



Cameroons' vision 2035 plans

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Abstract

This research work looks at the vision 2035 plan of Cameroon i.e. how it has progressed over the years and what the future prospects looks like. With the help of secondary data gotten from the worldbank, tradingcameroon and IMF, Cameroons' vision 2035 plans is discussed and presented employing the use of both the main and specific objectives of that vision plan. The data is presented and analysed with the use of graphs, tables, and figures to obtain proper findings and finally arrived at valid and reliable results. For the purpose of the nature of the research work, not all the specific objectives could be analysed quantitatively but qualitatively. The main objectives are: Eradicating poverty (taking it down to less than 10%), becoming a middle-income country, becoming a newly industrialized nation and becoming an emerging nation by the year 2035. With the obtained results it was realized that given the rich and diverse potential of the nation and being considered as Africa in One she is still hoping for emergence in 2035 to becoming a rich and industrialized nation. It was also discovered the ruling governments over the years are yet to realize the importance of innovation and hence invest less than 1% of the national budget which is one of the major reasons why growth and emergence is yet to be achieved. The entire research work is made up of six chapters. The research ends with possible policy recommendations which if properly employed will help speed up growth, development and emergence.

Chapter One:

Introduction

1.1 An overview of Cameroon as a state

As from the 1st of January 1960, this nation has gone by the name the Republic of Cameroon. Before that time, it went through German, then to French and English colonial rule and gained partial independence (partial self-governance) in 1957 and became a full fleshed nation in October 1961. The country is usually branded in the international scene as “Africa In Miniature” implying a little of what you find in other African nations can be found in Cameroon (**Africa in One**). In a journal article presented by BBC (2018) more emphasize was laid on the cultural and geographical diversity of the country with a wide range of fauna and flora species. Highlands, lowlands and large bodies of water. Current online figures on Worldometer (2018) based on the United nations standard estimates that the population of Cameroon stands at approximately 25 million people. The country’s rich cultural diversity can be in the more than 250 ethnic groups each having distinctive languages, cultural lifestyle, and meals and eating habits. When it comes to national languages, Cameroon and Canada stand out to be the only bilingual countries in the world with English and French being their official language of communication. The origin of its official languages is from its colonial masters (France and Britain) hence, the nation is a product of the unification of two independent states in October 1961 (La Republique du Cameroun and southern Cameroon). The country is heavily blessed with huge forest and mineral seabed. According to worldometer population review of 2018, more than 60% of the population are youths below the age of 25 years old meaning it is a young country with energetic young men/women who still have great ambitions to carry the country into the future. The country is tactically and geo-politically placed In the African continent. She is an integral and an active member of the CEMAC (Economic and Monetary Community of Central African States) zone with great inter-connected road networks linking different African nations. It is also a member of the AU (African Union) and a host to BEAC (Bank of Central African States) with its capital situated in Cameroon’s capital city of Yaoundé. Cameroon is bounded to the west by the Federal Republic of Nigeria, north east by Chad, east by Central African Republic, and to the south by Gabon, Equatorial Guinea and the Republic of Congo. It is latitudinal and longitudinally located 7.37 North and 12.35 East respectively. It is founded seated at the Gulf of Guinea and the Atlantic Ocean.

The world FACT book in 2015 estimated that the literacy rate of Cameroon stands at 75% (meaning more three quater of her nationals at least have basic education with many degree holders and fewer

master's degree holders). This number is large due to the presence of many secondary schools, high schools, Universities (Government and Private) and professional schools. With the large number of literate fellows, dependency rate stands at 85.9%. this clearly states that unemployment is the order of the day with many youths been under disguised under unemployment i.e. not employed in their field of studies with characterised by low pay packages. The World Bank records of 2017 states that the unemployment rate of the country stands at 4-5%. The unemployment figures disguised under unemployment, inappropriate distribution of income/wealth, low per capita, low GDP causing an out migration of the most educated youths for greener pastures toS the Asian, American and European continent with quite a good number based in Denmark. According Ache (2016) in his master's thesis titled the Impact of migration and brain drain in Cameroon. She went ahead explain that those moving out are the educated class, it possess a great trait to growth and development because the educated ones are the ones to build on the foundation to growth and development of the state. According to the Global Entrepreneurship and development institute (2018) Cameroon is ranked 121 out of 137 in the ecosystem of business-friendly nations.

The country just like any other is striving towards state development and progress to better the life of its fellow compatriots. Measures and institutions have been put in place to guide the country to emergence by 2035 as that is the most recent dream of the President of the Republic of Cameroon (Emergence and state growth and development). Given the countries rich diversity of fauna, flora, and precious mineral deposits as oil, gold, diamond, bauxite, iron ore, crude oil but to name a few, more than 50% of Cameroonians still live below the poverty line. Cameroon might as at now not have a clear vision as to what National Innovation System policies are but there is a strong believe that for Cameroon to develop and subsequently emerge by 2035 NIS policies are very necessary and a good catalyst for state development and quality of life for Cameroonians. The government of Cameroon holds dear four major objectives it hopes to achieve by 2035 i.e. realizing her dream of emergence and subsequently growth and development. The four main objectives she hopes to realize are:

- Eradicating poverty (taking it down to less than 10%)
- Becoming a middle-income country
- Becoming a newly industrialized nation
- Becoming an emerging nation

Below is a table which carries some little information about the state of Cameroon 2019.

Table 1: Economic measurements for Cameroon

Item	Number or Rate or position
Total population	25.88 million
Gross domestic product	\$1520
# of ethnic groups	250
Global innovation index	115 th

Source: Worldbank

1.2 Research Question

In this section of the thesis, the research question is presented as well as how it will be answered and the proposition of possible recommendation section. Cameroon as we see is quite a rich nation with a lot of resources as well as the available human population that is needed to get it managed but still she is not performing like it ought to and that is why at some point the reigning government came up with a plan which began immediately and is hoped to be achieved by 2035 (emergence). The research question is simply a guide informing the readers where Cameroon stands as at now, so they know what is needed to achieve her vision 2035 objectives. The National innovation system performance is very paramount for her objectives to be met

What is the current state of Cameroons' vision 2035 plans?

