Georgia State University ScholarWorks @ Georgia State University

Public Health Theses School of Public Health

5-10-2014

Health Sector Strategy and Economic Development in Cameroon: History, Challenges and Perspectives.

Valery Nzima Nzima

Follow this and additional works at: http://scholarworks.gsu.edu/iph theses

Recommended Citation

Nzima Nzima, Valery, "Health Sector Strategy and Economic Development in Cameroon: History, Challenges and Perspectives.." Thesis, Georgia State University, 2014. http://scholarworks.gsu.edu/iph_theses/341

This Thesis is brought to you for free and open access by the School of Public Health at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Public Health Theses by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

There are complex and multisectoral interdependent relationships between health systems and economic development in Cameroon that have been barely described in literature. Since its colonial and post-independence periods, Cameroon has faced an important economic crisis, from the mid-80s to the mid-2000s, which was addressed through structural adjustment programs (SAPs). The combined effects of the economic crisis and the liberal and market based programs resulted in a significant reduction of social programs and public interventions that negatively affected the country's social structure, including the health sector. For example, life expectancy at birth moved from 53.3 years in 1986 to 49 years in 2000.

As the country regained macroeconomic stability, and attained the completion point of the Highly Indebted Poor Countries Initiative in the mid-2000s, there was some room to improve social development, including population health status. This was the motivation for the strategic planning process that started with the elaboration of *Vision 2035* (Cameroon's national development strategy for 2010-2035) followed by the *Growth and Employment Strategic Paper* (the first decennial implementation phase of *Vision 2035*). The health sector, one of the seven development sectors identified in the 2010-2019 phase of the implementation of the national development policy, updated its 2001-2015 strategic plan to cohere with the national development strategy, as well as to align its objectives with that of the Millennium Development Goals (MDGs).

The 2001-2015 health sector strategy was aimed at strengthening health districts, reducing morbidity, decreasing maternal and child mortality, and improving intersectoral management for health. In order to achieve these objectives, the health system has to face some

critical challenges that were either not efficiently addressed or simply not accounted for, mainly because of weaknesses in the baseline assessment, and the lack of formative evaluation of its theory of change and process implementation. These challenges include but are not limited to: i) a poor health information system that is highly centralized and not utilized at peripheral level where all activities are implemented; ii) structural and capacity building problems in health service administrations at peripheral and central levels; iii) the inadequacy of training of the health workforce with present and forecasted population health status.

Having analyzed these challenges, the author of this capstone proposed the following policy alternatives:

- The organizational chart of the Ministry of Public Health should be in accordance with that of the Health Sector Strategy programs and with the *New Financial Regime Act* that command results-based management and programs' autonomy.
- ii) Formative evaluation (needs assessment and process evaluation) should be conducted for any strategy or program prior to its implementation.
- iii) The programs of the Health Sector Strategy should be restructured into two vertical programs (disease control and prevention and health promotion) and one horizontal program that would support the vertical programs on aspects such as governance, health workforce, infrastructures, drugs and laboratory supply, as well as strategic planning and financing.
- iv) A rising portion of health districts' revenues should originate from the resultsbased financing mechanism in order to accelerate their strengthening by

- reinforcing their economic autonomy, health information system, and quality of service delivery.
- v) Health workforce capacity (for clinicians and health district management teams) should be reinforced in accordance with present and forecasted population health status, economic environment, as well as governance challenges.

Health Sector Strategy and Economic Development in Cameroon: History, Challenges and Perspectives.

By

Valery NZIMA NZIMA,

MD, University of Yaoundé I, Cameroon

A Capstone Submitted to the Graduate Faculty

of Georgia State University in Partial Fulfillment

of the Requirements for the Degree

MASTER OF PUBLIC HEALTH

ATLANTA, GEORGIA

2014

Health Sector Strategy and Economic Development in Cameroon: History, Challenges and
Perspectives.

By

Valery Nzima Nzima

Approved:

Bruce Clement Perry, MD, MPH

Committee Chair

Lee Rivers Mobley, PhD

Committee Member

Betty Armstrong-Mensah, PhD, MIA

Committee Member

April 21st, 2014

Date

I would like to express my sincere thanks and appreciation the entire School of Public Health staff of Georgia State University in general, and to my advisors, Dr. Bruce Clement Perry, MD, MPH, and Dr. Lee Rivers Mobley, PhD in particular for their assistance, guidance, continuous support, feedback, and advice.

Additionally, I would like to specially thank the US Department of State, the Fulbright program, and the Institute of International Education (IIE) for having offered me this wonderful opportunity to pursue this Masters of Public Health program that is a major step toward achieving my professional goals.

I am much obliged to the Government of the Republic of Cameroon that granted me permission to pursue this program, and to the Ministry of Economy, Planning, and Regional Development that hosted me during my three months practicum.

Last and not least, I would love to extend my deep gratitude to my lovely wife, and to my family and friends.

NOTICE TO BORROWERS

All theses deposited in the Georgia State University Library must be used in accordance with the stipulations described by the author in the preceding statement.

The author of this thesis is:

Valery Nzima Nzima

valerynzima@gmail.com

The Chair of the committee for this thesis is:

Bruce Clement Perry, MD, MPH

School of Public Health, Urban Life Building Georgia State University 140 Decatur Street, Suite 878 Atlanta, GA 30303

Users of this thesis who are not regularly enrolled as students of Georgia State University are required to attest acceptance of the preceding stipulation by signing below. Libraries borrowing this thesis for the use of their patrons are required to see that each user records here the information requested.

NAME OF USER	ADDRESS	DATE	TYPE OF USE

LIST OF ABBREVIATIONS

DALYs Disability Adjusted Life Years

FCFA Franc de la Communaute Financiere d'Afrique (or currency of the African

Financial Community in English)

GDP Gross Domestic Product

GNI Gross National Income

HIPC Highly Indebted Poor Countries

IMF International Monetary Fund

MDGs Millennium Development Goals

MINEPAT Ministry of Economy, Planning, and Regional Development (Cameroon)

NGOs Non-Governmental Organizations

PRSP Poverty Reduction Strategic Paper

SAPs Structural Adjustment Programs

SMART Specific, Measurable, Achievable, Realistic, and Timely

SWOT Strengths, Weaknesses, Opportunities, Threats

UNICEF United Nation Children's Fund

WHO World Health Organization

LIST OF TABLES AND FIGURES

LIST OF TABLES

Table 1: Cameroon: Millennium Development Goals (MDGs) country progress report 2008 36
Table 2: SWOT analysis of preparation phase of the elaboration of the health sector strategy 45
Table 3: Diagnosis or situational analysis
Table 4: Analysis of Strategies, objectives, means, actions, and priority setting
LIST OF FIGURES
Figure 1: Evolution of GDP growth (%) in Cameroon (1961-2011)
Figure 2: Corruption Perception Index in Cameroon (1996-2013)
Figure 3: Correlation between GDP growth, Life Expectancy, Infant Mortality, and HIV 32
Figure 4: Evolution of National Health Accounts of Cameroon (1995-2009)

TABLE OF CONTENTS

1	Iı	ntroduction	1
	1.1	Background	1
	1.2	Key questions to be answered in the literature review	3
	1.3	Impact of the study	4
2	\mathbf{N}	Tethods and procedures	5
3	D	Definition of concepts	7
	3.1	Health system and health sector	7
	3.2	Health System Strengthening	8
	3.3	Health sector reform	8
	3.4	Economic development	. 12
	3.5	Strategic planning	. 14
4	E	volution of the economic and political context of the health sector	. 15
	4.1	Pre-colonial and colonial period (before 1960)	. 15
	4.2	Between independence and Alma Ata conference (1960-1978)	. 20
	4.3	Between Alma Ata Conference and Re-orientation of primary health care (1979-1990)	23
	4.4	After Re-orientation of primary health care (1991- 2006)	. 28
	4.5	2001-2010 Health Sector Strategy	. 34
	4.6	Since the achievement of completion point of the HIPC Initiative (2006-2014)	. 37
	4.7	Different phases of the elaboration of the health sector strategy	. 40
	4.8	Cohesion and coherence of national development policy and health sector strategy	. 43

5	S	WOT of 2001-2015 health sector strategy using MINEPAT (2009) framework .	45
	5.1	Preparation phase of the elaboration of the 2001-2015 health sector strategy	45
	5.2	Diagnosis or situational analysis	46
	5.3	Strategies, objectives, means, and priority setting	48
6	K	Key public health challenges and policy alternatives	50
	6.1	Governance challenges	50
	6.1	Qualitative orientation of health workforce training	56
	6.2	Health information system and health sector strategy	58
7	C	Conclusion	61
R	efere	ences	62

1 Introduction

1.1 Background

According to the World Health Organization, the health status of a country's population is an important determinant or even a prerequisite for its development since health contributes to people's happiness, wellbeing, economic progress, longevity, productivity, and savings (WHO, 2014b). Thus, every country should invest to make its population healthier. However, this is not always easy for developing countries such as Cameroon that need a healthier workforce to overcome its development challenges. In such countries, resources are scarce and needs are very important as they face a double burden of disease with an important share of communicable diseases and a rising proportion of non-communicable diseases (Marshall, 2004). Moreover, developing countries have to face other development challenges such as homeland security, education, improved water and sanitation, infrastructures, energy supply, food safety and security.

Cameroon is a developing country located in Central Sub-Saharan Africa, at the heart of the Gulf of Guinea, which became independent in 1960. The variety of its ecology (Savana, Semi-arid, and Forest zones) makes it to be called "Africa in miniature" (Jua, 1990). It has an estimated population of 21.7 million inhabitants in 2012 living in 475,442 square kilometers (183,569 square miles), two official languages which are French and English (inherited from colonization), and more than 230 ethnic groups. Christianity is the dominant religion (70%), followed by Islam (21%), and indigenous beliefs (6%) (INS & ICF, 2012). Regarding its macroeconomic indicators, Cameroon was classified in 2012 as a lower middle income country by the World Bank with a GDP per capita of \$1,167; a real GDP growth rate of 4.7%; a current account balance of -6.7%; and an inflation rate of 3% (World Bank, 2014a). Cameroon was

ranked 150th out of 187 countries for Human Development Index, in the 2011 Human Development Report, having scored 0.492 on a scale of 0 to 1; given a life expectancy at birth of 51.2 years, an expected years of schooling of 10.9 years, a mean years of schooling of 4.9 years, and GNI (Purchasing Power Parity) of \$2,114 (UNDP, 2011).

Concerning its health sector, the country has experienced many reforms and some of the milestones for these reforms are the independence (1960), the Alma Ata Declaration of Primary Health Care (1978), the World Health Organization's (WHO) Interregional conferences of Harare (1987) and Bamako (1987), the health policy statement (1992), the declaration of implementation of the reorientation of primary health care (1993), the adoption of 2001-2010 Health Sector Strategy, the adoption of Vision 2035 (the 2010-2035 national development strategy) and Growth and Employment Strategic Paper in 2009 (the first decennial implementation phase of Vision 2035), followed by the revision of the health sector strategy (2010). These reforms have either been initiated in response to or influenced by the financial and economic condition of the country.

Most of these changes occurred during the deep economic crisis that Cameroon experienced from the mid-80s to the mid-2000s, which necessitated the implementation of structural adjustment policies (SAPs) by the World Bank and the International Monetary Fund (IMF) (Konings, 1996). These structural adjustment policies aimed at stabilizing the country's macroeconomic indicators through a liberal economic program with a market approach, the privatization of public owned companies, and a severe reduction of social programs and public interventions (WHO, 2014d). These negatively affected the social structure (WHO, 2014d), including a worsening of health indicators such as life expectancy at birth that moved from 53 years in 1986 to 49 years in 2006 (World Bank, 2014b). Despite this economic hardship that

was similar in other Sub-Saharan Africa countries where it resulted in political instabilities (Nigeria, Chad, Central African Republic, Democratic Republic of Congo, Cote d'Ivoire, Niger, and Togo), Cameroon is among few countries that enjoyed political stability (Gabriel, 1999). In 2006, Cameroon benefited from a 27% debt relief, from the World Bank Group, IMF, African Development Bank, multilateral, bilateral, and commercial partners, after reaching the completion point of the Highly Indebted Poor Countries (HIPC) Initiative (IMF, 2006). This offered the country an opportunity to launch its development vision for 2035 as well as its 2010-2019 *Growth and Employment Strategy Paper*. As a result, the 2001-2010 health sector strategy was revised in 2009, in order to its alignment under the national development policy, and to the Millennium Development Goals as well: this revision gave birth to the 2001-2015 health sector strategy.

1.2 Key questions to be answered in the literature review

Nowadays, most countries, including developed countries are multiplying reforms with one constant motive which is the reduction of health care costs (other reform motives include accessibility and quality of care). The particular context of Cameron, a lower middle-income country, is similar to many developing countries with high burden of diseases (both communicable and non-communicable) and concurrent development challenges. Thus, the main question to be answered is how the financing of health (which is a social benefit, thus, generally considered as non-productive) has been influenced over time by the economic environment in Cameroon. Another question is to look at the potential challenges due to the changing national and global economic contexts and how these could impact the elaboration or the implementation of health policies.

Answering these questions will require this report to summarize in parallel the history of both the economic environment and the health sector in Cameroon, from the precolonial period to 2012. In addition, the 2001-2015 health sector strategy will be analyzed using a SWOT (Strengths, Weaknesses, Opportunities, and Threats) matrix. Further, major challenges of the current 2001-2015 health sector strategy will be presented and analyzed, and policy alternatives will be proposed.

1.3 Impact of the study

Regarding the evolution of the health sector and that of the economic environment presented above, there seem to have been a concomitancy between economic development and health sector policies in Cameroon that has been barely described in the literature. According to Peabody (1996), these relationships between economic reforms and health policies are complex, multisectoral; thus, there is a need for health policy makers to develop appropriate strategies in order to limit the negative effects of these reforms on individual and population health.

Therefore, alongside with the objective of providing historical health economics and policy data, this capstone project could as well provide decision makers of the health sector with needed information for efficient policy design and implementation.

