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MASTER THESIS

**Higher Education and Health Issues in
Development: an Insight Study of Cameroon.**

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EPIGRAPH

Wealth is evidently not the good we are seeking, for it is merely useful and for the sake of something else.

Nicomachean Ethics, Book 1, chapter 5, P.1096

**To my Lord JESUS-CHRIST,
The Lord of mercy,
Of all knowledge and wisdom.**

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LIST OF ABBREVIATIONS

- ADB: Asian Development Bank
- CEP: *Certificat d'études Primaire*
- CFA: Colonies françaises d'Afrique
- CM2: *Cours moyen deuxième année*
- CUSS: *Centre Universitaire des Sciences de la Santé*
- DESD: Decade of Education for Sustainable Development
- EMIA: *Ecole Militaire Inter- Armée*
- ENAM: *Ecole National d'Administration et de Magistrature*
- ENSP: *Ecole Nationale Supérieure Polytechnique*
- ENSTP: *Ecole Nationale Supérieure des Travaux Publics*
- ESIJY: *Ecole Supérieure International De Journalisme Yaoundé*
- FSLC: First school living certificate
- GCE: general certificate of Education
- GDI: Gender Related Indices
- GDP: Gross Domestic Product
- GNP: Gross National Product
- HDI: Human Development Index
- HIPC: Highly Indebted poor countries
- IMF: International Monetary Fund
- IRIC: *Institut des Relations International Du Cameroun.*
- MDG: Millennium Development Goals
- MTEF: Medium – Term Expenditure Frameworks
- OECD: Organisation for Economic Co-operation and Development
- PRSP: Poverty Reduction Strategy Papers

SAP: Structural Adjustment Programme

SIL : *Section d'Initiation à la Lecture*

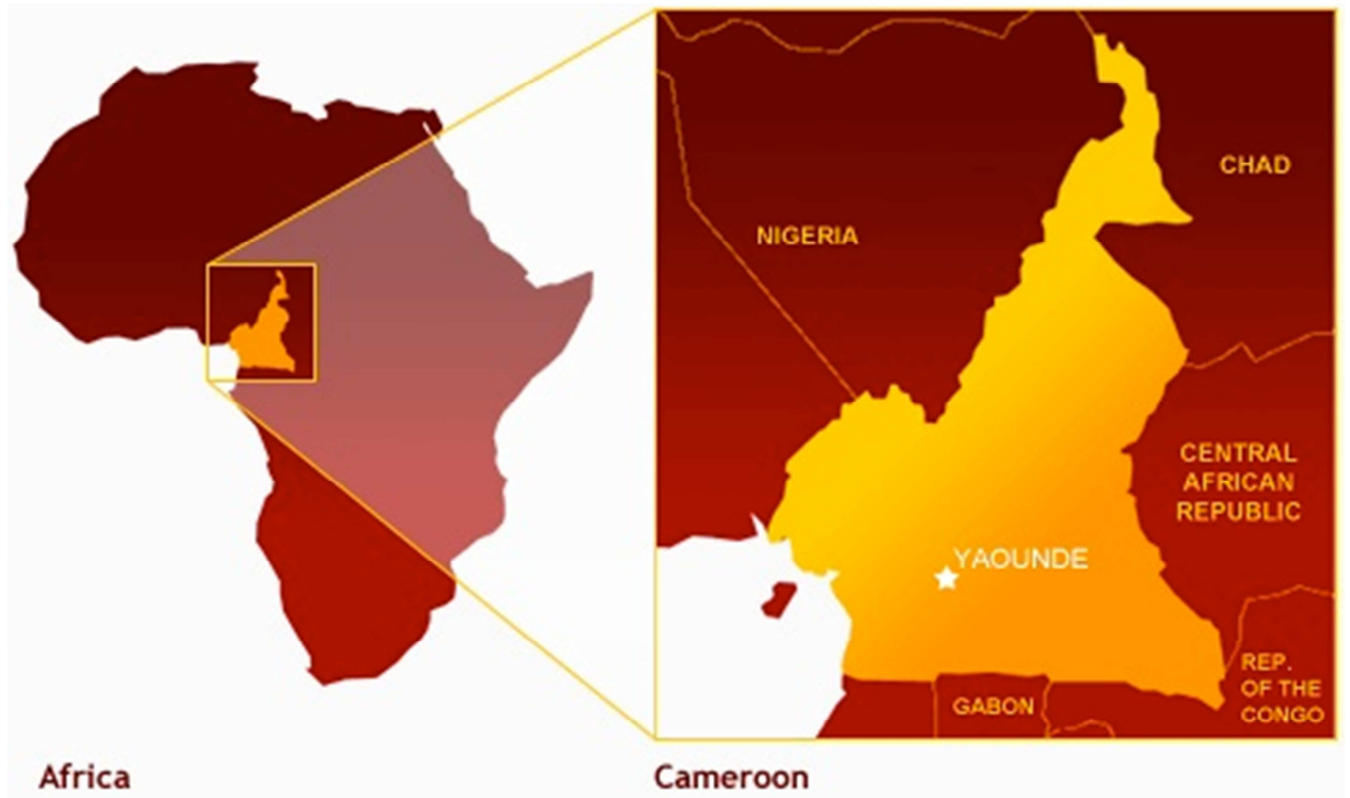
UNDP: United Nations Development Programme

UNECLA: United Nations Economic Commission for Latin America

UNESCO: United Nations Educational, Scientific and Cultural Organization

UNICEF: United Nations Children's Fund

WCED: World Commission on Environment and Development



Source: <http://www.developmenteducation.ie/taking-action/cameroon/>

INTRODUCTION

1.1 Presentation of the topic

There is an African proverb which says that an elder who dies is knowledge lost. Long before the present education systems, knowledge (understood to encompass spiritual beliefs, languages, cultural rituals, civilization technologies and know-how and so on) was passed on from one generation to the other in learning, through initiations, narrations and experiences. Sir Francis Bacon (1597) said knowledge is power. The knowledge that was passed on from generation to generation was the wealth but also the power of that given society. Though these forms of knowledge sharing are being largely outrun and even replaced by modern systems modes of communication (books, information systems, schools...Etc) the importance of knowledge has not changed. Many governments have gazed on education (formal or informal) as a source of wealth and power.

Cameroon is a country of central Africa, which gained independence in 1960. Development as wealth and power has been a central concern and main target of the government in Cameroon since the 1960s. It is in that idea that there have been several Development Plans which were drafted and implemented. Notwithstanding all the attempts to attain its so-desired goal of “development”, the Cameroonian government, after more than 50 years of independence has still not yet made it to its goal. Education is being argued by the UN and its agencies as well as by many national governments like the Cameroonian government, to have a prominent position in the development process. But, what is the relation between education and development? Or what is the contribution of education in development?

1.2 Background to the study

This thesis examines the relation between higher education and development. Concerning development, the focus is been placed on development issues of health and nutrition. Formal Higher Education in this study is understood to be the formal set of studies that starts from the A level (or *Baccalauréat* in French) upwards. Higher Education studies in Cameroon can be carried out in Universities, Graduate Schools, and Professional Schools.

1.3 Hypothesis

It is the contention of this work that there is a strong relation between higher education enrolment at tertiary level and health issues of development such as birth rate, infant mortality, death rate and fertility rate.

I argue that formal education, and more specifically higher education, is closely related to sustainable human development. As such it should be an important parameter to consider if governmental development plans in Cameroon are to be achieved. Better planned and well-managed, education system can foster human development and at the same time, meet the government goal of development as well as a well-planned development accounts for a good quality education. So reviewed and re-designed education policies are necessary if development goals are to be attained.

1.4 Objectives of the study

One of the objectives of this thesis is to consider the evolution of development and the different meanings it has carried over time. I have to acknowledge the fact that there is no consensus about the understanding of development, as the concept is constantly debated and challenged. But for the purpose of this work, the central point is placed upon development from the human development conception advocated by the U.N, and more particularly on sustainable human development.

A presentation of the State of Cameroon during pre-independence and post – independence periods and a presentation of the evolution of its higher education system and its particularity are provided in this work.

This work reviews the development plans implemented by the Cameroonian government from independence to present days. Development plans were set up for a period of five years with specific objectives it sought to achieve usually in that time range. Development plans also known as quinquennial development plans were quantified measurements to evaluate the progress of the desire goal of the Nation.

It also researches on the state of the relation between Cameroon’s formal higher education and Health issues, and advocates for a complete reform of the higher education system of Cameroon by looking at some examples from Asia.

1.5 The scope of study

The scope of this thesis is restricted to selected issues on development, which are health, nutrition and Higher Education. Because the relationship between education and development is bi-directional, the work is confined on compounding and comparing and analyzing quantitative data from Higher Education such as but not only enrolment rate to higher education institutions, and social indicators such as birth rate, infant mortality health and fertility rate from 1971 to 2011. I consciously avoid drawing into the vicious circle of who comes first between education and development, or who determines the other. That is why I step away from the analysis of the impact of education into development but restricting myself to the analysis of their relation without debating on the direction of the relation.

1.6 Structure of the thesis

In the first chapter of my thesis, I discuss the concepts that are central to this paper which are development and education. In this chapter, I present the theoretical

framework of my paper. I look at the meanings of development in the light of the different theories that support the concept over time. In the later part of this chapter, I discourse on the conceptual framework of this thesis. I engage specifically on human development, sustainable development, the capability approach, and the education as a concept. I also make a brief review of existing research on the issue of development and education and I give an insight on the discourse on gender, education and development. I present an insight on the discourse of higher education and development in Africa.

The second chapter presents the State of Cameroon in its pre and post-independence periods. I briefly present Cameroon geographically. I also make an analysis of its formal education system in general, and the higher education system in particular.

In the third chapter I present the different development plans carried out by the National government in Cameroon since independence in 1960. I discourse the target of these development plans that were build and how they were implemented. I also present the results these plans have generated. These plans were later replaced by structural adjustments plans geared by international financial institutions (mainly the Bretton Woods Institutions and the World Bank)

In the fourth chapter, I analyze higher education and health in Cameroon statistics, facts and figures. I use graphs and tables to show the evolution of higher education enrolment, and selected health issues in development of Cameroon. I calculate and analyse the correlation coefficient between enrolment and health issues such as fertility rates, birth rates, infant mortality rate and crude death rates. I later draw examples from the Asian continent, namely from South Korea and Singapore. I examine the characteristics of the policies that these governments have used to be able to increase the level of correlation between their higher education and training systems and the

requirements of the particular stage of growth they were, often by anticipating future skills demands. Most of the analyses methods are based on the example works of Walter McMahon in *Education and Development: Measuring the Social Benefits*, and *Higher Learning, Greater Good: the Private and Social Benefits of Higher Education*, but also on the work of Ingemar Fägerlind and Lawrence J. Saha in *Education and National Development: a Comparative Perspective*. I argue on the necessity of reforms in the Cameroon formal education system as well as the aspects to be considered in the reform.

In the conclusion, I summarize the results from the issues under investigation. I make a summary of the analyses and the discussion on findings, and provide recommendations for future researches.

1.7 Methodology of the study.

In this study, I use literature review and data analyses to support the arguments that I have put forward. The data used are mainly driven from the World Bank online database, The United Nations Population Division database online and other sources such as UNICEF or UNESCO. I use graphs to present the results for a group of years on the selected issues. I also determine the Pearson correlation coefficient between variables that are being studied that is birth rates, fertility rates, child mortality rates and death rates. I conducted an online survey on a population of twenty- two university students and graduates from Cameroon. The participants to the survey have been pre-selected to insure that they are issued from Cameroon universities. An interview of two lecturers - Professor Mbifung Lambi and Doctor Nde Peter Fon- from the University of Buea- was conducted. I want to extend my gratitude to these lecturers for their willingness to be namely cited in this work. These lecturers were sorted because of their experience on higher education in Cameroon as they are respectively former Vice –

chancellor at the University of Buea and actual Head of Department of Public Health and Hygiene at the University of Buea. The data collected from the survey and interviews were computed with Excel for quantitative data and content analysis for the qualitative data was done.

1.8 Limitations

Because the relation between development and education is not unidirectional but rather bi-directional, the work is confined on analyzing the statistics and data available. The Pearson correlation coefficient is statistical tool that determine if there exists of a correlation between two or more sets of variables without any specification on which causes the other. The Pearson correlation coefficient (which values are range between -1 and 1) is limited in defining the strength to which the possibility of occurrence of one phenomenon determines the occurrence of the other or others.

It is under much care about the fact that education and development are not isolated phenomena that the analyses of the variables are done. There are other factors that may also come into play to account for the end results in the analyses of social phenomena.

The countries that have been used as examples in this work are evolving in different historical, geographical and socio-political settings which could account for the results they obtained. There are not examples to be blindly copied. My aim in using them as examples is to point out the fact that there can serve as a models to be redesigned to suit the Cameroonian context.

The choice of the source of the data used in this study is mainly based on ready availability and appropriateness. I am not arguing for their reliability compared to other sources. But they served as an indication to the relation between higher education and health development issues.

And concerning the survey and interviews conducted, the number of participants to the survey was not intentionally designed, but is a result of the availability and willingness of the sample population targeted. It is also that unexpected socio-economic constraints played a restrictive role in limiting the targeted sample population planned at the beginning of the research. Concerning the interviews specifically, some university lecturers confess their fear to be mentioned namely in any work which criticizes governmental works, policies and programs or that criticizes the actual systems or regime in general.

CHAPTER I

THEORETICAL AND CONCEPTUAL FRAMEWORK

Concepts and Ideas have their foundations, origins and background and they stand as the result of historical, cultural and social constructs. Development and education, as concepts, are no exception to this fact. They too are results of historical, cultural and social realities and events.

In the first part of this chapter, I start by analyzing the construction of the concept of development, which constitutes the theoretical framework of this thesis. And in the second part, I deal with the concept development and education in the context they signify in this work. I restrict development around the concepts of human development, sustainable development and the human capability approach. Education, specifically tertiary education is also defined in the context of this work. A brief review on gender, development and education is offered in the later part of this work along with an insight on African higher education and development.

1 Theoretical Framework

Before narrowing this paper around the concept of human and sustainable development, I thought useful to have an insight on the concept of development and its evolution in history, looking at or understanding its different meanings in the discourse. Of course, I have selected out, from the multitude of theories on to this concept, a few ones that I deemed of importance to this thesis.

Many words can be used interchangeably to the term development. Social change, growth, evolution, and progress are some of them. Fletcher (1974) argued that there is a value-free meaning embedded in the concept of development. According to him, “[...] development can mean the actualization of an implicit potentiality, the simplest example

being the patterned growth and maturation of a seed, or animal, or human person. Without stipulating, at this point, anything too weighty or too precise, this can also certainly seem to apply to man and his social situations”, (Fletcher, 1974: 43).

In common language, development could be understood as a process. It is in this process that the potentialities of an object or organism are gradually expressed or revealed. In this process the organism or object reaches its natural and complete form. The natural growth of plants and other living beings illustrate and exemplify well the idea of development in this understanding, (Fletcher, 1974).

Despite the basic understanding of development stated above, in the history of social sciences, the concept of development has been presented as change in a desirable direction and has evolved many different dimensions. To simplify the reading of the theories, I have deliberately grouped the selected theories into 3 categories, holistically based on the period during which they were propounded and also according to the core idea they carry.

1.1 The first group theories.

In this first group, we have the Marxist theory, the modernization theory.

1.1.1 The Marxist theory of dialectics on development

The theory of dialectics certifies that all changes appear as a result of conflict between two or more opposite forces, ideas, position...etc. In other words, dialectics can be define as an approach according to which things do not remain the same, change always occurs. The constant fundamental change or transformative evolution is explained by the contradictions and struggles that take place. An example case here could be the destruction of the environment due to the degradation and over consumption of resources which might lead to the development of alternatives agricultural techniques, (Peet and Hartwick, 2009: 143-146).

According to Marx, societies can be seen as divided into classes opposed to each other, on the one side the exploiting and on the other side the exploited. Marx explained the changes from one stage to another in the society as the result of the evolution of conflicts within society and which in turn effect changes in modes of production. So, for the Marxist theorists, the economic structure of a society and the inequalities therein that could be expressed in the modes of production, stand as one of the major agents of social change, (Peet and Hartwick, 2009: 143-146).

Fägerlind and Saha (1989) explained that the Marxist theory has had considerable impact on the understanding of development. Even though he did not specifically discussed the concept on underdevelopment, the understanding of classes in the society and in the world has been a ground for the justification of later development mission on which colonial powers embarked. In this sense, Fägerlind and Saha (1989) said: “Marx spoke about colonialism and the stunting effect it sometimes has on development, [...] but he never extended his idea to include the notion of underdevelopment”, (Fägerlind and Saha, 1989: 21). The idea of development (and underdevelopment by the way) is thus not directly expressed but rather implied in the Marxist theory.

1.1.2 The modernization theory on Development.

According to Fägerlind and Saha (1989:15), “the Modernization theory emerged in the 1950s and contrasted sharply with the evolutionary theory of the 1920s and 1930s”. They argued that “modernization theory was an intellectual response to the two world wars and represents an attempt to take an optimistic view about the future of mankind”, (Fägerlind and Saha, 1989: 15).

The industrialized societies assumed that they had reached the complete form of development or at least a universalistic desirable level of growth, and that from their past stages they had to show the path to follow to those societies still on the road to

modernity or which were still in savagery. Fägerlind and Saha (1989: 15) stressed that according to Samuel Huntington theory on the clash of civilization, the early modernization theory served as a justification to *the status quo* of those self-mission invested states and also accounted for change abroad. The President Truman's speech illustrates and expresses the mind set embedded in the idea of development:

“We must embark [President Truman said] on a bold new paradigm for making the benefits of our scientific advances and industrial progress available for the improvement and growth of the underdeveloped areas.

The old imperialism - exploitation for foreign profit- has no place in our plans. What we envisage is a program of development based on the concepts of democratic fair dealing.” Harry S. Truman, Inaugural Address January 20, 1949, in *Documents on American Foreign Relations*, Connecticut: Princeton University Press, 1967.

The Main critics to the modernization theory focused on the underlying assumption that modern values and behaviour by individuals is essential to the socio – economic development of the state. Modernization is thus seen to be in opposition to traditional values.

Another critic to the modernization, which also accounts as critic to the economic growth theories that will be discoursed later is the propounded ideas about the achievement of the modernization process. Since the facts and variables used to evaluate the level of modernization are ideologically biased and ethnocentric, for less developed society to be objectively regarded as modern (Fägerlind and Saha 1989: 17). Modernization is then understood as Westernization. Development, in their idea, means to carry and display European values, attitudes and culture as a whole.

1.2 The second group theories

The theories in this group expressed a shift from the first group theories, in that they questioned the role played by the Western countries in the development of the

underdeveloped and bring in new parameters which could be used in defining development. In this category there are the dependency theory and the economic growth theory, without questioning the core meaning giving to development.

1.2.1 The economic growth theory on development.

The economic growth theory propounded by Arthur Lewis and Paul Baran, who stood as some of the most influential theorists after the modernization theory carried by Truman. Paul Baran, in 1957 in his book *the political economy of growth* equated growth or development to the increase in the per capita production of material goods among others. According to the economic growth theory, development is understood as growth in income per person in the economically less developed areas. Of course, it was a huge move to bring forth the understanding of development and present it as a measurable fact in the discourse. The place occupied by financial and economic variables is prominent. Unfortunately, the level of development is indicated by the measures and comparison tools based on the standards set by the so-called developed countries. As argued by Gustavo Esteva (1988: 12) “Development, which had suffered the most dramatic and grotesque metamorphosis of its history in Truman's hands, was impoverished even more in the hands of its first promoters, who reduced it to *economic growth*”. However, it should also be pointed out that Paul Baran (1957) had the merit to argue that the Western countries which were then known as the developed world only used the pretext of helping the Third World to emerge out of underdevelopment to plunder those they intended to help. He used the examples of Japan and India to contend that the export of economic surplus and raw materials from the poor regions to the advanced industrialized areas only contributed to impoverish more these regions that were not thought to administer the outcomes of their export. It was the same approach the industrialized countries used to plunder the “less developed” countries. These

countries exported cheap raw materials to buy expensive finished products from the already rich and technologically advanced countries. The result was the rapid accumulation of the wealth in the Western world and underdevelopment in the rest of the regions.

André Gunder Frank (1971), in *Capitalism and Underdevelopment in Latin America*, went further in the analyses of Lewis and Baran arguments on development and underdevelopment. He argued that not only did the first world draw out the resources of the third world but the western world also made sure that the third world countries were trapped in a vicious circle of debts and aids, and by doing so ensuring itself of a ready market for its finished goods and a constant supply of raw materials. These arguments are very close to the dependency theory argued by Raul Prebisch.

With the same contention than Gunter Frank, Samir Amin in his article “The Development of Capitalism in Ivory Coast” published in *African Politics and Society: Basic Issues and Problems of Government and Development*, edited by Irving Markovitz, cited an example in the case of Ivory Coast. He argued that “the planter bourgeoisie” stood as a parasite living from the fell off of the avails of foreign capital and at the expenses of the rest their population. The local elites advocated for the foreign rulers against their fellow men to keep the privileges they were getting from the rulers. The local bourgeoisie was working towards a status quo rather than changes for the benefits of all, which was supposedly part of the duty it had assigned itself.

1.2.2 The dependency theory on development

Dependency theory was developed in the late 1950s by Raul Prebisch when he was then the Director of the United Nation Economic Commission for Latin America (UNECLA). This theory stands to explain the disparity observed in the economic development of the world: the industrialised countries experienced high rate of

economic growth while the non-industrialised low or no growth rate. As explained by Peet and Hartwick (2009: 166-172), according to classical dependency theory, underdevelopment (and development) is understood as a historical process and not a condition that is intrinsic to less-developed countries (periphery). The Third World was gradually made to be underdeveloped by the Western. In his argument, Prebisch indicated that the economic activities in the West, more often than not, were a problem to the developing countries. The content of the dependency theory is that the world could be divided into two parts the core and the periphery. According to Peet and Hartwick (2009: 166) globally, the dependency argument was based on the idea that Europe developed through “external destruction rather than internal innovation”. By external destruction, it is meant the brutal conquest, colonial control, and stripping non-Western societies of their people, their culture, their resources, and their surpluses. Europe has historically operated through imperialism, slavery, colonization, neo-colonization...etc.

Fägerlind and Saha (1989: 22-24) argued that the understanding of the dependency theory was later broadened to include the idea that societies not only between them, but also from within their social, political, economic and cultural constitutions where constructed upon this core and periphery settings. The conflict of classes advocated in the Marxist theory somehow finds links with the dependency theory. The Core and periphery discourse embed the idea of struggles for change. But unlike the Marxist theory in which change (positive or negative) could not be foretold, with the dependency theory change is always at the expenses of the periphery, and to the advantages of the core part.

Since Prebisch's initial explanation for this approach was that periphery countries exported primary goods to the core industrialised countries that in turn will sell back to

them the manufactured products, Fägerlind and Saha (1983) added that within the core, there is a core and a periphery and in the periphery also there is a core and a periphery. So within societies, there were “micro sets of dependency approach” since development is not equal in all the parts of a given society. Neither development nor underdevelopment affects equally all parts, all sectors or all classes of a given society.

What it should be focused on, concerning the dependency theory is that the development of a region or society was and is made possible at the expenses of another. The underdevelopment of a society or region somewhere is linked to the development of another region or an outside society. The available scarce resources move from one region to another in a process which is determined by the power holders who can be a region, a state, or a group of states. The transfer of resources has been and can be organised in many ways, among which are colonial or neo-colonial relationships, or even through the operations of multinational corporations and Non – Governmental Organizations, (Fägerlind and Saha: 1989).

There are criticisms worth noting on the dependency theory. It is not always that the development of a region will cause the underdevelopment of another. There could be shared and agreed upon relations between regions which may be at the advantages of both parties, and can thus be looked at as inter-development relationships. A good example could be the result of recent studies, which suggested that foreign investment in a given country can contribute to economic development in that country (Bornschieer et al, 1978). In such context, Cardoso argued that it is better to talk of *dependent development* rather than talking of development and underdevelopment, (Cardoso, 1972). But for such mutual benefit relations to be effective there should be the willingness from the parties to do so, with careful designs and guides from both parties.