For this research question, the use of secondary data will be employed as well as some vital data sources as to know what is currently been done in Cameroon as per National innovation systems performance employing the use the use of her vision 2035 objectives of :Eradicating poverty (taking it down to less than 10%), becoming a middle-income country, becoming a newly industrialized nation and becoming an emerging nation by the year 2035. The questions go on to present the strength, weakness, opportunity and threats (SWOT) of Cameroon

What is the way out/forward (Recommendations)?

After looking at how Cameroon is so blessed with natural resources but still its level of development doesn't reflect what it ought to be. This section will outline recommendations that will effectively and efficiently assist in putting up a strong national innovation system so that the dream of emergence by 2035 be achieved. The researcher hoped to cover some aspects of Comparing Cameroons' level of innovation with other countries with similar status. This is a whole chapter sub-section on its own and because of time that was not included but will be mentioned in the section of further research.

The recommendations will present ways of turning around weakness and threats/challenges to strengths and opportunity to foster growth and emergence.

The research question is relevant in that it acts as a guide, so the researcher always remembers what his/or her limits are. It also can be referred to as a torchlight in the dark. It is relevant to both the researcher and those who will read this thesis or use it for whatever purpose.

1.3 Structure of the Thesis

The research work begins with a general introduction of the case under study as well as the research question which will be answered in the later chapters. Chapter two is all about the research methods which is made up of headings like choice of analytical approach, research design, available data, data analysis, relevance (to whom the research will be of uttermost importance to) and scope/limitations, and this chapter ends with how valid and reliable the research work is. Then to chapter three which begins with an overview of what the concept national innovation system is. It also looked at Different innovation concept, types of innovation systems and lastly some definitions. This chapter will be concluded with the SWOT analysis of Cameroon. Then to chapter four which will begin with data presentation and analysis of results employing the use of figures and bar graphs. The research also looked at a couple of linkages (partnerships that are built within this system). Chapter five is on policy implications and begins with national innovation policies and is concluded with the vision 2035 plan of action the state of Cameroon is currently building including all her objectives. And finally, chapter six which is just going to be general conclusion presenting what the research had as results as well as what it was not able to lay hands on and possible recommendations and final further research. The last few pages will be the reference list and appendix

Chapter Two

Research Methodology

2.1 Choice of Analytical Approach

The choice of approach boils down to the fact that the case under investigation is an entire state and hence, all components/parts of a national innovation system are present, and it can be clearly observed and researched on by employing a national innovation system analytical approach. According to OECD (1997), the national innovation system approach has gained analytical standing in the field of technology because of the following:

1. The recognition of knowledge as an important factor.
2. The increase in the use of systems approach.
3. The increasing number of institutions interred in and involved in knowledge creation/generation.

This study is simply out to observe and see what the performance indicators show in relations to the vision 2035 objectives of the republic of Cameroon as concerns the level of national innovation systems in Cameroon and hence, the new knowledge to be generated in the later chapters is proposing policy recommendations with the help of the SWOT analysis. Edquist, (2006) explained that the national innovation systems cover all the important parts of any innovation process (organizational, social, political and economic factors) he concluded by adding that this concept and its components is widely used by researchers and policy makers both internationally and at national levels. It is important to note that this research is part of that.

2.2 Research Design

Research designs are frameworks of methods and techniques a researcher chose with the goal of combining different components of research in a reasonable and logical way so that the research problem under examination is effectively and efficiently handled. It presents a totality of how research is conducted using certain methodologies. It is also looked at as methods and procedures employed for collecting and analyzing measures of variables in a research problem. The research design adopted for this case will mainly be an evaluative quantitative/qualitative research whereby secondary data will be collected from online datasets and some important documents about Cameroon and some important publications about the country revealing the state of things as per the realities of

the vision 2035 objectives and the emergence plan of Cameroon by 2035. It is a case study research design since Cameroon here is seen as the case the researcher is building on.

Evaluative quantitative/qualitative research entails gathering information that unveils the vision 2035 plans of Cameroon employing the use of her stated objectives so as to become an emerging nation by 2035. The data type used here (secondary data) means that the data will be gotten from renowned sources which talks about the various headings the research intends to cut across. The research will focus more on development and emergence employing the use of the vision 2035 objectives of Cameroon employing the use of an evaluative quantitative/qualitative method of analyses, discussions on how and what government of Cameroon has done so far and what it is yet to put in place to arrive at their desired goals.

2.3 Available Data

After looking at the choice of our analytical approach next is how that data to be analyzed to obtain results will be collected. As already indicated in the text above data was mainly collected from secondary sources. Secondary data was obtained from well-known online datasets as worldometer, the world bank, the IMF and tradingeconomics.com. And such research is termed desktop research

For this research, Secondary data was obtained from different sources and at different time periods. The collected data was from 4 main objectives as well as the specific objectives of the Cameroon vision 2035 i.e. Eradicating poverty (taking it down to less than 10%), becoming a middle-income country, becoming a newly industrialized nation, becoming an emerging nation. Social Progress Index which were presented on separate graphs. The obtained data as seen on the graphs presented how the planned objectives have progressed over the years from 2007 through 2019 for the different indicators with different points of high and low moments as indicated by the shape and curve lines. In the next subsection of data analysis, we will be looking at how the collected data will be analysed

2.4 Data Analysis

After collecting all data, the next thing that was done was analysing the collected data to obtain results so necessary conclusions and possible recommendations can be arrived at. The data about Cameroon's vision 2035 plans that was collected from renowned datasets and scientific publications which were produced by specialist was analysed descriptively with the use of graphs and charts. The analyses went across the various selected periods so there should be a clear-cut difference between

what went on in the different periods so who ever picks up this master thesis will be able to fully understand what the researcher stands to find out. In order to present a clearer view of what was found and discussed I employed the use of the SWOT (strength, weaknesses, opportunities and threats) model going ahead to proposing necessary recommendations as to what the various stakeholders as well as nationals can and should do to improve upon the steady realization of the vision 2035 plans which is to help the country attain growth and emergence.