2 Methods and procedures

After a three months practicum at the Ministry of Economy, Planning, and Regional Development, and at the Health Sector Strategy Steering Committee in Cameroon, in order to meet the study's objectives, a narrative literature review was conducted, using both grey literature and scholarly articles. Grey literature constituted mainly books, and published and unpublished official reports from the Ministry of Public Health, the Ministry in charge of Economy and Planning, international organizations such as the World Bank, International Monetary Fund, and United Nation agencies such as WHO, and UNICEF, as well as books from Georgia State University's library and interlibrary loan system. These reports were obtained either through online research, using *Google* research engines, or through the libraries of the aforementioned institutions. As for the scholarly articles, a research was conducted in search engines (Iris library, Google Scholar, Georgia State Discover, PubMed, PAIS International, EBSCO Global Health, Embase). Search key words included "Cameroon", Sub-Saharan Africa", "Health Sector", "Health Sector Strategy", "Health System reform", "Health sector reform", "Health System Strengthening", "Economic Development", "Millennium Development Goals", "Structural Adjustment Programs", "Pre-colonial/colonial", "Strategic planning". These keywords were combined using the "AND" and "OR" conjunctions. Articles in French and English were included, and no filter was activated for publication date. However, to make easy the historical contextual analysis, five periods have been used: the first period is the preindependence or the colonial period (before 1960); the second period is the early postindependence and before the Alma Ata conference (1960-1977); the third period is between Alma Ata conference and the re-orientation of primary health care (1978-1990); the next period is the era of early political plurality (1991-2005); and the last period is the strategic planning era,

or the period that after the completion of the completion of the Highly Indebted Poor Countries Initiative (2006-2012).

3 Definition of concepts

3.1 Health system and health sector

Most of the time, the concepts "health system" and "health sector" are used interchangeably; however, according to the World Health Organization, the difference relies in the fact that utilization of the second concept, health sector, is restricted to actions conducted by governments (that could include state and non-state actors as well) (WHO, 2010).

Defining heath system requires one to consider the holistic definition of health (a state of complete physical, social and mental wellbeing), as well as all that could contribute to its achievement. For Smith & Hanson (2012), a health system is a collection of people, organizations, and actions which through complex interactions among themselves and with other systems, promote, restore, or maintain population health. The World Health Organization's framework (WHO, 2014e) schematizes the health system in six building blocks that interact together to achieve the goal of improved coverage, responsiveness, social and financial risk protection, and efficiency. These building blocks are:

- A leadership and governance building block, whose role is to provide strategic framework and policies, forecasting, regulation and incentives, coalition building, and accountability;
- ii. **A health financing system** that is responsible for adequate fundraising in order to facilitate an efficient health service provision and organize a risk pooling mechanism;
- iii. A health workforce building block that has to be composed of competent and mixed staff that ensure the best possible outcome with responsiveness, fairness, and efficiency;

- iv. **A health information system** that organizes the production, analysis, dissemination, and utilization of reliable and timely information to enhance performance of the system and improve health;
- v. **A health service delivery** building block, which is the most visible aspect of the health system, comprising the combined utilization of money, staff, equipment, and drugs for delivery interventions;
- vi. **An essential medicines** building block that has to ensure equitable access to quality and cost-effective essential medical products, vaccines, and technologies.

Unlike this inventory framework provided by the World health Organization, the relational health system model proposed by Frenk (1994) depicts not only the complex interactions among elements of the health system in terms of their description and directionality, but it also clarifies interactions between the health sector and other sectors as well as levers for control and regulation. These other sectors include universities (workforce development and research), health insurance companies or social security institutions, companies that supply medications, reagents, and technologies (Frenk, 1994).

3.2 Health System Strengthening

The World Health Organization defines Health System Strengthening as a process through which a country identifies and addresses its key health challenges through policies and actions that lead to the increase of access, quality, efficiency, and coverage of health services and thus, improve population health (WHO, 2014c).

3.3 Health sector reform

There are various classifications of reform drivers. According to Cassels (1995), a health sector reform becomes necessary as countries face challenges related to scarcity of resources and

their inefficient utilization. He classifies these challenges that result in a poor customers' satisfaction into three categories: scarcity of resources, low access to health services, and low quality of provided services (Cassels, 1995). Low access to health services is either influenced by demand factors such as socioeconomic status, culture, gender; or supply factors such as geographic distribution of health services, nature of service provided, and poor management of services. Factors that are responsible for low quality of services include long waiting times, demotivated and poorly trained staff, lack of privacy and confidentiality, frequent out of stock of drugs and reagents, malfunctioning equipment (Cassels, 1995). The three conditions stated above are met in developing countries in general and in Cameroon in particular, meaning that there is a necessity for a health sector reform. On the other hand, Frenk (1994) categorizes reform drivers in terms of economic reasons such as economic crisis leading to scarcity of resources and thus some type of rationing, while economic growth leads to expansion of social benefits; political and ideological reasons like a change in government; epidemiological reasons including epidemiologic transitions that could deeply change the distribution morbidity and mortality drivers, as well as the population structure. For Saltman and Figueras (1998), reform is imposed by the association of several factors including demographics, technology, economic imperatives, increasing necessity for efficiency, pressures, and a patient's choice and influence.

There is thus no universal definition of a health system reform. Attempting to define the health sector reform, Lambo and Sambo (2003) stated that it is as "a sustained process of fundamental change in national health policy and institutional arrangements guided by governments and designed to improve the functioning and performance of the health system, and ultimately, the health status of the population". In another definition, Cassels (1995) theorizes that a health sector reform is the definition of priorities, the redefinition of policies, and the

reform of institutions that facilitates the implementation of these policies. By priorities, Cassels means equity and efficiency in resource allocation, as well as consumer satisfaction and empowerment, as well as risk reduction (Cassels, 1995). Furthermore, Cassels highlights that reforms are conducted through fundamental changes rather than in increments, and necessitates significant structural changes as the inefficient functioning model is embedded in a given structure (Cassels, 1995).

While analyzing health system reforms that occurred in Europe in the 80s, Saltman and Figueras (1998) found four recurrent themes or challenges. For the first challenge, states had to decide on how to adapt market mechanisms in funding and resource allocation, in order to enhance performances through competition and patient choice. The second challenge was related to the creation of a supportive environment to support decentralization as a strategy to face inefficient and heavily centralized bureaucracy. The third challenge was to reinforce citizen empowerment and patients' rights in terms of choosing their physicians, hospitals, as well as treatment strategies. The last challenge was related to strengthening public health initiatives through intersectoral management for health as many health determinants (education, housing, employment, agriculture, and others) are out of the scope of health services.

In order to achieve these reform objectives, Frenk (1994) suggests that states can possibly combine three mechanisms that are highly interdependent. These include: regulation, financing, and direct provision of services. For Saltman and Figueras (1998), four general categories of policy interventions have been utilized in Europe, including: cost control strategies, funding health care systems, resource allocation of health care systems, and health service delivery. Cost reduction interventions on the demand side included cost-sharing tools (copayment, coinsurance, insurance premium, and sometimes "under-the-table" payments) either at first contact,

referral, or pharmaceuticals; and systematization of priority setting for resource allocation based on economic evaluation studies and public debates (Saltman & Figueras, 1998). On the supply side, European states reduced the number of physicians and hospital beds, curbed the costs of workforce and of products for health service delivery, modified reimbursement mechanisms, and enhanced the utilization of technologies (Saltman & Figueras, 1998). Regarding the health financing aspect, European countries stabilized their principle of universal access to health services even though a few countries chose to introduce competition among private insurers (Saltman & Figueras, 1998). Effective resource allocation strategies included contracting and split the provider and purchaser functions; the adoption of new reimbursement schemes such as a mix of salary, capitation, and fees for service for physicians; and prospective budgets, and retrospective reimbursement based on performances for hospitals (Saltman & Figueras, 1998). In order to enhance the efficiency of health service delivery, states utilized "outcomes movement" strategies that include: quality assurance, health technology assessment, continuous quality improvement, systematic reviews, and clinical guidelines (Saltman & Figueras, 1998).

At the same time, in Sub-Saharan Africa, several key factors prevailed during the health sector reforms in the 90s. These include poor governance, the late 1970s world economic and financial crisis that severely hit Sub-Saharan African countries, negative effects of structural adjustment policies on social policies including health and education, the advent of new information technologies and democracy that gave more rights to citizens, epidemiological changes with the emergence of new epidemics such as HIV/AIDS and non-communicable diseases, as well as the inefficiency of health subsystems and services (Lambo & Sambo, 2003). According to Lambo and Sambo (2003), Sub-Saharan African countries implemented health sector reforms following recommendations at international and regional level, aiming at

improving health access and coverage, improving quality of services, improving population health status, improve efficiency, improving resource pooling, improving community participation and consumer satisfaction, revitalize health districts.

In order to achieve the aforementioned goals, they found that countries utilized four categories of reform strategies: strategies on health system leadership, organization and management, provision of quality health care, and financing of health services (Lambo & Sambo, 2003). Strategies on health system leadership included decentralization; review of policies and strategies; redefinition of roles, functions, and organization charts; management of support services. Regarding the organization and management of health services, countries utilized policy tools such as the definition of minimum package of services, the strengthening of institutional capacities, the promotion of community participation, the promotion of public-private partnership, the strengthening of primary health care approach, and health services integration. As for the provision of quality health care, it was based on such strategies as the development of health workforce, the utilization of essential drugs, the improvement of quality services, and the utilization of operational research. Reform strategies for health financing comprised broadening sources of resource pooling, improving management of resources. No country planned to increase funding for health, or to use cost-effectiveness as a reform strategy.

3.4 Economic development

Economists define economic development in different ways, including industrialization, economic growth followed by change, achievements of ideals of modernization, or even economic independence. However, Ndongko (1986) defines development as a "sustained, secular improvement in material wellbeing which may be reflected by an increasing flow of goods or services which are distributed to all members of the society in an acceptable manner

considering the existing social, cultural, and political framework." Further, he mentions that in order to achieve such a state of development, there should be an economic growth that has to precede the redistribution of social welfare, otherwise there is no possible development (Ndongko, 1986). More specifically, Smith & Hanson (2012) state that increasing wealth would lead to consumption of goods such as clean water, safe food, and education, and to the increased provision of public services (through increased government revenue) such as health services and transport facilities that contribute to improve population health status.

On the other hand, development through the modification of resources utilized for energy supply (non-renewable energy sources from nuclear or fossil origin), the expansion of the World Trade Organization [and other entities, including but not limited to the Africa, Caribbean, and Pacific trade zone; the Central Africa States Economic Community; and the European Union] as well as dumping policies for 'bad products' that are far cheaper, the increased production and utilization of electronic devices that result in the exportation of their wastes to poor countries, and deforestation could have detrimental effects on population health condition (Smith & Hanson, 2012). One major example, according to Smith and Hanson (2012), is the expected increase of food-related non-communicable diseases such as Diabetes, which prevalence will double in thirty years, reaching 366 million cases in 2030, with more than 75% of these cases being located in developing countries. Thus, there is a need to plan ahead in order to have a comprehensive vision and implementation framework for a nation's development, in order to obtain sustainable development in a globally unstable economic environment, maximize the positive effects and minimize negative consequences of development on population health. This process could be achieved through strategic planning.

3.5 Strategic planning

Originating from the military vocabulary, the concept of "strategy" was related to as the effective utilization of resources to defeat enemies, and this concept later on was utilized in business as from the end of World War II, since the economic environment was rapidly changing (Bracker, 1980). The fast pace of integration of scientific discoveries into the economy made competition tougher, and therefore, there was a need for businesses to anticipate future events in order to remain viable on the long term (Bracker, 1980). Among historical definitions provided by Bracker (1980), the most interesting ones included that of McNichols in 1977 who sees strategy as "embedded in policy formulation: it comprises a series of decisions reflecting the determination of basic business objectives and the utilization of skills and resources to attain those goals", and that of Mintzberg in 1979 for whom "strategy is the mediating force between the organization and the environment: consistent patterns in streams of organizational decisions to deal with the environment".

The Cameroonian Ministry of Economy and Regional Development (MINEPAT) defines strategic planning as a planning process through which an organization defines its mid-term or long-term realistic goals and objectives and develops strategies to achieve them in accordance with its mission, environment, and resources (MINEPAT, 2011). This cyclical and continuous process has to be embedded in a result based management scheme, and should respect some key principles including:

- Flexibility: to adapt to environmental variations;
- Selectivity: to focus on the essentials;
- Participation: to involve all relevant stakeholders;
- Realism: based on available resources, and target essential issues (MINEPAT, 2011).

4 Evolution of the economic and political context of the health sector

4.1 Pre-colonial and colonial period (before 1960)

After the Berlin conference in 1884, Cameroon became a German protectorate and this lasted until the WWI; Britain and France defeated Germany in Cameroon 1916 and they occupied the country, which was later on placed by the League of Nations in 1919 under French mandate for its eastern part (the largest) and under British mandate for its western part (Ardener, 1962). The "British-Cameroon" colonial administration was attached to Nigeria's while the French's was managed in the country's capital, Yaoundé. Nigeria and Cameroon were made of tribes and kingdoms, with either weak or strong feudal organization with growing economies relying more on agriculture and trade, and the surplus of food production was redistributed to non-producers, including traditional healers (Owona, 1973;Ityavyar, 1987). The latter were already organized in such specialties as midwifes, medicine men, diviners, magicians..., transmitting knowledge in an initiating mode, without any record (Ityavyar, 1987; Magoro, Masoga, & Mearns, 2010).

a. Colonial health system in "German Cameroon"

During the colonial period (1884-1960), traditional medicine was "weakened" and became informal due to stigmatization, discouragement, and repression by colonial and religious masters, even though their western health care system was only made of urban health structures with access initially limited to the latters (Magoro et al., 2010). During this period, the environment was perceived as particularly hostile to the colonial masters due to high prevalence of infectious diseases (prevalence also got high as a result of slavery during which the healthiest were removed from the pool), including Malaria, Trypanosomiasis, intestinal worms, Leprosy, Meningitis, Yaws, and lungs infections which were devastating the indigenous populations at a

point that the Germans believed that the local population will be eradicated in a hundred years' time (Nzogue, 2006). The Germans, through an indirect administration (using mostly coercible traditional representatives) organized the fight against these diseases that led to the improvement of life expectancy, even though health spending was described as highly insignificant given the uprising taxation, tenure, and land policies (Woodson, 1939; Aydelotte, 1942).

b. Colonial health system in "British Cameroon"

According to Ityavyar (1987), the British colonial administration, helped by the religious organizations, developed a comprehensive health system that was initially concentrated in urban and coastal areas, and later on extended to the inner country due to the health workforce development through the creation of several training nursing, midwifery, pharmacists, and medical schools (47% of existing hospitals in 1960 were mission-owned and enrolled 352 doctors and had 7241 beds). In order to supply the growing colonial economy with healthy workforce, in 1946, the British colonial administration created a University College, a Faculty of Medicine, a School of pharmacy, a School of Dental Technology, a School of Dental Hygienists, a School of Radiography, a School of Medical Laboratory Technology, regional schools for nurses, midwifes, sanitary inspectors, and health advisors (WHO, 1959; Ityavyar, 1987). In addition, the colonial administration designed a "Ten Year National Health Development Plan" that had to be coordinated by the Federal Ministry of Health, assisted by a Secretary of Health and five Divisional Officers (Curative Service Division, Urban Health Division, Endemic diseases division, Dental Health division, and Chemistry division) (WHO, 1959; Ityavyar, 1987).