Another critic to the dependency theory is the underlying assumption that the force behind the underdevelopment of the periphery is solely prompt by external factors. That is to say that the periphery has nothing or very little to do with the situation that resulted from its relation with the core. But this is not true, since the periphery also played a determinant role in the share of power that was given away. The core is core because there is a periphery, and the forces can be redistributed.

1.3 The third group theories.

The main point of focus of the constructive development theories in this group is that they questioned the very idea of development. They call for a re-thinking of the concept of development itself. In this group we mainly have post structuralism, post colonialism and post development theory.

1.3.1 Post structuralism and development.

Post structuralism is based on the deconstruction of the concept of development as a desired target. As pointed out by Peet and Hartwick (2009: 201): “Whereas structuralism saw potential for human emancipation in modern development, post structuralism saw development as a strategy of modern power and social control”. In this idea, development is merely an argument or a word which on its own can mean many things. In substance, there is no definition to development but definitions, depending on how and by whom it is used.

According to post-structuralism theorists such as Richard Rorty and Jacques Derrida, development as it has been presented to us is in no way a “universal truth”. Rather, as contented by Jacques Derrida, it is “linguistically mediated—that is, the play of language creates what is only taken to be “true” (Peet and Hartwick 2009: 201).

1.3.2 Post colonialism

Post colonialism has been propounded by writers such as Franz Fanon, Edward Said and Gayatri Spivak. The post colonialist approach was spread through writings such as *The Wretched of the Earth* (1968) of Franz Fanon and Edward Said's *Orientalism* (1979). The Post-colonialist approach is discussed not only in development studies but also in many other social sciences studies such as literature, and modern language studies. Post colonialism as explained by Prakash (1994: 1475) stands as "a radical rethinking of knowledge and social identities authored and authorized by colonialism and Western domination." So as Post-structuralism is based on the deconstruction of the concept of development, Post colonialism on its own tries to deplete the understanding of development for the former colonial territories from its western content. As colonialism sets the standard for a given type of development, Post colonialism questions the heritage left by the colonizers. Post colonialist approach questions development in that it has for a long time been considered as a desirable target. But the real meaning of "development" was never presented to those who were to be developed. As argued by Peet and Hartwick (2009: 212): "historical, literary, and psychoanalytical postcolonial work was unified around an examination of the impact of colonial discourses on subjectivity, knowledge, and power." In post colonialism, Development has to be redefined by the former oppressed, those who had been colonised and on who a certain definition of development was given. They are to work out their own understanding of the concept.

Post-Colonialism theorists advocate for a reconsideration of the history of colonialism and its impacts, from the point of view of those who live the consequences of it.

1.3.3 Post development

Post-development was argued by theorists such as Escobar and Gilbert Rist. The main argument in the post development approach is that development as a discourse has been presented as opposed to underdevelopment, and thus, the idea models the thinking of those considered developed and of those who are seen as underdeveloped. And as a later outcome, it will mould or drive their actions consequently. In Escobar's words:

“From this perspective, development can be described as an apparatus that links forms of knowledge about the Third World with the deployment of forms of power and intervention, resulting in the mapping and production of Third World societies. In other words, development is what constructs the contemporary, silently, without us noticing it. By means of this discourse, individuals, governments and communities are seen as ‘underdeveloped’ (or placed under conditions in which they tend to see themselves as such), and are treated accordingly” (Escobar 1992: 23)

Simply put, development is seen as a discourse of Western origin that operated as a powerful mechanism for the cultural, social, political and economic oppression of the Third World. Post development theories bring in the possibility of creating different discourses and representations not mediated by the current construction on development. Furthermore, as argued by Sachs: “[...] the historical conditions which catapulted the idea into prominence have vanished: development has become outdated. But above all, the hopes and desires which made the idea fly, are now exhausted: development has grown obsolete”. (Sachs 1992: 1) To effect the change in the current practices post development theorists see of a great importance the need to rely less on expert knowledge (usually outsiders) and more on the beneficiaries or those to whom the development policies, plans and actions are directed.

At this point, we can also consider Galtung's position, as he thought of development from its very definition and made attempts to give it different meanings. In his writing *Fifteen These on Development Theory and Practice*, It is particularly relevant at this point, to look at the second and the third definition of development.

In his second definition of development, Galtung (1996) says: "Development is the progressive satisfaction, of the needs of human and non-human nature, starting with those most in need."

Galtung (1996) argued that there are vital needs among all the needs expressed by human beings. He considers the vital needs to be those needs which define a person as human beings and which if not satisfied prevent him from being human beings. Some of the needs are the essence of human beings. In this category can be listed all those things that contributes in maintaining life, not only physically for example, but also spiritually or emotionally. As said in Galtung's words, "they are no longer human beings, 'meaning for the more material/somatic needs they are no longer beings (with life), and for the more non-material/spiritual needs they are no longer human."

This definition of development as a satisfaction of vital needs (some will say basic needs) has the merit to give an inclusive perspective of development. Development stops being an economic issue, but a life (all-inclusive) human issue. So if development is aimed at covering all the needs of human beings, then issues such as environmental degradation would be regarded also as a development issue.

In his third definition of development, Galtung (1996) takes another move to consider the economic aspect of development. He says: "Development is economic growth, but at nobody's expense". In other words, development should be at the detriment of any other person, society, region or generation.

This definition however close to the common understanding of development, poses an important condition without which economic growth will not be development. The costs of development have always been argued to be bore by one or many parties or by one or many aspects of live. And development in this sense is seen as a transfer of goods or privilege or power but not as an exchange between parties. But understanding and considering this third definition in a broader sense will bring up the ideas of sustainability, preservation and renewability. So development is not only the mere increase of gross national product per capital or all other economic variables, but it also includes taking into account the costs involved in obtaining such results. The outcome may result at a situation where the gross national product per capital for example might increase, but development would be absent.

Theoretically such a definition is interesting, but how far is it applicable. Can there be development without any negative fall out? Can development only be in positive terms all through?

Post structuralism, post colonialism and post development theories are criticized based on the fact that they over generalize the understanding of development and reduce it to a single view. They only discuss over a little part of the whole set. They are also criticised because of the fact that they focus on the discourse of development, overlooking the real problems that the understandings of development proposed before, were trying to solve. They only focus on the negative outcomes of the earlier meanings and (may be the most common) understanding of development and turn to wipe out the good result these understandings and definitions may have produced so far.

2 Conceptual Framework

From this point, consideration is given to the human development approach, a particular focus on Amartya Sen's capability approach, completed and deepened by Martha Nussbaum. This part constitutes the conceptual framework of this thesis.

2.1 The concept of development

2.1.1 The human development approach

The idea of human development has been commonly used in policy circles and public debate for more than two decades. The annual human development report produced by the United Nations development programme is one of the main tools for the spread of this idea. The first report issued by the UNDP was published in 1990, and the many issues that followed thereafter increasingly broaden the perspective of human development. As argued by the UNDP, the aim of these reports is to measure "the state of a population from the perspective of people's quality of life". To assess human development, the analyses are based on data from many aspects of people's lives such as political freedoms, security, environment health, and education. The end goal of these reports is to make these issues part of the public debate in governmental and intergovernmental policies and programmes. So from a people-centred perspective, these reports raise awareness on many issues and concerns, generates debates which may be followed (but not always) by policies aimed at improving the lives of the population.

Mahbub Ul Haq (2003), a Pakistani economist who introduced the Human Development Index, a system for measuring human development on different issues around the world, argued that:

"The basic purpose of development is to enlarge people's choice. In principle, these choices can be infinite and can change over time. People often

value achievements that do not show up at all, or not immediately, in income or growth figures: greater access to knowledge, better nutrition and health services, more secure livelihoods, security against crime and physical violence, satisfying leisure hours, political and cultural freedoms and a sense of participation in community activities. The objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives. The human development paradigm covers all aspects of development – whether economic growth or international trade; budget deficits or fiscal policy; savings.”

No aspect of human life falls out of the scope of development. And development, from economic, political or cultural perspectives should aim at widening people’s choice. No aspect or not only one issue of human life should be considered as predominant to other aspects or issues. Economic growth for example has to move from being the sole focus to be finally one among many subsets in the human development discourse. Though economic growth is essential, the emphasis would rather be placed upon the quality and distribution of such growth, and thorough analyses should be done on its link with all the other aspects of human lives and on their sustainability.

As Mahbub argued, there are some aspects in human development paradigm, on which there is a great level of agreement. Among these generally accepted issues of human development over which there is high consensus, there is the idea that development must be people-centred, the purpose of development is to enlarge all human choices.

He further stressed that: “Human development has four essential pillars: equality, sustainability, productivity and empowerment.”

Extracts from Mahbub Ul Haq “Reflections on Human Development”; in Fukuda-Parr and Shiva Kumar (eds.), *Readings in Human Development* (New Delhi: oxford university press, 2003), pp. 3-16.

Human development is all about putting people at the centre of what really matters to them. For example in the evaluation of growth and development, indicators such as income rates are also reviewed. That people matter does not mean that income does not, and income matters to the people. Income is only a means not an end for people to fully realize themselves.

People-centred growth should enable people to become the direct agent for and to development. From the decisions level to the implementation of policy level, and at all other levels development, people should be the active force that effects the desire development. People should always have the opportunity to make choices; the values of such choices should be left to the population development paradigm. The opportunities available should no more be presented as poverty versus wealth, or as tradition versus modernity, rather as the population can scrutinize further to see what every model presents and moreover what is preferable for them and at what time. Therefore, there is not a single model of development. Development is plural, multi-directional and encompasses many dimensions. As Amartya Sen (1999: 31) writes: “if traditional way of life has to be sacrificed to escape grinding poverty or minuscule longevity, then it is the people directly involved who must have the opportunity to participate in deciding what should be chosen”.

2.1.2 Sustainable development

The idea of sustainability is presented as being an essential feature of development. The concept sustainable development was introduced in the 1980s as a tool to describe the relationship between economic development, the natural

environment and the general population. Sustainable development was then defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs and aspirations” (WCED 1987: 43). More often than not, it is used with reference to environment. However sustainability should be seen from a broader perspective. If environment sustainability is about having developmental results without being detrimental to the natural resource base and biodiversity of the region and without affecting the resource base for future generations, then financial sustainability could refer to the way in which development is financed without having to run into deficit or into the debt traps. If the financial aspect should be looked from such perspective, then many of the so-called developed countries will not be presented as such. Since most of them are economically deficient, the financial development models they have had, was not a sustainable one. Same as financial sustainability, an aspect social sustainability could refer to the way in which all social groups could benefit from the health system without jeopardizing the quality of the service that is offered. This is to say a health system in which those who are the most in need are excluded from or a society in which health attention is made a preferential good reserved to those who can pay for is not sustainable.

2.1.3 The capability approach

The capability approach developed by Amartya Sen encompasses a wide range of fields in the social sciences. The main underlying idea in this concept is “that social arrangements should aim to expand people’s capabilities – their freedom to promote or achieve valuable beings and doings”, (Alkire and Deneulin 2009: 15).

Amartya Sen has been very careful to overt prescription. According to him, the capability approach should not be a regulation or a development outline or set rule to be followed to the letter. His main idea is that development and what should constitute

development should be subjective, that anyone defines what it should be. So the capability approach is purposely left incomplete and empty to be fill by anyone according to what they think is valuable to them. According to Alkire and Deneulin (2009), this is what Amartya Sen called the “fundamental and pragmatic reasons”, (Amartya Sen, 1992: 49) for incompleteness.

The incompleteness of Amartya Sen capability was reviewed by the philosopher Martha Nussbaum who came up with a list of capabilities that could be considered as guidelines for public policies and programs drafted in the sphere of development.

She argued that unless such list is made available to empower the population on what is valuable. She said: “just as people can be taught not to want or miss the things their culture has taught them they should not or could not have, so too can (they) be taught not to value certain functionings as constituents of their good living [...]” (Nussbaum, 1992: 198).

She argues that the list she proposed is based on what she named the “internalist essentialism”, (Martha Nussbaum 1992: 208). The list spelled out what constitutes a human being’s needs, what is absolute vital to and what prevent it from its fullness. The list of central human capabilities extracted from Martha Nussbaum’s book can be found in annex 1, (Nussbaum, 2000: 78-80).

2.2 The concept of education

To understand the concept of education, our first step will be to define it. It will however be difficult to define education with just a single definition since the concept can be understood in various ways and at different level. And moreover, education is somehow related to many aspects of human life, and thus, the term education carries a wide connotation. However, according to the *Oxford Dictionaries* (2010), education is referred to as “the process of receiving or giving systematic instruction, especially at a

school or university”. It also defines education as “the theory and practice of teaching”, and as “a body of knowledge acquired while being educated. It also refers to it as “an enlightening experience”.

According to the *Oxford dictionaries* (2010), Education has its origin from the Latin word *educare*. For John Dewey (1966), an American philosopher, and an educational reformer whose ideas have influenced education and social reform across the United States of America, “education is thus a fostering, a nurturing, and a cultivating process. All of these words mean that it implies attention to the conditions of growth,” (*Democracy and education*). John Dewey (1966) stressed that etymologically, the word "education" was taken from the Latin words *ēducātiō*, from *ēdūcō* (“I educate, I train”). He related to it as a composed word form of *ē-* (“from, out of”) and *dūcō* (“I lead, I conduct”).

Education, understood as a process, can be divided into level of studies. In most countries of the world, there is a basic and primary level education, the secondary education, and the higher education usually referred to as university studies.

A historical look on the concept of education pointed out the fact that, education was not accessible to everyone in the society. As Claudio Zaki Dib (1988) argued about the historical development of man, education was the reserved privilege of a few. Stressing this point of view, the anthropologist Yehudi Cohen (1970: 56) says that education in antiquity emerged merely as a political instrument to serve ruling purposes in the hand of the elites.

Concerning the history of Higher Education, Ajayi et Al (1996: 5) states that: “the roots of the university as a community of scholars, with an international outlook but also with responsibilities within particular cultures can be traced back to two institutions that developed in Egypt in the last two or three centuries BC and AD, with

the Alexandria model and the monastic system with sophisticated knowledge production.”

With time, education has been equated to civilization. Through education, every generation provides the following generation with the vital information of the society in which they are found to ensure the continuity of that society. According to Fägerlind and Saha (1983: 33), education is “a formal and deliberate process by which the cultural and normative heritage of a society is transmitted from generation to generation, and through which that heritage is improved through scientific discovery”. Zaki Dib (1988) says that education in the contemporary world mainly stands for “an institutional instruction, given to students in school colleges formally” and as “a pedagogical science, studied by the student of education”.

Education is commonly divided into two main systems, the formal and the non - formal education. Zaki Dib (1988) defines formal education as “a systematic, organized education model, structured and administered according to a given set of laws and norms, presenting a rather rigid curriculum as regards objectives, content and methodology”. According to him, the main characteristic of formal education is that, it is administratively, physically and curricular content organized and usually requires from students a minimum presence in classrooms. In formal education, it is of primary importance that teachers and students together follow the program that is set by the administration. Zaki Dib (1988) argues that the education program involves intermediate and final assessments in order to advance students to the next stage of their learning course. Concerning the methodology, in formal education, it is basically expositive. The formal model of education confers degrees and diplomas based on strict sets of regulations. This description of education match with the type of education process that is available in most schools and universities.

On the other hand, in defining non formal education, Zaki Dib (1988) argues that whenever one or more of features of formal education are absent, then the form of education that is obtained is usually referred to as non-formal. Therefore, for example if a given education system does not require the presence on site of the students and teachers, it is then classified as non-formal education. This is to say that non-formal education here is characterized by the fact that it does not require students' attendance and takes place outside institutional supervision.

2.3 Education and development

The Asian Development Bank (2001: 1) argued that development in itself is an education process since people learn to create new technologies and institutions. So education and development are faces of the same coin. Furthermore, it says that education stands a catalyst of forces of individuals to effect changes at national or global level. It stated that: "Education in a broad sense improves the capabilities of individuals and capacity of institutions and becomes a catalyst for all the closely interrelated economic, social, cultural, and demographic changes that are defined as national development." Asian Development Bank (2001: 1). The main contain of this argument lies on the fact that education, be it formal or non-formal, has been presented not only as a main provider of economic growth through the dissemination of general disciplines and specific skills that are requested according to stated necessities, but also as an instrument for human development by improving health, reducing fertility and contributing to political stability, for example.

Education is argued to produce more skilled and flexible resources to foster development, which in turn will produce the need of a higher skilled workforce. However, education can also create a development trap which the Asian Development Bank (1998) called a Vicious circle, as "greater skills lead to progressively greater

benefits from the introduction of new technology which, in turn, will lead to the further development of human resources”, (ADB 1998: 195). So as the economy and technology will continue to develop and be applied to production, the demand for workers with more and better education and skills will also increase.

According to Bloom et al (2006: 16), tertiary schooling presents less direct benefits for development. They stated as an example the rising of well-trained teachers that could ameliorate the quality of primary and secondary education systems and give secondary graduates greater opportunities for economic advancement. Another example is the training physicians and other health workers which will improve the overall health situation of a society which will in turn increase the productivity at various levels of the job market. A last example they stated is that, by feeding the students with governance and leadership skills, higher education can provide countries with the talented individuals needed to establish policies and develop programs favourable to growth. The tertiary education will then be the machine that sets up basis for political and legal institutions that will make the country fit to respond to the need of its people. Bloom et al. (2006) argued that developing a culture of job and business creation that will impact the economy significantly calls for advanced knowledge coupled with decision-making skills, in which higher education has a role to play. Addressing environmental problems and improving security against internal and external threats also give more importance to the skills that higher education is able to deliver.

Notwithstanding the idealistic statement of the relation of education and development, Glick and Sahn (2000) argue that education should not be considered only on a positive point of view. Under certain circumstances, education might also present negative effects. For example, they argued that if access to education is not evenly distributed it may enlarge the gap difference between the segments of the society, either

based on gender, wealth or status. So, formal education is a sword that should be manipulated and managed carefully.

Moreover, as the Asian development Bank (1998) later pointed out, the link between development and education is not well and clear cut. It should be noted that how development or growth occurs is not fully known. And such a situation of ignorance of all the determinants of development may cause difficulties in designing policy and planning, if development is the goal.

The contribution of higher education is deemed to be a key aspect in the achievement and the type of development that will occur. According to Ossi V. Lindqvist (2007: 18), higher education, in its essence, is both an international and local enterprise, and its duty is to provide support and responses to the challenges at the local and global levels. So, even though education as a whole is of importance, higher education is of premium importance as it equips the society as a whole with a set of people who can critically assess the path in which the entire society is evolving, provide for alternatives in research, develop and introduce existing technologies. Simo Isoaho and Tuula Pohjola (2007: 81) argued that since scientific and technological knowledge have an increasingly important role in all societies whether they are developed or developing countries, universities stand with the important role of studying human activities scientifically through critical thinking so as to improve human life patterns and maintaining and increasing new opportunities for the welfare of the society. As they rightly stated: “People with university degrees are messengers of these issues as specialists and citizens. They are the ones who can develop the necessary knowledge and skills for doing things differently,” extracted “Promoting Sustainability through University Education and Research in Technology” by Simo Isoaho and Tuula Pohjola,

2007 in *Towards Sustainable Development in Higher Education – Reflections* Edited by Taina Kaivola and Liisa Rohweder.)

To strengthen the importance that has been awarded to education and development in the international scene, The United Nations declared the years 2005–2014 as a decade of promoting education for sustainable development. According to Heljä Antola Crowe and Johanna Kohl In *Empowering Higher Education with Hopeful Advocacy* (2007: 50), the International Decade recommended and promoted amongst other things, linguistic, social and cultural diversity in education, and an education geared towards sustainable development.

The role of the Higher Education as expressed by the UN Decade of Education for Sustainable Development (DESD) 2005-2014 states that “Universities must function as places of research and learning for sustainable development”, Dawe et al (2005). Many States of the European continent, on their own, emphasized the role that education could play in both raising awareness among the students about development and providing them with the necessary skills to put sustainable development into practice by building in up policies and programmes in which sustainable development was at the centre. This was the case for example in United Kingdom, and in Finland. These countries came out with policies that placed sustainable development principles at the core of their education system, in the schools, colleges, and universities. The outcome of the learned principles at long with research results in sustainable development was put into practice within the communities where they were.

More generally, it can be said that with the current state of the world, it is not enough anymore to educate people for specific professional orientation. Education should be built not only on previous attempts to reach the economy or the political goals the states of the world, but it should go far beyond such expectations. As pointed out by

Lili-ann Wolf (2007: 62): “Learning for tomorrow is also about knowing the past, considering the present and recognizing oneself as a distinctive part of a larger entirety. Unfortunately, education cannot directly solve all current and future global problems, but higher education can nevertheless obtain a significant position in the debate”. As such, Higher education should equip the people with the flexibility, and vision that the whole society will need when moving on the way to the sustainable human development.

2.4 Gender, education and development

It has been difficult to find and get researches that combine the concepts of gender, education and development as they are few studies that worked on them at the same time. Gender has much been studied in relation to Education or to development, but few are researches that treated out all three issues together at once. As Christine Heward (1998) rightly stated Gender, education and development discourses are relatively new. A popular discourse was first established in 1995 by the World Bank. The discourse was born from the debates about women in development. Despite the efforts of the UNDP and UNICEF to broaden the context of debates about gender, education and development in the international donor community, only closing the gap between girls and boys in schools enrolments has been at the centre of concerns. Gender, education and development are addressed in this section, because not stepping into the gender discourse on education and development will have been a neglect of an important issue that clearly needs attention.

No one denies the fact that there are fundamental biological differences between women and men. Clearly, women have a biological role of reproduction in childbearing. But this role has been a justification to place constraints on their ability to participate fully in other social activities at certain stages of their lives. The biological differences

have not been proved to influence the behaviour and the ability of women and moreover fail to explain why some women do perform more than men in many areas traditionally ascribed to men.

As Fägerlind and Saha (1989: 167) argued, women are perceived less fit, and to be weaker, more passive, and more emotionally oriented than men, on the ground of cultural rather than biological constructs. Among the theories that were built around gender differences and inequality, Fägerlind and Saha (1989) identified the Functionalist theory, the radical feminist theory, and the implementary theory.

Acker (1984) argues that the functionalists' gender inequality theory presents gender roles as a consequence or as an evident outcome of the biological differences and the needs of an increasingly structured society. It served better the needs for order in production and distribution of resources in the society, to focus on some so called characteristics of men and women and allocate functions to exercise based on such "characteristics and ability".

The radical feminist theorists sustain that patriarchy is the major source of women's subordination. Patriarchy assumes a de facto superiority of men and it prevails in all aspects of the cultural and institutional life of a society.

The implementary theorists concentrate on the processes through which women are socialized to the subordinate position. In other words, they focus on the construction of the subordination of women throughout their lifetime. This approach is concerned with the ways that masculinity and femininity are constructed and reconstructed within the various setting of the society. Within these settings, it looks at the way girls and boys are raised in homes, or taught in schools or in other social settings to explain gender inequality.

From all these theories, the obvious link that exists between them is the blame which is being shifted to either the men or the state or the society. Women have not been clearly included in as one of the sources of their own trouble. As Fägerlind and Saha (1989: 171) rightly put it, if the blame is only stranger to the women, there is no way to account on how women sometimes possess power over men, even in overtly patriarchal societies.

Also, much of these theories hardly explained the origins and maintenance of patriarchy. Nevertheless, even though there is much to do to thoroughly explain how and from where gender inequality in all societies started, it is possible to recognized, beyond any reasonable doubt, the male domination in most societies.

Streaming, curriculum tracks, attention-giving, and stereotyping are some forms of gender twisted treatments received by students. These treatments are one factor that explains the variations in academic performances. Quite Often than not, the value of education for the attainment of jobs, income, political power, and social networks may be different for women and men, even though the type of education may be the same.

It has been wrongly assumed that access to facilities and materials, wherever they exist, provide equal opportunities to both sexes. However, it has been observed that in families in some countries, boys are favoured with access to schools while the girls are expected to contribute to home duties and catering. This is to say that women / or girls are expected to accomplish all the traditional roles they have been playing even when they have the possibility to play the same breadwinners role as men. Little girls for example, have to do all domestic tasks every day before they go to school, while the boys usually have nothing to do, but just to get up, get ready for school. This constraints, more often than not is put on the women, which can later turn into frustration and could lead her to forsake the breadwinner role or the interest in education

to concentrate solely on the traditional role with the sense of being fulfilled only in that role.