2.5 Relevance and Scope/Limitation of the Study

2.5.1 Relevance/Importance

This research work is of great importance to some group of people who in one way or another are either putting in time and energy so as to achieve the aforementioned objectives or those who will benefit from it when the goals are finally met. They are listed below:

- a) To the State.
- b) To Researchers and Student
- c) To the Businessmen (FDI)

2.5.2 Scope/Limitation

With time being a limiting factor and resources also being a constraint inspiration will be drawn from contributions from many others who have already done a great deal on the vision 2035 plan of Cameroon as well as a little from those who have carried out a little of unpublished worked as concerns Cameroon. The researcher faced problems getting exactly the same datasets as the specific objectives and hence adopted the use of proxies. Also, after putting in so much time to get the needed data, some specific objectives didn't have and hence, we simply defined, and an explanation developed to support the stated objective

Looking at the vision plans in a totality at the national level doesn't really reflect the truth about the entire economy or nation as a whole it is felt or it affects different people differently at the regional and district levels in that not everyone receives equal benefits or not everyone is opportune to partake. This is so because not everyone is educated at same level, not everyone earns same incomes, etc with such judgement we cannot guarantee high living standards for all, good education, good pays for all in a general sense this is so because different persons at different levels benefit differently from it It was a little challenging getting relevant information from previous researchers who have in the past contributed to vision 2035 objectives of Cameroon in particular and Africa at large. Cameroon being

an underdeveloped nation is still having problems storing vital information in a database but with the use of paper filing which in some cases are destroyed by mould, rats, water or fire. With the ease with which information is lost in the system, it was quite difficult finding out what has been done in the past or what the government of Cameroon has in the past been planning in line with innovation. But after a long struggle I was able to get across some important information from the ministry in charge of scientific research and innovation which is ministry that oversees that National innovation system is properly practised in Cameroon. The gathered information will be presented in chapter four with a clear explanation.

2.6 Study Validity and Reliability.

Validity here is some sort of judgement which is based on various types of evidence. It is the extent to which scores represent the variables they are intended for, As concerns this research, data sources employed are quite renowned and verifiable to avoid or minimise error margins. Also, the tools selected to represent the vision 2035 plans are the carefully selected main and specific objectives.

Reliability is a test of consistency across time (test-retest reliability), across items (internal consistency) and across researchers (interrater reliability). Reliability stands to tell how others can rely on this piece of research work and draw inferences for other research study in similar fields. it can be relied on because the researcher is very familiar with the study area as being a national from that country (Cameroon) and has lived and studied there for more than 2 decades. Also, the researcher has studied innovation in all its forms during his 1st and 2nd semester at Aalborg University with national innovation systems being part of the curriculum and knows quite a lot before coming up with this piece.

As concerns this research much was gotten from very renowned online data source with so many well-known articles reviewed just to make the work valid and reliable this was not just for readers and other researchers but most especially for the government of Cameroon to look at it and try to consider what is proposed in here as they look forward to growth and subsequent emergence in the year 2035.

Chapter Three

Literature Review

3.1 Introduction

This section of the thesis, there will be an elaborate discussion on the different bodies of literature as concerns national systems of innovation by the different writers from time immemorial till date. This part of literature is very important because it brings in the contributions and suggestions of others on a similar subject under discussion. It is also a body of knowledge from which actors of a national innovation system can get fresh ideas as how to build and strengthen their systems so as to gain a competitive edge. To make this section of the thesis interest, the researcher will be looking into what an innovation concept is all about, definition of an innovation system, in brief the different types of innovation systems there are, the division of the national system of innovation to two distinct groups with important literature to back them up (the broad national innovation systems and the narrow national innovation systems), a brief overview of the OECD contribution on the subject matter with the use of a figure titled “The Network Framework of the National Innovation System at the Core of Government” which is a contribution to the narrow school of thought as it looks at NIS as an alliance/network between the public and private sectors of an economy. It also looked more into some important aspects of national innovation systems and development which looks more at how states can develop by developing or improving on their national systems, innovation and performance which looks at how the performance of a national innovation system is vital for state growth and finally national innovation systems and poverty seeing possibilities as to how poverty can be taken out of any given society by working on her systems of innovation. Next will be all about national systems of innovation from different concepts, to various definitions as to what an innovation system is and finally to different types of innovation systems.

Definition of Innovation Systems

An innovation system can be defined as a set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and provides the framework within which governments form and implement policies to influence the innovation process. It is also seen as a process that involves multiple activities to uncover new ways to doing things. In order for a

business, an organization or a nation to gain a competitive advantage, adapting and innovating to suite the changing trends and new generation of things. The table below presents different definitions of an innovation systems as seen by previous authors and researchers who had put in a lot of time and finances to make this concept what it is today.

Table 2: Definition of Innovation Systems

Authors	Definition
Lundvall (1992)	A good national innovation system is made up of two important arms i.e. “the production structure” and “the institutional set-up”. The elements and relationships which interact in the production, diffusion and use of new, and economically useful, knowledge and are either located within or rooted inside the borders of a nation state
OECD (1997)	National innovation systems Is an institutional set whose interaction levels determines the innovative performance of firms within the. national territory. They added that it is a network of institutions in both the public and private sectors whose interactions creates, builds on and shares new technology. Elements that interact create, diffuse and the use of new knowledge which is not only of great value but is also economical.
Freeman (1987)	Defined an innovation system as institutions that make up a network linking private and public sector which is the driving force for national innovation and the wide spread of new technology.
Edquist (1997)	Came up with a more general definition of an innovation system where he included all important economic, social, political, organizational, institutional and other major factors that support development, diffusion and the use of innovation

Metcalfe (1995, 10)	Innovation systems is “that set of distinctive institutions which jointly and individually contribute to the development and diffusion of new technologies which provides the framework within which governments form and implement policies to influence the innovation process. As such, it is a system of interconnected institutions to create, store and transfer the knowledge, skills and artefacts which define new technologies.”
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3.2 National Systems of Innovation

The concept of National systems of innovation came into existence in the late 1980s when Christopher Freeman and Bengt-Ake Lundvall carried-out great works on the said concept. Freeman based his research heavily on Friedrich list of his political economy and a reset of Japan as a world economic power at the time. Lundvall on the other side researched on the social interaction between suppliers (firms/organizations) and customers (B2B or B2C) and their various roles they played to encourage innovation in Denmark.