This reform organized a three layer health system with central services coordinated by the Minister and his division officers, the regional body with the three medical divisions (Southern Cameroon was directly attached to the Federal Ministry), and the medical areas ruled

by a medical officer working in a public hospital (WHO, 1959). The implementation of this strategic plan resulted in the improvement of life expectancy which, according to the United Nation's estimates, was between 31.3 and 36.5 years in the early 1950s (Ayeni, 1976). Also, the annual death rate improved from 28.8/1,000 to 12.4/1,000, and the infant mortality ratio improved from 285/1,000 to 81/1,000 live births, respectively from 1928 to 1955 (Ityavyar, 1987). The principal causes of mortality and morbidity in 1959 in Southern Cameroon were malaria, accidental injuries, worm infestations, bronchitis, dysentery, and diseases of the eye and ear (WHO, 1963). In 1956, the Southern Cameroon had 19 hospitals (6 public, 13 mission and private), and 1,059 beds (WHO, 1959).

c. Colonial health system in "French Cameroon"

On the other hand, in the "French Cameroon", the Infant Mortality Ratio was as high as 486/1,000 live births in 1922, due principally to Malaria and other epidemics as mentioned earlier (Nzogue, 2006). The French colonial administration oriented its health strategy more toward hygiene and sanitation activities in urban settings, in addition to disease specific prevention interventions at community level (Nzogue, 2006; Monteillet, 2006). More specifically, the first policies that the colonial administration put in place in 1916 (inspired from their experience in other African colonies) were strict regulations that aimed at ensuring primarily their protection through urban planning, racial segregation, waste collection and treatment, sewage systems, cemeteries, and immunization against tuberculosis; and later on "hygiene mobile" teams coordinated by Dr. Eugene Jamot (Nzogue, 2006). These measures were not sustainable, due to the fact that they were mainly coercive rather than educative, and indigenous populations, unable to understand what was going on, became resistant or apathetic to some health interventions (Nzogue, 2006). In addition, due to rapid urbanization (as rural

populations were attracted by monetary economy in the cities) and low investment in cities layout, slums grew rapidly downstream of colonial residential areas, and were abandoned to themselves; as a result, these areas had population census and benefited from a few sporadic public health interventions (Nzogue, 2006).

Moreover, the promotion of agriculture in marshy places was responsible for vector propagation in the inner country (Monteillet, 2006). In fact, Monteillet (2006) claims that France's colonial authorities were not well prepared to organize and manage efficiently the colonial health system in Cameroon as their health workforce was understaffed and they built a small number of hospitals; and he explained this by the fact that France had been trying to bring its health spending to the lowest possible level. A study found later that between 1870 and 1936, Britain had funded 77% of black African investments in Africa as opposed to 5.2% funded by France (Coquery & Vidrovitch, 1985).

In contrast to Nigeria, Cameroon had only one colonial nursing training school in Ayos, created in 1933 by the colonial masters and indigenous physicians had to be trained in Senegal were the French colonial administration created a medical school, or in France, after their graduation from the nursing school (Nzogue, 2006). In fact, the first university and the first faculty of medicine were created in Cameroon respectively one year and nine years after the country became independent: in 1961 and 1969 respectively (FMSB, 2014). At independence in 1960, the health workforce in 1960 comprised 159 doctors, 11 dentists, 46 pharmacists, 2184 nurses and nursing auxiliaries, and 45 midwifes (WHO, 1963). Regarding the health service delivery, there were 4 hospitals in 1960; 58 health centers; 72 infirmaries, dispensaries, and leprosaria; with a total bed per population ratio of 3.95/1000 (WHO, 1963). Also, Government health expenditure was \$14.6bn, with 10% allocated to health services (WHO, 1963).

d. Colonial economy of Cameroon

The economic models implemented in African colonies were the Cash Crop Export

Strategies and the Import Substitution and Industry Policies (Wambalaba, 1999). The strategy of massive production of crops such as coffee, cocoa, cotton, oil palm... was utilized for a rapid monetization of the colonial economy and led to the development of vertical and horizontal inequities as the regions having those crop plantations were wealthier than those that did not, and also due to the low wages paid to the workers (Wambalaba, 1999). However, this cash and crop export policy led to a rising interwar economy growth that, due to its high dependence on international market for these crops, was severely hit by the 1929-31 economic crisis, which also attained the colonial powers, especially France, more severely (Coquery & Vidrovitch, 1985).

Despite their significant increase of production of goods to compensate their low cost, the country became indebted, and the colonial authorities had to increase taxes and this resulted in rationing, famine, epidemics, large scale urban immigration, and increased mortality (Coquery & Vidrovitch, 1985).

Another consequence of the Great Depression, was the creation of social and political tensions, and nationalist /independent movements, as the colonial administrations failed to provide basic essential social services such as health; education; and imported necessity goods such as clothes, dishes and kitchen ware, which gave indigenous populations the impression of a failed colonial administration (Diop, Birmigham, Hrbek, Margarido, & Niane, 1993). France's colonial development plan was never implemented due to its inner political instability, to WWII, and to its colonial direct-administration strategy, which resulted in the collapse of indigenous traditional organizations (Diop et al., 1993). On the other hand, Britain, using an indirect-administration strategy (relying on traditional institutions that got strengthened), implemented

some social and economic reforms on 1940 (known as the Colonial Development and Welfare Act), in addition to some constitutional reforms aiming at preparing the decolonization process (Crowder, 1993). Independence movements in the Southern Cameroon (the southern part of the British Cameroon) failed to obtain their independence from Nigeria, as the British claimed that the region would not be economically viable; instead it became a federal region of Nigeria in 1953; and in 1961, it became independent and got reunited to its French counterpart, la Republique du Cameroun (Awasom, 1998).

4.2 Between independence and Alma Ata conference (1960-1978)

a. Economic development between 1960 and 1978

The "French-Cameroon" became independent in 1960 and the Southern Cameroon (the southern part of British-Cameroon) in 1961, and both Cameroons became the Federal Republic of Cameroon in 1961, the United Republic of Cameroon in 1972, and the Republic of Cameroon in 1983 (INS & ICF, 2012). The expansion of primary and secondary education (due to colonial development plans implemented in the late 50s); the high demand of crops export on the international market; the oil production that began in the late 1970s; and the support of international financial institutions let the country implement optimistically the Import Substitution and Industry Policies, aiming at delocalizing some western companies for low-cost production, in order to satisfy the rising postwar demand in western countries (Wambalaba, 1999; Crowder, 1993; Ndongko, 1986). During this period, Cameroon was cited as a development model (Chauvin, 2012) due to its important GDP growth (Figure1).

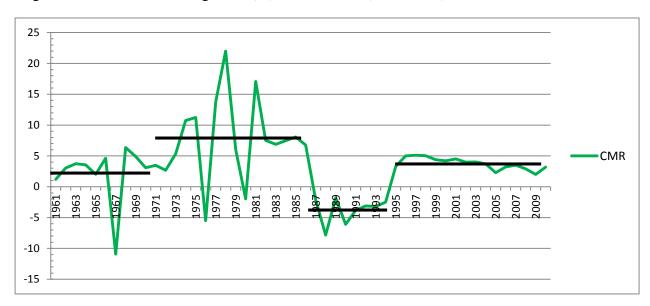


Figure 1: Evolution of GDP growth (%) in Cameroon (1961-2011).

<u>Data source</u>: World Bank (2014) GDP: Dross Domestic Product

The government political economy was based on the planned liberalism philosophy, and auto-centered development strategy, aiming at encouraging local production of necessity goods through foreign direct investments and state run corporations that were mainly funded by oil revenues (Dessouane & Verre, 1986). These policies proved inefficient for two major reasons: the first reason was structural as the colonial administration limited communication (lack of roads and railways) and trade infrastructures between neighboring countries not belonging to the same colonial entity (thus limiting the market size), and because it was difficult to coordinate the crops production between countries and almost all of them produced similar products (Wambalaba, 1999). The second reason is the lack of long-term strategies (quinquennial plans) and the wrong choices and implementation strategies chosen for agribusiness and industrial sectors' development such as top-down planning and inefficient market analyses (Dessouane & Verre, 1986). Therefore, these major agribusiness projects and industries, which later-on appeared to be "white elephants", ended up being highly resource consuming and inefficient (Willame, 1985).

b. Health system between 1960 and 1978

Based on the studies provided in 1959 by a French contractor (Societe Generale d'Etudes et de Planifications), the government designed its first quinquennial plan for 1961-65, which major health objectives was to reinforce preventive medicine and health promotion (school health, nutrition), health workforce, vertical and horizontal equity in the distribution of health services, and the development of vertical programs for Malaria control, and maternal and child health (WHO, 1967). The health aspect of the plan had to be coordinated by the Commissioner-General of Public Health and Populations, WHO's public adviser, and a French

Government specialist; however, this health plan [was not implemented and] served mainly as a precursor of the development of the second quinquennial plan (WHO, 1967).

The Federal Minister of Health and Population created in 1961 became in 1965 the Commission-General of Public Health and Populations with a deputy assigned for the west-Cameroon; the Commissioner-General was assisted by a Director General of Public Health who had to coordinate seven departments which were: Endemic Diseases and Rural Health, Maternal and Child Health, Malaria Eradication, Pharmaceutical Services, Medical and Hospital Surveys and Statistics, Public Hygiene and Environmental Sanitation, Nursing Care and Education (WHO, 1967). At intermediate level, there were one hospital per department (staffed with a clinician doctor) and a departmental health centers in charge of preventive medicine, including mobile units for immunizations and patients-finding (WHO, 1971).

For service delivery, the country had 71 hospitals, 730 medical centers, and 34 Leprosaria, for a total of 13,499 beds (2.6/1,000 inhabitants); the out-patients service utilization rate was 29.4% (1.5 million consultations for a total population of 5.1 million inhabitants in 1965); and the major diseases included malaria, measles, whooping-cough, dysentery, yaws, pulmonary infections (WHO, 1967). The health workforce in 1965 comprised 196 doctors (1/26,000 inhabitants) of whom 65% worked for the Government, 7 dentists, 79 midwifes, 105 assistant nurses (WHO, 1967); and for health financing, the Government spent 10% of its budget for health (368 CFA Francs per capita) in 1965.

- 4.3 Between Alma Ata Conference and the re-orientation of primary health care (1979-1990)
 - a. Economic situation after Alma Ata Conference (1979-1990)

As mentioned earlier, the oil production that began in the late 1970s boosted substantially the economic growth of Cameroon and thus, the country made several massive hazardous investments aiming at reinforcing its primary and secondary sectors. Even though Cameroon resisted to major external shocks such as the first oil crisis of the late 70s and the severe drought in the early 80s, it followed five years later the steps of other Sub-Saharan African countries like Cote d'Ivoire and Ghana (Schneider et al., 1992; Kapur, Hadjimichael, Hilbers, Schiff, & Szymczak, 1991) in a severe economic recession as from 1986 (Chauvin, 2012). This economic crisis was explained by the concomitance of external shocks such as the drop in oil cost on the international market, an important reduction of crops exports' revenues due to a reduction of terms of trade and a 40% decrease in currency value vis-à-vis of US Dollar, the mid-80s' oil crisis, and a 40% loss of the currency (Tchoungui et al., 1995).

In addition to these external factors, some intrinsic causes for the economic crisis included the massive investments in inefficient development of agribusiness and industrial programs, which later on were defined as "White elephants" (Willame, 1985). In fact, these programs were included in the quinquennial plans that were described by Gabriel (1999) as mere lists of projects aiming at attracting direct foreign investment rather than a comprehensive and integrated economic, financial, and social development strategy. The management of these already poorly planned (Willame, 1985) 150 state-owned companies was based on "Neopatrimonialism", which Gabriel (1999) defines as "...a highly personal and clientelistic type of rule involving the massive redistribution of state resources." Moreover, the country experienced political instabilities in 1984, with the tentative coup d'état against the newly installed President of the Republic (Gabriel; 1999).

As a result of the economic crisis, all the macroeconomic indicators were in the red as from 1985: national debt that moved from \$431.4 million in 1973 to \$3,367.4 million ten years later (Willame, 1985); and this debt even reached 126.7% of GDP in 1995 (AfDB/OECD, 2004). Public investment decreased from 15% of national budget in the 80s to 2.2% in 1992; real per capita GDP fell by 50% from 1986 and 1993; important banks representing 75% of the market went bankrupt (Gabriel; 1999). After the failure of its initiatives to correct macroeconomic and financial indicators as from 1987 through savings on public costs and public spending, the Government enacted several structural adjustment policy plans with the International Monetary Fund (IMF) in 1988, 1991, 1994, and the World Bank in 1989 and 1994 (Tchoungui et al., 1995).

The structural adjustment policies aimed at stabilizing the country's public finances and stimulating its economy, using actions on the supply side, the demand side, or on both sides (Tchoungui et al., 1995). These adjustment policies failed for several reasons including the underestimation of the effects on the long exposure to the exchange rate issue, and inadequate governance (Tchoungui et al., 1995). Many indicators could testify the deleterious effect of these structural adjustment policies on the country's economy. The first is the massive "informalisation" of the economy (which was depicted by the World Bank as the most significant and least appreciated of the structural adjustment plans) mainly due to the tremendous reduction of the formal sector employments; this informalisation came along with the reinforcement of ethnic solidarity (Tchoungui et al., 1995; Yokono, 1995). Another consequence is the rise in poverty level that moved from 49% in 1983 to 71% in 1993, and a 55% decrease in per capita real GDP from 1986 to 1993 (Tchoungui et al., 1995). These tremendous effects were not only limited to urban areas, as they also reached rural regions due to the 60% reduction of

cash crop farming as well as a 40% reduction in food crop production prices (Tchoungui et al., 1995).

b. Health system post-Alma Ata conference (1979-1990)

After the declaration of the Health for All in 2000 strategy in 1977, WHO and its member countries issued the Alma Ata declaration in 1978 (WHO Afro, 2011). Cameroon adopted this strategy and enacted in 1982 through a presidential decree its first health development policy act oriented toward Primary Health Care (Essomba, Bryant, & Bodart, 1993). These health development policies supported by surplus of the petroleum boom (Tchoungui et al., 1995) aimed at transforming the postcolonial intermittent health care into a continuous integrated health service offered for free across the country (Essomba et al., 1993). As a result of the implementation of Primary Health Care policies from 1982 to 1985/6 (before the economic crisis), the country gained 1 year of life expectancy at birth (from 50 to 51 years); a 12% decrease in the under-five mortality rate that moved from 176 to 153/1,000; a 15% reduction in the infant mortality ration that moved from 110 to 94/1,000; and a 32% decrease in the crude death rate that moved from 19/1,000 to 13/1,000 (Essomba et al., 1993).