Social constructs make it difficult for women to be at ease or feel comfortable in the role of breadwinner. The “biological” role of child bearing makes it evident for the society to shift the social role of child rearing to women, thus moving to a secondary or even useless position any other role they might want to take such as their professional career.

Even though as Fägerlind and Saha (1989) stated, with the increasing awareness, the gap between women and men enrolment is reducing. There is still much to be done to reach complete equality. One of the obstacles that impede difficult the equality in enrolment between men and women in education is the fact that the contribution of women in development is hard to appreciate properly. This is to say that the contribution of the work of women for example to social and economic development is negatively evaluated when evaluated at all. Fägerlind and Saha (1989) argued that the reason for such is the fact that the work of women mostly in family labour and household duties are not paid, while they clearly make a contribution to the social and economic life of the society and the State. So, the great part of contribution of women (worldwide) cannot be included neither in the family nor in the national accounting.

Another obstacle mentioned by Fägerlind and Saha (1989) is the fact that, for women in the paid workforce, they usually do not receive wages equal to men, even in the same or higher as the case may be, posts and skill levels. More often than not, women get pushed into residual less well paid jobs. In my opinion, the intention behind this is the secret pretension of minimizing the loss or troubles that might be caused by women needs when the time comes for them to dedicate to their “primary role” of mothers and wives. Most managers do not recruit women because they argue that there

will come a moment when the women will be pregnant, and this might disrupt the running of the company, especially if they are occupying high position. Rather, if they are placed at residual less paid jobs which do not need great qualification, they can easily be replaced.

Another issue that stands as an obstacle for women enrolment in education is the idea that all women are called to get married. There is a popular saying in Cameroon which states that spending over the education of a girl is watering the garden of the neighbour. The argument is that she will one day get married and her parents will not benefit from her education. So inequalities of the labour market between men and women are strongly related to inequalities in education. But also the inequality in education between men and women is related to the inequality in the labour market. What does it mean? This means, because women are less paid in their jobs, families (and the women themselves) are reluctant to have more girls enrolled while boys are encouraged into education as they will have greater returns.

In developing countries, according to Fägerlind and Saha (1989), the prospects of women enrolling into education and job occupations is also linked to social class, and family strategies for survival and upward social mobility. The constraints women are facing in education are as a result of job opportunities, social settings, traditional and cultural background, marriage prospects, and values giving to the contribution they bring in to the economy and the family mobility opportunities.

As Fägerlind and Saha (1989: 181) highlighted, and which is the case in many developing societies, the improvements in education are usually accompanied by the risk of lowering marriage opportunities. Men usually look for less educated girls to marry as they assumed they will not be a threat to them with a desire for running a professional career or challenging them in their patriarchal authority but will dedicate

themselves to them and their homes. Many of the social actors failed to understand that, a better qualified female population can enhance national development through meaningful provision in the nature and the quality of labour force, but also through un-estimated contribution to family welfare, family planning, and health and child care. As Christine Heward (1998) has pointed out, the education of women contributes to social development and a rise in the quality of life of a country. In other words, educating girls and women can benefit the society in its traditional settings and it will provide women with better tools to fulfil any social and or traditional role for national benefits. As argued by Fägerlind and Saha (1989: 183), research has shown that there is an inverse relationship between level of education and fertility and population control, and the relationship is stronger for women than for men. In the same way, it has been substantiated that women are more influential as far as the health and nutrition of the children and even in many cases of the household are concerned. They argued that the higher the education levels of women, the better the health and nutrition states of their family members.

In summary, the factors that could explain gender inequality in education and development in many developing countries are complex and difficult to overcome only by the development of government policies and Non Governmental and International Organizations programs, to encourage the education of girls. It should be admitted that the role of the state in these policies can be crucial. But in many countries, legal statements or settings arranged to provide equal access to girls and boys may not be enough to bring to an end all the discriminatory practices. Discriminatory practices usually continue to operate or are allowed to continue. On the other hand, the programs that are developed and implemented should also consider how to educate the adult population and create awareness on improving the life condition of women and why

their education is important not only for justice reasons, but also for their own benefits and for those of the country as well, (UNESCO, 1986).

3 Africa, higher education and development

As mentioned earlier in this work, Lili-Ann Wolf (2007: 62) in the article “The Quest for a Route to Sustainable Development in Higher Education” states that: “Learning for tomorrow is also about knowing the past, considering the present and recognizing oneself as a distinctive part of a larger entirety”. So to understand the state of higher education in Africa, it is of importance to look at its history. To articulate even more the importance of history, Clarke (1996) stated:

“History is a clock that people use to tell the political and cultural time of the day. It is also a compass that people use to find themselves on the map of human geography. History tells the people where they have been, what they have been, where they are and what they are. Most important, history tells people where they still must go and what they still must be.”

For the purpose of this work, a precise look is given at three periods in the history of Higher Education in Africa. I study the colonial period, the post-independence period and the actual period (which can be considered as a more recent period). I start the time rewind from the colonial period, not because before then there was no education in Africa, but because the facts and data concerning pre -colonial education are merely inexistent or very hard to find. Moreover, the model of education that was running during that period was considered non-formal by the colonial powers, which erased and wiped out most of its vestiges.

3.1.1 Higher education in Africa during colonial period.

Education as a whole, during the colonial period was considered by the colonial administrators and by the churches missionaries as a means for generating a qualitative

labour force both for and from the colonies. Africans on their side, considered the colonial education just as another colonial institution to maintain them into oppression. But surprisingly to the colonial powers and to the colonized, the same education later served as the instrument through which the bases of colonial domination were to be reviewed and fought against. Assie – Lumumba (2006: 31) argues that between the 1930 and 1950, the Africans who were schooled by forces into the Western model of education requested from the colonial power to establish in African countries the full European system of education. This request was formulated in almost all the colonies irrespective of colonial power that was ruling. Assie – Lumumba (2006: 31) argues that: “their demand for Western education was substantiated by the arguments that if European education was good for the Europeans, it was good for the Africans too”. The formal Western-model education moved from being an organ for the oppression of the colonial population to a powerful tool for struggle in the hand of the colonized and the oppressed population.

The structures and academic models of education that were conceived in the colonized states are merely copies and not necessarily good ones, of the former colonial powers that was ruling and controlling the territory. As far as higher education is concerned, the great majority of African universities were created after 1960, after most African countries had acquired independence. However as mentioned by Assié – Lumumba (2006) no matter whether they were created before or after independence, the origin of African universities is characterized by structural dependence on, and submission to, the models of the former colonial powers institutions. The result of such dependence has been according to Assie – Lumumba (2006) a situation in which African universities found themselves struggling between a caducous Western model and its social and economic mission. The Colonial powers by then where faced with the

difficulty to define what education was relevant for the colonized Africans, whether to focus on the liberal arts education, or on a technical and vocational education, or again to focus on universalistic or on specific and locally adapted education for example. As a result of the definition on the type of education to be established in the colonies, education in almost all the institutions in the colonies was technical and vocational, and the concern for relevance focused on adaptation to the local environment. However, the colonial powers developed the alternatives to have few of the colonised students amongst the best that were educated trained at their Western based universities, with the aim to later serve their interests.

The implementation of the policies was however done through distinct approaches under the British administration and the French administration. For the French administration, the official policy was conceptualized as assimilation. But even in the context of assimilation policy, higher education took quite more time before it was introduced into the French colonies than in the British. The French administration's main preoccupation was how to use education to serve their policy of assimilation and whether to transfer the French system only partially, or to adapt the system that would be imported (Assié- Lumumba, 2006).

On a general view, higher education was not really offered to the French colonies. The French colonial administration opted for a different method in most of their colonies, as summarized by Ajayi et al. (1996) who confirmed that “for the Africans, the French policy aimed to leave the mass uneducated, and to groom a selected few as *évolués*, co-opted as loyal upholders of French culture and colonial rule, encouraged to complete their education in France and to feel more at home in Paris than in Africa”, (Ajayi et al, 1996: 39).

The British colonial policy advocated for indirect rule. In such a situation, authority was given to the different churches to take up the organization of education in the colonies.

The policy of indirect rule favoured the preservation of the colonized native culture. However according to Assié – Lumumba (2006), the indirect rule policy was rather motivated not out of concern for the colonised people, but based on social Darwinism. Basically, Social Darwinism postulated that culture was hereditary and thus, it would have been useless to educate the natives or colonised people to British knowledge and culture. The strength of the local resistance was also conducive to the implementation of the indirect rule policy. Assié – Lumumba (2006) argued that that the indirect rule policy explains the institution of a policy urging for the use of African languages in the schools.

3.1.2 Higher education and the colonial legacy

As stated before, the argument advocated by the Africans elites to create higher education institutions devised the loss of African Universities, in a context which evolved from colonial dictatorship to neo-colonialist domination.

At the independence of most of African countries, education was considered the surest means for individual upward mobility. Most, if not all of these new states were counting on education as a whole, for their socio-economic development. So much pressure was put on the education system to produce the growth these nations needed to stand in the international scene. As argued by Assié – Lumumba (2006), the coefficient of correlation between education and earnings in the Western countries along with private and social rates of returns were used to support the choice of dependence on education for national development. As a result, African leaders were greatly influenced by the European system of education as it was expressly presented as the model to copy.

The expectations were that if the same system of education was applied in their region, then African nations will have the same outcomes and great results that the European countries were experiencing. Assié – Lumumba (2006) grounds that the leaders of the newly independent states were well-minded but that they were misguided in their demand for an integral and full transfer of European education into their respective societies. According to him, African education fell into what he called *a dependence trap*. Assié – Lumumba (2006) says: “Thus, even the institutions created after independence have been modelled in the form of the systems of colonial powers and their extensions in the west”.

The importance of education to national development as thus expressed in the policies, plans and programmes that these African states designed and implemented to insure they meet the desire goal. Many of these states controlled the whole education system, but almost all of them exercised a full control over higher education. According to Assié – Lumumba (2006), the state control was by then accepted by all and justified with a great feeling of nationalism and social adherence. Concerning the administration of higher education, Assié – Lumumba (2006) stated that the central governments in these countries stood “nearly as the sole agent of subsidy of higher education: full scholarships, including travel expenses, local transportation, health care, boarding, lodging, and monthly stipends and living expenses to all students who, in theory were qualified or those who had family and personal connections to attend the university”, Assié – Lumumba (2006).

Unfortunately, in most cases as time went by, the policies and programmes that were supposed to bring the highest possible returns to the African states had to be sustained by their limited resources and investment. The African states embarked during many years on the promotion of education as a whole and on higher education in

particular as the most vital objective of their social policies. In the 1980s, most of them came to a point of economic crisis which could no more support the expenses that were generated in education because the planned results were not coming forth. Practically two decades after their independence, most of the African states came to a point of disillusion concerning their expectations about education and national development since the policies and programmes had little or no results.

3.1.3 An actual insight into African universities.

As many African states were faced with economic crises in the 1980s, the role of formal education in Africa, especially higher education, had to be redefined and re-examined within the framework of the national strategies of development. Many countries set commissions to analyse the education system in order to understand what went wrong and propose reforms that were to be implemented. Amongst other results, it was argued that chief academic officers and prominent intellectuals in academic institutions had limited power and were reduced to accept decisions made by the central government based on the advice of technical supports from industrial countries and experts from international organisations. According to Mazrui (1975) the situation of education presented a paradox between the role played by formal education in providing the tools for the liberation from oppression within African countries, but at same time was wrapped into a perpetuation of cultural dependence to the oppressor. In a later publication, Mazrui (1992) further argued that the problem faced by African education in general and higher education in particular originated from the very foundations of the system itself. For most of the policies, instruction, evaluation, and programmes that were adopted and implemented were decided and approved by overseas institutions in Britain, France and Belgium. For Mazrui (1992), if Africa is to build up an environment

that is conducive to socio-economic progress, the bases of its education system must be analysed critically and the impeding factors recognized and addressed.

Closely related to the dependence problem of African universities, the issue of equivalence of the degree granted was also raised as it played a major role in maintaining the dependency framework. Almost all European institutions have set an equivalence of degree requirement for African graduate before they could be admitted to their institutions. Such requirement is implicitly stating that the African universities first degree for example is not equivalent to a first degree obtained in a Western university. This was a contradictory situation because, while most of African academic contents, structures, an evaluation were been designed by the same European institutions, the same western institutions turned to underrate the degrees issued at the African universities. As pointed by Assié – Lumumba (2006), there has been an important degree of similarity in the curriculum and the organisation of African education systems with that of the former colonizing powers that were controlling them. So due to the dependency trap, the contemporary higher education in Africa, the Western powers were still firmly guiding educational decisions and planning in Africa. Under such circumstances, it was not surprising that the higher education in most African countries could not respond to the challenges it had to tackle for national development. Gaidzanwa (1994) argued that the western control of Western institutions produced as a result the alienation of African universities from the broader society and community. Gaidzanwa (1994) argued that the alienation was made explicit as the universities became elitist. So despite the increase in student enrolment rates in most of higher education institutions, the universities continued to be viewed from its historical context as a vestige of the Western society reproduced in Africa. Gaidzanwa (1994) also pointed another level of alienation that is current in the African higher education

systems. He argued that within the university itself, students were barely represented or involved in the decision-making processes affecting the structures and aspects of their social and academic outcome.

However, as a result of the economic crises that most African countries faced during the 1980s, the state of government financial investment into education had to be drastically reduced. Assié – Lumumba (2006) argued that: “the cost of management of higher education or of its rehabilitation was considered to be too high, while higher education only yielded limited monetary returns. Indeed, higher education was perceived to consume too high a share of education budget, and its rates of returns were lower than those of other educational levels”. For Blair (1992: 1), the current state of African universities is characterised by little financial support from state government, mismanagement of the little resources that are available, poor staff morale, the loss of the staff to the private sector or to the universities in other countries, mainly to European institutions, outdated and deteriorating library resources, (Blair 1992: 1).

So as pointed out by Gaidzanwa (1994), African universities have copied the structure of Western universities, but they failed to create a personalized model from the colonial masters education system that could best respond to expected role of higher education in inciting national development. In fact, African universities are not generating the human resources that are needed to build up knowledge and leadership to fulfil basic human needs and feed national development. African Universities could play satisfactorily their role in nurturing development, if various aspects were reconsidered such as enrolment and graduation requirements, relevance of the institutions and the training that could, the involvement of graduates and the labour market, and focus on research (Mohamedbhai, 1994).

CHAPTER II

HIGHER EDUCATION IN CAMEROON

In this section, to be able to present higher education in Cameroon, first and foremost I present the Nation of Cameroon. This is of uttermost important for one to understand the historical context of this work. In the presentation of Cameroonian, I look at its historical background, divided into 2 sections, the pre-independent and the post independence period. Then I present the Cameroonian education system which has the particularity of being a bi-system. And in the later part of this chapter, I focus on the presentation of higher education in Cameroon.

1 The pre-independence history of Cameroon.

Earlier in this thesis, I have stressed the importance of history in understanding the actual development of any social phenomenon. In the case of Cameroon, I look at the pre-independent period and the post-independent period. I could have as well spoken of colonial period and post colonial period. But I am avoiding the term Colonization in the case of Cameroon because technically and legally, Cameroon was never a colony to the German, nor to the French and the British powers who ruled it. Even though it is true, all of these powers ruled with policies similar to those in the colonies. But for sure, Cameroon gained independence in 1960 and 1961.

For the purpose of this thesis, I start the examination of the pre-independent history of Cameroon from the Berlin conference in 1884. This does not mean that there have not been major events before then in the Cameroon territory (for example, there was the Portuguese exploration mission lead by Fernando Do Po from which the name Cameroon originated). But I focus on two main events of the pre-independence period as they are relevant to the core discourse of this thesis. On the one hand, we have the

German protectorate period which lasted from 1884 to 1916 when the German forces in Cameroon were defeated during the First World War. The map of the territory occupied by the German power can be found in annex 2. However, Chiabi (1997) and Rubin (1971) argued that Cameroon was one of the few German territories in Africa as Germany engaged very late in the colonization course. Cameroon (*Kamerun* under the German rule) was more of a prestige territory (or a kind of showroom) for the German administrative powers. The city of Buea at the foot of Mount Cameroon was chosen as the capital of the German - Cameroon. According to Wilfried A. Ndongko (1986: 21) in *economic management in Cameroon: Policies and performance*, during its seventy six years of occupation, the German set up a small but modern economy with infrastructures such as: roads, railways, ports, post offices, towns, hospitals, and plantations and schools. Large hectares of plantations with forced African labour were developed for cocoa, rubber, bananas, coffee, tea...etc.

The second period in the Pre-independent history of Cameroon often referred to as the French and British rule, went from 1922 to independence. As from 1922, the former German territory of Cameroon was divided and placed under British and a French mandate until 1946. As pointed out by Lee and Schultz (2012: 7) this arrangement was confirmed by the Treaty of Versailles, which gave to the allies the ex-German colonies as “mandates” under the loose supervision of the League of Nations. And later the mandate was turn into a trusteeship. So Cameroon was under the trusteeship of Britain and France until 1960 when the French Cameroon gained its independence and 1961 for the British Cameroon. These two territories were attached to the French Cameroon for the southern part and to Nigeria for the northern part (see annex 3 and 4). During 42 years, the two territories of Cameroon would have separate histories. The British administered their own part of Cameroon which came to be known as British

Cameroons, composed of Northern Cameroon and Southern Cameroon, while the other part was called the Western Cameroon, French Cameroon or simply *Cameroun*.

As pointed by Lee and Schultz (2012: 11), the two colonial powers practiced in Cameroon different policies in almost all aspects of their administration. The legal system on the British *Cameroons* territory was based on common law, meanwhile in French Cameroon it was based on civil law. The labour policies were paid in the British territory and forced in the French side. The nature of colonial rule was direct in the French Cameroon while it was indirect in the British *Cameroons* and the prevailing religion. Indirect rule from the British power meant that Native chiefs were allowed to function practically as they had been functioning but under the instruction and guide of the British administrators. They obtained the adherence of these local chiefs and traditional leaders by paying the wages in kind and or in cash. The policy of indirect rule was less costly both in finances and in manpower to the British (Rubin 1971: 74). Concerning the providing education to the administered, Johnson (1970: 84) argued that the British rulers were too concerned with saving money, time and human resources. They entrusted the education and religious provision of the territory to the missionary. However, the native educated elites who emerged later on were integrated into the administrative machinery through the creation of elected advisory councils. With the great loss of the world war II, the British decided to increased the autonomy of the natives on the territories under its power as argued by Chiabi (1997: 18-19). This move from the British resulted in providing a large degree of legitimacy to the elected advisory councils that were somehow the main leaders in these territories (Geschiere, 1993).

On the other hand, with the direct ruling of their territories, the French administration was targeting the integration of the colonies to the home country. To be

able to integrate the administered territory into the home territory, they clearly put in place the policy of assimilation, by which Africans who had received a French education were granted French citizenship and the legal rights of French natives, such as participation in elections to urban councils or to the French parliament (LeVine, 1964: 98).

Even though education and religion were administered by the catholic and protestant churches, the content of the courses were practically the same in the settlement and in the capital (LeVine, 1964: 92–98).

Lee and Schultz (2012: 11) argued that many scholars such as Hayek (1960), Lipset (1994), and North (2005) have suggested “that colonization by the British led to better outcomes than colonization by the French or by the smaller colonial powers, because of either the adaptability of British legal institutions to the market economy or the higher levels of personal freedom provided by British political institutions and culture”. For sure, colonial administration have had a lot to play in the outcomes of the post independence of the states that emerged, but be it from with the British type or the French type of administration, the territories oppressed will never recover from the consequences of this presence. According to Lee and Schultz (2012: 1) Colonial institutions are thought to be an important determinant of post-independence levels of political stability, economic growth, and public goods provision further more as neo-colonization comes into the scene.

2 The post-independence history

In the land under French trusteeship, agitation for independence started in 1948. The independence was finally "granted" by the French authorities in January 1st 1960. The territory became known as *La République du Cameroun*, with Ahmadou Ahidjo as the first president.

While one year later, on February 11th 1961 a plebiscite was organized by the United Nations in the British territory to decide if they wanted to be attached to Nigeria or Cameroon. The *northern Cameroons* elected to be joined to Federal republic of Nigeria, and the *southern Cameroons* chose to be united to the already independent Former French Cameroon (Chiabi, 1997: 105–156). The annex 5 shows the Map of Cameroon before and after the plebiscite. After the plebiscite, a constitutional conference was held in a border town of called Foumban between *Southern Cameroons* and *La République du Cameroun* during which a Federal system was adopted. From this conference, the Federal Republic of Cameroon was constituted with two federated states: West Cameroon, with Buea as the capital and East Cameroon with the capital in Yaoundé. The bilingual states institutions also were established among which three parliaments, two legal systems, two educational systems, two administrative systems (Lee and Schultz, 2012).

Then in 1972, a referendum was called to decide upon the blend of the two federated states into a unitary state. The proposition was widely accepted and by decree, the president Ahmadou Ahidjo changed the name of the country from Federal Republic of Cameroon to United Republic of Cameroon. After the resignation of president Ahidjo in 1982 (the reasons of his resignation have ever been disclosed), Paul Biya was invested as head of State (and he is still in power today, 31 years later). In 1984, under President Paul Biya, the constitution was significantly revised and the name of the country moved from the unitary state of Cameroon to the Republic of Cameroon as it is today (Tangwa: 1999: 7-10).

Cameroon today is a land of self-sufficiency in local food products, and produces large exportable market products such as Cocoa, Coffee, Tea, Groundnuts, Bananas, Cotton, Timber, petroleum and countless fruits, most of which were initiated by the

Germans, during their rule (Lee and Schultz 2012: 5). The population of Cameroon is estimated to 21 million people by The Cameroon national Office of Statistics and it has about 240 indigenous languages and almost the same corresponding amount of tribes. (Delancey and al, 2010: 145)

3 The education system in Cameroon

Due to the complexity of the history of the nation Cameroon, the education system is also a complex one. As pointed out previously, Cameroon is officially a bilingual country as it has been under the rule of the French and the British for more than 40 years.

The education system which resulted after the federation of the British Cameroons and the “*République du Cameroun*”, like almost all institutions under state control were built upon this double background.

Delancey et al (2010: 144) argued that responsibility for education is principally resting upon the Ministry of Higher Education, the Ministry of Secondary Education, the Ministry of Basic Education, and the Ministry of Employment and Vocational Training.

The formal education system is divided into three levels, the basic level and the secondary level and higher level. However, there is a nursery level which is not obligatory. The English line of formal education goes from class 1 to class 7 at the primary level while the French line goes from SIL (*Section d’Initiation a la Lecture*) to CM2 (*Cours Moyen - deuxième année*) and has six academic grades.

At the end of the primary level, to be admitted to the secondary one, the students present an exam called Common Entrance. The French line pupils also present the CEP (*Certificat d’Enseignement Primaire*) at the end of their basic cycle while those of English present the FSLC (First School Living Certificate). The secondary level in the

English line starts at Form 1 to upper - sixth and is terminated with the GCE A level examination. The French line secondary level starts on *sixième* and ends at *terminal* and is crown with the *Baccalauréat*.

Higher education in Cameroon is offered by a wide range of educational institutions. These institutions include government administered and privately own universities which offer courses in the sciences, arts, humanities, polytechnics and engineering, and more. Higher education also is also proposed by advanced vocational training schools and professional school, Fonkeng and Ntembe (2009: 232). Actually, it is worth noting that more and more institutions provide for both systems under the same administration. This is to say that bilingual schools at all level are spreading all over the national territory, mostly in the big cities. Unfortunately, as argued by Delancey et al (2010: 144-145), there are problems plaguing the education system of Cameroon in general. Delancey et al (2010: 144-145) among the problems that they identified, there are low average pay, poor training, and a shortage of teachers and education state employees, inadequate buildings, teaching materials and facilities. Corruption also stands as one of the major and widespread problems. There are illegal networks for sale of admissions, purchase of diplomas and buying of grades, misappropriation of fees and supplies, and teachers demanding favours from students and or from their parents, (Delancey et al 2012: 144-145).

3.1 Higher education in Cameroon

The first university in Cameroon was created in 1962. Before its creation, many qualified students were going abroad to pursuit higher education while the others were simply integrated into the administration or other private corporations.