The concept of NIS can be divided into two main group to make the work easily understood by all. The two groups to be looked at here are; The Broad and Narrow definition of national innovation systems.

3.2.1 Broad National Systems of Innovation

Innovation in the broad sense is defined as a continuous cumulative process which does not consider only radical and incremental innovation but in addition diffusion, absorption and the use of innovation (Lundvall, 1985, 1992; Freeman, 1987). Furthermore, another major source of innovation in addition to science, is the interactive learning process that takes place in connection with production and sales. Meaning that the process of innovation begins at the point of production and product development assuming that the alliance going between users and producers is fundamental for innovating a product.

According to Lundvall (1992), a good national innovation system is made up of two important arms i.e. “the production structure” and “the institutional set-up”. Gu (1999) elaborated on the distinctive

characteristics of national innovation systems in developing countries as seen; a) NIS in developing countries is less developed by order. Historically, the technological and institutional properties necessary for modern growth were not developed within their systems. NIS in developing countries should be studied in the context of economic development, i.e. it is important to ask how innovation related activities started and how they continued to improve once started in relation to their local conditions and changing internal and external environment. (b) NIS in developing countries is specifically related to the country's development level. Therefore, it is important to connect levels of NIS development with levels of economic structural and institutional development. (c) Extraordinary 'intensive learning' of developing countries like Korea and Taiwan was the crucial factor for their successful catching-up, which required and was supported by the rapid development of their NIS. Studies on NIS in developing countries should pay high attention to purposeful strategic management for catching-up. (d) As market mechanisms in developing countries are still under-developed, the role of the market in developing countries in terms of promoting learning needs to be perceived differently from that of developed countries of Europe and USA. (c) Unlike developed countries, capital accumulation rather than intangible assets (such as knowledge) and learning, is the main contribution to technical progress in developing countries. Arocena and Sutz (1999) argued that industrial innovation is highly informal in developing countries i.e. not products of formally expressed R&D activities Rosenberg (1993) went on to emphasize that the main catalyse that help speed-up innovation in any given economy are the R&D supporting organizations who help promote all forms of research and new designs. In 2007, Lundvall in an individual research article where he stated that knowledge and learning development play a great role in any nation's national system of innovation. Lundvall made mention of the mutual role of actors and networks in a national innovation system. Lundvall et al (2009) now in the 20th century resurfaced with another definition to national innovation systems. It is seen to be open, dynamic but a complex body which is made up of a network within and between institutions and socioeconomic structures who oversee the rate and direction of innovation. Patel and Pavitt in 1994 in an article titled national innovation systems: why they are important and how they might be measured. They built on an argument that NIS is a useful model because it covers clearly all that the earlier models left out. According to Freeman & Soete (1997) presented innovation system as recombination of already existing bits or the creation of new ideas into new processes to obtain new products. Metcalfe and Ramlogan (2008) stated that nations that are successful in the domain of economic development is strongly linked to the nation's ability to purchase, absorb, distribute and put modern technologies to effective and efficient use. Godin (2009)

“In the late 1980s, a new conceptual framework appeared in the science of technology, and innovation studies: National Innovation System. The framework suggests that the research system’s ultimate goal is innovation and that the system is part of a larger system composed of sectors such as government, university and industry and their environment. The framework also emphasized the relationships between the components or the sectors as the ‘cause’ that explains the performance of innovation systems”. According to Sharif (2006), national innovation systems concept is an embodiment of all main parts of an innovation process which is made up of organizational, political, social, and economic factors. Sharif concluded by saying that this concept of national innovation systems is of great importance to researchers, and policy makers at regional, national and international levels. This clearly means that the concept touches every part of an economy and helps the state manage her affairs without any section of the economy being left out. Freeman (1995) explains that in the turf of innovation and technology, research has created a possibility to changing *“economics from a science that brings tidings of gloom into an economics of hope”*. (Sharif, 2006) the concept of NIS has now become the source for innovation research carried out by the European Union (EU), the United Nations Conference of Trade and Development (UNCTAD), Organization of Economic Cooperation and Development (OECD) and United Nations Industrial Development Organization (UNIDO). Lundvall (2000) pointed out that innovation is a “universal phenomenon” meaning that in every economy at all times there is a possibility that one will find a continuous learning process, researching and finding out new ways in which things could be done (changing the face of things) which finally ends up with results (new products, new techniques, new forms of organization and new markets). Makarov, (2003 p. 896) amongst other researchers added that the coming into existence of this concept of national innovation systems happens to be the most important event as concerns the field of innovation research. Lundvall (2002, p. 214) raised another important point on national innovation systems where he alongside other colleagues speculated that the main idea behind the national innovation system became popular because the *“mainstream economic theory and policy have failed to deliver an understanding and control of the factors behind international competitiveness and economic development”*.