However, the global context was not favorable to the implementation of Primary Health Care policies as the United States were opposed for two main reasons: the first being the fact that it was launched and steered by its rival, the Soviet Union; and the second being that the United States were opposed to the World Health Organization's program aiming at extending access to generic drugs (Brown, Cueto, & Fee, 2006). Thus, the United States piloted a series of measures including the launching of an alternative meeting called "Bellagio meeting" for "Selective Primary Health Care" in 1979; followed a year later by the introduction of the Health thematic in the portfolio of the World Bank and some United Nations agencies (such as UNICEF that was

supposed to be an emergency postwar fund); and WHO's budget got reduced in favor of the latter institutions (Brown et al., 2006). Under the leadership of the World Bank, developing countries enacted vertical health programs, as well as a market based approach which was incompatible with an integrative long term health development strategy (Brown et al., 2006).

In Cameroon, as in many African countries, community health activities were stopped in 30% of surveyed villages between 1982 and 1988 and 50% of community health workers received no training sessions (Essomba et al., 1993). In addition, the health system experienced difficulties with continuity of care (no referral system); integration of care (community based workers focused on curative health care and abandoned promotional activities); inclusiveness of care (health services failed to include community health workers); consistency of care (due to poor training of community workers); and mainly financial sustainability as per capita health expenditures were reduced by almost 50% between 1985 and 1992 (from CFAF 3,971 to 2,061) and Government health expenditures experienced a negative annual average growth of -7.8% per year from 1986 to 1993; Okalla & Le Vigouroux, 2001). As from 1989, the Government began to prepare its new health reform aiming at correction flaws observed during the implementation of Primary Health Care policies and the elaboration of a National Health Development Plan (Essomba et al., 1993; Okalla & Le Vigouroux, 2001).

In 1994, it was recognized by bilateral and multilateral agencies including WHO and the World Bank, that most of Sub-Saharan African health systems had failed and that important reforms had to be implemented following key principal guidelines including countries' ownership, internal market and public-private partnership, decentralization, intersectoral management, capacity and capacity building, new financing options, and strategy development

(WHO, 1994). It was during this period that WHO took back the driver seat of technician of health systems strengthening (Brown et al., 2006).

4.4 After the re-orientation of primary health care (1991- 2006)

a. Political economy after the re-orientation of primary health care (1991- 2006)

In order to reduce significantly public expenditures, Government privatized a wide range of state-owned companies; reduced investment on infrastructures for health, education, transport, energy; and a significant reduction of its payroll (AfDB/OECD, 2004; Tchoungui et al., 1995; Willame, 1985; Yokono, 1995). However, refusing to apply the proposed 40% cut in public workforce (which had risen from a mere 20,000 civil servants in 1960 to almost 250,000 in 1980); Government instead chose to apply a 30% salary cuts in January 1993, followed by another 50% salary cuts in the same year some months later (Tchoungui et al., 1995; Yokono, 1995; Gabriel, 1999). A different approach was considered in countries such as Cote d'Ivoire that instead decided to freeze public payroll, while Ghana even increased salaries of civil servant to avoid brain drain (Kapur et al., 1991; Schneider et al., 1992). This total 70% cut of civil servants salaries in 1993, added to the 50% currency devaluation in 1994 which resulted in a 29% increase of consumer price index (Tchoungui et al., 1995), were responsible for the 70% increase of the level of corruption (Israr, Razum, Ndiforchu, & Martiny, 2000) that tarnished the country's image and thus, reduced its attractability toward foreign direct investors (AfDB/OECD, 2004). As a result, Cameroon was ranked the most highly corrupted country of the world for the years 1998 and 1999, and since then, corruption remained endemic in the country, despite some slight changes, as shown in Figure 2 (Transparency International, 2014).

According to Gabriel (1999), the early 1990s political unrests, which were due to several factors, including the economic crisis and the fall of the Soviet Union, only succeeded in

installing multipartism in the country, and steps toward democracy have been too slow due to the strong power of neopatrimonialism. Also, a new constitution was adopted in 1996 with some major changes including the decentralization process, which implementation is still going on (Okalla & Le Vigouroux, 2001).

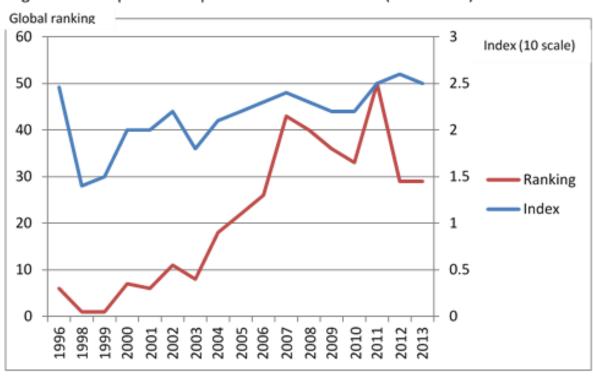


Figure 2: Corruption Perception Index in Cameroon (1996-2013)

Data source: Transparency International (2014)

(NB: Ranking should be interpreted as the mostly corrupted country of the world)

Despite the return of economy growth in 1994 (Figure 1), Cameroon failed to meet some important structural adjustment program goals, and this was the reason for the second structural adjustment program (SAP II) in 1997-1998 and 1999-2000 which aimed at restoring macroeconomic balance, sustainable growth, and reducing poverty (Razafindramanana & Diomande, 2002). Some of the loans received during this period were geared towards social services (education and health) and agriculture, and this resulted in a 10.3% drop in poverty rate (that moved from 50.5% in 1996 to 40.2% in 2001) (Razafindramanana & Diomande, 2002). This was mainly due to the deterioration of some health indicators, including the reduction of life expectancy at birth that moved from 53 years in 1986 at the onset of the crisis, to 49 years in 2000, a brutal regression in the trend of Infant Mortality Ratio, and the generalization of the HIV epidemic as summarized in Figure 3 (Razafindramanana & Diomande, 2002).

Further reforms engaged upon completion of SAP II included the development of a civil service reform, a national governance program (NGP) in 2000, and a poverty reduction strategic plan (PRSP) in 2003, which was a condition for the country's eligibility for the Heavily Indebted Poor Countries (HIPC) Initiative as from the year 2000, when the interim document (PSRP) was issued (Razafindramanana & Diomande, 2002). The completion of this initiative in 2006 resulted in a debt relief program including a 27% of its total external debt; which reimbursement was substituted with the funding of governance, growth, and poverty reduction programs (IMF, 2006).

- b. The health system after the re-orientation of primary health care (1991- 2006)
 - i. Governance: 1993 Reorientation of Primary Health Care

Cameroon reformed its health system in 1993 in order to "re-orient" its primary health care policy. The three core elements of the reform were community participation and self-

reliance; close link between health and development; and the respect of human rights (rights to information and free will) (Ministry of Public Health, 1993). This reform aimed at developing a solid three layers pyramidal health system with a strong basis through the creation and the strengthening of health districts (operational layer), that had to be fully integrated into local development committees; and technically and strategically supported by provincial and central health services respectively (Ministry of Public Health, 1993).

ii. Health system financing in 1991-2006

The cuts of Government health expenditure that had been going on since the onset of the economic crisis, reached a peak of -25% in 1993 (Okalla & Le Vigouroux, 2001). This could had been an important reason for the launching of the co-financing of the health system that was introduced in this reform through community financing measures such as payment of services, purchasing of essential drugs, volunteering, gifts, bequest; as well as non-community financing strategies, including public or state budget as well as development assistance for health (Ministry of Public Health, 1993). However, with economic recovery and mainly poverty reduction strategy, public spending for health rose back, even faster than GDP, peaking at 8.8% of Government spending in 2003 as shown in Figure 4 (World Bank, 2014). Private health spending that was funded almost entirely out-of-pocket (95%), represented around 75-80% of total health expenditures from 1995 to 2009 as depicted in Figure 4 (World Bank, 2014).

LEAB (years) HIV prevalence (%) 60 160 GDP growth (%) 50 140 40 120 30 100 LEAB_CMR GDP_CMR 20 80 HIV_CMR 10 60 • IMR CMR 0 40 .963 -10 20 0 -20

Figure 3. Correlation between GDP growth, Life Expectancy, Infant Mortality, and HIV.

Data source: World Bank (2014)

LEAB: Life Expectancy at Birth; IMR: Infant Mortality Ratio; HIV: HIV Prevalence; GDP: Gross

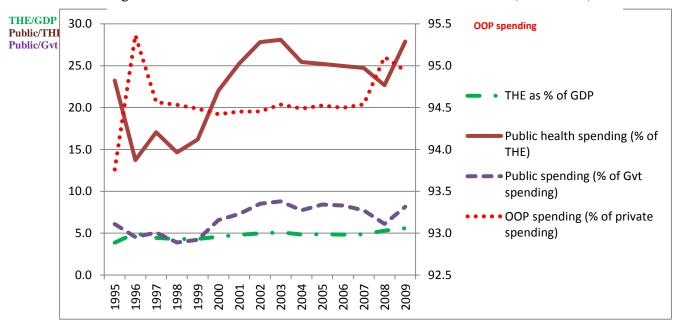


Figure 3: Evolution of National Health Accounts of Cameroon (1995-2009)

<u>Data source</u>: World Bank (2014) THE: Total Health Expenditures; GDP: Gross Domestic Product; Gvt: Government; OOP: Out-of -Pockets

iii. Health workforce in 1991-2006

For the health workforce, experiencing a 2/3rd cut in their wages and an increased living cost, almost 25 to 30% of health workers trained in Cameroon decided to leave the country for "greener pastures", and 70-80% of those trained outside the country did not come back (Amani, 2010; Israr et al., 2000). In fact, the fraction of Cameroonian physicians abroad represented about 45% in 2000 (Clemens & Pettersson, 2008), and 49.3% of them were willing to leave the country in 2003 (Amani, 2010). Those remaining in the country had been experiencing an increased work load as a result, and they concentrated in urban cities (Amani, 2010) and developed multiple coping strategies including poor diet and lifestyle to reduce consumption; income-raising activities either related to their profession (corruption, selling of unreliable drugs, working in private clinics, providing informal care) or non-related (farming or petit commerce) (Israr et al., 2000). This means that the co-financing mechanism has not been be sufficient to compensate wages lost and provide motivation to health workforce.

iv. Health infrastructures and service delivery in 1991-2006

Regarding health infrastructures, after their expansion that followed the petroleum boom of the late 1970s, they were deteriorated due to austerity policies during the economic crisis period and the implementation of the structural adjustment programs. However, the number of health centers and hospitals increased due to the poverty reduction strategies, the decentralization, and the 1993 health system reform that created health districts; an indicator of this is the ratio of hospital bed per inhabitant that was 1/400 in 1997, compared to 1/900 in Sub-Saharan Africa (Medard, 2011; Okalla & Le Vigouroux, 2001).

v. Health information system from 1991 to 2006

A new health information system was developed to accompany the implementation of the 1993 health reform; however, upon its evaluation in 2008, its performance were very poor due to several factors including the absence of a legal framework; the multiplicity of sub-systems for health information; the lack of qualified human resources; poor and inappropriate infrastructures despite the support from multilateral and bilateral partners (European Union, WHO, and GTZ); the poor management of vital statistics (almost not organized); as well as the low request and utilization of health information by decision makers and resource allocation at every level of the health pyramid; and poor supervision and feedback mechanisms (Ministry of Public Health, 2008; Ndongo & Ongolo-Zogo, 2010).

4.5 2001-2010 Health Sector Strategy

Cameroon developed its first health sector strategic plan for 2001-2010, as a part of the poverty reduction strategy development, aiming at reducing by a third, the morbidity and mortality of vulnerable populations; increasing access to health services with more than 90% of the population living less than one hour walk from health facilities that will be provided with minimum activity packages; and promoting an effective and efficient management of resources in the health system (Ministry of Public Health, 2006). For this new strategy, the mission of the Ministry of Public Health was to contribute to the achievement of the Millennium Development Goals (MDGs) through the implementation of eight programs amongst which four were vertical programs (disease control, reproductive health, health promotion, and the supply of essential medications, lab reagents, and special devices) and four were horizontal programs (health financing, total quality management, institutional development, improved access to health services and health care) (Ministry of Public Health, 2006).

A mid-term evaluation report on the implementation of this strategy completed in 2006 revealed that the strategy was not supported by a clear political will or commitment towards the achievement of the MDGs. Also, there was neither a clear vision, nor any prioritization of interventions, nor framework for public-private partnership, nor risk pooling mechanisms such as health insurance or social protection were not taken into consideration. Moreover, the document appeared like a melting pot without clear implementation plans. Further, it was poorly diffused at the operational level as up to 65% of district health officers were not aware of its existence and its content due to the top down and non-participatory approach (Ministry of Public Health, 2006). As for the MDGs, most of the health related targets were not met as shown in Table 1. The maternal mortality ratio increased by 56% between 1998 and 2004 (from 430 to 669 per 100,000 live births), and the under-five mortality rate and infant mortality ratio remained stagnant (moving from 146.3 to 144/1,000 and from 80.5 to 79.9/1,000, respectively) (INS & ICF, 2012; UNDP, 2008). However, among positive contributions, the mid-term evaluation of the 2001-2010 Health Sector Strategy noted an increased level of community participation in the health system at peripheral level through health committees, and the improvement of the implementation of existing programs (Ministry of Public Health, 2006).