According to Fonkeng and Ntembe (2009: 232), the Federal university of Cameroon was created in June 1962 and began functioning in September of the same

year with six hundred students enrolled. All of these students, according to Fonkeng and Ntembe (2009) were registered in the Faculty of Arts and Social Sciences, the Faculty of Science, and the Faculty of Law and Economics.

To encourage more students to enrol in the university and by so doing reduce the number of students going abroad, the federal government engaged to provide many advantages to the students. Students were not required to pay tuitions, and most received subsidies for meal and accommodation, (Njeuma et al 1999: 3).

Fonteng and Ntembe (2009:232) contented that in the years that followed, specialized schools were attached to the university and other professional institutions of higher learning were created to set up graduates for professional careers among which the school of medicine (CUSS) created in 1969, the Institute of International Relations (IRIC), the school of engineering (ENSP) created in 1971 and the School of Journalism (ESIJY) created in 1970. Also, there has been the creation of other specialized schools which were not placed under the umbrella of the Federal university. These specialized schools are the school of public works (ENSTP), the military academy (EMIA), the school of administration (ENAM). The main difference between the specialized schools and the university faculties is based on the admission process. While admission in the university faculty is based on the acquisition of the advanced level certificate from the English system or the *Baccalauréat* from the French system, admission in the specialized schools is competitive, that prospective students undergo a specific an entrance examination from which only a limited number (supposedly the best) will gain admission, (Fonkeng and Ntembe, 2009: 232).

Njeuma et al (1999: 2) argued that the root of present higher education problems in Cameroon is found in the management these two types of higher education. Professional and specialized technical education is selective, and only admits a limited

numbers of students through highly competitive entrance examinations while no selection is done to admit students into the university faculties for general studies. “This produced in the universities a huge number of less qualified graduates who were not readily employable. Overall, the numbers of students in the university faculties increased while those in the more demanding professional schools progressively decreased”, (Njeuma et al 1999: 2).

More than ten years after the opening of the federal university of Cameroon, enrolment had increased from 600 to 6,000. Sadly though, as the enrolment was increasing, there was almost very little expansion as far as the infrastructures were concerned. Obviously, such a situation rapidly produced an over-crowding of the university, which in turn sequenced other problems such as inadequacy of learning conditions, (Njeuma et al, 1999). The rise in student enrolment and the desire to decongest the university, led to the creation of the university centre for languages, translation and interpretation in Buea; the university centre for Agriculture in Dschang; the university centre for Business studies and training of technical teachers in Douala; the university centre for Food Science and Food Technology in Ngaoundéré in 1977. And with the reforms of 1993, six universities were created to resolve the problem of congestion in infrastructure and broaden the opportunities and choices of the students. And a seventh university was created in the 2008, in Maroua, (Delancey et al 2010: 200).

The actual state of higher education in Cameroon is nevertheless undergoing serious crises. As Bloom et al (2006) there are difficulties facing higher education in Cameroon as it is in dire need for trained lecturers. And there is more concern on administration rather than teaching and research. And almost nothing is done to improve vocational and professional training which may facilitate the integration in the labour

market. In this line, Bloom et al (2006) argued that there should be a revision of the university curricula to fit the needs identified and to provide for employment opportunities in the private sectors. The curricula must give room to flexibility and adaptability. As Delancey et al (2010) also pointed, there is a serious problem of Brain drain to worsen it all. More and more graduates leave for other African countries or for Europe countries, which absorb them with great facilities by providing them large range of advantages and opportunities and better working conditions (Delancey et al, 2010: 200).

CHAPTER III

DEVELOPMENT IN CAMEROON

Right from independence 1960, development has been one of the main targets of the Cameroonian government. Many policies and programs have been put in place to achieve *Development*. After independence, Cameroonian government embarked on five-year development planning programs. These programs were operated until 1986, when the emergent economic crisis compelled the Government to give up on these programs and to later embark on structural adjustment programs. Until 1986, five quinquennial development plans were elaborated. In this chapter, I present the different development plans that have been set up and undertaken since independence and their respective results. Then I go on with examining some of the present programs that are being built up. But before looking into the development planning and implementation of the independent state of Cameroon, I discuss the pre- independence development policies and management.

1 The pre-independence development

According to Wilfried Ndongko (1986), during the years of foreign occupation, Cameroon was growing and was managed as a classic colonial economy. According to him, Cameroon's development was moving along Marxist lines, with the characteristics of a primitive capital economy. First the German rule demonstrated brutal and violent use of force along with the construction of modern infrastructures such as hospitals, railways, roads, plantations, ports and others, (Ndongko, 1986: 21).

As Ndongko (1986: 26) pointed out, the development of infrastructural network put in place by the German were built up merely to facilitate the extraction and the exportation of their production and of the local raw materials that were available. This

explains why during German rule, it is the coastal and southern parts of Cameroon which benefited from the modern constructions and facilities.

After the World War II, the French rule and British rule replaced the German rule over Cameroon, dividing it into two parts: the Western Cameroon administered by the British and the Eastern Cameroon administered by the French. The French rule in the East part of Cameroon was marked by the introduction of development plans which focused more on the economic aspect, while the British Cameroon's development and financial management was done through direct capital grants to the colonial governor of Nigeria who was also in charge of the administration of Western Cameroon (Ndongko, 1986: 20). As indicated by Ndongko (1986: 22), before the end of French rule in East Cameroon, two development plans were drafted with capital projects rising to 96 million francs CFA (which is more than 140,000 Euros today). Even though in Western Cameroon there was no development plan per say, the British colonial government however implemented development projects worth £8.8 million during the whole period of British rule in that part of Cameroon. Just like the Germans during their rule of the Cameroon territory, the British and the French administration placed their emphasis on the development of infrastructural network to serve their interest and facilitate the exportation of local products out of the country. Ndongko (1986: 22) indicates that "in this regard then, a greater part of the funding (85% in these plans were devoted to construction of roads, ports, railways and telecommunication". It is only at the dawn of independence that these colonial administrations, with the turmoil of independence gave greater attention to the social aspect of development, with the construction of hospitals, schools, etc. The economy of both the French and the British *Cameroons* was largely depending on agriculture. Many investments were done on large plantations, producing goods for export such as cacao, coffee and tobacco. The development of plantations for

export was done at the expenses of local consumption food production. Also, very few food processing plants were constructed as the administrators relied more on exports. Due to the type administration the French and the British rulers set in Cameroon, the coastal regions stood as their head quarters, and experienced a greater influence of Western values, knowledge, infrastructures, etc, just as during the period of German ruling.

Later, after independence, the development of cities followed the former lines left the colonial rulers that were designed around the exportation of goods. As Ndongko rightly put it:

“Since 1960, differences in the relative development of the region on Cameroon are associated with the contrasts in the number, nature and age of modern enterprises. As industrial activities in the country originally involved both exports and imports, and because of colonial investment policy in location firms to take advantages of the infrastructure network, there was, and still is, a relatively high concentration of older enterprises in and around the Mungo area, especially firms engaged in primary activities or in the processing and transformation of raw materials for export.” (Ndongko, 1986)

This is to say that, the regions that were already benefiting from the modern infrastructure built by the colonial rulers, had an advantage over the other regions and thus, experienced a more rapid expansion than the hinterland regions. Unfortunately, these coastal regions continued to experience more attention from the state government at independence at the expenses of the other regions creating an imbalance in the access of modern infrastructure.

2 Five year development plans.

According to Mirjam Van Donk (2004: 9), independence brought to newly created states a couple of challenges to tackle. For Van Donk (2004: 9), the first challenge was the instillation of national identity and shared sense of unity. The process through which the African continent was shared among the colonial powers at Berlin conference had virtually no consideration of the cultural links and ties between the different communities. As a consequence, at independence many African states were constituted of different ethnic groups. Colonial occupation and later independence brought under the same banner separated groups that had to learn to be together as a single state.

Another challenge she mentioned, was the difficulty to address the colonial legacy of underdevelopment. The new colonial powers were guilty of selfishness. Most, if not all of their administration was turned to their own benefit. The local population could only profit from the leftovers and crumbs, which moreover were unequally distributed over the whole territory. Development was a need to be addressed for the government to be able to provide equal opportunity to the whole country and to insure steady peace and balance. Van Donk (2004) also argued that another challenge facing the new African governments was the improvement of their overall economy and the building of powerful and effective administrative and governmental bodies. The governmental institutions had to embody a sense of legitimacy from the people intended to represent and serve apart from the legal stand they already had.

Many aspects such as the ideological orientation or the evaluation of the local situation greatly influenced the response each government gave to these challenges (Van Donk, 2004: 9). One of the responses of the Cameroonian government as it was the case in many other African countries to these challenges was to put in place a centralized form of administration. As stated by Van Donk (2004: 9) : “Given the

vastness and the complexity of these challenges, it is hardly surprising that African states opted for the centralization of decision-making and resources and favoured state intervention in the economy and in the development process in general”.

At the period during which African countries gained independence, development was understood or presented in economic and financial terms. The African governments and the Cameroonian government as well, turned their attention, strategies, planning, and policies towards the improvement of the economic situation. Getting out of “underdevelopment” was a clear target. Issues on the increase of, and concerns about GNP, GDP, and other economic indicators, were the primary concerns of the Cameroonian government.

Van Donk (2004: 10) argued that: “In accordance with modernization theory, which identified various stages of development, development planning became a tool to enable ‘underdeveloped’ countries to follow the appropriate stages of modernization”.

Arguing specifically on the case of Cameroon, Tabi Atemnkeng et al (2011: 368) stated that the first government of the independent Cameroon put into place instruments to promote economic and social development. In the early phase of Cameroon’s independence, the government elaborated instruments for building the Cameroonian nation and promoting economic development, strengthening the country politically and economically in order to improve the standard of living of the population. In other words, there was a clear ambition from the Cameroonian government to tackle the main challenges that were outlined above.

A series of five-year economic and social development plans were initiated, which started in 1961. The establishment of the Federal State (East and West Cameroon) in 1961 helped to increase the importance of the country economically, demographically and politically. However, the first Development Plan (1961 to 1965) was designed for

and by the eastern Cameroon (French Cameroon) and before federation of the two *Cameroons*. Thus, Development policies of the federated states were only integrated in the second Development Plan which ran from 1966 to 1971. Meeting the goals of economic growth and modernisation of the society constituted the framework by which the two first five -year Development Plans were set up. The clearly stated goal was to double the per capital income. A centralised form of administration was opted to produce better coordinated results. So during the first ten years of independence, Atemnkeng et al (2011) argued that good results were obtained mainly in the social life of the country. This goes in straight line with the argument of Seidman (1974) who stated that most African countries made major improvements as regarding the social services such as health or education. The first development plan went from 1961 to 1965. As Van Donk (2004: 63-65) mentioned, concerns over social and economic issues took an important stand, mainly the achievement of more balanced nutrition, the development and extension of education. Of course such social were believed to be closely linked to economic development in the provision potential labour force. Concerning the economy aspect properly, the focus was placed on the enhancement of agricultural potential from the colonial legacy with the development of international trade and industrialization.

The second development plan went from 1966 to 1971. The objectives that were stated carried on the general conditions suitable for development such as public security for all, national cohesion, and the strengthening of international bilateral and multilateral relations and the boot up of rural development. And to achieve this, the government projected to lay emphasis on raising the availability of education, on the diversification of agricultural production and on industrial and infrastructural development.

Even though the focus was laid on the increase of the economic performances, other aspects such as the social, cultural life of the country were benefiting greatly from the measures that were put in place. As stated by Van Donk (2004): “Strong public investment in newly established national health care systems contributed to a significant decrease in infant mortality and maternal mortality, resulting in higher population growth rates and an increase in life expectancy of about four years per decade, rising from 40 years in 1960 to 48 years in 1980 and reaching nearly 52 years in 1990 (Cooper, 2002: 107; World Bank, 2002a)”. A central point to economic growth was argued to be the availability and the quality human capital. According to Cheru (2002), the importance of human capital makes it central that focusing on economic growth also implies a focus on education, and health for example. So, policies set up for economic growth will also carry in their major content, aspects of health or education policies. For example in the case of Cameroon, the government offered scholarships and grants for primary and secondary school students or full tuition fee levy or living and lodging scholarship to university students. And more over employment was guaranteed for university graduates.

So, with the focus placed on the economy, all the other aspects of Cameroon society were also showing green light. According to facts such as infant mortality, primary school enrolment for the five years following independence, it could be argued that Cameroon was on the road to “development”.

Talking about financial issues, Ajab Amin (2002: 1) stated that Cameroonian economy performed very well the first decades of independence. He pointed out that, during the first decade, under the first two development plans, it was agriculture that supported the economy. Cameroon greatly gazed on the growth of exportation to improve capital formation. During this decade, Aloysius argued that Cameroon was

presented as well managed. It had one of the highest per capital incomes in sub Sahara Africa. According to Aloysius Ajab Amin (2002: 1), during the period when agricultural activities supported most of the economy, they accounted for almost 34% of GDP, employing 80% of the labour force and providing 85% of exports. The share of industry was just 17% of GDP.

If to these facts we have to add social statistics that were presented earlier, we come to understand that the offer for social services was also growing. These are just indications of how successful Cameroon was in achieving progress. Of course such social facts do not say anything concerning the quality of the services, but it helps us understand that, at least, they were been offered.

During the period of the 3rd development plan, agriculture was the driving force of the economy, but not in a large proportion as before, given that petroleum production was increasingly sustaining an increasing part of the Cameroon economy. However, as mentioned by Van Donk (2004) the third plan which went from 1971 to 1976 kept the focus on rural development by putting a stake on agricultural production, animal farming and forestry. But lesser emphasis was given to industrialisation. And during the period from 1976 to 1981, under the 4th development plan petroleum production finally took the lead over agriculture in driving the economy (Ajab Amin 2002: 1). As the discourse over development had began to change in the international scene, the Cameroonian government thus included in its fourth development plan as an important point along with economic development, the reduction of socioeconomic inequality. By the 1980s, the discourses about poverty, and re-conceptualization of development gained a new dimension. The development of less – developed areas and regions in the country was elaborated in the development plan. More consideration was also given to private sectors of the economy with the allocation of large investment finances to

encourage private initiative. As Ajab Amin (2002: 7) stressed: “In the third plan (1971–1976) 63% of total investment was allocated directly to productive projects compared with 46% in the second plan. While the second plan had relied mainly on external resources, the third plan relied essentially on national resources”.

During the second decade after independence, the economy as a whole was reported to be on the increase, while the rate of such increase was greatly due to petroleum production. So, even though on the international scene, there were ongoing economic crises during at that same period, the situation seemed to have had an insignificant impact on the economy of Cameroon. Ajab Amin (2002: 7) rightly noted the fourth development plan (1976–1981) was developed during the oil boom period. The oil-boom will also nurture the economy up to the early year of the fifth development plan. The government relied more and more on the wealth it was deriving from the production of petroleum. The economic possibilities offered by this production seemed to be unlimited. This is manifested in the policies and projects the government undertook during this period. According to Ajab Amin (2002: 7), “The plan stressed large public projects and import substitution industry, and salaries of civil servants were regularly increased with the main public salary scales established in 1970. In fact, between 1975 and 1982 there were yearly salary increases”.

The last development plan was drafted in the 1981 and lasted until 1986. The fifth development plan focused on culture as an important component of development. The Cameroonian cultural diversity, sport teams, and tourists enticing potential were given a special attention. Reference was also made to research and scientific development as well as communication and information technologies (Van Donk: 2004). By the end of this fifth development plan, Atemnkeng et al (2011) argued that the contribution of petroleum to the economy had increased.

Unfortunately at this period, the prices of commodity in world had begun to increase. The situation turned to nightmare to the government and to the society as a whole when in 1986, “the fall in the price of export commodities, such as cacao, coffee and rubber produce negative shocks which led to a drop in terms of trade by approximately sixty per cent from 1986 to 1990 and plunged the country into a crisis with severe economic and political consequences”, (Awung and Atanga 2011: 95).

Since Cameroon relied greatly on the exports of its productions, the international market meltdown gradually sank the country into a trade deficit. This is to say, as the price of imported commodities was rising, the price exports in return were dropping. And there were very few transformative industries. A high quantity of the agricultural production was transformed abroad and later re-imported in the form of finished goods. As the goods that were imported counted among the basic commodities, the shock was hard on the economic life of the country. The Cameroonian government had to start reducing its expenditures in an attempt to avoid more damages on its economic and social administration.

3 Structural Adjustment Programs.

As earlier argued, the Cameroonian government had to reduce its expenditures. The central government took unpopular measures in trying to contain the consequences of the exports commodities’ prices reduction, and thus avoid an economic crisis. Among the measures that were put in place, the government cut down the salary of civil servants. “In presenting the seven point plan Economic stabilization plan to the national assembly, on June 20, 1987, he called for streamlining of government expenditure on Water, electricity and fuel and followed with the curbing of government vehicles and housing allowances for civil servants”, (Awung and Atanga: 2011: 110).

All aspects of the country activities and administration were concerned with budget down trimming. Unfortunately, the measures taken did not produce the expected results. Contrary to what the president had announced before, the government finally took the step to accept to an offer of loans from the Bretton Woods Institutions.

As argued by Awung and Atanga (2011: 110), the economic recession deeply thwarted the development plans that the government was designing for the nation. They even went further arguing that not only was the development process stopped, but in some situations, the development gains were totally lost. In other words, in some instances the situation was worse than before independence.

To the loans offer from the Bretton woods institutions with specific payment frames, Cameroon has been unable to fulfil to the time lag, rather, the economic situation went worse. So to be able to repay the Northern Banks, most African countries turned to the International Monetary Fund for a set of loans designed for them. Unfortunately for Cameroon and other African countries that were concerned, to the IMF loans there were attached requirement conditions to be followed (Cheru, 2002). These conditions dealt with carried on policies to be undertaken to improve the state of the economic. The stated aims of these conditions, the experts from the IMF argued were first to reduce budget deficits through the increase in the rate of taxation and a reduction in both the wage bill and subsidies, and the restructuring of state-owned enterprises. Also, they aimed at the restoration of external competitiveness focusing on the reduction of costs of management in state-owned enterprises. (African Development Bank, 2007: 1). Finally, the Cameroonian government in 1989 decided to give in to the Structural Adjustment Program with a \$ 150 million loan from the IMF, (Awung and Atanga, 2011: 110). Within the structural adjustment program, the Government put in place draconian cut down in civil service salaries in the range of 50% in 1993. It then

led to a significant degradation of the socio-economic conditions of civil servants first and of a large portion of the population later. The monetary devaluation of the CFA Francs that occurred later did not ameliorate the situation. “Nevertheless, in the absence of monetary adjustment, the results obtained as a result of the implementation of these programmes remained very limited” (African development Bank: 2007: 01).

According to the IMF, policies that were conducive to economic stability, growth and development included: domestic trade liberalisation, relaxation of foreign exchange controls, the privatisation of basic services and an end to social subsidies.

After a decade under the SAP, the Cameroonian government was unable to reduce the financial deficit and achieve the economic objectives that were stated by the international economic institutions. Such situation finally brought Cameroon to be admitted in the HIPC. The admission into the HIPC initiative meant for Cameroon a moratorium in the debts payment along with the reduction of part of its debts.

From the year 2000 as signified by Van Donk (2004: 64), Cameroon adopted the following key development planning frameworks among which there are: the Poverty Reduction Strategy Paper (PRSP), the Medium Term Expenditure Framework (MTEF) and the Rural Development Strategy (DSDSR).

With regards to poverty reduction, The PRSP was targeting the promotion employment and access to income production. The PRSP were designed “to promote income generating activities for the poor, particularly those related to self-employment” (Van Donk 2004: 65). However, it is not yet quite clear who are the poor it seeks to address as they are not specifically identified, and it could be everyone or it could be no one. Another default of the PRSP as mentioned by Van Donk (2004: 65) is that “no attention is given to the tension between agriculture reform and efforts to enhance economic competitiveness (especially in the manufacturing sector) - efforts generally

associated with at best a stabilisation, at worst a contraction of the labour market and with greater labour disparities due to higher levels of specialisation – and the need for stable employment and decent wages”. While the agricultural sector stands as a valuable option that needs to be looked in and development as it offers greater prospects and has proved in the past to present high development and economic potentials.

Since the introduction of strategy papers and frameworks, Cameroon is no more drafting development plans per se. Rather, the nation is merely functioning under the Poverty Reduction Strategy Paper and other framework and strategies designed by the International Institutions such as the UN or the IMF. Van Donk (2004) argued that these strategy papers and frameworks are expected to be evolving towards a full national development plan (Van Donk 2004: 64). Officially, the implementation period for the PRSP scheduled to last until 2015, along with the MGDs which should have been expectedly achieved by then.

In summary, after independence, Cameroon experienced high growth rates, and even evolved from the list of low income countries to that of medium income. The growth and economic prosperity lasted for at least 2 decades. However, as mentioned by Seidman (1974), on the actual fact productivity and growth did not spread to all the national economy as promised and expected by the central government. In other words, national economic prosperity and growth could not be reflected into a fair distribution of growth and improved standards of living for a great majority of people (Seidman, 1974). Some analysts described the African experience as “growth without development” (Clower et al, quoted in Seidman, 1974: 4).

In the 1980s, the situation began to change with the occurrence of economic crisis. Van Donk (2004) argued that: “Macroeconomic reform and structural adjustment became the buzzwords, associated with measures such as non-inflationary budgetary

policies and monetary restraint, the liberalisation of trade and financial flows, exchange rate correction, privatisation and deregulation of domestic financial markets”. The overall socio-economic situation began to degrade with salary and budgets cut-downs while the cost of primary goods and foods were rising. The standards of living and other social gains of the prosperous years were lost. The brake in the development impulse greatly affected thousands of graduates. The government has been encouraging university study to produce more and more qualified man power. Unfortunately with the economic meltdown, the number of graduates kept growing while job opportunities were decreasing. The phenomenon of graduate unemployment was clearly an indication of a growing disparity between the expansion of education opportunities and the production of economic activities. As indicated and as it has been argued by Elbadawi and Contributors (2001), the economic decline was demonstrated in almost all economic and social indicators and in negative per capita growth rates.

Ali (2001) on his own holds that, altogether sub-Saharan Africa has witnessed a significant increase in poverty, mostly in the rural areas. According to him, this increase in poverty was greater than what it was reported to be. He stated that in the 1980s, it could get to between six and ten per cent per annum.

The introduction of structural adjustment program did not improve but instead worsened the situation. But, it would be unjust to say there has not been any aspect that has improved, since it is argued that there was a better redistribution of assets to all layers of the society, thus constructing better bases for future development (Van Donk 2004). However, we should be cautious with such arguments as African analysts such as Ali (2001) on their own account argue that it is difficult to appreciate such discourse since there was no evidence of such. Van Donk (2004) also emphasised on the increase involvement of donor agencies in the social life of the country most importantly in

health and education. The situation led to the multiplication of donor projects and programs over the whole national territory and resulting in a high number of duplication, and competence battle on recipient population and regions.

However the SAP, as argued Elbadawi and contributors (2001) laid emphasis no more on the central government but the market for the provision of social services. Services such as health and education became subject to additional fees add up to the usual administration and service fees.

The actual situation of Cameroon is slightly different with positive improvements worth noting, although there is still much to be done. There are many development challenges that are still to be tackled. A high portion of the population does not still have access to basic services in the regions were they are found. The problem is that the reforms directed towards efficiency instead of sustainability and accessibility. Economic growth is still a goal but the social aspect has become an unavoidable component of development.

CHAPTER IV

DEVELOPMENT AND HIGHER EDUCATION:

STATISTICS AND PROSPECTS

In this chapter, facts (statistics and graphs) about development and higher education in Cameroon are presented. I look at development, from the perspective of health issues. I discuss and analyze demographic indicators such as population, and dependency ratio, but also indicators on health such as mortality rates, birth rates. And I compare them with indicators from higher education such as enrolment rates. I pick up examples from the Asian continent, which best illustrate the arguments I put forth in this section. As already said, I examine the relation between development and education in the light of Pearson correlation also known as the simple correlation formula. Correlation is a statistical tool which determines the existence or absence of a relationship between two or more phenomena of expressed values taken from groups of subjects. The coefficient of correlation helps to quantify the relationship, with the sign of the correlation (positive and negative) indicating the direction of such relation, and determine the strength of such relation. The degree of correlation is evaluated with the correlation coefficient and is measured on a scale of 0 to 1. Zero means a total absence of correlation between the studied variables, while one means a perfect correlation. The correlation formula used in this study is:

$$r_{xy} = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

r_{xy} is the correlation coefficient between the variables observed.

x and y are the value units of the variables

n is the sample size of the study.