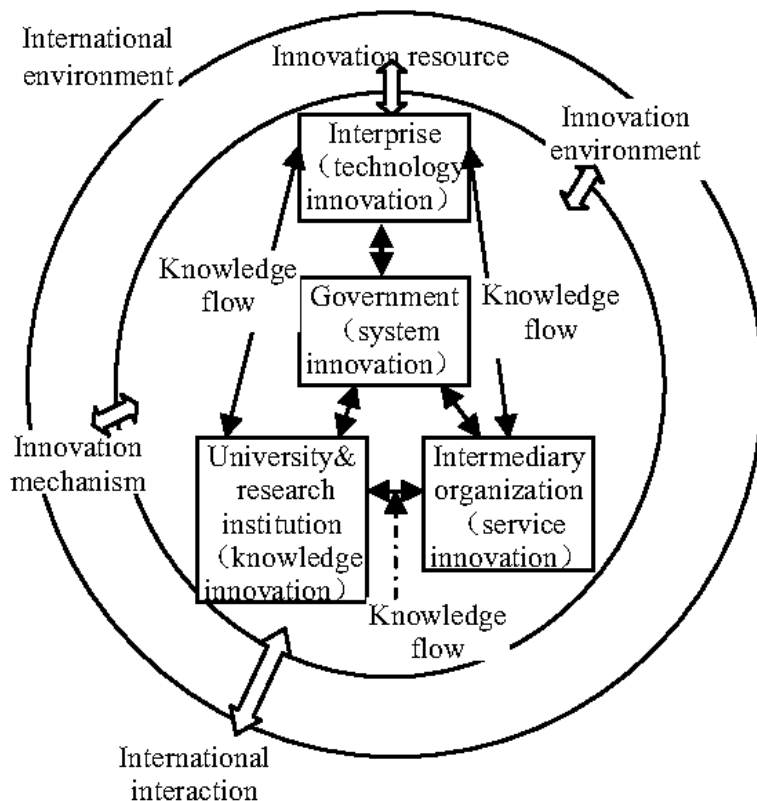
3.2.2 Narrow National Systems of Innovation

The narrow definition would include organisations and institutions involved in searching and exploring such as R&D departments, technological institutes and universities (Lundvall, 1992, p.12)

One of the earliest attempts on national innovation systems in published forms was done by Lundvall (1985) said that innovation as a process is made up of various actors or players who are either contributing to or benefiting from the system. Niosi et al (1993), observed national innovation system to be an alliance that exist amongst the public sector and the private sector (either large or small), universities/higher institutions of learning, and government agencies with the hope of creating more science, technology and new knowledge within the confines of the national territory. In 2003, Mytelka explained that national innovation is not at all a linear process but is a continuous and interactive process between clients, universities, productivity centres, standard setting bodies, banks, as well as other important social and economic actors. Laredo & Mustar (2001b, 6-7) explained that, different organizations in the public sector (universities & public research institutes) can perform similar actions (R&D) in a NIS. But that NIS is totally different with regards to the organization that is involved in carryout the public R&D as well as he laid down laws, rules and regulations that govern the affairs on the organization in question. In a report presented by OECD (2002b, p194) *“In most NSIs, especially in low-and medium-income nations, only modest sums are invested in R&D and most of the R&D is performed by public organizations. The few countries that invest heavily in R&D are all rich and much of their R&D is carried out by private organizations. This group includes some large countries, such as the USA, and Japan, but also some small and medium-sized countries such as Sweden, Switzerland and South Korea. There are also some rich countries that do (p. 194) rather little R&D, e.g. Denmark and Norway. As mentioned, a considerable part of the R&D in many rich countries is carried out and financed by the private sector, primarily firms (although there are also public financial support schemes to stimulate firms to perform R&D). The proportion of all R&D performed in high-income OECD member states that is financed by firms ranged from 21% (Portugal) and 72% (Japan) in 1999.”*

Below is a figure which is the contribution of the organization for economic cooperation and development to the concept of national innovation system.

Figure 1 The network Framework of the National Innovation System at the Core of Government



Source: OECD, 1997

This OECD figure presented above is a well-established approach that in a relatively simple way illustrates the main idea behind a national innovation system and the figure can be applied both in a narrow and broad way. As seen on figure 1 above, there are exist two circles. The first is that which goes on within the country whose national innovation system is being examined. Within the circle all actors of the innovation system interact to build up the system and make it produce desired results. Out of the first circle is the part of the innovation system which is linked to the international scene. Being a network means that there exists a relationship or a form of communication. The main reason why this framework was selected amongst others is because it is quite simple to interpret and also because it shows all aspects on how to build and improve on a national innovation system presenting all its networks in and out of the system which in one way or another helps keep the system together and also helps the government achieve her desired goals and objectives.

First circle

Government

The government/state is at the centre of the whole system and all components of the network framework are linked to her meaning that she controls and coordinates the entire system making sure

everyone is comfortable (i.e. producers/consumers of the innovation) and also making sure that desired goal of the innovation is met. To make the system better, enterprises in their support to strengthening the system improve mainly on technology innovation.

Intermediary organizations

Intermediary organizations (service innovation) build on the knowledge innovation to improve on their services which is a way to supporting the entire system.

Communication infrastructure refers to the backbone of the communications upon which various broadcasting and telecommunication services are operated. Communication and infrastructure are very much important to build a good national innovation. It makes communication and resource sharing much earlier. It also makes communication from top to bottom easier.

Universities and Research institutions

Universities/higher institutions of learning and research institutes are at the core of creating new knowledge via research. They come up with fresh new ideas which continuously supports innovation and holds the network framework (knowledge innovation).

An educational or training system is concerned with gaining new knowledge to better your productivity in terms of quantity and/or quality. Innovation is all about putting into use newly gained skills or knowledge to better an outcome and hence, a sound education and training system will act as a facilitator for Cameroons' national system of innovation. This is so because those in charge of overseeing the innovation process will be continually exposed to new knowledge which will help build that reasoning and hence affect their performance.

A research system is a research mechanism which has an input, process and outputs/results. With the case of Cameroon, her input are all the propositions and efforts put towards growth and emergence by 2035 the process is captured in one-word innovation and the final output or results are the objectives that will be arrived at.