Table 1: Cameroon: Millennium Development Goals (MDGs) country progress report 2008

#	Objective	Target/Indicator	2001	2007	2011 (DHS)	Least performing regions in 2007
	Reduce	extreme poverty	40.2%	39.9%		North (62.7%), Far North (65.9%), Adamaoua (52.9%)
1	extreme poverty and hunger	Moderate and severe Under 5 malnutrition rate	22.0%	24.5%		North (50.3%), Far North (47.4%), East (24.6%)
2	Primary	Completion of primary education	59.1%	71.5%	78.5%	
	education	Literacy rate 15-24 years	82.3%	83.1%	81.8%	North (46.9%), Far North (41.3%), Adamaoua (57.3%)
3	Gender equality &	Girls to boys parity ratio primary education	0.94	0.95	0.9	North (0.86), Far North (0.76), Adamaoua (0.64)
	women empowerment	Female/male literacy ratio 15-24 yrs	0.88	0.87		North (0.55), Far North (0.53), Adamaoua (0.67)
	Children health	Under 5 mortality rate per 1000 (1998-2004)	146.3	144	122	North (202.9), Far North (202.9), Adamaoua (202.9)
4		Infant Mortality Ratio per 1,000 (1998-2004)	80.5	79.8	62	North (103.2), Far North (103.2), Adamaoua (103.2)
		Immunization rate for Measles (2004-2006)	64.8%	78.8%	70.6%	Far North (55.3%), East (73.0%), Adamaoua (74.2%)
	Maternal	Assisted deliveries(2004-06)	61.8%	58.9%	63.6%	Far North (19.4%), East (27.5%), North (29.3%)
5	health	Maternal Mortality Ratio per 100,000 (1998-2004)	430	669	782	NA
		HIV prevalence		5.5%	4.5%	Women (6.8%), men (4.1%)
6	Disease control	unsafe sex				Women (28.7%), men (61.9%)
		Malaria prevalence	40%	15%		
		Access to potable drinking water	40.6%	43.9%	68.6%	Far North (29.4%), East (19.6%), North (23.1%)
7	Environment	Access to improved sanitation	44.7%	31.7%	39.9%	Far North (5.3%), East (13.7%), North (6.0%)
		Improved housing	22.7%	25.5%	15.3%	Far North (6.8%), Adamaoua (6.4%), North (7.1%)
	Global	Youth unemployment (15-24 yrs)	7.6%	8.2%		South (10.8%), Center (10.0%), Littoral (5.5%)
8	partnership for development	Youth underemployment (15-24 yrs)	73.3%	84.3%		North (93.7%), Nord-West (93.7%), Far North (93.4%)

Data source: Cameroon MDGs country progress report (UNDP, 2008) for 2007 and 2008 data, and Demographic Health Survey for 2011 (INS & ICF, 2011)

Given these unsatisfactory results, due in part to the weaknesses in the health sector strategy, the lack of political will, structural problems within the Ministry of Public Health, logistics problems, insufficient funding, target population (sometime overestimated target in some areas), lack of motivation among health workers, the evaluators recommended that the Health Sector Strategy be aligned with the MDGs 2015 goals through a revision of the strategy using international standards, a bottom-up approach for planning and budgeting, capacity building among local managers, health information system strengthening, improvement of work conditions on health facilities and in health districts, vulgarize the strategy document (Ministry of Public Health, 2006).

4.6 Since the achievement of the completion point of the Highly Indebted Poor Countries' Initiative (2006-2014)

a. Elaboration of the national development strategy

As mentioned earlier, having obtained a debt relief upon the completion of the Highly Indebted Poor Countries Initiative and after the evaluation of its poverty reduction strategic paper (PRSP), Cameroon decided in 2008 to create a Ministry of Economy, Planning and Regional Development (MINEPAT), with one of its short term missions including the design of a national long term development policy called *Vision 2035*, which objective is to make Cameroon an emerging, democratic, and unified country in its diversity by 2035 (MINEPAT, 2009b). *Vision 2035* was declined in four strategic objectives (to reduce poverty below the 10% line; to become a middle income country with a more than \$3,706 per capita GDP; to become a newly industrialized country, and to consolidate democracy and national unity) that will be implemented during three phases: 2010-2019, 2020-2027, and 2028-2035 (MINEPAT, 2009b). The main goal of the first phase, that will last ten years (2010-2019), is the modernization of the national economy and the acceleration of economic growth; while during the next eight years,

the second phase (2020-2027) would consolidate the economic growth, widen income distribution, and reinforce environmental protection; and the third phase of eight years (2028-2035) would turn Cameroon into an industrialized nation with a less than 10% poverty rate (MINEPAT, 2009a).

The first phase of the *Vision 2035* (2010-2019) will be guided by the *Growth and Employment Strategic Paper* (MINEPAT, 2009a). This paper, aiming at providing the Government with an integrated development, a financial coherence, a government coordination, a public-private partnership advisory, and a consultation framework to walk through *Vision 2035*, was developed during an uncertain international environment (due to the economic and financial crisis, and a global energy and food crises) as well as a national context lead by civil unrests due to high cost of life, a structural rigidity, an economic growth of 3.32% between 2001 and 2007 that was not able of sustaining the 1.9% inflation rate added to the 2.6% population growth rate (MINEPAT, 2009a). The approach used for its conception by government officials, in collaboration with the private sector, academicians, and international development agencies was a mixed bottom-up and top-down approaches, even though the latter strategy was strongly dominant mainly for coherence and cohesion purposes.

The *Growth and Employment Strategic Paper* has three specific goals, which are: to obtain an average annual economic growth rate of 5.5% for 2010-2012; to reduce underemployment from 75.8% to less than 50% in 2020; and to reduce poverty rate from 39.9% to 28.7% in 2020 (MINEPAT, 2009a). This paper has been implemented by three global development sectors comprising seven specific sectors which are organized as follow: the global social sector with three specific sectors: Social Services, Health, and Education and Professional Development; the global governance sector with three specific sectors: Justice, Administration,

and Finance; and the global production sector made of Infrastructures, Industries and Services, and Rural Development sectors (MINEPAT, 2009a). Apart from the health sector that comprises only the Ministry of Public Health, each specific sector is composed by several sub-sectors or ministerial department, and each Ministerial department only belongs to a unique specific sector, even though it may be involved in collaborative actions with other ministerial departments (MINEPAT, 2009a). This is probably due to the highly fragmented Government framework, with a high number of ministerial portfolios; one major example being the education and professional training specific sector which comprises five ministerial departments: the Ministry of Basic Education, the Ministry of Secondary Education, the Ministry of Higher Education, the Ministry in charge of Professional Training, and the Ministry of Innovation and Scientific Research. This hyper fragmentation of the government represents a major coordination and coherence challenge that may impact its efficiency.

Every global sector elaborated its sectorial strategy (in the exception of the global social sector), and following the same pathway, every specific sector and sub-sector designed their sectoral strategy based on a national framework provided by the MINEPAT to ensure coherence and cohesion. This framework constitutes a sort of guidelines that administrations used to elaborate their plan, but the specific content was designed by these administrations helped by key stakeholders in the sector (MINEPAT, 2009a). Next, the Government developed a short term and long term financial coherence framework and a budgeting system based on mixed incremental and rational comprehensive models (MINEPAT, 2009a).

The *Growth and Employment Strategic Paper* is based on three strategic axes which are: economic growth, employment, and state's strategic management (MINEPAT, 2009a). The economic growth strategic axis developed around three implementation strategies: development

of infrastructures strategy for energy supply, transports, telecommunications, and water and sanitation; the modernization of production equipment strategy for agriculture, forestry, natural resources, and industry; and the human development strategy in which education, professional training, culture, sport and physical education, gender equality, social protection, national solidarity, and health care will play a significant role (MINEPAT, 2009a).

b. Elaboration of the 2001-2015 health sector strategy (revision)

The revision of the 2001-2010 health sector strategy was due to several reasons. One reason may be the necessity of the integration of the aforementioned recommendations from the 2006 mid-term evaluation report of the 2001-2010 health sector strategy. Another possible reason could be that the health strategy goals had to be realigned on the MDGs whose deadline is the year 2015. Moreover, this strategic plan had to be aligned with the *Vision 2035* and the Growth and Employment Strategy Paper that were already available as from 2008. The Ministry of Public Health not only had to utilize the framework and guidelines provided by the Ministry of Economy and Planning, it also had to revise its strategies accordingly.

4.7 Different phases of the elaboration of the health sector strategy

Following the guidelines of the Ministry and Economy and Planning (MINEPAT, 2011), several stages were necessary for the elaboration of the health sector strategy. The first step, the preparatory phase was dedicated to the creation of the institutional framework, a steering committee, and the task force, and the designation of their members; the identification of key stakeholders; data collection (research, national surveys, and administrative data) (Ministry of Public Health, 2009b). This step aimed at describing the health sector, its components, the demand and supply of services, actors and beneficiaries, strengths and weaknesses, external factors, as well as stakeholder power analysis. Also, actual programs were evaluated, as well as

current and future challenges (Ministry of Public Health, 2009b). This situational analysis found that performances were still poor regarding the health-related MDGs (MDG 1, 4, 5, & 6, see Table 1). Also, on one hand, there is public sub-sector made of several ministries that play key roles within the health sector; these include those who act as direct providers of health services (ministries in charge of public health, defense, social security, prison administration, education); those who play a funding role for health (such as the ministry in charge of finance, economy and planning, territorial administration); and those who contribute in health promotion (social affairs, women empowerment and family, rural development...) (Ministry of Public Health, 2009b). On the other hand, there is a private sub-sector that contains both for-profit and non-for-profit organizations, as well as traditional practitioners.

There was no detail about how different stakeholders contribute in the health sector and what the power-relationships are. Moreover, the current situational analysis failed to provide clear evaluation of ongoing strategies and programs, especially reasons for failures or successes when they existed. Further, there was no structural analysis of the health sector aiming at looking at whether the organization of the ministry of health and other organizations as well as its governance affected the outcome of the sector. In addition, this strategic plan has very few details about health care financing. Analysis has been limited on the budget of the ministry of health (with no clue of the spending of others sectors intervening in the health sector) which represents only about 25% of total health expenditures (Figure 4). Also, there was no analysis conducted to explain why the US\$562 million allocated for the ministry of health between the year 2000 and 2006 had a mere average utilization rate of 65% (Ministry of Public Health, 2009b).

The second step was the conceptualization of strategic choices that had to be made in coherence and conformity with political and strategic orientations, and short term and long term goals (MINEPAT, 2011). Strategic options were then formulated for each identified strategy, followed by the design of an operational strategy. These strategies were declined in strategic axes, then strategic options, followed by operational programs and support programs. The overall goal of the health sector strategy was to fight against poverty through the improvement of social and health conditions of populations of Cameroon (Ministry of Public Health, 2009b). The general objective was to strengthen all health districts (economic, technical, and institutional autonomy), making them able to contribute to the achievement of the MDGs by 2015 (Ministry of Public Health, 2009b). Specific objectives included 1/3rd reduction of burden of diseases; 2/3rd reduction of under-five mortality; 3/5th reduction in maternal mortality; consolidation of 80% of health districts; and the strengthening of intermediate and central level health services (Ministry of Public Health, 2009b). In order to attain these objectives, five strategic axes were identified: health system strengthening; vulgarization of minimum and complementary activities packages in health facilities; development of an operational referral system, partnership reinforcement; and increasing the demand for health services (Ministry of Public Health, 2009b). Program were then designed after these strategic axes. These programs are: Maternal, child, and adolescent health; disease control, health promotion; and health district strengthening (Ministry of Public Health, 2009b).

The third stage was elaboration of the action plan, the prioritized action plan, as well as the monitoring arrangements of the health sector strategy (MINEPAT, 2011). During this stage, 21 sub-programs were planned, as well as 265 actions that were budgeted (Ministry of Public Health, 2009b). Also, using a mixed top-down and bottom-up approach, district health services,

health facilities, and intermediate or regional health services were enabled to design their four year (2009-2013) development plans and annual working plans, using guidelines provided by central level. Moreover, the Sector Wide Approach (SWAP) tool was introduced in accordance with the Paris declaration on development assistance for health, in order to pool resources from international donors and the Government for the elaboration of a comprehensive budget (Lambo & Sambo, 2003).

This budgeting was developed for the years 2009 to 2013 (five years) FCFA 1,256 billion or FCFA 925 billion for the years 2011, 2012, and 2013 (Ministry of Public Health, 2009b). However, the 2011-2013 budget was cut by 26% during the elaboration of the mid-term budget framework of the ministry of health for that period (MINSANTE, 2011). The mid-term budget framework is a macroeconomic tool that is constituted by programs, budget aggregates, as well as budget ceilings that are coherent both with the sector and the national development goals (MINEPAT, 2012). The problem with the budget that is supposed to deserve the health sector is that no mention is made of funds from other ministries or generated at peripheral level (hospitals, municipalities, pharmacies, traditional healers...). In addition, a significant proportion of these actions are not SMART (Specific, Measurable, Achievable, Realistic, and Timely).

4.8 Cohesion and coherence of the national development policy and the health sector strategy

This revision of the 2001-2010 health sector strategy was conducted using a top-down approach which followed the mid-term evaluation that required the contribution of all actors or stakeholders from all layers of the health system, including community members, health workers, public and private providers, insurance companies, government officials, local and international NGOs. In addition to this top-down approach, other mechanisms contribute to the

cohesion and the coordination of the inter-sectoral, the intra-sectoral, as well as the vertical levels. To ensure the inter-sectoral cohesion, the Inter-ministerial Committee for Programs Evaluation chaired by the Prime Minister, was created in 2011. This committee ensures that programs are structured and function in accordance with the national development strategy and the 2007 new financial regime of the state; and also it arbitrates on sectoral perimeter matters (MINEPAT, 2011). In addition, at intra-sectoral level, every sector has a steering committee of its strategy and this committee is chaired by the Ministry of Economy and Planning assisted by the leading ministerial department of that sector, or visa-verse (MINEPAT, 2011). However, this rule is not followed in the case of the health sector which strategy is piloted 'solely' by the ministry of health. Moreover, each sub-sector or ministry possesses an integrated internal committee for planning, programing, budgeting, monitoring, and evaluation which works under the coordination of the secretary general of that ministry.

5 SWOT analysis of the 2001-2015 health sector strategy using MINEPAT (2009) framework

In order to have a systematic understanding of the difficulties of its implementation, the author of this practicum analyzed the 2001-2015 health sector strategy using the SWOT matrix. Three phases were considered for this analysis: the preparation phase, the diagnosis or situational analysis phase, and the strategies, strategies, objectives, means, and priority setting phase. Results of this analysis are presented in Table 2, 3, and 4.