Σ is a Greek letter (sigma) which is mathematical presentation meaning “the sum of”.

$\sqrt{\quad}$ is the mathematical symbol of square root.

In this study, Correlation coefficient indicates the level of correlation between two or more variables, without specifying the nature of the correlation that is used. The causality discourse is willingly avoided as I understand that the relationship is a two – way relationship. And moreover, from the level at which this research has been conducted, mainly based on historical and statistical facts and figures, it is difficult to objectively say which from development and education determines the other. And again, education can also be considered as a component of development itself. We cannot discuss about development, no matter how development is defined (be it human or sustainable or in economical terms) without discoursing education.

The figures that are presented in this chapter have been collected from the World Bank Database, from the United Nations Population Division, from UNICEF and from the UNESCO. The selected sources were chosen on the bases of availability and readiness. We are not arguing for the reliability of these sources over any other, but there are useful indicators to understand the phenomena being studied. The figures and statistics are regrouped in 10 years sequences from 1971 to 2011. I have also conducted an online survey on a sample of Cameroonian students to analyze their perceptions of higher education and health issues, as they are one of the key actors. The sample group is constituted by twenty-two Cameroonian university students from Anglophone and from francophone education systems. For a sense of balance, an interview of some lecturers (and former) lecturers of universities in Cameroon was conducted to have their

opinion on the issues treated in this study. The interview was conducted by mail. Copies of the interviews and the questionnaire are presented respectively as annex 2 and annex 3 of this work.

1 Demographic indicators

As already stated in the introduction, education is related to development, first as a part of development but also as it is influenced by development and at the same time development influences it. Development as we said is composed of a great number of variables all of them of importance. And these variables, such as economic growth or education, or social services are also interacting among themselves. The Asian Development Bank (ADB) (2001:6), while arguing specifically in the case of education, stated that the quantity and quality of schooling are influenced by demographic structures and are particularly sensitive to the size of the school age cohort.

Total population is defined as a count “of all residents regardless of legal status or citizenship--except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of their country of origin”, (The World Bank, online source). In its definition of total population, the World Bank commented that increases in human population, no matter the origin of such increases, be it as a result of immigration or more births than deaths, may result in placing great constraints on the country's resources and on the capacity of the leaders to respond to the needs in a sustainable way. An example stated by the World Bank is a significant increase in population which can greatly affect the availability of land for agricultural production, and increment in demands for food, energy, water, social services, and other infrastructures. On the other hand, the decline of the population size can affect negatively the overall productivity of the countries.

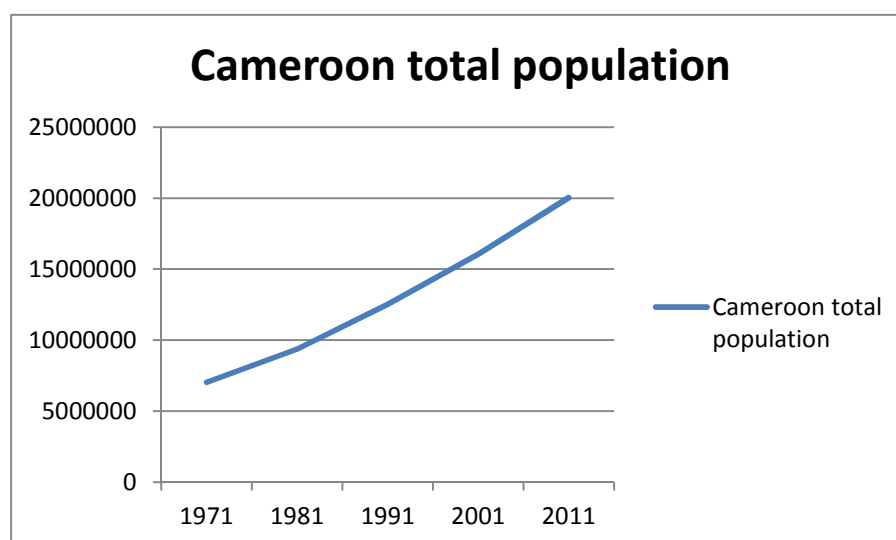
The ADB (2001: 28) indicated that: “The structure of a country’s population provides one important context for understanding the growth of education systems and constraints on support for economic growth”.

In the table 1 below are presented figures about the total population of Cameroon.

Years	1971	1981	1991	2001	2011
Cameroon population	7022124	9379109	12529904	16039737	20030362

Table 1: Source: United Nations online Database

The graph below presents the evolution of the Cameroonian annual total population on a period from 1971 to 2011, for the selected years 1971, 1981, 1991, 2001, and 2011.



Graph 1: Source: United Nations online Database

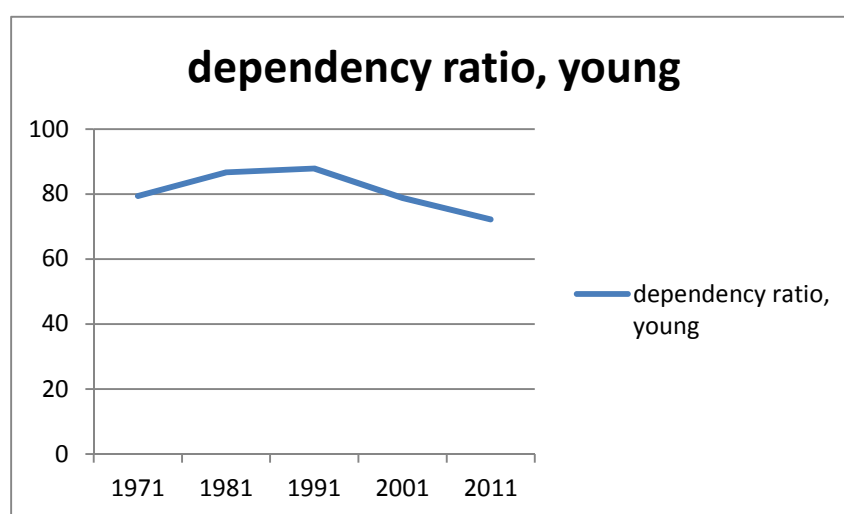
Another interesting demographic indicator is the young dependency ratio. The young dependency ratio is defined by the World Bank as the ratio of younger dependents – people younger than 15 – to the working-age population – those aged between 15 and 64. Data are shown as the proportion of dependents per 100 working-age population. In the case of Cameroon the young dependency ratios is presented in the table below. It is been argued that countries presenting lower dependency ratios have a greater ability to invest more per child at similar level of allocations of funds. While on

the contrary, high young dependency ratios in poorer countries, by forcing choices as to which children go to school, tend to be associated with suppression of female enrolments and, thus indirectly may reduce the number of opportunities in the labour market for girl”, Lewis (1996: 50).

	1971	1981	1991	2001	2011
Dependency Ratio	79,344	86,663	87,829	78,841	72,171

Table 2: Source: World Bank online database.

The graph 2 below represents the dependency ratio curve of Cameroon from 1971 till 2011.



Graph 2: Source: World Bank online database.

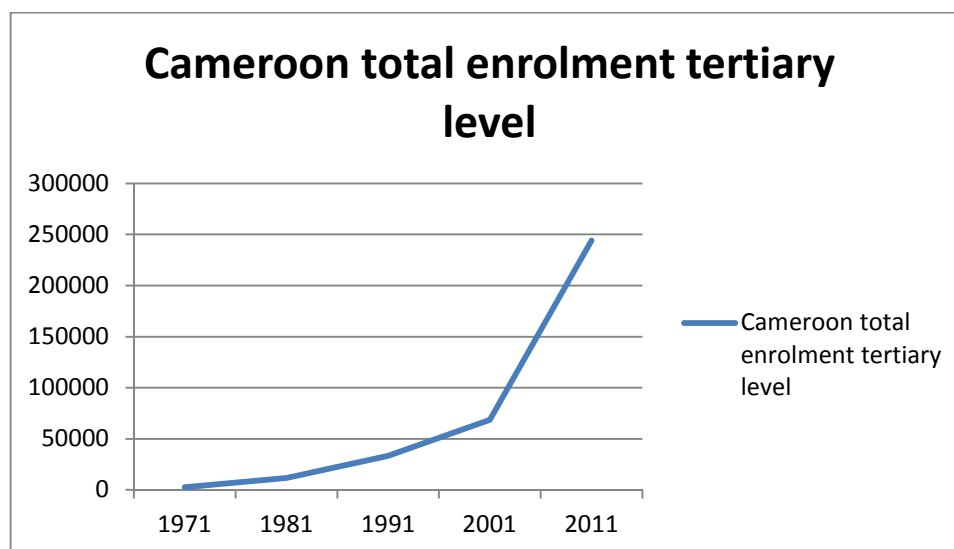
The Asian Development Bank (2001) argued that a situation in which a large percentage of the population is in the age segment below 15, is an indication of a potentially high demand for early levels of education in the present and higher level in the future. It also implies more efforts to improve education quality. The Nation of Cameroon presents a high dependency ratio.

Total enrolment rate, according to the UNESCO Institute of statistics is understood to be the total number of students enrolled at any tertiary level institution both public and private, per 100,000 inhabitants. The enrolment rates in tertiary education institutions for the years 1971, 1981, 1991, 2001, and 2011 is been present

both in the table 3 and while the graph 3 presents the evolution of the total enrolment at tertiary level.

Years	1971	1981	1991	2001	2011
Enrolment rates	40	130	275	442	1260

Table 3 Source: UNESCO online database.



Graph 3 Source: UNESCO online database

The inter-relation that exists between the components of development and the social demographic variables plays an important role on the development outcome or achievement. The ADB (2001: 6) argued that some countries of Asia “with high urban population ratios tend to have lower dependency ratios, longer life expectancies, lower mortality and fertility rates, and better rankings in the human development index (HDI), human poverty index (HPI) and gender-related development index (GDI). Urbanization brings new opportunities and new problems to education”. Despite the understanding of the importance of all the variables of development, economic growth seemed to still draw a great part of the attention both from political leaders and from the population. The contribution of education to development is generally presented and considered significant when expressed in economic terms or measured either in monetary terms or directly in terms of efficiency or productivity, for example. But the ADB (2001: 11)

without refuting the importance of economic insisted on the fact that economic growth has contributed much to national development but it should be noted that it is marked by the expansion of opportunities in education, wider availability of health services, and increases in quality of life. In other word, the importance of the economy is certain in influencing health and education for example, but it should not undermine the fact that economy on its own is also affected by health or education.

Many studies and investigation were published by many writers such as Tilak who carried out a study to defend the importance of education over economy or to substantiate the fact education is directly link to the incidence of poverty. It seemed that economic growth is a unique powerful weapon against poverty, and there was no possibility to do without. According to Tilak (1994: 122), it all starts with finance. In his analyses, he defended a clear correlation between poverty and illiteracy in Asia. The conclusion of his findings included that the lower the literacy rate, the higher the percentage of poverty in a country or the community. Tilak (1994) also added in his conclusion the example of Thailand where almost 99% of the poor have no education, and the example of Pakistan where nearly all the poor are illiterate.

However, finance is directional but not indispensable. Finances can be a tool in directing the path and the pace of development, because certainly communities will often find it difficult to recruit and maintain quality teachers without financial possibilities, but financial possibilities solely cannot guarantee quality education.

In the same way, without refuting the results of the research carried out by Tilak and others, the ADB (2001: 12) stated that a low incidence of poverty is not necessary always directly linked to education achievement. The Asian Development Bank used the example of two Indian rural provinces, Kerala and Rajasthan. Both provinces

presented similar level of poverty, while on the contrary female literacy rates vary from 85% in the former to 12% in the latter.

McMahon (2009:35) stating over the link between education and development said that there were many factors mediating this relationship. But, the access to school and the policies implemented determine how education opportunities are distributed across social groups, and thus will clearly have effects on future job opportunities.

Employment patterns sometimes are reflected in the demands for schooling and academic orientations. It would have been interesting to look at the expenditure of higher education, or the percentage of the Gross National Product share allocated to higher education to understand more about the financial importance of higher education in Cameroon. However, the financial problem is not really laying in the availability of resources but in their distribution. The percentage of share given to education and more particularly to tertiary level is part of the political will of the leaders. According to McMahon (2009: 33) “the problem is that higher education is not seen by political leaders as “*the*” solution”. He further argued that there are other policies that are proposed and applied in preference to the investment in higher education as “*the*” solution to development. He reasoned that early investments in education were a successful strategy employed by Japan, then later by South Korea, Taiwan, Hong Kong and Singapore. The investments they made in education, especially at tertiary level, enabled them to rather export manufactured goods rather than raw materials as it was the case few years back. The policies of free trade which has been presented by some political and economic ideology as “*the*” solution are not significant without some considerable prior investments in higher education (McMahon, 2009: 33-34). McMahon contented that in many countries, to cover up the shortage of government investments on higher level education, there was an increasing shift of the costs of higher education

to students and their families as an important aspect of the privatization of the financing of higher education, (McMahon, 2009: 35).

Nevertheless, concerning the financing issue of higher education level the ADB (2001: 18) argued on the analysis of the expenditure that:

“Like all education indicators, expenditure figures tell, at best, an incomplete story. Many types of financial support for schools and other education programs are not included within typically reported expenditure figures. Also, and more subtly, there is room to manoeuvre within the same amount of available fiscal resources talented administrators, imaginative teachers and enthusiastic parents can obtain additional returns on a given level of resources”.

As well as financial issues in education are directional, economic growth is with almost no doubt clearly important to offer citizens the opportunity to make choices. Usually economic growth and social resources can improve the quality of life for all. But again we insist on the fact that all these factors should go together, without one taking the lead over the others.

Coupled to financial issues, there are strategic policies adopted by the government that also affect the results produced by education. And policies are usually drafted based on demographic patterns derived from national statistics or on the results of researches and studies. As ADB (2001) put forward on page 27, “demographic structure and change support or inhibit economic growth”. But a clear limit to researches carried out on education and development that has been often put forth, is the fact that it is quite impossible to isolate the impacts of a social factor from the others. McMahon however in his book *Higher Learning, Greater Good: The Private and Social Benefits of Higher Education* (2009) stated that it is possible to measure the incidence of education on the

other social indicators of development. He stated in page 121 that: “lest some feel that we are setting out to measure the unmeasurable, it is important to briefly consider in more depth how the important non market outcomes of higher education are measured”. He further defended for example “the rationale for the measurement of the productivity of human capital created by higher education in producing non market outcomes is the household production function based on Becker’s (1965, 1976) theory of the allocation of time”, (McMahon, 2009: 123).

So according to McMahon (2009), it is possible to measure not only the impact of education as a whole, but also the specific returns of higher education.

The demographic structure of a country is of key importance in analyzing the link between education and development components.

In the case of some Asian country, The ADB (2001: 32) argued that national commitment to, and political support for, education were expressed through implementing national policies, enacting laws, and financing programs. It should be noted that in most of these governments, the share expenditure allocated to education was not necessarily high prior to the rise up of their economic situation. The ADB (2001) contented that private implication from the civil society duplicated the results of the efforts of the government to raise the quality and the outcome of education. As matter of fact, the implication of all was explicitly express in a very low teachers and pupil’s absenteeism, in teachers’ quality and commitment comparatively high, the creation of private institutions facilitating the access to nearly all the segment of the society and the government facilitating the bureaucratic procedures for such initiatives, (McMahon 2009:59). In the Korean growth model, higher education occupied a central position in the development of new technologies and its diffusion, which directly or indirectly gave an impulse to the growth process.

According to Bloom et al (2006), South Korea experienced important changes, which were driven by education. This country moved from agriculture and fishing, accounting for 36 per cent of its GDP, services accounting for 47 per cent and manufacturing for 16 per cent in 1960. But by 2002, the situation was such that services accounted for 63 per cent of employment and agriculture and fishing for just 4 per cent. Bloom et al (2006) argued that according to the World Bank, South Korea is among the five countries of OECD with the highest percentage of their GDP invested in knowledge (higher education, software, and research and development). Korea has invested heavily in education at all levels. As matter of fact, full primary education enrolment which is one of the Millennium Development Goals (MDG) was already achieved by 1970, and it even went further with full secondary level enrolment been achieved by 1997, (Bloom et al, 2006). Bloom et al (2006: 83) argued that tertiary education has played a vital part in the achievement of such results. To be able to make it to its goal, the government of South Korea tuition fees has been the responsibility of the students (and their families) However, the introduction of tuition fee as a responsibility to the student in the 1950s was not an obstacle to the growth of tertiary public education (Bloom et al, 2006: 83). There has been a growing labour demand for technicians, Links between colleges and industry were fostered through research cooperation, field practice, staff exchanges for lectures and consulting, and contracted training activities.

The government set up a series of five year professional institutes that offered three-year vocational programs at the secondary level and two-year vocational programs at the tertiary level, a number of the five-year professional institutes were converted into two-year vocational junior colleges as the market demand for higher skill levels became stronger. And later, the government engaged in broader two-year junior college system of both public and private colleges. Ng'ethe et al (2008: 41) contented the private higher

institutions played an important role. With the increase of the demand for higher education the South Korean government made arrangements for the expansion of private tertiary education. South Korea laid emphasis on the promotion of science and engineering programs, on strategic economic areas such as ship-building, electronics, and automotives with policies such as competitive funding programs, tax credits, and customs duty waivers on research equipment or programs such as "Brain Korea 21" project which encourage research funds to a relatively narrow set of institutions and graduate students, in an attempt to create world-class research universities in Korea. One of the successes of the government has been attracting Diaspora talent back to South Korea.

Singapore also bet on education as the motor of its development. Ng'ethe et al (2008: 42) argued that Singapore is now one of the wealthiest countries in the Asian continent, despite its little size greatly through its human capital formation strategies. The national government undertook a sequence of policy initiatives to reform its Tertiary education system. First early in the 1990s, the government set up a network of ten post-secondary Institutes of Technical Education with the aim of generating middle level technical skills. Important measures were taking on to orientate teaching pedagogy in the country's tertiary institutions towards problem-based, interdisciplinary learning with a strong practice orientation developed in collaboration with industry. The government laid strong policies and programs to ensure that Singapore meet up with the challenges the new technologies give to the development it aimed at. Among the measures that were taken in Singapore, three planned regional tertiary-level Institutes of Technical Education were opened. To this effect, access to tertiary education was expanded by setting up several regional junior colleges that were linked to the national university through student transfer mechanisms. The access to university was by these

measures fostered, and enrolment rates highly increased. According to Ng’ethe et al (2008: 42), more recently, two national universities were awarded greater institutional autonomy and corporate status, and higher education funding was re-shaped to respond to more competitive and performance-based global development needs.

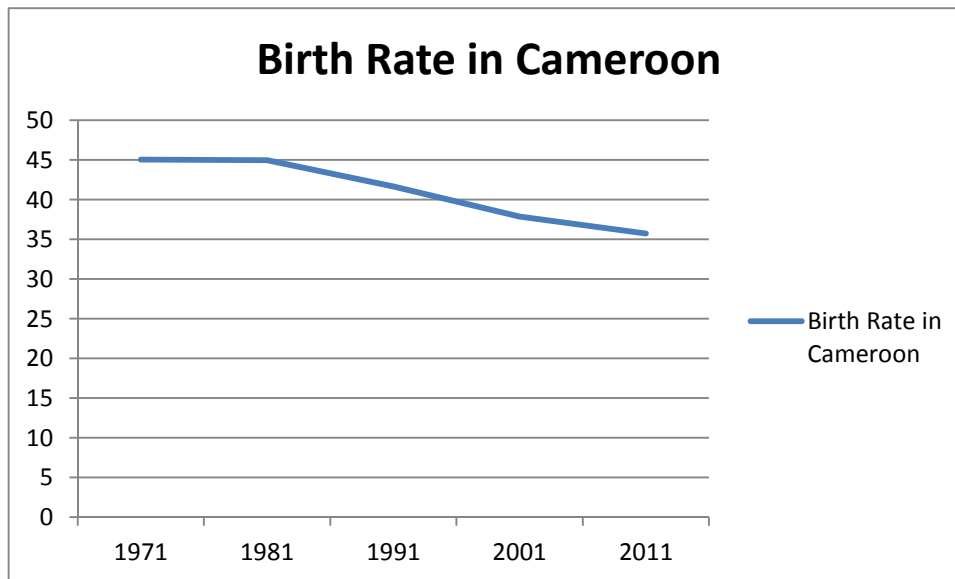
2 Education and health

Many indicators demonstrate the close relationship between of health and education in the society. Schultz 1998 pointed out that education (particularly for girls) is connected to the changes in the family unit, with evidence of better health and sanitation, and augmentation of increase in the education of future generations. This is to say there are high indices of probability that children with educated parents, be it at the basic level, will also be educated at least at the same level, but more probably to a higher level. Schultz (1998) further argued that education increases what he called the phenomenon of smaller families, which is a low birth rate for families with educated parents. He added that education is also closely related with the improvement of child nutrition quality, health and sanitation.

The table 4 below carries the child birth rates for the years 1971, 1981, 1991, 2001, and 2011 while the graph 4 shows the curve of the evolution these rates for the same set of years in Cameroon.

Years	1971	1981	1991	2001	2011
Birth Rate	45,045	44,954	41,626	37,866	35,703

Table 4 Source: United Nations Population Division online database



Graph 4 Source: United Nations Population Division

It would have been interesting to also compare the child birth rate to female enrolment rates long with the total enrolment rate, to see if the curves follow the same tendencies. But from the information that were available in the database of the World Bank, female enrolment rates at tertiary level, was only available for the year 1971 and 2011. From the enrolment rates for these years, female students constituted only 7.8% in 1971, while in 2011, they made up 42.2% of the total students enrolled (World Bank online database).

The level of correlation between birth rate and university enrolment, with the Pearson Correlation formula has been determined as stated earlier in the introduction of this chapter using the formula used is:

$$r_{xy} = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

r_{xy} is the correlation coefficient between the variables observed.

x and y are the value units of the variables

n is the sample size of the study.

Σ is a Greek letter (sigma) which is mathematical presentation meaning “the sum of”.

$\sqrt{\quad}$ is the mathematical symbol of square root.

The correlation coefficient between birth rates and total enrolment in Cameroon has been calculated as follows:

Years	total enrolment: X	Birth rate: Y	xy	x ²	y ²
1971	2690	45,045	121171,05	7236100	2029,052025
1981	11686	44,954	525332,444	136562596	2020,862116
1991	33177	41,626	1381025,802	1100713329	1732,723876
2001	68495	37,866	2593631,67	4691565025	1433,833956
2011	244233	35,703	8719850,799	59649758289	1274,704209
Σ	360281	205,194	13341011,77	65585835339	8491,176182

N	5	Σx^2	65585835339
(Σxy)	13341011,77	$(\Sigma x)^2$	129802398961
Σx	360281	Σy^2	8491,176182
Σy	205,194	$(\Sigma y)^2$	42104,57764

$$r_{xy} = \frac{(5 \times 13341011,77) - (360281 \times 205,194)}{\sqrt{((5 \times 65585835339) - 129802398961) \times ((5 \times 8491,176182) - 42104,57764)}}$$

$$r_{xy} = -0,87$$

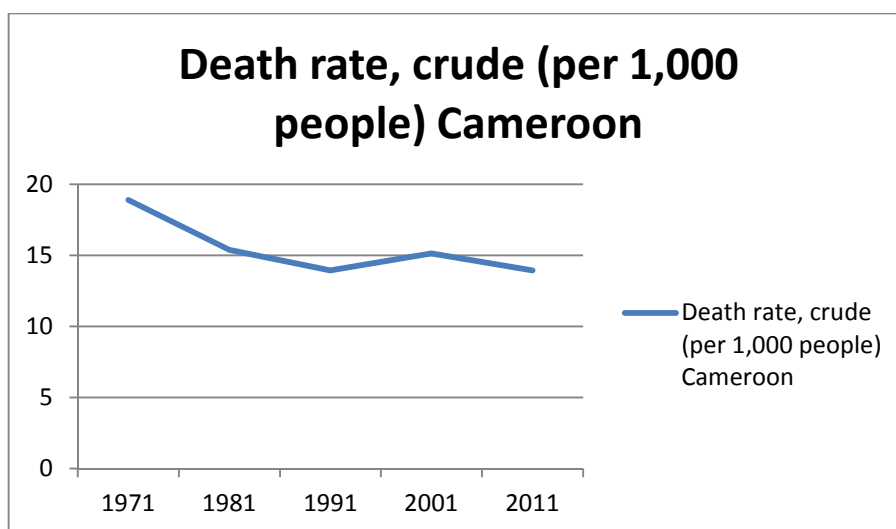
The coefficient of birth rate and total enrolment in Cameroon for the five selected years indicates that there is a strong negative linear relation that links the two variables. This is to say that, an increase in enrolment is linked to decrease of birth rates or the Increase in the birth rates is linked to a decrease in enrolment.