Linkages

Linkages here looks at the network/alliances that exist between universities, Government and industries or other multinational companies. Like the case of Cameroon a few of her universities have some existing partnership which in the one hand, the university provide research services to the

industries while the industries act as research centers to the higher institutions. In other cases, either the university or the company is a partner and a customer at the same time or vice versa in a new adventure (innovation). In this research piece, two scenarios will be discussed i.e. that of the research center and that of a partner and customer. Information extracted from the website of the Cameroon development corporation (<https://cdc-cameroon.net/new2014/donation-to-cdc-deceased-families/>), on the 19th of November 2013 CDC Demonte signed a partnership agreement with the University of Buea-Cameroon (the first anglophone university in Cameroon). The goal of that partnership was to facilitate research for both institutions. UB students carry out internship and various research on CDC Demonte farms (palm produce, banana etc.) CDC on her part makes use of the results opened to improve on the quality of their outputs through an innovation setup. Hence establishing a win-win relationship between both establishments. Due to the benefits of this partnership which has gone a long way to keep innovation alive at CDC, it was agreed that after a couple of working sessions the partnership will continuously be reviewed and renewed so they are sure of continuous and sustainable innovation policies and until date the partnership still exists with CDC sponsoring a few projects at the university of Buea. Finally, the partnership agreed on the need for synergy between CDC and UB, stating that with the activities undertaken by CDC, there is need for continuous research and innovation in moving the corporation forward to play its role in Cameroon's emergency plans by 2035. On the other side of customer and partner, there exist an alliance between orange Cameroon and some state universities (university of Bamenda and university of Buea) students of this universities pay their tuition fees via orange money into the university's account this started in 2013 and runs till date. It is quite safe, time saving and convenient unlike before now when students had to queue in-front of the bank to get the payments done.

Conclusively, this sub-section amongst others make up economic components which needs to be considered at all times when building up the national innovation system of Cameroon. Breaking it down, education and training is the backbone of creating new knowledge which is the engine of every innovation (new knowledge, new ideas, new creation). When an economy sorts out for innovation it has to continuously and constantly improve on the sector of education and training investing as much money as possible and if she wants good results more money has to be set aside for that sector to operate properly. The research system just like any other system has 3 distinct parts (input, output and processes). The research system is very important for any innovation plans. This is so because, the idea of innovation builds on new creation and new things can't be created except they are researched on and realized how important they are to any given purpose which is the main reason

why a research system is very important for the improvement in the national innovation system of a country. When communication channels are well structured and designed information flow is fast and accurate hence, for an innovation to achieve what it is out for, there need to be proper communication amongst the various sectors involved. Also, in some cases, for an innovation to properly work, new ideas need to flow in from abroad and without a proper communication network that won't be achieved. Lastly, linkages here look at the alliances the various sectors of the economy create so as work together to make the innovation function properly. In some cases, one sector has to create the innovation, and another simply benefits from the new knowledge that has been created.

Second circle

The second circle being linked to the external environment indicates that the network framework is linked with the external environment meaning the system is opened to ideas from abroad (open innovation). Innovation resources (knowledge/ideas or raw material) they could be moving into or out of the system. We now have the innovation environment and the innovation mechanism which is that point in which the innovation is been practiced. International environment and international interaction are that part of the network framework which keenly observes the outside environment to make use of any outside resources that can in one way or another help in improving this system.

This OECD figures reflects the case under study in that they all in the network strive to improve upon performance of the national innovation system which is what is been looked at here.

Having a closer look at the diagram, we realize that the government (system innovation) is at the center and is linked to the other 3 components with a 2-edged arrow connecting them meaning that there is some flow of knowledge/resources to and fro. There also exists a link between the enterprise (technology innovation) and the university and research institute (knowledge innovation) as well as between the enterprise and intermediary organization (service innovation) here, there exist some flow of knowledge i.e. there is some knowledge sharing going on between those components. There is also some knowledge flow between the university & research institute and the intermediary organization. Conclusively, all other surrounding components: international environment, innovation environment, innovation mechanism, international interaction. All four components have a doubled edged arrow linking the inner circle to the outer circle so that there should be enough knowledge flow in the network framework.

Conclusively, national innovation system is a concept which builds on the transfer of knowledge and technology to help build on growth and development. As will be the case of Cameroon. Here, with

the use of performance indicators data will be analyzed to obtain results to know the current status of Cameroon's national system of innovation and that which could be implemented as the government of Cameroon fights to achieving their vision 2035 objectives. It is important to note that poverty can be reduced to less than 10% if she is able to improve on her enterprises (technological innovation) i.e. carrying out more and better production thereby generating more incomes, employing many more people who get paid and this incomes go a long way to better their finances and hence, reducing poverty in the society. The next main objective of becoming a medium income country can be achieved if more attention is given to university and research institutes (knowledge innovation) whereby more knowledge is created on how to improve on industrial production, innovation in services which directly leads to offering of large outputs (goods and services) which when marketed will generate more income meaning more incomes for all. For her to become industrialized, the section of university and research institutes creating more knowledge is a very important factor. For that to also go on properly, knowledge needs to flow from enterprises and knowledge innovation body's as well as to service innovation body's as indicated on the OECD figure above.

3.2.3 Types of Innovation Systems

This subsection will be examining the different types of innovation systems that exist International Innovation Systems (IIS), National Innovation Systems (NIS), Regional Innovation Systems (RIS), Corporate Innovation Systems (CIS). Below will just be a brief explanation as to what the different innovation types are.

- **International Innovation Systems:** They are transnational corporations realizing innovative projects. National companies working with external markets for innovation, international innovative networks and innovative communities. They are also made up of international organizations that provide financial support to legal entities and innovators. They have specialized information systems focused on innovation.
- **National Innovation Systems:** They are made up of national institutes of innovative development. National companies supplying innovative products and services to domestic markets. They operate national innovation networks. Specialized national organizations providing financial, consulting, technical and information support to legal entities and individuals.
- **Regional Innovation Systems:** They are made up of stakeholders who determine the strategy and tactics of innovative development of the region. Companies of the region utilising its key

resources for innovation. There also exist regional clusters. There also exist innovation intermediaries and support organizations in the region (business incubators, techno parks, innovation centres, technology transfer centres.)