5.1 Preparation phase of the elaboration of the 2001-2015 health sector strategy

Table 2: SWOT analysis of the preparation phase of the elaboration of the health sector strategy

Item	Strengths	Weaknesses	Opportunities	Threats	
Respect of	Procedures from the national planning framework were globally respected	There is no mention of whether there was a collaboration for involved stakeholders	A detailed guideline exist for central, intermediate, and peripheral levels	No initial training for most of the	
planning procedures		Lack of planning skills among health workers	Funding for capacity building at every level of the health pyramid	managers in the health sector	
Institutional framework	The institutional framework exist for the operationalization and the monitoring and evaluation of this sector strategy	The steering committee does not have enough workforce to address its challenges	Strategic planning and health system strengthening are key agenda issues for donors	Political will (time for taking and implementing decisions)	
Strategic monitoring and	Some projections were made about the trends of	The health sector strategy does not put an emphasis on strategic monitoring and prospective analysis, it rather relies more in past history	technical expertise exist in schools of medicine, management, MINEPAT		
prospective analysis	the evolution of the MDGs	Lack of collaborative initiatives on research between the government and universities	The national observatory of health was just created		

Past and current programs' evaluation	A quantitative and qualitative mid-term evaluation was conducted in 2006	Evaluation not SMART as initial objectives were not Specific, Measurable, Achievable, Realistic, and Time bound either; thus, baseline not clear and not understandable. For example nothing clear is said about the viability health district (target or results) apart from some data about hospital construction. Also, for human resources, it is not clear about what the target was and what the actual gap is. The same could be said about the institutional framework were mentions is made about some slight changes in the organization of the ministry of health with no clear analysis about what problems had to be fixed at this level and how have the task been performed so far.	Expertise exist at the level of the ministry of economy and planning that could be used appropriately	
---------------------------------------	--	--	---	--

5.2 Diagnosis or situational analysis

Table 3: Diagnosis or situational analysis

Item	Strengths	Weaknesses	Opportunities	Threats
Sector delimitation	Stakeholders have been identified and categorized	The stakeholders' analysis did not provide details about the interests of stakeholders as well as power distribution within the sector. This is probably due to the lack of data regarding these issues.	Competencies exist at the Ministry of Economy and Planning	
Description of the sector and its components	Domains were described in terms of their objectives, actions, indicators, and budget	In this document, there was no description of the structure and the functioning of programs. Moreover, the organization of programs in the health sector strategy (Maternal and Child Health, Disease control, health promotion, and district strengthening) is totally different of the organization present in the Priority Action Plan (Maternal and Child Health, Disease control and Health Promotion, health district strengthening, and governance). Moreover, the private sector in general and more specifically the traditional sector was not described. It was the	All NGOs and community based organizations are authorized by administrative authorities and their situations exist in records that could	Most of the NGOs and CBOs could be labile and change rapidly their goals or domains of intervention.

			1	1
		same for NGOs that were just mentioned but there is a lack of	be collected and	
		information about their number, distribution, and filed of interest	analyzed.	
Inventory of				
products or		This inventory was not performed in the health sector strategy		
service supply				
		Probably due to lack of data, the economic analysis that was performed		
		was very incomplete and lack depth about health care financing in	Data as well as	
		Cameroon (funding strategies and motivations by modalities of	Data, as well as	
		financing); exact figures about mutual health organization, social security	competencies exist	
-		and health insurance; income/poverty distribution and health	(government	
Economic		expenditures; funding from other government entities; efficiency of	budget, national	
analysis of the		public and private spending for health; analysis of distribution of health	health accounts,	
sector		spending across the different levels of the health system, as well as	research and	
		distribution per program or functions. Moreover, the country's economy	national surveys,	
		in terms of balance of payment of health or medical supply. Further, no	government	
		account was taken on possible scenario of the economic development	reports)	
		strategy, given that it could impact availability for resources for health		
		There was no description of horizontal inequities in both geographic and		
		financial access to health services. No analysis was conducted on access		
Social and		ad utilization of alternative health services (traditional medicine, auto-		Adequate
spatial		medication) and how they are framed by culture and/or socioeconomic		funding for
analysis of the		status. In addition, there was no analysis performed regarding the		research?
sector		distribution of populations to serve, their way of life and how this affects		
		the morbidity and mortality.		
		The natural environment was not described in terms of the impact it	Data, as well as	
	A mere	could have on the health system and its performances. For example, the	competencies exist	
	standardized	ecological milieu was not put in relationship with the description of the	(government	
National	description of	distribution of the burden of diseases. Moreover, elements such as the	budget, national	
National	geographic and	demographic transition as well as the rapid urbanization rate should have	health accounts,	
environment	epidemiologic	been studied in terms of their effect on disease distribution and access to	research and	
	situation of the	health services as well. Further, the political environment as well as the	national surveys,	
	country	decentralization process have a significant role to play in the system and	government	
	·	should be accounted for.	reports)	
E 1		No mention was made here about international and global issues in terms	Data and technical	
External		of security at borders and refugees camps that could be related to the	expertise exist in	
environment		spread of epidemics and disaster emergencies. Also, bilateral and	universities,	

		multilateral partners could have been identified and characterized in terms of their interest, power, and goals. Moreover, their compliance toward the SWAP approach could be mentioned.	management schools, government, NGOs	
State's institutional analysis of the sector		This section could have been used for an in-depth analysis of the structure of the Ministry of health as well as the Standard operational procedures, in accordance to the new economic deal, as well as the bottlenecks caused by the actual structural organization.	Competencies exist at the MINEPAT, and ministry of administrative reform	Political will? Programs becoming autonomous means that some key stakeholders have to lose some power.
Participatory approach	All stakeholders involved, using both a top-down and bottom-up approaches			

5.3 Strategies, objectives, means, and priority setting

Table 4: Analysis of Strategies, objectives, means, actions, and priority setting

Item	Strengths	Weaknesses	Opportunities	Threats
Missions, vision, values, and goals	These were set and were very clear	There is no information on whether the health workforce and organization are aware of these principles	Initial and continuous training	
Synoptic view of objectives with their prioritization	Executive summary	No priority plan within the strategic plan but this exist in a different documents such as the mid-term budget framework, and priority action plan		
SMART objectives and actions	Operational objectives and actions regarding maternal and child health and disease control were SMART enough and even details presented about efforts distribution in time	Lack of visibility regarding the viability of health district.		

Maternal & child health Disease control Health promotion District Viabilization Governance? Comparison of actual and targeted situations	Activities are planned at every level of the health sector Bottlenecks analysis performed Budget planned and analyzed for every intervention level Input from every level Unique budget frame for everyone Targeted situation is well explained and sometimes SMART especially regarding the MDGs	Programs are not well defined with respect to the new financial regime, meaning that there is no clear distinction between vertical and horizontal programs and this could led to duplicates and difficulties in coordination An incremental budget approach has been utilize with inconvenient that districts could see almost no significant changes Lack of decentralized data to help health districts and region plan, implement, and evaluate their activities accordingly since most of the results of MDGs are only available at central level Not clearly stated how other stakeholders could contribute The present situation actually is not clearly described probably due to the lack of adequate data regarding objectives like making health district viable and governance	Other ministries involved as well as donors	26% reduction in budget Lack of political will
Stakeholders accountability	Stakeholders were identified by action			
Cartography of problems and solutions		This was not done because the situation was only analyzed at national level, and geographical disparities were not accounted for.		
Feasibility and Evaluation research	An integrated monitoring and evaluation plan was issued and it is mostly summative with indicators, targeted situation.	No formative evaluation was planned nor conducted on this strategy or on the programs.		Funding
	A survival analysis was performed to measure the gaps in some programs.	Also, it is difficult to know if some of these actions are feasible because sometimes the initial situation is not analyzed.		

6 Key public health challenges and policy alternatives

6.1 Governance challenges

a. Health district strengthening (district organization and decentralization process)

While it is not always utilized precisely in health sector reforms, the concept of "decentralization" that refers to the transfer of either political, economic, and/or administrative power from higher to lower levels of an organization or a system, has four stages which are delegation, de-concentration, devolution, and privatization; delegation being the closest to centralization and privatization being its extreme opposite (Saltman, Bankauskaite, & Vrangbaek, 2006). The goal followed by decentralization is to optimize efficiency of organizations, using small scale management units which are believed to be more flexible and responsive, well structured, as well as more accountable as compared to bureaucracy (Saltman et al., 2006). Probably attracted by these potential gains in efficiency, and also because of their will to strengthen primary health care policies, twelve Sub-Saharan African countries opted for decentralization as a health system reform strategy (Lambo & Sambo, 2003).

However, some years later several European critics suggested that decentralization was not efficient due to several factors, including: the significant growth of health expenditures associated with the scarcity of funding at national level; the worsening of inequities; the hyper fragmentation of the system leading to duplications; the problem of share of political responsibility between local and central authorities; as well as the facilitation of the centralization of the system due to technology (Saltman, 2008). Since then, European countries started recentralize their health systems, using different strategies (Richard B. Saltman, 2008).

Since their creation in 1996 (almost 20 years ago) in Cameroon, health districts were designed to become autonomous managerial entities that will implement primary health care

policies. This creation occurred concomitantly with the necessity of the country to move towards more decentralization, as a result of early 90s civil unrests, and political bargains and constitutional reform that followed (Gabriel, 1999). Despite the fast pace of health district creation, none of them up to know has reached a stage of autonomy including technical, institutional, or economic autonomy (Ministry of Public Health, 2009). The reasons for Cameroonian health districts remaining merely at a stage of delegation or de-concentration twenty years later could be classified in institutional, technical, and economic reasons. However, the situation was different in countries like Zambia that decided to have their health district authorities elected and provided them with complete autonomy; while in countries like Mozambique, Nigeria, and Tanzania, power within the health sector was transferred to elected lower government levels (Lambo & Sambo, 2003).

Among institutional reasons, the very slow pace of the whole national decentralization process that has been too slow in the entire public administration, has resulted in the limitation of the power of local and regional authorities. Also, district management teams still have a low power in terms of human resources management that remains highly centralized. In addition, health districts still have a total dependence on central level for funding, and this regulation authority does not have an equitable tool for resource allocation to health districts and thus resource allocation respects neither territorial size, nor population size, and even not health districts performances. This financial dependency contributes to lower the decision power of district management teams in their localities.

Regarding technical reasons, district management teams lack technical expertise as many of its members are clinicians with most of the time no initial training in management of health services. Even though they may benefit from continuous training, it seems not to be efficient as

most of these training sessions aim at enhancing the implementation of some specific vertical programs. In addition to these managerial difficulties, health district management teams lack competencies in such fields as health promotion, environmental health, and health communication. This is probably due to the quality of staffing that is almost entirely constituted by clinicians (physicians and nurses). This gives an early orientation on health district activities that will be geared almost toward infectious disease control patterns. District management teams lack expertise in facing the epidemiological transition in a country with a high burden of infectious diseases and a rising burden of non-communicable diseases (Echouffo-Tcheugui & Kengne, 2011).

The contribution of the actual health sector strategy to health district strengthening given the aforementioned challenges will be very limited. A first possible way to enhance district strengthening is an adequate training of health workers in leadership and management, coupled with the implementation of the results based management strategy. The adequate training of health workers could be conducted through the creation of a training program in management and leadership at the school of public health that will recruit medical doctors with at least two years of work experience and provide them with a nine to twelve months training in management and leadership, as well as in health system strengthening and other core disciplines in public health (epidemiology, biostatistics, research methods, planning, monitoring and evaluation...). As for physicians that already hold this positions as district medical officers, they could be offered opt for the same program in an executive training program that will allow their intermittent presence at the school, and that could be followed by an onsite monitoring. This initiative could be funded through the Highly Indebted Countries Initiative that aim at funding social and health projects and are highly underutilized (Omboui, 2014).

b. Intersectoral management challenges

This epidemiological transition requires a multi-sectoral approach to health problems, and this was a key objective of the health sector strategy. However, institutional arrangements for coordination of health district activities at peripheral and to some extend at central level are still weak. This coordination have to be performed at peripheral level by administrative authorities (divisional and sub-divisional officers), and by municipality or regional boards. This coordination was supposed to be made easier within the local development committees that have to be promoted by municipalities, but still remain almost inexistent or underfunded. Moreover, there is no institutional arrangement that makes the district health service member of the public health commission at the municipal level. The development plans and action plans of these municipalities are approved by administrative authorities that does not requires the inside of experts from the health sector; and after their approval, these plans are not made public. This results in duplication of resources at local level, as well as plans based on wrong situational analysis. Further, the territorial organization of health districts is very different from that of other municipalities (and public administrations), and this creates some difficulties in intersectoral management in some location, several health districts belong to a unique municipality while in others, several municipalities belong to a single health district.

To address these issues, research should be conducted in order to evaluate possible effects of this territorial inadequacy among health districts and municipalities and/or other administrative units. Also, another study could evaluate on one hand the laws and regulations that govern both public administrations and municipalities in order to see if collaboration mechanisms that exist are compatible, and on the other hand to observe the effectiveness of this collaboration on the field. A hypothesis of such a study could be that intersectoral management is

limited both by laws and regulations, and by personal issues such as technical deficiencies or lack of human capacities of managers.

c. Structural changes (New economic regime) within the MoH

The new economic deal act was passed in 2007 and was planned to be implemented in 2013, in order to allow some time for capacity building and structural changes. This economic regime was an attempt of the government to promote results based management mostly within public organizations. According to this economic regime, programs are supposed to be autonomous with a program director that has to be assigned objectives and to be totally accountable for his performances. Most of the ministries, including the ministry of health made some changes in their structures to adapt to this economic regime.

However, at the level of the ministry of health, the organizational chart does not reflect the organization in programs as designed in the health sector strategy. The ministry of health is still organized in ten directions and divisions working under the coordination of the Secretary General (family health, human resources, health promotion, financial and patrimonial resources, cooperation, disease control, legal affairs and litigations, health care and health technology, pharmacy, drugs and laboratory, and operational research) (Republic of Cameroon, 2013). This was a king of status quo position in which each direction or division remains accountable for their budgets and performances. Their implication of these hyper fragmented directions or divisions in programs will be difficult as they are not accountable to programs performances. This situation was identified by the intersectoral Committee for Program Evaluation found that required the Ministry of Health to make some changes in that organogram and to design program directors that would be responsible and accountable for the management of these programs (Government of Cameroun, 2012). Some slight changes were made to address this issues as

program coordinators were designed but the program themselves are still not designed accordingly to be operated in an autonomous way, and the power relations between program directors and other key stakeholders is not very clear. Moreover, this will result in difficulties to determine the limits of the horizontal programs giving the fact that these programs will still share most of the resources from previous directions and divisions.

This why a stakeholders power analysis could have helped everyone understand exact reasons why there was a failure to achieve the needed structural changes that is necessary for the efficiency of the health sector strategy. The existence of such a design could have been a great opportunity not only to increase the performance of the ministry of health at central level but to enhance health districts' strengthening and autonomy as well; using the results based management approach. The organization of the health sector strategy in two operational or vertical programs that are Disease Control and Prevention, and Health Promotion, and one transversal or horizontal program that would be in charge of support actions for the latters (human resources, training, research and development, strategic planning, evaluation research). These programs would then establish a contractual relationship with health districts that would receive an increasing part of their funding through regional structures (such as regional funds for health promotion, or other accredited agencies that would purchase their performances. Given the success encountered in 14 African countries by this result based financing approach (national and local health system strengthening, improved health status, innovation, creativity, ownership), Cameroon has been implementing randomized control trials in some regions with the support of the World Bank and preliminary results are satisfactory (Bove, Robyn, & Singh, 2013).

d. Role of political parties

It is difficult to know what alternative programs are offered by political parties for the health sector both at central and peripheral level. There is no published document that explains in detail the mission, vision, values, strategies, and programs by leaders of these parties. From the website of some major political parties such as the ruling party which is the Cameroon People's Democratic Party (CPDM, 2014) and some opposition parties such as the Cameroon Renaissance movement (MRC, 2014) and the United People for Social Renovation (PURS, 2014), only their social projects are mentioned with no clue about situational analysis performed in order to frame evidence based strategies that could be offer some alternatives.