It would have been interesting to calculate the correlation between female enrolment rate and health variables that have been analyzed, to look with a different approach and on comparative basis the level of their relation. But since only two data were available concerning female the selected years that are examined, the result obtain would not have been reliable.

Table 5 shows the death rate for the whole population while the graph 5 shows the curve of the death rates. The Crude Death Rate indicates the number of deaths per 1,000 midyear population.

Years	1971	1981	1991	2001	2011
Birth Rate	18,883	15,39	13,932	15,134	13937

Table 5 Source: United Nations Population Division online database



Graph 5 Source: United Nations Population Division online database

Concerning the death rate and enrolment in tertiary education, the result obtained

was:

Years	Enrolment rate x	Death rate y	xy	x ²	y ²
1971	2690	18,883	50795,27	7236100	357
1981	11686	15,39	179847,54	136562596	237
1991	33177	13,932	462221,964	1100713329	194
2001	68495	15,134	1036603,33	4691565025	229
2011	244233	13,937	3403875,321	59649758289	194
Σ	360281	77,276	5133343,425	65585835339	1211

$$r_{xy} = \frac{(5 \times 5133343,425) - (360281 \times 77,276)}{\sqrt{((5 \times 65585835339) - 129802398961) \times ((5 \times 5971,580) - 1211)}}$$

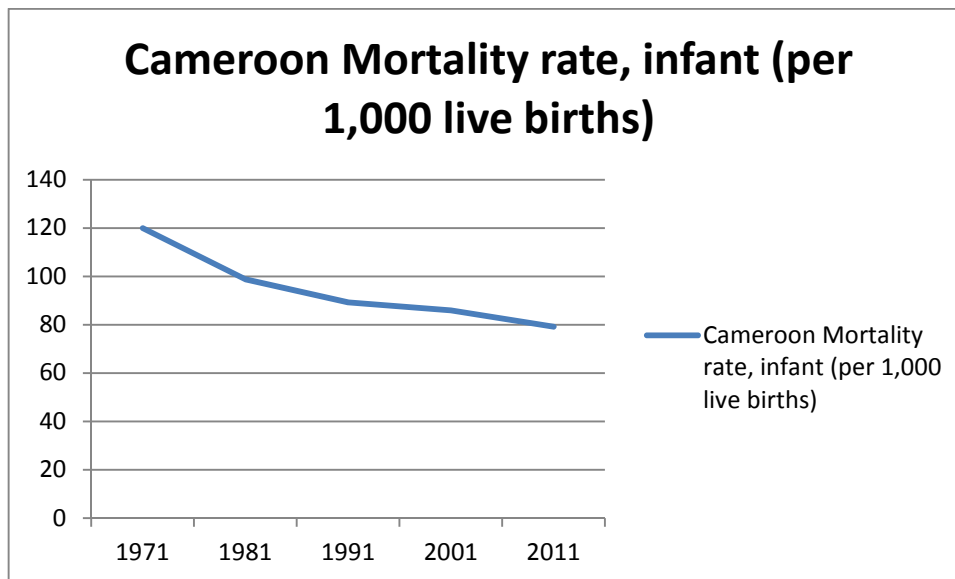
$$r_{xy} = -0,538$$

According to the value of the coefficient of correlation between death rate and enrolment rate at tertiary education, the result shows that there is a negative but moderate relation between the two variables.

Below, the table 6 presents child mortality rate and the graph 6 displays child mortality rate curve for the years 1971, 1981, 1991, 2001 and 2011. Child mortality according to the United Nation is understood as the number of children dying before reaching one year of age per 1,000 live births in a given year.

Years	1971	1981	1991	2001	2011
Child mortality	120	98,8	89,3	85,9	79,2

Table 6 Source UNICEF online database.



Graph 6 Source: UNICEF online database.

The correlation coefficient between enrolment rate and child mortality is:

N	5	$\sum x^2$	65585835339
$(\sum xy)$	29667057	$(\sum x)^2$	129802398961
$\sum x$	360281	$\sum y^2$	45787,38
$\sum y$	473,20	$(\sum y)^2$	223918,24

$$r_{xy} = \frac{(5 \times 29667057) - (360281 \times 473,20)}{\sqrt{((5 \times 65585835339) - 129802398961) \times ((5 \times 45787,38) - 223918,24)}}$$

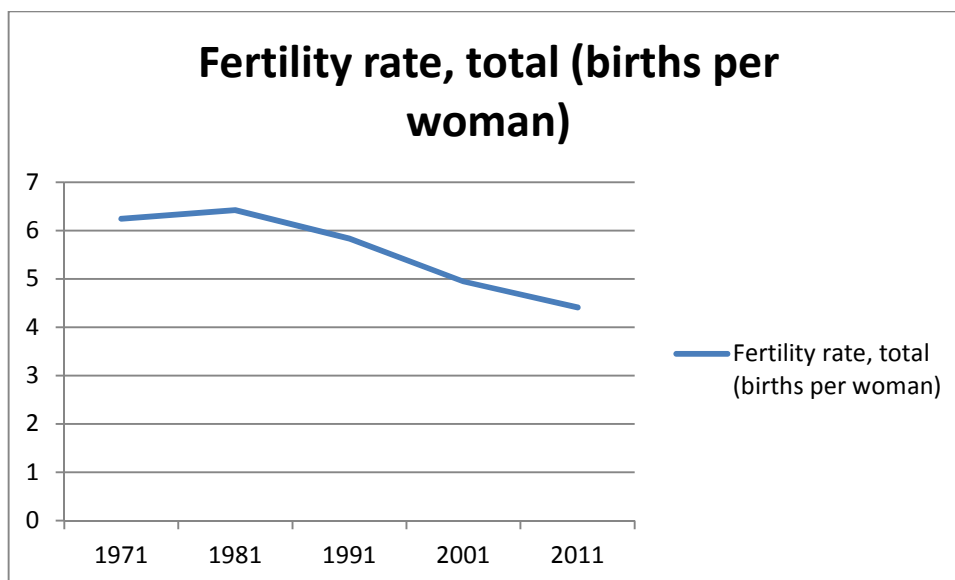
$$r_{xy} = -0,70$$

The correlation coefficient obtained is a negative linear value which determines that the relation between these two variables is strong. And thus while enrolment rate increases, the child mortality decreases, and vice versa. In a sense, the occurrence of one of this variable can help predict the outcome of the other.

The table shows the fertility rate for the Cameroon population in the years 1971, 1981, 1991, 2001, 2011. The graph above shows the curve of fertility rate. Fertility rate is defined as the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with current age-specific fertility rates.

Years	1971	1981	1991	2001	2011
Fertility rate	6,247	6,425	5,832	4,947	4,409

Table 7 Source: United Nations population Division online database



Graph 7 Source: United Nations population Division online database

The correlation coefficient for enrolment rates and fertility rate is as below:

N	5	$\sum x^2$	65585835339
$(\sum xy)$	1701043,31	$(\sum x)^2$	129802398961
$\sum x$	360281	$\sum y^2$	158,23
$\sum y$	27,86	$(\sum y)^2$	776,18

$$r_{xy} = \frac{(5 \times 1701043,31) - (360281 \times 27,86)}{\sqrt{((5 \times 65585835339) - 129802398961) \times ((5 \times 158,23) - 776,18)}}$$

$$r_{xy} = -0,88$$

Here we also obtain a high negative correlation coefficient between fertility and enrolment rates. This means that while fertility rates decrease, enrolment rates have the tendency to increase. And the increase of enrolment rates will indicate in a high probability a decrease in fertility rates.

McMahon (2009) argued that the effects of education on population growth have as net result the improvement of health and weight on reducing fertility rates. So as far health is concerned, the impacts of education are also measured in terms reduction in infant mortality rates and increase in longevity.

As demonstrated from the above correlation coefficient concerning total enrolment rates in tertiary level of education, there are also abiding supports in social science literature that relate education of women and female literacy reduction of fertility (Michael (1974), Caldwell (1986), Levine (1987), and Schultz (1993). Caldwell (1986) and Levine (1987) enounced that there are many findings on studies conducted in a number of developing countries which concluded a close link between education or literacy and life expectancy of the present and future generation, principally through improvements in infant and child survival rates (Caldwell 1986, Levine 1987). But as McMahon (2009: 35) pointed out “the system works together to act as major nationwide

engine for creating new knowledge, transmitting new and existing knowledge, and encouraging knowledge-based growth”.

So even though he earlier stated that it was possible to measure the incidence of education over a particular aspect of development, he nevertheless recognized that the benefits cannot always all be assessed fully, because they are direct and indirect returns.

Concerning the indirect link between higher education and health, McMahon (2009) defended that, for example “if higher education improves health, and then this improvement in health contributes to earnings, the latter increment to earnings is really due to an indirect benefit from education”. The reason of the difficulty in measuring indirect impacts of education on health is that some of them spill over in time and space. In other words, the influence of education can go as far as to future generations or other localities, thus the effects of education have to be observed over longer periods in a large space definition. McMahon alleged over externalities which he presented as the benefits of education to others in the society and in future generations, (McMahon, 2009: 52).

In arguing for the differentiation between the contribution of higher education and the other levels of education, McMahon (2009: 126) says: “just because basic education contributes to a particular higher education outcomes, such as longevity, does not mean that higher education does not. Normally the contribution of each year of education continues into the college years”. And moreover, higher education on its own should be considered taking into account the contribution of levels of training as completion year may vary from one program to another. McMahon (2009: 133) stated, based on prior studies carried out by Grossman, that: the evidence are overwhelming that each additional year spent in college contributes to increasingly better health and, in due course to greater longevity. Those in top of the education distribution live seven or more

years longer in Western economies for example. This finding substantiate this argument “whether health levels are measured by mortality rates, self-evaluation of health status, or physiological indicators of health, and whether the units of observation are individuals or groups”, Grossman (2006: 33).

From their opinion, Deaton and Paxson (2001) confirmed the importance of schooling to mortality after carrying out analyzes on family income. They supported that it is interesting that the effect of income in lowering mortality becomes weaker and the effect of years of schooling becomes stronger and the year of death increases. In other words, the economy alone did not explain the decrease of mortality rate. Rather the increase of education years and the decrease of death were demonstrating a close link.

3 Theoretical and research discussion

Over time, the Cameroonian government has modelled its race to development according to the prevailing discourse and understanding of the concept. Academic programs reflected the tendency followed by the government. When Development was understood in economic terms, national objectives were spelled out with financial and economical figures. And when the idea of sustainability became the central focus in the understanding of development, sustainable development was the new direction adopted in all government plans and programs. The point is not to argue that the changes in understanding are dangerous or wrong. But the issue is that, in almost all the cases, the understanding of development by the national government was borrowed from outside.

Westernization was a heavy legacy left by the European powers that ruled over Cameroon. The education system was mapped following the French and the British education models. Unfortunately, more than fifty years after independence, the education system continues to be designed by foreign powers. From there, rises a

problem. The problem is that the patterns followed the system do not correspond to the social reality and needs of Cameroon. The academic contents and curricula do not consider the environment for which they are built.

Western ruling (under colonialism for example), or neo-colonialism, as presented in the dependency theory or in post-colonialism earlier in this work, could be pointed at, to explain the poor state of the education and development. But, the outcome of the Nation of Cameroon cannot be solely attributed to outsiders. There has not been a rethinking over crucial key points such as the understanding of development. To be able to determine its fate, there has to be, as contended in the post-development theory, a personalized definition of development. Cameroonian authorities should define what development ought to mean for them and for the Nation as a whole. And from there, conceived the plans and projects to attain the identified targets. From the research done in this study, it has been stipulated the relation between higher education and health issues is close. Designing the type of development that is targeted should be combined to measures on health and education. The importance of higher education and health issues would constitute some of the main focuses to dwell upon in the understanding of development in Cameroon. It fits to the capability approach as stated by Amartya Sen and Martha Nussbaum. A people-centred development will have to be a development not only defined by the people, but implemented by the people to the benefit of the people.

The social and natural environment can serve as guidance in planning development. In the case of Cameroon, before the oil boom, agriculture was the driving force of the economy. The large and fertile lands, suitable for the expansion of agriculture can constitute possible pathway to explore. Agriculture has been a historical driven force of the economy and the financial life of Cameroon. With inputs from health

and from education, agriculture can make high contribution to socio-economic development. Researches geared towards the improvement of agricultural technologies for example, are contributions that in time would be answers to social, environmental, economic, human development.

4 Advocating for reforms in higher education

From the above levels of correlation between enrolment rates and health issues in development, it is possible to make predictions and consider desired outcomes as far as these variables are concerned. This is to say that, for example, if the reduction in child mortality is a goal to be achieved, then enrolment in tertiary education should be encouraged. In the same way, if enrolment in tertiary education would rise, then fertility rate should decrease.

A survey has been conducted on twenty-two Cameroonian students and graduates to analyze their perceptions on the relation between health issues and higher education. Eighteen of the participants were from the French speaking Cameroon while four of them were from the English speaking Cameroon. A copy of the questionnaire is available in annex 6. The French speaking group of students is been called the group A while the English speaking students in this survey is named the group B and the whole survey participants made up of both English and French speaking students is been referred to as the group G. The full results of the survey have been compiled and are presented in annex 8.

On the evaluation of their perception of the importance of their tertiary education on their own health, group A students had an average of 7.06 on a scale of 10. And group B students' perception was rated 4.5 over 10.

Concerning their perception on the importance of tertiary education on the health of their family members (children, brothers, parents, spouse...etc), group A rated an average of 7.11 over 10 while group B rated 4 on a scale of 10.

The difference in the perception of the importance of higher education in health between the two groups could find its reason in the differences that exist between the two types of education systems that are ran on the Cameroonian territory. It might also be a reflection of the little importance given to higher education in the English speaking part of the country by the government. There is only one fully English public university against three fully Francophone, and four that are alleged to be bilingual, that is with fifty per cent of the courses being taught in French and the other fifty per cent in English (at least, that was the initial setting in the mind of the government). And the admission into the only English public university (the University of Buea) is highly competitive as it has been for years one of the best, if not the highest ranked university of Cameroon. Further studies can be undertaken to have a closer look on other factors that can be of influence in the relation between higher education and health issues. Possible lines to explore can be the access or admission process to such education, also the curricula or study lines proposed or degree offered at higher level.

In evaluating higher education in Cameroon, group A rated it with an average of 5 on 10, while group B rated higher at 6 over 10. This difference comforts the idea that the English line enjoys a better appreciation from its students than the French system.

In evaluating their perception on a need for reforms, group A asserted on 8.11 over 10 for a reform while group B also rated the need for reform high at 8.75 on 10. Further studies could look on the type of reform advocated or desired by each group for the relation between higher education health issues to be strengthened.

On the other hand, an interview was carried with lecturers from the University of Buea in Cameroon, to analyze their position, concerning the relation of health and tertiary education in Cameroon. It is unfortunate that no lecturer from the other university from the French system of education or from the bilingual universities institutions was willing to participate. The reason for some of them might be the political games which make it difficult for them to openly criticize the system in which they are incorporated (and that feeds them). As argued by Awung and Atanga (2011), promotion is based on political loyalty rather than merit or academic performance and achievement. Another reason could be the fact that the interview was done online and through emails exchange. And the new technologies of communication such as internet are not widely and easily available and accessible (compared to Europe for example).

The Head of Department of Public Health and Hygiene from the University of Buea, Dr. Nde Peter Fon and the former Dean, Faculty of Social and Management Sciences; Former Vice-Chancellor at University of Buea, Professor Cornelius Mbifung Lambi, participated in the interview. The full interviews are available in annex 7.

Professor Mbifung Lambi, in whose opinion higher education has a primordial to provide human resources for the outreach and enhancement of socio-economic and academic development, argued that higher education in this perspective is fully playing its role. In his idea, just as education is a continuous process, the continuous development of Cameroon is an evidence of the impact of higher education. To his own opinion, Dr. Nde Peter Fon argued that Higher education has to identify the needs of the society and provide for university and advanced training of Cameroonians of all ages to foster socio- economic growth. He contended that even though efforts are been done to have this role fulfilled, much is still left to be done mainly in the provision of basic life needs and energy. Both of the interviewed are of the thought that the role of Higher

education should be improved through appropriate policies to address of national interest in the different segments of the society in the domain of science and technology.

Dr. Nde Peter Fon amplified that improvement of higher education should consider the following:

- a) Match training programs with national needs
- b) Close down or reduce recruitment of students in programs that already have many jobless graduates
- c) Professionalize the higher education programs as much as possible giving more attention to technical programs: computer technology, engineering, agricultural technology, communication technology, environmental hygiene and safety, water and mineral resources technology, energy development, etc.
- d) Equip higher institutions to meet the educational needs with adequate teaching equipments and experts from within and out of the country.
- e) Research intensification through local and international funding, in order to meet local needs.
- f) Create more programs with terminal degrees (PhD), especially professional programs.
- g) Recruit more qualified lecturers from home and abroad and pay them properly to deliver the knowledge.
- h) Encourage, promote and develop innovative initiatives by Cameroonians in every domain.

Finally on the possible obstacles that could slow down the reform of Higher Education, Professor Mbifung Lambi saw adequate funding and appropriate qualified human resources, the problem of policy orientation and the need for a proper policy

implementation has possible issues to threaten the reform. Dr. Nde Peter Fon listed the following:

- a) Lack of proper planning
- b) Corruption which is at its peak now
- c) Intelligent Cameroonians are in the streets and do not have the opportunity to participate in national development, those who are there are not capable of carrying out reforms because they are not qualified.
- d) Recruitment is not done according to needs
- e) Tribalism is in higher education ministry. Workers in some offices speak and work in the dialect.
- f) less attention is given to research

The ADB (2001) proposed some key points that should be taken into account, based not only on the analyses of some Asian success story, but also in studying the shortcomings of those countries whose higher level education is not producing any significant impact.

If efficiency in meeting social demands for development is the aim of the policymakers, the ADB (2001: 195) advocated that they should consider increasing the fees of public tertiary institutions, rely more on students' families to carry over a greater share of the overall costs, and encourage direct profit making activities by higher level institutions, often in collaboration with industries. And all of these measures should be guided by a high degree of accountability and transparency in the administration of the institutions and the commitment of civil society as a whole. Development in the society, no matter how development is being address, goes along with consciousness and commitment. It not about how much has to be spent in financial terms, but what use we make with what is available. The ADB (2001) suppose that the higher the cost of

education to the family, the more attention it will get from the society. Such an argument may be tempting, as it is assumed that people turn to give more value to what has cost them much. But I disagree with this position as it might decrease the rates of enrolments and turn higher education into an elitist institution. And finally the result might be the exact contrary of what is expected, the privilege of some. Even though the ADB (2009:138) argued that there should be settings for financial and structural support of the poor, to avoid the problem of equity and to avoid digging the gap between the rich and the poor. But here again, the problem will rise as to define who is a poor and on what basis.

It is important to have financial support programs and other systems of cost reduction for those who are unable to bear the cost, but higher education should be made accessible to the majority of the population who fulfil the academic requisite. And academic performance should be the primary selection criteria. Fortunately, high academic performance is not the privilege for the rich. Achieving high level of efficiency in tertiary education requires better planning of the funds available.

To this, it should be added that quality of the education system as a whole should be regularly be evaluated. Usually urban areas are thought to have better infrastructures and facilities than the rural region. And it is assumed that the quality of the teaching vary at the same from urban to rural region for the same level of academic program. Thus a first degree from the university of a big city presumably is given more consideration than a first degree from one of the few universities in rural area. But such assumption will not stand long if the students that are graduating from both regions are efficient and competitive. Such competitiveness and efficiency can be maintained through regular evaluation of the quality and the policies taken through the guide of data and specific indicators. But though there is a National Institute of Statistics in

Cameroon, such studies are rarely conducted, and data almost never available, making difficult adequate policy planning.

Another aspect in the reforming Higher education proposed by the ADB (2001: 143) is the encouragement of private and non government provision of tertiary education. Private initiatives at the moment in Cameroon face a lot of bureaucratic constraints. Rather, private institutions or let say nongovernmental institutions should be instigated. This is not to say that there shouldn't be any governmental control over the provision of higher education by the private sector, but the bureaucratic, cumbersome, and arbitrary procedures can be relieved. The increase of private provision at higher level will promote healthy competition which will in turn benefit to the quality and the availability. In defending private provision of higher level education, The ADB (2001: 143) stated that it can “be crucial to sharing cost burden, extending the opportunity for participation, and encouraging healthy competition”.

In summary, despite the Asian examples presented earlier, and with the statistics from the Cameroonian case, large disparities in access to health, education, and social services exist between areas within countries, between rural and urban populations, between ethnic groups, and between the sexes. And there are many elements to account for such disparities. But as concerns higher education and health issues in development, there is way to improvement. The coefficients of correlation between health issues variables and higher education enrolment have demonstrated that desired outcomes in health and in higher education can be predicted and achieved. From the proposition made by the Professor Lambi Mbifung and Dr. Nde Peter Fon, and also as stated by the participants to the survey, reform is a real need that has to be befitted in Cameroon Higher Education. What is worth emphasizing on, from the example countries and on the propositions put forth in this chapter, is to consider the alternatives offered, ideas

that can be adapt to suit to various contexts, following proper historical, socio-cultural, financial, and environment patterns. There are possibilities; measures should also be taken. And these measures should emphasize more on the participation of all the segments of the society, as this is compulsory for their success.

CONCLUSION

1 Summary and conclusions

This work is an insight study of the relation between public and private health issues in development and higher education in Cameroon. The health issues that have been discussed in this study are birth rate, fertility rate, death rate, and child mortality.

To begin with, the concepts of Development and Education have been looked into. They were analysed from historical, cultural and social realities and events which explained their origin. The construction of the concept of development over time and different meanings the concept of education constituted the theoretical framework of this thesis.

The concept of development has been presented as change in a desirable direction and its different understandings and meaning were classified under three groups of theories, holistically organised according to the period during which they were advocated and also according to the core idea they convey.

In a nutshell, development throughout this study has been understood as a people-centred growth which gives the present generation but also the future generations the possibility to make choices and fulfil their basic needs, without losing their dignity. The concept of education has been defined as a body of knowledge acquired through an enlightening process. The link between education and development has been established as it has been contended that Education is a nurturing, and a cultivating process same as development and education stands to produce skilled and flexible resources (material and human resources) that can foster development. Concerning tertiary education,

Universities and advanced institutions are suitable and appropriate places of research and learning for development.

The gender parameter was considered in this study. It would be hard to argue that there are no biological differences between women and men. Clearly, women have a biological role of reproduction in childbearing. But the problem lies in the fact that this role has been a justification to place constraints on their ability to participate fully in other social activities at certain stages of their lives. Though almost all the theories do not explained the origins and maintenance of patriarchy, male domination is a reality. All the sections of the society are tinged with such a fact. In many societies gender inequality is a problem. Cameroon is not the exemption, neither higher education nor developments are exempted dimensions or levels. One of the huge issues that stand as an obstacle for women enrolment in education is the idea that all women are expected to get married. There is a popular saying in Cameroon which states that spending over the education of a girl is watering the garden of the neighbour. It is like taking care of the garden of someone else without any assurance that you will benefit from the fruits of your labour. The education of girls and women is presented as a risky enterprise without a sure return. The education of the society, of the whole society on the benefit of educating girls and women has been advocated as possible measures to be taken to reduce gender inequality in education in general and in higher education in particular.

Among the problems faced by higher education in Cameroon, one of them is the structures and academic models of education that were conceived as copies and ugly reproductions of higher institutions of the former European powers that were ruling and controlling the territory. It created a problem of structural dependence on, and submission to, the models of the former colonial powers institutions. The result of such dependence has been a situation in which many African universities and Cameroonian

universities included found themselves struggling between a caducous Western model and its social and economic mission. The tertiary institutions that are functioning now failed to create a model that could respond to the expected role of higher education in inciting national development.