- **Corporate Innovation Systems:** It is made up of a specialized innovative division of the company. Management bodies that determine the innovative strategy and tactics of the company. They are made up of specialized division of companies, whose business models are focused on services to innovative divisions of the company. Innovators make up this type of innovation systems.

3.3 National Innovation Systems and Development

Sen (1999) defined development as expanding the real freedom people enjoy. Solow (1956) In the past, there was this growing believe by economists that the differences that exist in the levels of development across different nations were to be clarified by a single factor, which is the amount of capital accrued per worker in a national innovation system. This simply explains that for Cameroon to be able to improve upon industrialization, eradicate poverty or becoming a medium-income country, she has to focus on how to increase capital accrued per worker in the national innovation system. Gerschenkron (1962) amongst others from the 1960s onwards went on to add that the differences in development are mainly caused by technological differences (amount of innovation). For Cameroon to be able to achieve all stated objectives, she has to pay great attention to the amount of innovation carried out within the national territory as explained by different innovation researchers. Many writers argued that the part of technology for development clearly stress on the fact that trying to catch up in technology and levels of development is no free ride (meaning it entails so much cost and sacrifice). With this in mind, these writers concluded by saying that countries who fail to develop proper technological capabilities and other factors that support development, they will continue lagging. Before now, Cameroon is lagging behind as concerns innovation and for her to innovate and achieve the stated objectives put forward in her vision 2035 plans, the various actors and players have to sacrifice a whole lot so as not to fail in their quest for emergence as explained by different researchers who contributed to innovation. The following authors and concepts support this fact: “social capability “ (Ohkawa and Rosovsky, 1974; Abamovitz, 1986), “technological capability”(Kim, 1997), “absorptive capacity” (Cohen and Levinthal, 1990), and “innovation systems” (Lundvall, 1992; Nelson, 1993; Edquist, 1997). The concepts mentioned above all present technology as a route way (catalyst) to development. In an article by Lundvall (2011) titled notes on

innovation systems and economic development “*Innovative cities are essential for economic growth and development of countries. At the same time, however, social and environmental problems related to city growth can be serious threats to the full realization of the socio-economic contribution that the cities can make. In this paper, it is argued that the notion of a “system of innovation” is helpful in understanding the factors that shape the process of innovation and that determines the extent to which problems related to city growth may be solved*”. Lundvall (2011) in an introductory statement explained that cities have an important part to play as concerns the social and economic development of any country. Cities which are resourceful and industrious are crucial for national economic growth and major economies are vital in providing the needed resources for public and private investment in education, infrastructure and health, improved standards of living and alleviating poverty. Lundvall added that sustainability in recent times is now amongst the thing’s in cities. He went on to describe cities as the cradles of creativity and innovation which is a gate way to state development. As explained by Lundvall, for Cameroon to be able to achieve her major objectives of poverty eradication, becoming a medium income country, becoming industrialized and finally emergence, her major resourceful and industrious cities (Yaoundé, Douala, Buea, Bamenda, Limbe etc.) have to do all it takes to help the nation move forward as concerns national systems of innovation. According to Sen (2000), in his 384-page book titled “development as freedom”. In one of the subsections of this book where he titled it “the ends and the means of development” here, he explained the importance of freedom to development. “*the process of development, when judged by the enhancement of human freedom, has to include the removal of this person’s deprivation.*” Arocena and Sutz (2000) argued on building technical capabilities and encouraging learning are genuine concerns, meanwhile ‘innovation’ sets targets too high for less-developed countries. It was added that there is no full blown ‘system’ of innovation in a less-developed country which can be researched on. Viotti (2002), the major concern of many developing countries today is bringing about economic transformations and catching up with countries of the developed world. He went on to add that innovation systems should most at times be earmarked for developing nations where the firms leading create innovations that are new to the world. In most developing countries, incremental innovation is mostly adopted. Viotti concluded by making a distinction between activate and passive systems of learning using Korea and Brazil as examples.

3.4 Innovation and Performance

Above present national innovation systems as seen by earlier writers now we progress to innovation and performance. Here, relevant literature will be reviewed on what other writers and researchers

have in the past documented in journal articles and books. In an article presented by Gregersen and Johnson (2006) titled Performance of Innovation Systems: Towards a capability-based concept and measurement. *“The idea of building and promoting innovation systems in order to improve dynamic performance of the economy is appealing to both high- and low-income countries and bench-marking of different systems of national innovation has consequently been introduced by various national and international policy analysis institution as a way of evaluating the performance of the national innovation systems. However, it raises the question of meaningful performance indicators in order to get an estimation of how successful specific systems are and to be able to compare and learn from other countries and regions.”*(p.1) Both writers due to the complex and none clear definition as to what performance means in economic term stating that it is a rather complex concept which goes on describing a rather complex process which is why they decided to come forth with three sub-headings which go a long way to capture performance. (I) a broad and narrow definition (ii) distinguishing between the innovation system performance and the economic system performance in which the innovation system is a part of that body which could also be innovation performance and economic performance (discrete and embedded performance of an innovation system). (iii) Distinction between a static and a dynamic view on performance.

3.4.1 Narrow and Broad Performance

According to Lundvall et al 1992 in different time periods, the concept of innovation and performance explained that the narrow definition of innovation and performance lays emphasis on R&D systems thereby causing the meaning of performance to appear straightforward. He went on to add that both the broad and narrow national innovation system definitions could in the same way be restricted meaning none is an exempt meaning performance can be seen in a narrow sense of a broadly defined system of innovation. Performance in every economy can be seen from two separate levels i.e. firm and system level. The researchers stated that performance as concerns their research work is at the system level rather than firm level. Looking through this research work having used a case clearly states this research also studies performance at system rather than firm level.