A study should be conducted to assess the potential of political parties to address health policy issues. This could enhance the public debate on public health issues that could provide the country with innovative approaches either at national or local level. Also, political leaders could be sensitized on health policies issues and could therefore request or exploit results of research, or even attach services of health policy scholars or experts.

6.1 Qualitative orientation of health workforce training

Amani (2010) has performed an interesting analysis on the physicians' crisis in

Cameroon in which she proved that most of problems occurring in the health sector are related either to the lack of competencies or to the lack of motivation of health workers at different levels of the pyramid. Among policy alternatives that she proposed, some include the liberalization and the delocalization of the training of physicians, and now are being implemented by the Government as the country moved from a unique medical school to almost ten medical schools across the country. However, there seems to be a reduction in clinical skills acquired by clinicians with time, mainly because of this multiplication of medical schools was neither preceded by a strategic plan, nor followed by an increase in teaching schools. Even at the

level of these institutions, an evaluation report found that they lack a strategic vision, a qualified staff, and infrastructures (teaching hospitals and laboratories) (Cameroun Actu, 2013).

In a recent reform of the training of medical professionals, the Government has decided to subsidize medical schools and to create harmonized national exams which will precede the recruitment of medical students and will sanction the end of their curriculum as well. Also, this reform followed the human resources development plan objectives, by increasing the number of primary care physicians as well as that of specialists physicians trained. If the quantitative aspect of medical training has been addressed during this reform, the strategies utilized for the qualitative training seems not to be correlated with the country's health profile.

Even though Cameroon's burden of diseases was still highly dominated by infectious diseases with 75% of total years of life lost (YLL) in 2008 (WHO, 2014a), there is a significant rising trend of non-communicable diseases that represented 43% of all deaths and 21% of total DALYs in 2002 (Echouffo-Tcheugui & Kengne, 2011); probably due to lifestyle changes brought by urbanization and globalization. In this epidemiological transition context, the risk of comorbidity between communicable diseases, non-communicable diseases, as well as communicable and non-communicable diseases among Cameroonian citizens exist and is important (Young, Critchley, Johnstone, & Unwin, 2009). Therefore, health professionals should be trained accordingly to handle these complex patients in an integrated manner instead of training highly specialized physicians. This approach of hyper specialization will be highly expensive not only for payroll, but for the large number of paramedical exams that will be required for the same patient. Also, they will encounter difficulties in collaboration that could result in time lost and in inefficient patients' management as well.

Given the high burden of diseases, the important level of comorbidity, as well as the poverty level of the country, it would be cost effective for a country like Cameroon to replace its highly specialized physician crews by primary care physicians whose training should be redesigned to make them more competent in patients' comprehensive approach. This means the training of more primary care physicians such as pediatricians, family doctors, gynecologist/ obstetricians, internists, and hospitalists. In addition, these physicians could be provided with some skills in leadership and management, epidemiology, as well as health economics, nutrition, and communication. With this approach, both public and private spending could be saved mainly because where many specialists would have been necessary to threat one patient with multiple diseases, just one primary care physician will perform the task. Also, these primary care physicians that will work at all levels of the health pyramid (from primary to tertiary care hospitals) could play an important role of gate keepers for the referral to specialists, thus saving cost. They could expect an increase of their revenue that would not impact the total health care spending. This comprehensive primary health care approach is currently used in the implementation of the Patient Protection and Affordable Care Act that was enacted in the US and has already enable the country to double its number of primary health care work force between 2008 and 2013, the modernization of training of primary care physicians is ongoing, as well the increase of their Medicaid reimbursement and the development of innovative incentive mechanisms (ASPA, 2013)

6.2 Health information system and health sector strategy

An evaluation research conducted by the Ministry of Public Health found that none of the six components of the national health information system (resources, indicators, data sources, data management, information product, and data dissemination and utilization) was efficient

(Ministry of Public Health, 2009a). Also, it was reported that managers of health services do not value data management and even commit staff they would like to punish to this activity (Ministry of Public Health, 2008). This could be explain by the fact that these data are not useful for those who are supposed to collect them. Moreover, among most significant data sources, national surveys such as the Demographic and Health Survey, which are organized almost every five years, play the role of summative evaluation research for the health sector strategy and other social development programs at national level. However, these types or surveys fail at providing peripheral level (health districts) with accurate information for their planning, monitoring, and evaluation cycles; and this could result in or could be worsened by the lack a appropriation of the Millennium Development Goals, as reported by the UN task team on the post 2015 UN development agenda (2012).

Another important issue is that, significant and not expensive potential research structures exist and are underutilized if not utilized at all; these include medical and nursing training schools and other schools where social sciences are taught. In these institutions, thousands and thousands of thesis or research are conducted every year and just abandoned for two main reasons, the first being that the quality of research is not satisfactory and another reason being that these researches are conducted on issues that are not useful or requested by decision makers.

An interesting way of enhancing research in medical and social sciences, as well as providing relevant data to the health system either at regional or national level is the improvement of research potential in universities and the creation of collaboration platforms between local, regional, and central institutions. This platform could centralize requested research topics needed by organizations of every level. For small institutions with limited resources such as health districts, primary and secondary care hospitals could pool their limited

results to purchase similar researches that they need to plan or evaluate their activities. Results of such studies could be aggregated and utilized by the central level that could complete or verify those, using national surveys. This approach could also be enhanced by the results based financing approach that would "force" peripheral health structures not only to utilize the purchased indicators and ensure the quality of their health information system, but to request research from for data they are not able to collect and that could help them develop adequate strategies.

7 Conclusion

In the context of a rapidly changing economic and social environment, and in a situation of epidemiologic and demographic transitions, strategic planning appears to be an important tool for countries like Cameroon, which has experienced an incremental management approach to its health problems since the colonial and post-colonial periods. This management tool has been utilized for more than a decade in Cameroon with mediocre (or poor) results (or outcome). This is probably due to the lack of accurate data at national and mostly at peripheral level of the health system, which could lead to a flawed situational analysis and diagnosis of the health sector, or to a superficial comprehension of ongoing issues to be addressed. Moreover, no formative evaluation was conducted in order to test the theory of change or the process of the health sector strategic plan. Such studies could have revealed some issues that needed to be addressed prior to or during the implementation of the health sector strategy. These issues include the conformity of the health sector strategy to the new economic regime of the state as well as the programs design, and the weakness of the forecasting analysis that should impact the training of health workforce in accordance to the country health profile and the evolution of its socioeconomic and cultural environment. Policy alternatives to these problems include structural changes in the ministry of public health to meet the new economic regime's requirements, the redesigning of programs into two vertical and one horizontal, the capacity building of health managers and physicians in conformity with actual and forecasted population health status, as well as economic and managerial challenges.

References

- AfDB/OECD. (2004). Cameroun. AfDB & OCDE.
- Amani, A. (2010). The Health Workers Crises In Cameroon. Retrieved from http://digitalarchive.gsu.edu/iph_theses/139/
- Ardener, E. (1962). The Political History of Cameroon. *Royal Institute of International Affairs*, 18(8), 341–350. Retrieved from http://www.jstor.org/stable/40393427
- ASPA. (2013, June 21). Creating Jobs by Addressing Primary Care Workforce Needs. Retrieved

 March 26, 2014, from

 http://www.hhs.gov/healthcare/facts/factsheets/2013/06/jobs06212012.html
- Awasom, N. F. (1998). Colonial background to the development of autonomist tendencies in Anglophone Cameroon, 1946-1961. *Journal of Third World Studies*, *15*(1), 163–183. Retrieved from
 - http://search.proquest.com.ezproxy.gsu.edu/docview/233191067?accountid=11226
- Aydelotte, W. O. (1942). Review of Germans in the Cameroons, 1884-1914: A Case Study in Modern Imperialism by Harry R. Rudin. *The English Historical Review*, *57*(226), 276–278. Retrieved from http://www.jstor.org/stable/554817
- Ayeni, O. (1976). Retrospective estimates of mortality from the Nigerian medical censuses of 1930-1932: a research note. *Nigerian Journal of Economic and Social Studies*, *18*(3). Retrieved from http://www.popline.org/node/454081
- Bove, A., Robyn, P. J., & Singh, R. J. (2013). *Cameroon economic update: Towards greater* equity: a special focus on health (No. 80671) (pp. 1–40). The World Bank. Retrieved from http://documents.worldbank.org/curated/en/2013/07/18146466/towards-greater-equity-special-focus-health

- Bracker, J. (1980). The Historical Development of the Strategic Management Concept. *The Academy of Management Review*, 5(2), 219. doi:10.2307/257431
- Brown, T. M., Cueto, M., & Fee, E. (2006). The World Health Organization and the Transition From "International" to "Global" Public Health. *American Journal of Public Health*, 96(1), 62–72. doi:10.2105/AJPH.2004.050831
- Cameroun Actu. (2013). Un rapport discrédite la formation en médecine au Cameroun. Online news paper. Retrieved March 25, 2014, from http://www.camerounactu.net/en/social/education/3278-un-rapport-discredite-la-formation-en-medecine-au-cameroun
- Cassels, A. (1995). Health sector reform: key issues in less developed countries. *Journal of International Development*, 7(3), 329–347. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/jid.3380070303/full
- Chauvin, S. (2012). Cameroun : les enjeux de la croissance. *Macroéconomie & Développement*, 6, 1–28.
- Clemens, M. A., & Pettersson, G. (2008). New data on African health professionals abroad.

 Human Resources for Health, 6(1), 1. doi:10.1186/1478-4491-6-1
- Coquery, C., & Vidrovitch. (1985). The colonial economy of the former French, Belgian and Portuguese zones, 1914-35. In *General History of Africa volume 7: Africa under Colonial Domination 1880-1935* (1st ed., Vols. 1-8, Vol. 7, pp. 351–381). Calverton, MD, USA: UNESCO & Heinemann.
- CPDM. (2014). Site Web Officiel du RDPC / Official Web Site of CPDM. Retrieved March 25, 2014, from http://www.rdpcpdm.cm/en

- Crowder, M. (1993). Africa under British and Belgian domination, 1935-45. In *General History* of Africa Volume VIII Africa since 1935 (Vols. 1-8, Vol. 8, p. 1,039). Fontenoy, France: UNESCO & Heinemann. Retrieved from http://www.unesco.org/new/en/culture/themes/dialogue/general-history-of-africa/volumes/complete-edition/volume-viii-africa-since-1935/
- Dessouane, P., & Verre, P. (1986). Cameroun: du développement autocentré au national libéralisme. *Politique Africaine*, 22, 111–119.
- Diop, M., Birmigham, D., Hrbek, I., Margarido, A., & Niane, D. T. (1993). Tropical and equatorial Africa under French, Portuguese and Spanish domination, 1935-45. In *General History of Africa Volume VIII Africa since 1935* (1st ed., Vols. 1-8, Vol. 8, p. 1,039). Fontenoy, France: UNESCO & Heinemann. Retrieved from http://www.unesco.org/new/en/culture/themes/dialogue/general-history-of-africa/volumes/complete-edition/volume-iii-africa-from-the-seventh-to-the-eleventh-century/#c181022
- Echouffo-Tcheugui, J. B., & Kengne, A. P. (2011). Chronic non-communicable diseases in Cameroon burden, determinants and current policies. *Globalization and Health*, 7(1), 44. doi:10.1186/1744-8603-7-44
- Essomba, R. O., Bryant, M., & Bodart, C. (1993). The reorientation of primary health care in Cameroon: rationale, obstacles and constraints. *Health Policy and Planning*, 8(3), 232–239. Retrieved from http://heapol.oxfordjournals.org/content/8/3/232.short
- FMSB. (2014). Quelques reperes historiques. *Faculty de Medecine et des Sciences Biomedicales*.

 Retrieved February 14, 2014, from

- http://www.fmsb.uninet.cm/index.php?option=com_content&view=article&id=47&Itemi d=62
- Frenk, J. (1994). Dimensions of health system reform. *Health Policy*, 27(1), 19–34. doi:10.1016/0168-8510(94)90155-4
- Gabriel, J. M. (1999). Cameroon's neopatrimonial dilemma. *Journal of Contemporary African Studies*, 17(2), 173–196. Retrieved from http://www.tandfonline.com/doi/pdf/10.1080/02589009908729646
- Government of Cameroun. (2012). Rapport du Comité Interministériel d'Examen des Programmes : Session du 19 juillet au 08 août 2012, (2012), République du Cameroun. Government of Cameroun.
- IMF. (2006). Press Release: IMF and World Bank Support Cameroon's Completion Point Under the Enhanced HIPC Initiative and the IMF Immediately Grants 100 Percent Debt Relief to Cameroon Under the Multilateral Debt Relief Initiative. *International Monetary Fund*. Retrieved January 17, 2014, from http://www.imf.org/external/np/sec/pr/2006/pr0685.htm
- Institut National de la Statistique (INS), & ICF. International. (2012). Enquête Démographique et de Santé et à Indicateurs Multiples du Cameroun 2011. Calverton, MD, USA: INS et ICF International. Retrieved from http://www.measuredhs.com/publications/publication-FR260-DHS-Final-Reports.cfm
- Israr, S. M., Razum, O., Ndiforchu, V., & Martiny, P. (2000). Coping strategies of health personnel during economic crisis: A case study from Cameroon. *Tropical Medicine & International Health*, 5(4), 288–292. doi:10.1046/j.1365-3156.2000.00547.x

- Ityavyar, D. A. (1987). Background to the development of health services in Nigeria. *Social Science & Medicine* (1982), 24(6), 487–499.
- Jua, N. (1990). Economic management in neo-colonial states: a case study of Cameroon.
 External research report. Retrieved February 12, 2014, from
 https://openaccess.leidenuniv.nl/handle/1887/453
- Kapur, I., Hadjimichael, M. T., Hilbers, P., Schiff, J., & Szymczak, P. (1991). *Ghana:***Adjustment and growth, 1983-1991 (International Monetary Fund., Vol. 86). Washington,

 DC: International Monetary Fund. Retrieved from

 http://books.google.com/books?hl=en&lr=&id=FzrUo1wtBh8C&oi=fnd&pg=PT7&dq=g

 hana+adjustemnt+and+growth&ots=_6JEnUCa06&sig=MUT03
 deUdw393cLGpIXl6CzW1w
- Konings, P. (1996). *The post-colonial state and economic and political reforms in Cameroon*.