Cameroon is officially a bilingual country which has been under the rule of the French and the British for more than 40 years, and under the German rule before the French and the British without it being a colony to the German, nor to the French and the British powers.

Higher education in Cameroon displays aspects of this historical past as education in Cameroon is ran by a bi-system- the French and the English systems. Tertiary level of education is offered by a wide range of educational institutions. These institutions include government administered and privately own universities which offer courses in the sciences, arts, humanities, polytechnics and engineering, by advanced vocational training schools and professional schools.

The actual state of higher education in Cameroon is nevertheless undergoing serious crises, among which are the need for trained lecturers, a focus on teaching and research, and the improvement of vocational, professional training and research which can facilitate the integration in the labour market.

Though the socio – economic life of Cameroon was blooming during the first fifteen years that followed its independence, the global economic crisis rapidly stopped drastically its flow. And the crisis was later followed by heavy indebtedness of the nation to foreign international financial institutions. The effects of the indebtedness did not spare any aspect of the socio economic life as all the layers and of the society were affected by unpopular measures such as structural adjustment programs which meant drastic cut downs in the state finances and increases in tax and levy. Education and

particularly higher education was heavily affected with the end of grants and scholarships and introduction of tuition fees for universities and other tertiary level institutions. The cut down in the salary of lecturers encouraged brain drain which on its own affected the quality of the teaching that were offered.

From the statistical figures concerning health and education in Cameroon, it was demonstrated that there is strong negative linear relation between the health issues studied that is birth rates, fertility rates, and child mortality and higher education enrolment in Cameroon. An exception has been the death rate which only presented a moderate negative relation with enrolment in tertiary education.

From the findings of this study, health and higher education are vital development components that have to be considered. Given the computed information concerning health issues in development and higher education, the strong linear relation that has been demonstrated made us to understand that prediction can be made to obtain desire results. This is to say that as it has been demonstrated in this work that the occurrence of one phenomenon implies a high probability of the negative occurrence of the other. Simply put, the increase of enrolment in higher education will mean for example, a decrease of child mortality. One variable can thus be manipulated to affect the other as there is a strong link between both variables.

2 Recommendations

The study presents examples from South Korean and Singapore, meaningful reforms can be undertaken to develop and adapt a tertiary education system that will best suit the needs of the local, national and in the later plan, the global communities. In the case of Cameroon, reforms have to be undertaken to encourage the participation of the whole society (both men and women) in education and more particularly in higher

education for the development of its socio-economic life. But there is still much to be done.

First of all, there should be a rethinking over the understanding of development. National authorities have to be able to determine what development will mean for Cameroon. Cameroonians should define what development means for them. Such determination can be done through referendum or by the legislative powers; and or through a national committee composed of Cameroonians of all works of life, and which will be set to come out with a consensus to development. After the obtainment of a national definition of development, the Government and legislative authorities will then have to reflect on National plans and designs for the expect growth. As stipulated in this study, the relation between higher education and health issues is a close one. The importance of higher education and health issues should be among the main focuses to dwell upon in the understanding of development in Cameroon.

From the personalized definition, and with the conception of the plans and projects, a careful monitoring will be required in the next steps taken to attain the identified targets. Flexibility will be required for the adaptability in the changing social world.

Social and natural environment should also help in planning development. In the case of Cameroon, before the oil boom, agriculture was the driving force of the economy. The large and fertile lands, suitable for the expansion of agriculture can constitute possible pathway to explore.

More generally, there should be campaigns and programs to create more awareness among the citizens on the importance of education and health in development. This is to say that, people should be taught on education and health. It is

not enough to invest in these fields if people do not adhere to their functioning. At every level of development, the people should be involved either directly or indirectly.

Academic authorities should clearly take a stand in the outgoing situation. They have to make meaningful and clear calls to the improvement of the working conditions. They should be advocating for a national focus not only in the combination of training and research to socio-economic needs but to wider human needs in the communities.

3 Suggestions for further research.

The work done on the research for this thesis can be deepened with field works on a large sample population and figures collected directly from the local and national authority as this information may be available in hard copies but not computerized or accessible online. Also, the researches undertaken while writing this work have enlighten the challenge that gender inequality still represents for the Cameroon society. It will be interesting to study the legal and social constraints that women face in education in Cameroon.

Researches can also be undertaken to compare the relations between other levels of education such as the secondary or the primary and some selected development issues. It would be interesting to embark on such study as primary and secondary educations in Cameroon are operating under distinct governmental approaches to development than higher education.

BIBLIOGRAPHY

- AJAB AMIN, ALOYSIUS (2002): *An Examination of the Sources of Economic Growth in Cameroon*, AERC Research Paper 116 African Economic Research Consortiums, Nairobi March 2002, published by the African Economic Research Consortium.
- AJAYI, J. F. ADE, L. K. H. GOMA, AND AMPAH G. JOHNSON (1996): *The African experience with higher education*, Accra: Association of African Universities.
- ALI, A. A. G. (2001): "The Challenge of Poverty Alleviation in Sub - Saharan Africa", in ELBADAWI I A. AND NDULU B. J. (eds.), *Economic Development in Sub-Saharan Africa*, Palgrave, Basingstoke, pp. 115-139.
- ALKIRE, SABINE AND SEVERINE DENEULIN (2009): "The human development and capability approach" in *An Introduction to the Human Development and Capability Approach: Freedom and agency* by SEVERINE DENEULIN AND LILA SHAHANI (Eds.).
- AMIN, SAMIR (1970): "Capitalism and development in the Ivory Coast" in *African Politics and Society: Basic Issues and Problems of Government and Development*, by IRVING L. MARKOVITZ (ed.) – New York [u.a.]: Free Press. - 1970, p. 277-288.
- ASIAN DEVELOPMENT BANK (2001): *Education and national development in Asia: trends, issues, policies, and strategies*.
- ASIAN DEVELOPMENT BANK (1998): *Asian Development Outlook 1998 Part III*, 1998. Manila.
- ASSIÉ- LUMUMBA, N'DRI T. (2006): *Higher Education in Africa: Crises, Reforms, And Transformation*, working paper series, Imprimerie Saint Paul, Dakar Senegal.

- ATEMNKENG, TABI JOHANNES, ALOYSIUS MOM NJONG AND NEBA CLETUS (2011):
Cameroon: Governance and Management in the Education Sector, March 2011
 Africa Region.
- BACON, SIR FRANCIS (1597): *Religious Meditations, Of Heresies*.
- BARAN, PAUL N. (1957): *The Political Economy of Growth*, New York: Monthly
 Review Press, 1957.
- BLAIR R.D.D (1992): *Financial Diversification and Income Generation at African
 Universities*, Washington DC, the World Bank.
- BLOOM, DAVID, DAVID CANNING, AND KEVIN CHAN (2006): *Higher Education and
 Economic Development in Africa*; Harvard University, 2006 Human Development
 Sector, Africa Region.
- BORNSCHIER, VOLKER, CHRISTOPHER CHASE-DUN AND RICHARD RUBINSON (1978)
 “Cross- National Evidence of the Effects of Foreign Investment on Aid and
 Economic Growth and Inequality: A Survey of Findings and Reanalysis” in
American Journal of Sociology, 84/3, pp. 651-683.
- CARDOSO, FERNANDO HENRIQUE (1972): “Dependency and Development in Latin
 America” in *New Left Review*, N° 74, July-august (83-95)
- CHERU, F. (2002): *African Renaissance: Roadmaps to the Challenge of Globalization*,
 Zed Books London.
- CHIABI, E. (1997): *The Making of Modern Cameroon*. Vol. 1, Lanham, MD: University
 Press of America.
- CLARKE, J.H (1996): “A Great and Mighty Walk” video recording [SI], Black dot
 media, new York: distributed by cinema Guide.

- COHEN, YEHUDI (1970): "Schools systems and Civilization States." Pp. 55–147 in *The Social Sciences and the Comparative Study of Education*, by FISCHER J. (Ed.), New York: In text Press.
- DAWE, GERALD, ROLF JUCKER AND STEPHEN MARTIN (2005): *Sustainable Development in Higher Education: Current Practice and Future Developments*, A report for The Higher Education Academy November 2005 Innovation Way, York Science Park Heslington, York.
- DEATON, ANGUS AND CHRISTINA PAXSON (2001): "Mortality, education, income and inequality among American Cohorts", in D.A. WISE (ed.), *Themes in the Economics of Aging*, Chicago: University of Chicago Press, pp. 129-165.
- DELANCEY, MARK DIKE ET AL (2010): *Historical Dictionary of the Republic of Cameroon*, fourth edition, the scarecrow press Inc, Lanham, Maryland.
- DEWEY, JOHN (2001): *Democracy and Education*, a Penn State Electronic Classics Series Publication 2001, the Pennsylvania State University.
- ELBADAWI, I. A. AND CONTRIBUTORS (2001): "Economic Reforms, Growth and Development in Sub-Saharan Africa: Recent Experiences and Prospective Issues", in ELBADAWI, I. A. AND NDULU B. J. (eds), *Economic Development in Sub-Saharan Africa*, Palgrave, Basingstoke, pp. 1-32.
- ELBAZ, EDGAR AND VARSEN AGHABEKIAN SHAHIN (2000): "Universities and Social Development: Partners and Stakeholders" in *The Universities' Responsibilities to Society: International Perspectives* by GUY NEAVE (ed.), New York: Pergamon, published for the IAU Press, 2000.
- ESCOBAR, ARTURO (1992): "Imagining a Post Development Era? Critical Thought, Development and Social Movements", in *Social Text 31/32, Third World and Post Colonial Issues*, pp 20-56, Duke University Press.

- ESTEVA, GUSTAVO (1988): *Knowledge and People's Power*, New Delhi: Indian Social Science Institute.
- ESTEVA, GUSTAVO (1991): "Development", in SACHS, WOLFGANG (Ed.): *The Development Dictionary: a Guide to Knowledge as Power*, New York/London, Zed Books, pages 6-25.
- FANON, FRANZ (1968): *The Wretched of the Earth*, New York: Grove Press.
- FÄGERLIND, INGEMAR AND LAWRENCE J. SAHA (1989): *Education and National Development, a Comparative Perspective*, Pergamon Press New York.
- FLETCHER, RONALD (1974): "Evolutionary and Developmental Sociology" in JOHN REX (Ed.) *Approaches to Sociology*, London: Routledge & Kegan Paul, pp 39-69.
- FONKENG, GEORGE E. AND AUGUSTINE N. NTEMBE (2009): "Higher Education and Economic Development in Africa: the Case of Cameroon", *Educational Research and Review Vol. 4 (5)*, pp. 231-246, 2009.
- GAIDZANWA, R. B. (1994): *Governance Issues in African Universities: Improving Management and Governance to Make African Universities Viable in the 1990s and Beyond*, Accra, Association of African Universities.
- GALTUNG, JOHAN (1996): *Peace by Peaceful Means: Peace and Conflict, Development and Civilization*, International Peace Research Institute Oslo, Sage Publications Ltd, London.
- GESCHIERE, PETER (1993): "Chiefs and Colonial Rule in Cameroon: Inventing Chieftaincy, French and British Style" in *Journal of the International African Institute* 63(2): 151-175.
- GLICK, PETER AND DAVID E. SAHN (2000): "Schooling of Girls and Boys in a West African Country: The Effects of Parental Education, Income, Household Structure". *Economics of Education Review* 19 (1): 63-87.

- GROSSMAN, MICHAEL (2006): “Education and non-market outcomes”, in *Handbook of the Economics of Education*, by HANUSHEK E. AND E. WELCH (Eds.), Amsterdam: North Holland, pp. 576-633.
- GUNDER, ANDRÉ FRANK (1971): *Capitalism and Underdevelopment in Latin America*, Penguin Books Ltd.
- HELJÄ ANTOLA CROWE AND JOHANNA KOHL (2007): “Empowering Higher Education with Hopeful Advocacy” in *Towards Sustainable Development in Higher Education – Reflections* Edited by TAINA KAIVOLA AND LIISA ROHWEDER (Eds.), Publications of the Ministry of Education, Helsinki University Press, 2007.
- HEWARD, CHRISTINE AND SHEILA BUNWAREE (1999): *Gender, Education and Development: Beyond Access to Empowerment*, Anthony Rowe ltd, Eastbourne.
- JOHNSON, W. R. (1970): *The Cameroon Federation: Political Integration in a Fragmentary Society*, Princeton, NJ: Princeton University Press.
- LEE, ALEXANDER AND KENNETH A. SCHULTZ (2012): “Comparing British and French Colonial Legacies: A Discontinuity Analysis of Cameroon” in *Quarterly Journal of Political Science*, 2012, 7: 1–46.
- LEWIS, W. ARTHUR (1955): *The Theory of Economic Growth*, Homewood, TIL, Richard D. Irwin, 1955.
- LEVINE VICTOR T. (1964): *The Cameroons from Mandate to Independence*, University of California Press, Los Angeles.
- LEVINE, Victor T. (1987): “Women’s Schooling, Patterns of Fertility, and Child Survival” in *Educational Researcher*, 16.
- MAHBUB, UL HAQ (2003): “The Human Development Paradigm”; in FUKUDA-PARR AND SHIVA KUMAR (eds.), *Readings in Human Development*, New Delhi: Oxford University Press, 2003, pp 3-16.

- MARTHA NUSSBAUM (1992): "Nature, function and capability: Aristotle on political distribution" in *Marx and Aristotle: Nineteenth-Century German Social Theory and Classical antiquity* by GEORGE E. MCCARTHY (Ed).
- MARTHA NUSSBAUM (1992): "Human Functioning and Social Justice: in Defence of Aristotelian Essentialism", *Political Theory*, 20, 2 May 1992, pp.202-246.
- MARTHA C. NUSSBAUM (2000): *Women and Human Development*, Cambridge University Press, 2000.
- MAZRUI, ALI. A. (1975): "the African University as a Multinational Corporation: Problems of Penetration and Dependency" in *Harvard Educational Review*, 45, 191-210.
- MAZRUI, ALI. A (1992): "Towards Diagnosing and Treating Cultural Dependency: The Case of African University" in *International Journal of Educational Development*, 12 (2) 9-111.
- MCCMAHON, WALTER (1999): *Education and Development: Measuring the Social Benefits*, Oxford University Press New-York.
- MCCMAHON, WALTER (2009): *Higher Learning, Greater Good: the Private and Social Benefits of Higher Education*, The John Hopkins University Press, Baltimore, Maryland.
- MOHAMMEDBHAI G.T.G (1994): *The Emerging Role of African Universities in The Development of Science and Technology*, Accra AAU.
- NDONGKO, WILFRIED A. (1986): *Economic Management In Cameroon: Policies And Performance*, African Studies Centre.
- NG'ETHE NJUGUNA, GEORGE SUBOTZKY AND GEORGE AFETI (2008): *Differentiation and Articulation in Tertiary Education Systems: A Study of Twelve African Countries*,

Africa Region Human Development Department, the World Bank, Washington, D.C.

NGOTHO WA KARIUKI: “The Challenges of Financing Research In Institutions of Higher Education in Africa” Conference Paper; Association of African Universities Conference On Sustainable Development in Africa: The Role of Higher Education, Unpublished.

NJEUMA , DOROTHY L. ET AL 1999: *Reforming a National System of Higher Education: the Case of Cameroon*, Published by the ADEA Working Group on Higher Education , The World Bank, Washington, D.C.U.S.A.

NYAMNJOH, FRANCIS. B. 1999. “Cameroon: a Country United by Ethnic Ambition and Difference”, In *Journal of Economics and International Finance* Vol. 3(6), pp. 367-375, June 2011, Available online at <http://www.academicjournals.org/JEIF>, 2011, *Academic Journals Financial development and economic growth in Cameroon, 1970-2005*.

OSSI V. LINDQVIST (2007): “Sustainable Development, is it Sustainable?” in *Towards Sustainable Development in Higher Education – Reflections* Edited by TAINA KAIVOLA AND LIISA ROHWEDER (Eds.), Publications of the Ministry of Education, Helsinki University Press, 2007.

OXFORD DICTIONARIES (2010): online dictionary access on April 22, 2013, <http://oxforddictionaries.com/definition/english/education?q=education>, Oxford University Press, 24 January 2010.

PEET, R. & HARTWICK, E. (2009): *Theories of Development Contentions, Arguments, Alternatives*, New York: The Guilford Press.

- PRAKASH, GYAN (1992): "Post Colonial Criticism and Indian Historiography", in *Social Text* 31/32, *Third World and Post Colonial Issues*, pp 8-19, Duke University Press.
- PREBISCH, RAUL (1962): "The Economic Development of Latin America and Its Principal Problems: Theoretical Framework for Development", in *Economic Bulletin for Latin America*, Vol. 7, No. 1, pp. 1-22.
- RUBIN, N. (1971): *Cameroun: An African Federation*, New - York: Praeger.
- SACHS, W. (1992): *The Development Dictionary: A Guide to Knowledge as Power*. London: Zed Books.
- SAID, EDWARD (1979): *Orientalism*, New-York, Vintage Books.
- SEIDMAN, A. (1974): *Planning for Development in Sub - Saharan Africa*, Praeger Publishers, New - York.
- SEN, AMARTYA K., (1992): *Inequality Re-Examined*, Clarendon Press, Oxford.
- SEN, AMARTYA (1999): *Development as Freedom* Oxford university press.
- SIMO ISOAHO AND TUULA POHJOLA (2007): "Promoting Sustainability through University Education and Research in Technology" in *Towards Sustainable Development in Higher Education – Reflections* Edited by TAINA KAIVOLA AND LIISA ROHWEDER (Eds.), Publications of the Ministry of Education, Helsinki University Press, 2007.
- TANGWA, GODFREY (1999): "Colonialism and Linguistic Dilemmas in Africa: Cameroon as a Paradigm" in *Quest Vol. XIII*, No. 1-2, 1999.
- TILAK, J.B.G. (1994): *Education for development in Asia*, New Delhi: sage Publications.
- TRUMAN, HARRY S. (1967): Inaugural Address, January 20, 1949, in *Documents on American Foreign Relations*, Connecticut: Princeton University Press, 1967.

UNESCO (1986): *Education of Girls in Asia and the Pacific*, Bangkok: UNESCO Regional Office.

VAN BREDa, ALEX WEAVER (2004): “*EIA and Sustainable Development: Key Concepts and Tools*” in DESD Draft International Implementation Scheme (IIS), UNESCO, 2004.

VAN DONK, MIRJAM (2004): *Planning and HIV/AIDS in Sub-Saharan Africa*, Final Report Prepared for the UNDP Regional Project on HIV and Development in Sub-Saharan Africa, July 2004.

WOLF, LILI-ANN (2007): “The Quest for a Route to Sustainable Development in Higher Education”, in *Towards Sustainable Development in Higher Education – Reflections* Edited by TAINA KAIVOLA AND LIISA ROHWEDER (Eds.), Publications of the Ministry of Education, Helsinki University Press, 2007.

WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT (1987): *Our Common Future*, Oxford: Oxford University Press.

ZAKI DIB, CLAUDIO (1988): “Formal, Non-Formal And Informal Education: Concepts/Applicability”, Published in “*Cooperative Networks in Physics Education - Conference Proceedings 173*”, American Institute of Physics, New York, 1988, pgs. 300 - 315.

Online Resources

UN DATABASE: <http://data.un.org/Search.aspx?q=cameroon>

WORLD BANK DATABASE: <http://data.worldbank.org/country/cameroon>

<http://www.developmenteducation.ie/taking-action/cameroon/>

ANNEX 1

1. *Life*: Being able to live to the end of a human life of normal length; not dying prematurely.
2. *Bodily health*: Being able to have good health, including reproductive health; being adequately nourished; being able to have adequate shelter.
3. *Bodily integrity*. Being able to move freely from place to place; being able to be secure against violent assault, including sexual assault; having opportunities for sexual satisfaction and for choice in matters of reproduction
4. *Senses, imagination, thought*: Being able to use the senses; being able to imagine, to think, and to reason; and to do these things in a way informed and cultivated by an adequate education; being able to use imagination and thought in connection with experiencing, and producing expressive works and events of one's own choice ; being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech and freedom of religious exercise; being able to have pleasurable experiences and to avoid non-beneficial pain
5. *Emotions*: Being able to have attachments to things and persons outside ourselves; being able to love those who love and care for us; being able to grieve at their absence, to experience longing, gratitude, and justified anger; not having one's emotional developing blighted by fear or anxiety.
6. *Practical reason*: Being able to form a conception of the good and to engage in critical reflection about the planning of one's own life. (This entails protection for liberty of conscience.)
7. *Affiliation*: Being able to live for and in relation to others, to recognize and show concern for other human beings, to engage in various forms of social interaction; being able to imagine the situation of another and to have compassion for that situation; having the capability for both justice and friendship; Being able to be treated as a dignified being whose worth is equal to that of others.
8. *Other species*: Being able to live with concern for and in relation to animals, plants, and the world of nature.
9. *Play*: Being able to laugh, to play, to enjoy recreational activities.
10. *Control over one's environment*: (A) *Political*: being able to participate effectively in political choices that govern one's life; having the rights of political participation, free

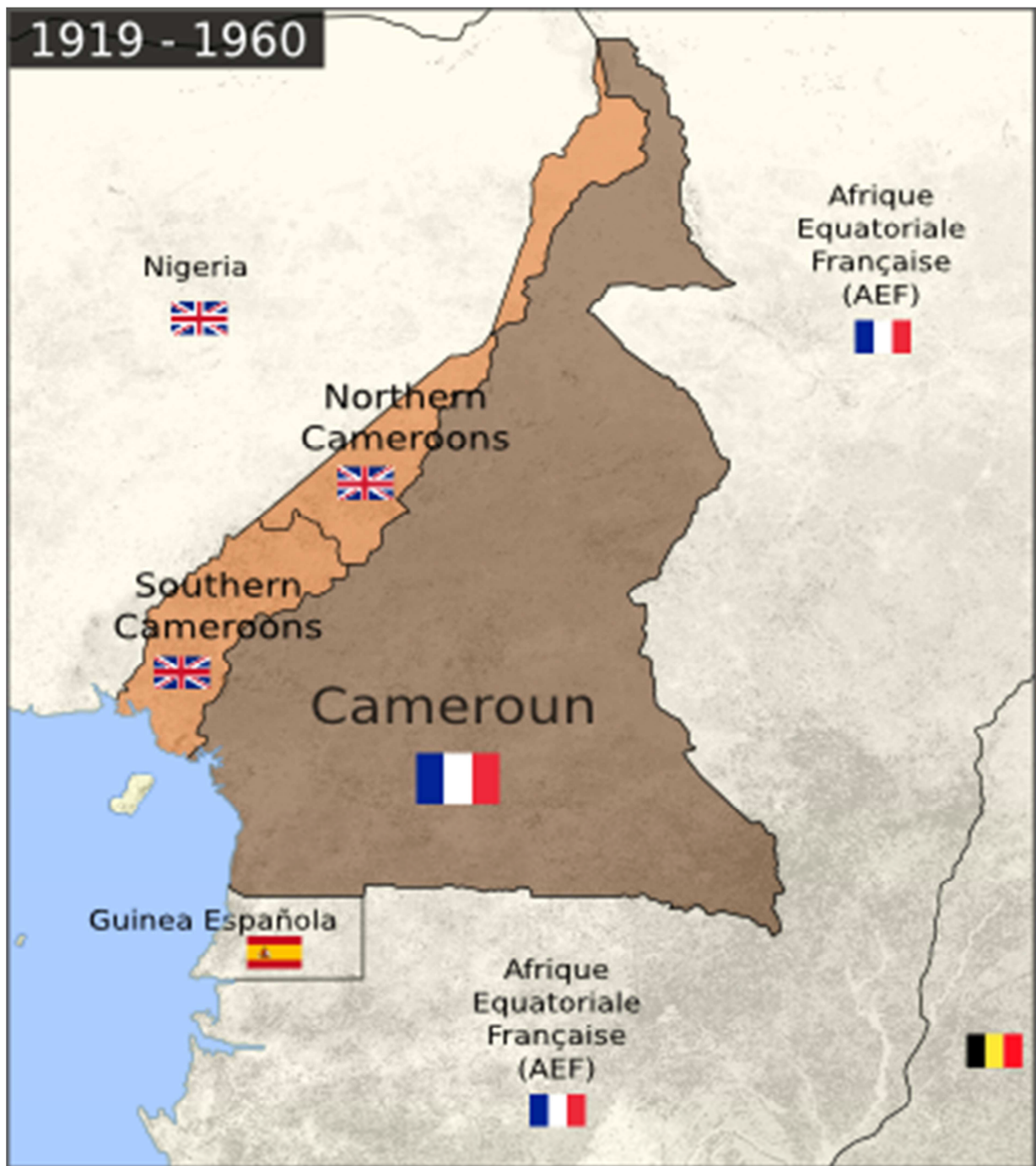
speech and freedom of association; (B) *Material*: being able to hold property (both land and movable goods); having the right to seek employment on an equal basis with others.

