and maintenance of equipment in 71 Government hospitals nationwide. The contractual partnership means that Philips is executing a five-year Customer Support Agreement at a value of approximately EUR 25 million. The contract covers imaging, patient monitoring, operating theater, dental, and laboratory equipment. In continuation, the Customer Support Agreement maintains focus also on developing local capacity.

Philips has also been working with the MoH on healthcare workforce development since early 2003 as well as on programmes for capacity building in mother and child health care.

Ironically, before the 2011 elections the Philips contract was questioned by Sata due to issues as to whether the procurement had been done in a proper way.

Siemens is another global supplier considered to have a good presence in Zambia, along with GE Healthcare, Roche Diagnostics, Aloka Hitachi and Medison Co Ltd.

Sources: ‘Philips commits to playing a leading role in improving maternal and child health in Zambia’, ‘Rupiah is dismantling nation because of corrupt deals’

7.12 Business risks – donor activities

The Swedish policy of untied development support receives praise in Zambia, and contributes to Sweden’s good reputation in the region. In preparing this report, the consultant has experienced comments such as “Don’t be so shy!”, an exclamation that appreciates the Swedish traditions, but could also be interpreted to encourage a tighter relation between donors and industry. In cases when the health products are clearly
appealing, one can even sense a frustration on the Zambian side over this policy. These reactions confirm the fact that many other donor countries do not in practice adhere to such a policy. Swedish industry should be aware that funding from other countries might in some cases distort fair competition.

### 7.13 Business risks – hidden trade barriers

In any setting with different business/management cultures, hidden barriers for efficient business are present. For a western business leader there are certainly issues that take time to come to terms with in Zambia. The most obvious example is that there seems to be a cultural rejection of risk in Zambia, the devise being “less risk to do nothing than to take action”. It is possible to find ways to deal with this national trait, but it takes patience and a respectful attitude. Sometimes however it even requires the foreigner to just be firm in decision making and stating clear examples of effects of not taking the relevant action or obeying an order.

“Cash is king” is an old proverb that is still applicable in many respects. Bank services could be slow and many suppliers demand immediate payment.

Zambia is a very conservative society in social interaction. It is no understatement that it will pay off to be (overly) polite. In the Zambian context being polite is about taking time to chat about the weather and current issues, and not forget to say “How are you?” and to respond to the same in a polite way, not least in situations where it might seem much more efficient to get right down to business.

In terms of customer expectations, there are no obvious hidden trade barriers. Rather, companies of Scandinavian origin are generally perceived as more serious and reliable than local ones or even companies from other areas of the world. However, there is a high price sensitivity and quality could easily be compromised for lower price.

Naturally, in connection with the delivery of an order of pharmaceuticals or machinery it is useful to have established a service set-up that works locally. The value of a local servicing presence cannot be underestimated. When considering business activities in Zambia over a longer period of time, or even if only for a single procurement, it is considered to be crucial by local business people to have a local presence in order to be perceived in a proper way.

### 7.14 Trade Agreements

Zambia belongs to the 19-member Common Market for Eastern and Southern Africa (COMESA), which allows for preferential tariff duties between member states. In June 2009, COMESA launched a customs union. Zambia also belongs to the 14-member SADC, which established a free trade area in 2008.

Negotiations with the European Union over the Economic Partnership Agreement are ongoing. At the end of 2007, some African countries, among them Zambia concluded an interim Economic Partnership Agreement (EPA) with the EU.
Zambia and Sweden have entered into a double taxation agreement, effective from 1 April 1976, for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to Taxes on Income. The double taxation agreement is available at [http://www.zra.org.zm/sweden.pdf](http://www.zra.org.zm/sweden.pdf).

### References

#### 8.1 Documentation

Here is a list of documentation appearing as reference material in this report. All of the documentation is available on request as web links or as pdfs.

**Policy documents**

- Republic of Zambia (2012). ‘National Health Policy 2012’
- Zambia Development Agency (2011). ‘Health Sector Profile’
- President Michael Sata’s speech to the National Assembly on 21 September 2012
- Finance Minister Alexander Chikwanda’s budget speech on 12 October 2012

**Reports and surveys**

- CSO et. al. (2009). Zambia Demographic and Health Survey 2007 (‘ZDHS 2007’)
- Africa Health Workforce Observatory et. al. (2010). Human Resources for Health Country Profile (‘HRHCP’)
- Transparency International (2012). ‘Corruption Perceptions Index 2012’
- Citi Research (2012). ‘Zambia Macro View’ (of 9 October 2012)
- Frost & Sullivan (2010). ‘SADC Pharmaceutical Industry, Executive Summary’
- Jonsson et.al. (2012). ‘An assessment of the Zambian healthcare market’