 Routledge. Retrieved from
 http://books.google.com/books?hl=en&lr=&id=djtajyy5pzQC&oi=fnd&pg=PA244&dq=
 economic+crisis+in+cameroon&ots=SPvxL_0uvE&sig=un1vEko479AIfddZjtdJx_nTj0Y
- Lambo, E., & Sambo, L. G. (2003). Health Sector Reform in sub-Saharan Africa: a synthesis of country experiences. *East African Medical Journal*, 80(6), S1–S20. doi:10.4314/eamj.v80i6.9308
- Magoro, M. D., Masoga, M. A., & Mearns, M. A. (2010). Traditional health practitioners' practices and the sustainability of extinction-prone traditional medicinal plants.

 *International Journal of African Renaissance Studies, 5(2), 229–241. Retrieved from http://www.tandfonline.com/doi/abs/10.1080/18186874.2010.534842

- Marshall, S. J. (2004). Developing countries face double burden of disease. *Bulletin of the World Health Organization*, 82(7), 556. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2622909/
- Medard, J. F. (2011, July 5). Evaluation du système de santé Camerounais. *OverBlog*. Retrieved March 3, 2014, from http://acjp-education-livres.over-blog.com/article-evaluation-dusysteme-de-sante-camerounais-78622433.html
- MINEPAT. (2009a). Growth and Employment Strategy Paper: Cameroon. Ministry of Economy,
 Planning, and Regional Development, Cameroon. Retrieved from
 http://minepat.gov.cm/index.php/en/modules-menu/cat_view/7-publication-and-studyreports/32-strategic-development-vision
- MINEPAT. (2009b). Vision 2035 Cameroon. Ministry of Economy, Planning, and Regional Development, Cameroon. Retrieved from http://minepat.gov.cm/index.php/en/modules-menu/cat_view/7-publication-and-study-reports/32-strategic-development-vision
- MINEPAT. (2011). Guide national de la planification strategique au Cameroun. Ministry of Economy, Planning, and Regional Development, Cameroon. Retrieved from http://www.minepat.gov.cm/index.php/fr/modules-menu/cat_view/7-publication-and-study-reports/33-planning-tools
- MINEPAT. (2012). Glossaire de la chaine PPBS (planification, programmation, budgetisation, suivi/evaluation) au Cameroun. Ministry of Economy, Planning, and Regional Development, Cameroon.
- Ministry of Public Health. (1993). National declaration on the implementation of the reorientation of Primary Health Care. Ministry of Public health Cameroon. Retrieved from

- http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=7&cad=rja&ved= 0CFwQFjAG&url=http%3A%2F%2Fwww.unicef.org%2Fspecialsession%2Fhow_count ry%2Fedr_cameroon_fr.PDF&ei=1NcUU6DbH4ylkQeavIDgAw&usg=AFQjCNFtWzpy D__p2gl728H4cl3FUtGlqg&bvm=bv.61965928,d.eW0
- Ministry of Public Health. (2006). Evaluation a mi-parcours de la mise en œuvre de la stratégie sectorielle de la sante 2001-2010. *Centre de Documentation Numérique Secteur Sante du Cameroun*. Retrieved March 4, 2014, from http://minsante-cdnss.cm/en/node/2303
- Ministry of Public Health. (2008). *Plan strategique de renforcement du systeme d'information*sanitaire 2009-2015 (p. 54). Yaounde, Cameroun: Ministere de la Sante Publique.

 Retrieved from http://www.afro.who.int/en/cameroon/press-materials/item/5955
 syst%C3%A8me-dinformation-sanitaire.html
- Ministry of Public Health. (2009a). Projet de developpement s systeme d'information sanitaire (2010-2012). Ministry of Public health Cameroon. Retrieved from http://minsante-cdnss.cm/en
- Ministry of Public Health. (2009b). Stratégie Sectorielle de la Santé 2001-2015. *Ministry of Public Health*. Government. Retrieved March 4, 2014, from http://cm-minsante-drh.com/site/index.php?option=com_docman&task=cat_view&gid=112&Itemid=130&lang=fr
- MINSANTE. (2011). Ministere de la Sante Publique: Cadre de depenses a moyen terme 2011-2013. Ministry of Public health Cameroon. Retrieved from cm-minsante-drh.com/site/images/stories/cdmt/cdmten.pdf
- Monteillet, N. (2006). De la méthode Jamot à la médecine de rue. *Politique africaine*, N° 103(3), 127–142. doi:10.3917/polaf.103.0127

- MRC. (2014). MRC CRM :: Mouvement pour la Renaissance du Cameroun Cameroon Renaissance Movement. Retrieved March 25, 2014, from http://www.mrcparty.org/
- Ndongko, W. A. (1986). Economic management in Cameroon: policies and perspectives

 (Research report No. 29/1986) (p. 196). Leide, Netherlands: African Studies Centre.

 Retrieved from

 https://www.google.com/search?q=Economic+management+in+Cameroon%3A+Policies

+and+performance&hl=en

ant+_18jul10.pdf

- Ndongo, J. S., & Ongolo-Zogo, P. (2010). Renforcer le Système d'Information Sanitaire pour accélérer la Viabilisation du District de Santé Policy brief. *Centre pour le Développement des Bonnes Pratiques en Santé*, 1–12. Retrieved from http://cdbph.org/documents/ID49_PolicyBrief_fr_RenforcerleSIS_ViabiliserleDistrictdeS
- Nzogue, J. B. (2006). hygiène et urbanisme dans le Cameroun colonial études-coloniales. *Etudes Coloniales*. Retrieved February 13, 2014, from http://etudescoloniales.canalblog.com/archives/2013/04/13/26915937.html
- Okalla, R., & Le Vigouroux, A. (2001). Cameroun : de la réorientation des soins de santé primaires au plan national de développement sanitaire. *Bulletin de l'APAD*, (21). Retrieved from http://apad.revues.org/181#tocto1n1
- Omboui, M. (2014). Cameroun-France: 170 milliards disponibles dans le compte du C2D.

 Cameroon Report cameroon-report.com. Retrieved March 26, 2014, from http://www.cameroon-report.com/cooperation/619-cameroun-france-170-milliards-disponibles-dans-le-compte-du-c2d.html

- Owona, A. (1973). La naissance du Cameroun (1884-1914). *Cahiers D'études Africaines*, 13(49), 16–36. doi:10.3406/cea.1973.2724
- Peabody, J. W. (1996). Economic reform and health sector policy: Lessons from structural adjustment programs. *Social Science & Medicine*, 43(5), 823–835. doi:10.1016/0277-9536(96)00127-X
- PURS. (2014). Bienvenue sur le site du PURS. *Peuple Uni pour la Renovation Sociale*. Retrieved March 25, 2014, from http://www.purscm.org/site/fr/home
- Razafindramanaa, H., & Diomande. (2002). Cameroon: Structural Adjustment Program II

 (SAP II), Project Performance Evaluation Report (PPER) (pp. 1–50). African

 Development Bank Group. Retrieved from http://www.afdb.org/en/
- Republic of Cameroon. (2013). Decret N0 2013/093 du 03 Avril 2013 portant organisation et fnctionnement du ministere de la sante publique. Republic of Cameroon. Retrieved from http://minsante-cdnss.cm/en/node/2226
- Saltman, R. B. (2008). Decentralization, re-centralization and future European health policy. *The European Journal of Public Health*, *18*(2), 104–106. doi:10.1093/eurpub/ckn013
- Saltman, R. B., & Figueras, J. (1998). Analyzing the evidence on European health care reforms.

 Health Affairs, 17(2), 85–108. doi:10.1377/hlthaff.17.2.85
- Saltman, R., Bankauskaite, V., & Vrangbaek, K. (2006). *Decentralization in health care:***strategies and outcomes. McGraw-Hill International. Retrieved from

 http://books.google.com/books?hl=en&lr=&id=21DiozeH9wYC&oi=fnd&pg=PP1&dq=

 saltman+decentralization&ots=SVejbOwJ-n&sig=l6ElpAXjDQrQxxCd1hDvBN1IzFw
- Schneider, H., Weekes-Vagliani, W., Groppo, P., Lambert, S., Suwa, A., & Tinh, N. N. (1992).

 *Adjustment and equity in Côte d'Ivoire (OECD.). Paris, France: OECD Publishing.

Retrieved from

http://books.google.com/books?hl=en&lr=&id=c556fTTQPWgC&oi=fnd&pg=PA10&dq =adjustment+and+equity+in+cote+d%27ivoire&ots=7bARf_QNwZ&sig=Z5zGHm98g1 OJ84o1zxD23hTDITU

- Smith, R. D., & Hanson, K. (2012). *Health systems in low-and middle-income countries: An economic and policy perspective* (1st ed.). Oxford, New York: Oxford University Press. Retrieved from
 - $http://books.google.com/books?hl=en\&lr=\&id=k_DG9aR7A3kC\&oi=fnd\&pg=PP2\&dq=health+system+in+low+and+middle+income+countries+an+economic+and+policy+pers\\pective\&ots=aoFsjVhkCQ\&sig=6ezaLAF2bbV4t0NBNT_agASVL5M$
- Tchoungui, R., Gartlan, S., Simo, J. A. M., Sikod, F., Youmbi, A., Ndjatsana, M., & Winpenny, J. (1995). Structural adjustment and sustainable development in Cameroon: A world wide fund for nature study. *ODI Working Paper (United Kingdom)*. Retrieved from http://agris.fao.org/agris-search/search.do?recordID=GB9617732
- Transparency International. (2014). policy_research/surveys_indices/cpi/previous cpi.

 Transparency International: Archive site. Retrieved March 3, 2014, from http://archive.transparency.org/policy_research/surveys_indices/cpi/previous_cpi
- UN task team on the post 2015 UN development agenda. (2012). Review of the contributions of the MDG Agenda to foster development: lessons for the post-2015 UN development agenda (p. 24). New York, NY: United Nations. Retrieved from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CEEQFj AA&url=http%3A%2F%2Fwww.un.org%2Fmillenniumgoals%2Fpdf%2Fmdg_assessme

- nt_Aug.pdf&ei=BjOrUpOKLYfi2gWJ0YDACQ&usg=AFQjCNER1g8XYpoq9_coTJ7z OPP3xtd6Bw&sig2=5XMh8-G6wnFn1pzch5s7CA&bvm=bv.57967247,d.b2I
- UNDP. (2008). Cameroun: rapport de progres pour l'atteinte des Objectifs du Millenaire pour le Developpement 2008. UNDP-Africa. Retrieved from http://www.undp.org/content/undp/en/home/librarypage/mdg/mdg-reports/africa-collection.html
- UNDP. (2011). | Human Development Reports. *United Nations Development Programme*.

 Retrieved February 12, 2014, from http://hdr.undp.org/en/countries/profiles/CMR
- Wambalaba, W. F. K. (1999). *Dimensions of contemporary African development strategies*.

 Debuque, Iowa: Kendall/Hunt.
- WHO. (1959). First report on the world health situation 1954-1956. WHO: International Repository for Information Sharing. Governing body documents. Retrieved February 15, 2014, from http://apps.who.int/iris/handle/10665/85718
- WHO. (1963). Second report on the world health situation, 1957-1960. WHO Institutional

 *Repository fro Information Sharing. Governing body documents. Retrieved February 15,

 2014, from zotero://attachment/913/
- WHO. (1967). Third report on the world health situation, 1961-1964. WHO: International Repository for Information Sharing. Governing body documents. Retrieved February 15, 2014, from http://apps.who.int/iris/handle/10665/85794
- WHO. (1971). Fourth report on the world health situation, 1965-1968. WHO: International Repository for Information Sharing. Governing body documents. Retrieved February 15, 2014, from http://apps.who.int/iris/handle/10665/85832

- WHO. (1994). Health sector reform: report of the second consultation, 28-29 April 1994,

 Geneva. Retrieved February 24, 2014, from

 http://apps.who.int/iris/handle/10665/62599?mode=full
- WHO. (2010). Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization. Retrieved from http://www.who.int/healthinfo/systems/monitoring/en/
- WHO. (2014a). WHO | Cameroon country profile. *World Health Organization*. Retrieved March 25, 2014, from http://www.who.int/countries/cmr/en/
- WHO. (2014b). WHO | Health and development. *World Health Organization*. Retrieved January 17, 2014, from http://www.who.int/hdp/en/
- WHO. (2014c). WHO | Health Systems Strengthening Glossary. *WHO*. Retrieved March 6, 2014, from http://www.who.int/healthsystems/hss_glossary/en/index5.html
- WHO. (2014d). WHO | Structural Adjustment Programmes (SAPs). World Health Organization:

 *Trade, foreign policy, dipolmacy and health. Retrieved January 17, 2014, from
 http://www.who.int/trade/glossary/story084/en/
- WHO. (2014e). WPRO | The WHO Health Systems Framework. *WPRO*. Retrieved March 6, 2014, from http://www.wpro.who.int/health_services/health_systems_framework/en/
- WHO Afro. (2011, May 24). Framework for the implementation of the Ouagadougou

 Declaration on Primary Health Care and Health Systems in Africa: achieving better
 health for Africa in the new Millennium: Report of the Regional Director. Technical
 Report. Retrieved February 23, 2014, from http://apps.who.int/iris/handle/10665/1645
- Willame, J.-C. (1985). Cameroun: les avatars d'un libéralisme planifié. *Politique Africaine*, (18), 44–70.

- Woodson, C. G. (1939). Review of Germans in the Cameroons, 1884-1914, A Case Study in Modern Imperialism by Harry R. Rudin. *The Journal of Negro History*, 24(2), 217–219. doi:10.2307/2714453
- World Bank. (2014a). World DataBank World Development Indicators. *The World Bank*.

 Retrieved February 12, 2014, from

 http://databank.worldbank.org/data/views/reports/tableview.aspx#
- World Bank. (2014b, January 16). Cameroon | Data. *World Bank*. Retrieved January 17, 2014, from http://data.worldbank.org/country/cameroon#cp_wdi
- Yokono, D. B. (1995). Ajustement structurel, solidarites ethniques et equilibre socio-economique au Cameroun. *UNESCO: Ethno-net Africa*. Retrieved from http://www.ethnonet-africa.org/pubs/p95cir6.htm
- Young, F., Critchley, J. A., Johnstone, L. K., & Unwin, N. C. (2009). A review of co-morbidity between infectious and chronic disease in Sub Saharan Africa: TB and Diabetes Mellitus, HIV and Metabolic Syndrome, and the impact of globalization. *Globalization and Health*, *5*(1), 9. doi:10.1186/1744-8603-5-9