ANNEX 2



Source: <http://fr.academic.ru/dic.nsf/frwiki/780769>

ANNEX 3

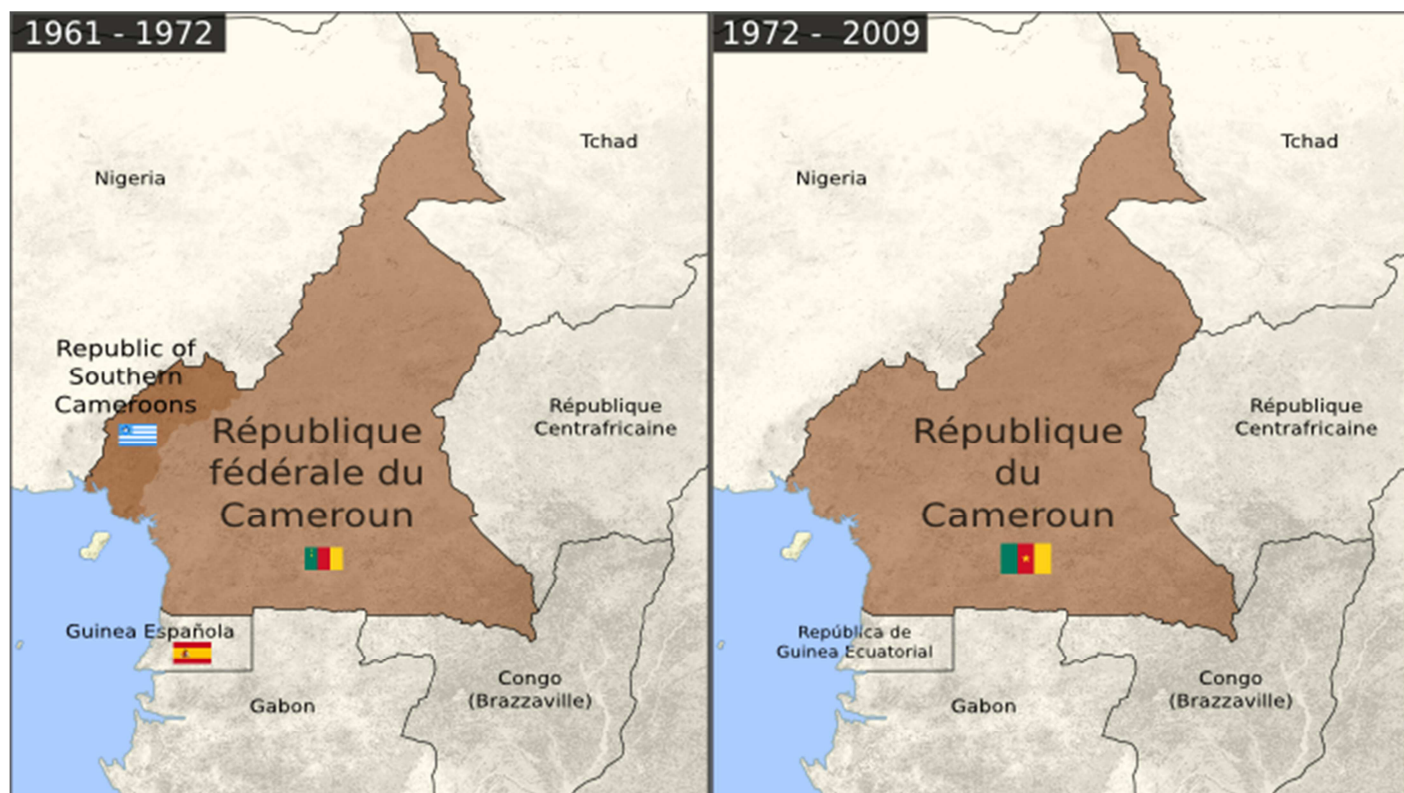


Source : <http://afrique.arte.tv/blog/?cat=6>

ANNEX 4



ANNEX 5



ANNEX 6

Interview 1

Names: Professor Cornelius Mbifung Lambi

Higher education Institution: University of Buea

Position held in the Institution: Former Dean, Faculty of Social and Management Sciences; Former Vice-Chancellor, University of Buea

1. From your perspective, what do you think should be the role of Higher Education in a society like Cameroon?

Answer: To train and equip the younger generation that constitutes the future leadership of Cameroon. This aspect of human resource development remains vital for the socio-economic development of Cameroon in all areas of human endeavour. The primordial role of education in both the social and academic enhancement and the outreach to the global society cannot be called to question.

2. In practice, is this role been fulfilled?

Answer: Education is a continuous process. The continuous development of Cameroon following the human resource base can undoubtedly be regarded as a signpost or flag bearer of development. Consequently, this role is being fulfilled.

3. Can the role of Higher Education be improved in Cameroon?

Answer: Yes it can. From the academic perspective, the improvement of the knowledge base in this country has been spectacular over the years. Yet there remain more areas of improvements in the domain of science and technology, which remain the brain child of industrialisation.

4. Do you think Higher Education Institutions in Cameroon play a determinant in public Health issues such as Birth rates, infant mortality?

Answer: Yes. It has played a significant role.

5. If yes, how? And if not, why?

Answer: By training the medical doctors to serve in the hospitals in the republic, meaning that tertiary education has played a significant role at the dawn of the third millennium.

6. From a survey conducted on a sample of University students, according to the participants, a reform on Higher Education is highly recommended with an average score of more than 8 over 10. From your perspective as lecturer, do you agree that Higher Education in Cameroon should be reformed?

Answer: Yes, it should be reformed to address issues of national interest in the different segments of the society as previously indicated under question three above.

7. What aspects of the Higher Education do you think should be reformed?

Answer: Aspects of science and technology which may help to make things happen by changing our economy from a strictly agricultural base economy to one of much greater industrialisation in the years that lay ahead.

8. According to you, what could be the possible obstacles to a reform of Higher Education in Cameroon?

Answer: Perhaps the greatest problem confronting this reform in the higher education system is that of adequate funding and appropriate qualified human resources, the problem of policy orientation and the need for a proper policy implementation.

INTERVIEW 2

Names: DR NDE PETER FON

Higher education Institution: University of Buea, Cameroon

Position held in the Institution: Head of Department of Public Health and Hygiene

1. From your perspective, what do you think should be the role of Higher Education in a society like Cameroon?

Answer: Higher education should be involved in university and advanced professional training of the Cameroonian no matter the age. Research should be one major objective of higher education, in the domains of innovation technology, in identifying the needs of Cameroon, in identifying the threats that can hinder the development of the nation, in domains that can foster economic growth and improvement in health sciences. Educational programmes should be designed to meet national needs, and should not be “you study what is available” and what is available may not provide you with a job.

2. In practice, is this role been fulfilled?

Answer: The role is not entirely fulfilled because of lack of proper planning. Little effort is being made to fulfil 2035 ambition that Cameroon will be an emerging economy. A lot has to be done in the domains of energy and the provision of basic life needs (e.g water, safe transport systems, housing etc)

3. Can the role of Higher Education be improved in Cameroon?

Answer: The role of higher education can be improved if the right persons are placed at the right posts or places. Criteria for selecting those who plan the system are certainly not the best.

4. Do you think Higher Education Institutions in Cameroon play a determinant in public Health issues such as Birth rates, infant mortality?

Answer: Yes

5. If yes, how? And if not, why?

Answer: This has been entirely the function of the ministry of public health. It is just recently that the ministry of higher education has been involved in authorising some institutions to run health training programmes, especially in reproductive health. When many reproductive health experts will be recruited in the ministry of public health, the situation may improve.

6. From a survey conducted on a sample of University students, according to the participants, a reform on Higher Education is highly recommended with an average score of more than 8 over 10. From your perspective as lecturer, do you agree that Higher Education in Cameroon should be reformed?

Answer: A lot has to be reformed.

7. What aspects of the Higher Education do you think should be reformed?

Answer:

- a) Match training programmes with national needs
- b) Close down or reduce recruitment of students in programmes that already have many jobless graduates
- c) Professionalize the higher education programmes as much as possible giving more attention to technical programmes: computer technology, engineering, agricultural technology, communication technology, environmental hygiene and safety, water and mineral resources technology, energy development, etc.
- d) Equip higher institutions to meet the educational needs with adequate teaching equipments and experts from within and out of the country.

- e) Research intensification through local and international funding, in order to meet local needs.
 - f) Create more programmes with terminal degrees (PhD.), especially professional programmes.
 - g) Recruit more qualified lecturers from home and abroad and pay them properly to deliver the knowledge.
 - h) Encourage, promote and develop innovative initiatives by Cameroonians in every domain.
8. According to you, what could be the possible obstacles to a reform of Higher Education in Cameroon?

Answer:

- a) Lack of proper planning
 - b) Corruption which is at its peak now
 - c) Intelligent Cameroonians are in the streets and do not have the opportunity to participate in national development. Those who are there are not capable of carrying out reforms because they are not qualified.
 - d) Recruitment is not done according to needs
 - e) Tribalism is in higher education ministry. Workers in some offices speak and work in the dialect.
 - f) Less attention is given to research
-

ANNEX 7

Questionnaire English version

1. What is your level of study?

- Primary
- Secondary
- University

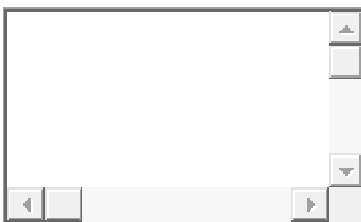
2. Do you have children?

- Yes
- No

3. If yes, How many?

- 1
- 2
- 3
- 4
- 5
- More than 5

4. How many children would you want to have?



5. According to you, on a scale of 1 to 10, what has been the importance of your university studies on your health?

- 1 2 3 4 5 6 7 8 9 10
irrelevant very important

6. According to you, on a scale of 1 to 10, has University Studies knowledge contributed on the health of your family (children, brothers, parents...etc)

- 1 2 3 4 5 6 7 8 9 10

irrelevant very important

7. On a scale of 1 to 10, what is your general appreciation of Higher Education in Cameroon?

1 2 3 4 5 6 7 8 9 10
Bad very Good

8. On a scale of 1 to 10, do you think higher education in Cameroon has to be reformed?

1 2 3 4 5 6 7 8 9 10
not at all highly recommended

9. What is your professional situation?

- Student
- Looking for a job
- On professional training (not paid)
- Paid worker
- Self employed / freelance worker
- Entrepreneur (company owner)

10. On a general base, do you think you go to hospital for health problems...

- Rarely
- Sometimes
- Often
- Frequently

Questionnaire French version

1. Quel est votre niveau d'études? (plusieurs réponses possibles)

- Primaire
- Secondaire
- Universitaire

2. Avez- vous des enfants? (plusieurs réponses possibles)

- Non
- Oui

3. Si oui, Combien?

- 1
- 2
- 3
- 4
- 5
- Plus de 5

4. Combien d'enfants aimeriez-vous avoir?

5. Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour votre santé?

- 1 2 3 4 5 6 7 8 9 10
sans importance Indispensable

6. Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, frères, conjoint...etc.)?

- 1 2 3 4 5 6 7 8 9 10
sans importance Indispensable

7. Sur une échelle de 1 à 10, quel est votre évaluation sur la qualité de l'enseignement universitaire au Cameroun?

1 2 3 4 5 6 7 8 9 10
Mauvais Bien

8. Sur une échelle de 1 à 10, pensez-vous que l'enseignement de supérieur au Cameroun devrait être réformé?

1 2 3 4 5 6 7 8 9 10
pas du tout indispensable

9. Quel est votre situation professionnelle?

- Elève/étudiant
- Sans emploi
- En formation professionnelle (emploi sans rémunération)
- Employé rémunéré
- Auto employé / indépendant
- Entrepreneur/ employeur

10. De façon générale, pensez-vous aller à l'hôpital pour des problèmes de santé ...

- Rarement
- Parfois
- Souvent
- Fréquemment

ANNEX 8

Question Number	Question	answers	Number of answers
1	What is your level of study?	Primary	0
1	What is your level of study?	secondary	0
1	What is your level of study?	University	4
2	Do you have children?	yes	3
2	Do you have children?	no	1
3	If yes, How many?	1	0
3	If yes, How many?	2	2
3	If yes, How many?	3	1
3	If yes, How many?	4	0
3	If yes, How many?	5	0
3	If yes, How many?	More than 5	0
4	How many children would you want to have?	four (4)	1
4	How many children would you want to have?	5	1
4	How many children would you want to have?	5	1
4	How many children would you want to have?	3	1
5	On a scale of 1 to 10, what has been the importance of your university studies on your health?	La réponse 1	5
5	On a scale of 1 to 10, what has been the importance of your university studies on your health?	La réponse 2	3
5	On a scale of 1 to 10, what has been the importance of your university studies on your health?	La réponse 3	3
5	On a scale of 1 to 10, what has been the importance of your university studies on your health?	La réponse 4	7
5	On a scale of 1 to 10, what has been the importance of your university studies on your health?	Moyenne	4,5
5	On a scale of 1 to 10, what has been the importance of your university studies on your health?	irrelevant	1
5	On a scale of 1 to 10, what has been the importance of your university studies on your health?	very important	10
6	On a scale of 1 to 10, has university studies knowledge contributed to the health of your family (children, brothers, parents...etc)	La réponse 1	5
6	On a scale of 1 to 10, has university studies knowledge contributed to the health of your family (children, brothers, parents...etc)	La réponse 2	2

6	On a scale of 1 to 10, has university studies knowledge contributed on the health of your family (children, brothers, parents...etc)	La réponse 3	2
6	On a scale of 1 to 10, has university studies knowledge contributed on the health of your family (children, brothers, parents...etc)	La réponse 4	7
6	On a scale of 1 to 10, has university studies knowledge contributed on the health of your family (children, brothers, parents...etc)	Moyenne	4
6	On a scale of 1 to 10, has university studies knowledge contributed on the health of your family (children, brothers, parents...etc)	irrelevant	1
6	On a scale of 1 to 10, has university studies knowledge contributed on the health of your family (children, brothers, parents...etc)	very important	10
7	On a scale of 1 to 10, what is your general appreciation of Higher education in Cameroon?	La réponse 1	6
7	On a scale of 1 to 10, what is your general appreciation of Higher education in Cameroon?	La réponse 2	6
7	On a scale of 1 to 10, what is your general appreciation of Higher education in Cameroon?	La réponse 3	6
7	On a scale of 1 to 10, what is your general appreciation of Higher education in Cameroon?	La réponse 4	6
7	On a scale of 1 to 10, what is your general appreciation of Higher education in Cameroon?	Moyenne	6
7	On a scale of 1 to 10, what is your general appreciation of Higher education in Cameroon?	Bad	1
7	On a scale of 1 to 10, what is your general appreciation of Higher education in Cameroon?	very Good	10
8	On a scale of 1 to 10, do you think higher education in Cameroon has to be reformed?	La réponse 1	7
8	On a scale of 1 to 10, do you think higher education in Cameroon has to be reformed?	La réponse 2	9
8	On a scale of 1 to 10, do you think higher education in Cameroon has to be reformed?	La réponse 3	9
8	On a scale of 1 to 10, do you think higher education in Cameroon has to be reformed?	La réponse 4	10
8	On a scale of 1 to 10, do you think higher education in Cameroon has to be reformed?	Moyenne	8,75
8	On a scale of 1 to 10, do you think higher education in Cameroon has to be reformed?	not at all	1
8	On a scale of 1 to 10, do you think higher education in Cameroon has to be reformed?	highly recommended	10
9	What is your professional situation?	Student	2
9	What is your professional situation?	Paid worker	2
9	What is your professional situation?	self employed/freelance	0

		worker	
10	On a general base, do you think you go to hospital for health problems...	rarely	1
10	On a general base, do you think you go to hospital for health problems...	sometimes	2
10	On a general base, do you think you go to hospital for health problems...	often	0
10	On a general base, do you think you go to hospital for health problems...	frequently	1

Le numéro de la question	La question	La réponse	Le nombre des réponses
1	Quel est votre niveau d études?	Primaire	0
1	Quel est votre niveau d études?	secondaire	0
1	Quel est votre niveau d études?	Universitaire	18
2	avez vous des enfants?	non	12
2	avez vous des enfants?	oui	6
3	Si oui, Combien?	1	4
3	Si oui, Combien?	2	2
3	Si oui, Combien?	3	1
3	Si oui, Combien?	4	0
3	Si oui, Combien?	5	0
3	Si oui, Combien?	plus de 5	0
4	combien d enfants aimeriez vous avoir?	3	1
4	combien d enfants aimeriez vous avoir?	2	1
4	combien d enfants aimeriez vous avoir?	3	1
4	combien d enfants aimeriez vous avoir?	4	1
4	combien d enfants aimeriez vous avoir?	3	1
4	combien d enfants aimeriez vous avoir?	4	1
4	combien d enfants aimeriez vous avoir?	Trois,tout au plus	1
4	combien d enfants aimeriez vous avoir?	3	1
4	combien d enfants aimeriez vous avoir?	3	1

4	combien d enfants aimeriez vous avoir?	3	1
4	combien d enfants aimeriez vous avoir?	1	1
4	combien d enfants aimeriez vous avoir?	4	1
4	combien d enfants aimeriez vous avoir?	5 enfants	1
4	combien d enfants aimeriez vous avoir?	5	1
4	combien d enfants aimeriez vous avoir?	5	1
4	combien d enfants aimeriez vous avoir?	3	1
4	combien d enfants aimeriez vous avoir?	DEUX	1
4	combien d enfants aimeriez vous avoir?	3	1
5	Sur une échelle de 1 a 10, quel est l importance des etudes universitaires pour votre santé?	La réponse 1	10
5	Sur une échelle de 1 a 10, quel est l importance des etudes universitaires pour votre santé?	La réponse 2	6
5	Sur une échelle de 1 a 10, quel est l importance des etudes universitaires pour votre santé?	La réponse 3	10
5	Sur une échelle de 1 a 10, quel est l importance des etudes universitaires pour votre santé?	La réponse 4	10
5	Sur une échelle de 1 a 10, quel est l importance des etudes universitaires pour votre santé?	La réponse 5	10
5	Sur une échelle de 1 a 10, quel est l importance des etudes universitaires pour votre santé?	La réponse 6	6
5	Sur une échelle de 1 a 10, quel est l importance des etudes universitaires pour votre santé?	La réponse 7	10
5	Sur une échelle de 1 a 10, quel est l importance des etudes universitaires pour votre santé?	La réponse 8	5

5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	La réponse 9	1
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	La réponse 10	5
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	La réponse 11	10
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	La réponse 12	10
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	La réponse 13	1
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	La réponse 14	6
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	La réponse 15	4
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	La réponse 16	6
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	La réponse 17	9
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	La réponse 18	8
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	Moyenne	7,06
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	sans importance	1
5	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour votre santé?	indispensable	10

6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 1	10
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 2	7
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 3	10
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 4	7
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 5	10
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 6	8
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 7	10
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 8	5

6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 9	1
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 10	5
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 11	10
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 12	10
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 13	4
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 14	6
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 15	4
6	Sur une échelle de 1 à 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 16	4

6	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 17	9
6	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	La réponse 18	8
6	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	Moyenne	7,11
6	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	sans importance	1
6	Sur une échelle de 1 a 10, quel est l'importance des études universitaires pour la santé de votre famille (enfants, freres ...etc)?	indispensable	10
7	Sur une échelle de 1 a 10, quel est votre evaluation sur la qualité de l'enseignement universitaire au Cameroun?	La réponse 1	4
7	Sur une échelle de 1 a 10, quel est votre evaluation sur la qualité de l'enseignement universitaire au Cameroun?	La réponse 2	7
7	Sur une échelle de 1 a 10, quel est votre evaluation sur la qualité de l'enseignement universitaire au Cameroun?	La réponse 3	5
7	Sur une échelle de 1 a 10, quel est votre evaluation sur la qualité de l'enseignement universitaire au Cameroun?	La réponse 4	6
7	Sur une échelle de 1 a 10, quel est votre evaluation sur la qualité de l'enseignement universitaire au Cameroun?	La réponse 5	6

7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 6	5
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 7	3
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 8	6
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 9	6
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 10	6
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 11	5
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 12	6
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 13	1
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 14	5
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 15	5
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 16	6
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 17	3
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l enseignement universitaire au Cameroun?	La réponse 18	5

7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l'enseignement universitaire au Cameroun?	Moyenne	5
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l'enseignement universitaire au Cameroun?	Mauvais	1
7	Sur une echelle de 1 a 10, quel est votre evaluation sur la qualite de l'enseignement universitaire au Cameroun?	Bien	10
8	sur une echelle de 1 a 10, pensez vous que l'enseignement de superieur au cameroun devrait etre reforme?	La réponse 1	7
8	sur une echelle de 1 a 10, pensez vous que l'enseignement de superieur au cameroun devrait etre reforme?	La réponse 2	8
8	sur une echelle de 1 a 10, pensez vous que l'enseignement de superieur au cameroun devrait etre reforme?	La réponse 3	5
8	sur une echelle de 1 a 10, pensez vous que l'enseignement de superieur au cameroun devrait etre reforme?	La réponse 4	8
8	sur une echelle de 1 a 10, pensez vous que l'enseignement de superieur au cameroun devrait etre reforme?	La réponse 5	9
8	sur une echelle de 1 a 10, pensez vous que l'enseignement de superieur au cameroun devrait etre reforme?	La réponse 6	10
8	sur une echelle de 1 a 10, pensez vous que l'enseignement de superieur au cameroun devrait etre reforme?	La réponse 7	10
8	sur une echelle de 1 a 10, pensez vous que l'enseignement de superieur au cameroun devrait etre reforme?	La réponse 8	7
8	sur une echelle de 1 a 10, pensez vous que l'enseignement de superieur au cameroun devrait etre reforme?	La réponse 9	7
8	sur une echelle de 1 a 10, pensez vous que l'enseignement de superieur au cameroun devrait etre reforme?	La réponse 10	4

8	sur une echelle de 1 a 10, pensez vous que l enseignement de superieur au cameroun devrait etre reforme?	La réponse 11	10
8	sur une echelle de 1 a 10, pensez vous que l enseignement de superieur au cameroun devrait etre reforme?	La réponse 12	8
8	sur une echelle de 1 a 10, pensez vous que l enseignement de superieur au cameroun devrait etre reforme?	La réponse 13	10
8	sur une echelle de 1 a 10, pensez vous que l enseignement de superieur au cameroun devrait etre reforme?	La réponse 14	8
8	sur une echelle de 1 a 10, pensez vous que l enseignement de superieur au cameroun devrait etre reforme?	La réponse 15	6
8	sur une echelle de 1 a 10, pensez vous que l enseignement de superieur au cameroun devrait etre reforme?	La réponse 16	10
8	sur une echelle de 1 a 10, pensez vous que l enseignement de superieur au cameroun devrait etre reforme?	La réponse 17	10
8	sur une echelle de 1 a 10, pensez vous que l enseignement de superieur au cameroun devrait etre reforme?	La réponse 18	9
8	sur une echelle de 1 a 10, pensez vous que l enseignement de superieur au cameroun devrait etre reforme?	Moyenne	8,11
8	sur une echelle de 1 a 10, pensez vous que l enseignement de superieur au cameroun devrait etre reforme?	pas du tout	1
8	sur une echelle de 1 a 10, pensez vous que l enseignement de superieur au cameroun devrait etre reforme?	indispensable	10
9	quel est votre situation laborale?	eleve/etudiant	5
9	quel est votre situation laborale?	sans emploi	2
9	quel est votre situation laborale?	en formation professionel (emploi	1