Articles

- Achberger, Zambian Economist (17 October 2012). ‘Looking Beyond China’
- Chakwe, Post Newspaper (28 November 2012). ‘War against HIV far from over’
- Chanda, Times of Zambia (30 December 2011). ‘China to Restock Levy Mwanawasa Hospital’
- Chanda, BBC World, Focus on Africa (3 January 2013). ‘Zambia's battle against drug addiction’
- Chilemba, The Post (14 July 2010). ‘Rupiah is dismantling nation because of corrupt deals – Sata’
- OFID Quarterly (October 2010). ‘Boosting Cancer Care in Zambia’
- PlusNews (27 May 2009). ‘Zambia: Health funding frozen after corruption alleged’
- Shabongo, Times of Zambia (5 December 2012): ‘Interact More With Others, Govt Urges Disabled Persons’
- Sinyangwe, Post Newspaper (3 March 2012). ‘Fitch downgrades Zambia's economic outlook’
- Zimba, Times of Zambia (9 November 2011). ‘Zambia: An Icon for Regional Cancer Treatment’
- Wangwe, The Post (22 October 2012). ‘Van Wyk urges mandatory corporate social responsibility programmes’
- Whitehead, This is Africa (11 October 2012). ‘Zambia: Investors Rattled by Zambian reforms’
- Zanis, Lusaka Times (9 January 2013). ‘Ministry of Health to prioritize the enhancement of emergency health care services this year’

Other

- Business Innovation Facility (2012). ‘Project Profile Child and Family Wellness (CFW) clinics’
- Embassy of Sweden Lusaka (2012). ‘The Government of Sweden supports the Ministry of Health of Zambia with ZMK 33.5 billion’
- IAEA (2012). Technical Cooperation Programme description
- Lagerstedt, Presentation Swecare (2012). ‘Health Care Development and Business Opportunities in Zambia’
- Lishimpi (2012). ‘The Cancer Diseases Hospital Story’
- Philips. Press Release (19 July 2012). ‘Philips commits to playing a leading role in improving maternal and child health in Zambia’
- Simoonga, Presentation (2010). ‘Making the most of International Partnerships’

Websites

- www.amchamzambia.org  ‘US chamber of commerce website’
- www.medicinetransparency.org  ‘MeTA Zambia Phase 2 Snapshot’
- www.nmcc.org.zm/malaria_control.htm ‘National Malaria Control Centre website’
- www.ofid.org/COUNTRIES/Africa/Zambia.aspx  ‘OFID website’
- www.pinkandredribbon.org  ‘Pink Ribbon Red Ribbon website’
- www.ppa.org.zm  Zambia Public Procurement Website - ‘ZPPA Website’
- www.smecc.com/our-business/divisions/africa/zambia  ‘SMEC website’
- www.unicefinnovation.org/projects/project-mwana  ‘Project Mwana website’
8.2 Interviews

Here is a list of individuals interviewed as a basis for this report:

Mulenga Muleba, Crown Agents/Medical Stores Limited, 11 November 2012
Timothy Kantenga, Fairview Hospital, 14 November 2012 and 14 December 2012
Adam Lagerstedt, Embassy of Sweden, 22 November 2012
Moses Mwanakatwe, Zambia Development Agency, 26 November 2012
Martinet Songuile Maloyo, Zambia Development Agency, 26 November 2012
Dr Kennedy Lishimpi, Cancer Diseases Hospital, 27 November 2012 and 7 January 2013
Guy Phiri, Engen Zambia, 1 December 2012
Veronica Perzanowska, Embassy of Sweden, 3 December 2012
Dr Vincent Mosowe, APEX Medical University, 5 December 2012
Dr Lackson Kasonka, University Teaching Hospital, 7 December 2012
Dr Amadeus Mukobe, Ministry of Health, 7 December 2012
Laura Beres, CIDRZ, 8 December 2012
Dr Margaret Mambwe Siwale, Lusaka Trust Hospital, 11 December 2012
Dick Jonsson, University of Zambia, 12 December 2012
Ethel Kayonde, Zambia Public Procurement Agency, 11 December 2012 (telephone)
Björn von Hofsten, Ngansa Pharmaceuticals, 12 December 2012
Boniface Fundafunda, Ministry of Health, 13 December 2012
Dr Aditya Pratap Singh, Fairview Hospital, 14 December 2012
Huw Jones, The Virtual Doctor Project, 20 December 2012 (e-mail)
Dr Peter Mwaba, Permanent Secretary, Ministry of Health, 7 January 2013
Andronikos Antonopoulos, Fairview Hospital, 8 January 2013
Appendix 1

In December 2010 the CDH has the following equipment:

1. Treatment Units:
   - One linear accelerator
   - One Cobalt 60
   - One ortholvolage
   - One High Dose Rate Brachytherapy unit
   - External beam and brachytherapy Treatment Planning Systems
   - One Conventional Simulator
   - Mould Room and Workshop

2. Diagnostics Units:
   - Mammography
   - 4 dimensional ultrasound
   - One CT simulator
   - One MRI
   - Laboratory equipment microscopes, heamatology and chemistry machines
Appendix 2 – Selection of Private Hospitals

Lusaka
- Lusaka Trust Hospital
- Care For Business Clinic
- Fairview Hospital
- Corpmed
- Coptic Hospital
- Beit Cure, www.cure.org
- Mum’s Care Clinics,
- Victoria Hospital, www.victoriahospital.org
- Hilltop Hospital
- St. John’s Hospital
- Pearl of Health
- MKP Trust

Copperbelt
- Mopani Copper Mines (Wusakile) Hospital
- Nkana Mine Hospital
- Sinosam
This activity forms part of the Swecare pilot-project co-financed by Sida under their Business for Development (B4D) instrument