Table 3: Narrow and broad performance of National Systems of Innovation

	Narrow performance	Broad performance
Narrow NSI Approach	Patents Scientific publications New high-tech products	Number of high-tech spin-off Companies University-industry Collaborations
Broad NSI approach	New to the market Innovations (incl. Medium And low-tech sectors) UNCTAD Innovation Capability Index ArCo (Archibugi and Coco)	Organizational innovations Innovation in the health care And education Environmental innovations

Source: Gregersen and Johnson, 2005

On the side of narrow performance vs narrow NSI approach there exist a couple of patents (this approach specifically is selected for the case of Cameroon), few scientific publications because very few people are interested to write and most important lack of research funds and facilities. Little or no high-tech products are produced in this system, the country instead goes on to selling most of her resources as raw material which brings in very little income. Broad performance vs narrow NSI here, there exist little or no high techs-offs, there are a couple of companies that are on the daily basis increasing, hence increasing domestic production. CDC (2013) Collaborations do exist between some state universities and industry good examples are the collaboration that's going on between the University of Buea and CDC Delmonte oil and palm an industry specialized in farm produce (CDC acts as a research/ internship centre for the university and the university on her part provides new knowledge for CDC to use to improve on her products and production methods) . Orange (2019) We also have the collaboration between orange Cameroon and most state universities (customer and agent relationship) more will be discussed in the later chapters. Narrow performance vs broad NSI approach. There of course exist a couple of medium and low-tech sectors which come into the economy as new entrants as explained by Archibugi and Coco. Broad performance vs broad NIS approach. Looks at organizational innovations, innovation in the health care and education, environmental innovations. Reading across different literature about Cameroon and innovation, they are trying in their own little way to tackle these components to make the innovation journey get better as they move along.

According to the OECD (1997). National innovation system is major determining factor to national competitiveness. It is seen to be an evaluation that takes into special consideration how the overall industrial effect would cause a better understanding on the effect of NIS on national competitiveness. “Innovation performance is seen as changing innovation input through a process to arrive at innovation outputs being able to transform innovation proficiencies and efforts into market operations.” According to Frosch (2011, p. 416) *“education contributes to innovation performance. At the same time in his research, the negative correlation between innovation performance of the low educated elderly workers and well-educated young people is misleading. This opinion implied that education has a positive effect on innovation performance”*. Zizlavsky, (2016, p. 819) added that innovation performance places more emphasis on the technical part of the innovation itself and the new product it offers to the market. Drucker (1954), came up with an argument that because of the short-lived nature of market characteristics and rapid entrants of new products into the market, innovation capacity is of paramount importance to achieving superior innovation performance. Edquist & Zabala (2009, p. 4) defined innovation performance as the outcome/results of an innovation process and they went on to conclude that the outcome of the innovation process (performance) shouldn’t be mistaken for being an impact.

3.5 National Innovation Systems and Poverty

This section of literature duels on how national innovation system deals with poverty. A little will be discussed on inequality since in a community which is plagued with poverty it has aspects of Inequalities in incomes and wealth (unequal distribution of income and wealth).

According to Kwass and Siegel (1995), there exist numerous benefits when a range of actors are in collaboration. These collaborative action through a process leads to synergies, which lead to generation of new ideas. Goods and services will then be developed with a more precise understanding of real-world need. This collaborative arrangement helps in breaking down administrative barriers and hence provide quick responses to problems on ground and making use of opportunities as they present. When collaborative actions become successful, trust is abounding and hence, providing a positive effect on economic activities far beyond the specific innovation activity. As explained by Kwass and Siegel, collaborative actions have to be undertaken by the various innovative actors whereby new ideas will be developed which when implemented will lead to the creation of more goods and services. In the case of Cameroon, when this collaborative actions become

successful there will be an increase in domestic production which means they will be more than enough to sell and hence more incomes through revenue which will go a long way to reducing poverty in the economy to a socially accepted level (less than 10%) Rosenfeld (2001: 22) with the existence of certain common factors, community-based poverty reduction and cluster-based innovation have some clear differences. Worthy of note is the fact that they possess different target goals. Cluster development strategies has as their drive objectives to enhancing competitiveness or regional economic growth. Meanwhile the target goal for the community-based poverty reduction is an equal and fair distribution of all economic opportunities. As is the case of Cameroon, the objective of reducing poverty to a socially acceptable level is for the entire nation and not a regional objective and hence, is supported by the community-based poverty reduction strategy. In a research paper by Torjman and Leviten-Reid (2003) titled innovation and poverty reduction. As a response to the ever changing social and economic settings, innovation has emerged to becoming a focal point for actors to build on when coming up with public policies. The pair went on examining how innovation relates to poverty reduction. It explores the various ways in which a nation or a community can employ the use of community-based poverty reduction to getting rid of the challenges posed by innovation economy's. Competence building, is an essential factor to generating income overtime and this doesn't only affect growth as well as income distribution in a variety of ways. On the aspect of innovation and inequality, Acemoglu (2002), when there is an introduction of a new technology (innovation), this will automatically lead to an increase in the demand for skilled workers who will be paid high wages. The introduction of a new technology means increase production in industries which is one of the main objectives of the said vision 2035 i.e. the essence of the innovation should be to make the country to become an industrialized nation and this can only be achieved through the introduction of new technology (technology innovation) which will also have a positive effect on income levels in Cameroon because an increase in production means more income will be generated for the entire nation. Galbraith (1998) also added that when a high-technology sector is introduced into a developing country which will attract hyper-wages to be received by just a few people. In some situations, as this people will get to earn more to reduce poverty. For the case of Cameroon, a similar high technology sector being introduced here will also help achieve the objective of reducing poverty.

3.6 Summing up

After presenting the necessary literature and looking back at the problem statement and the objectives of the vision 2035 plans of the republic of Cameroon (emergence), it is important to note that for her

to attain all the desired objectives by 2035 she has to innovate with great focus on the aspects of the economy she hopes to better and also on the thing she hopes to get rid of. Linking the objectives as seen in chapter one with this part of our literature; reducing poverty to less than 10% and becoming a middle-income country as seen from the literature can be seen through increase production because of innovation. With the country being able to produce more because of innovation many more people will be employed and many more people in the country will be paid reducing dependency ratio as well as poverty levels. Still in the light of increase in production the country will of course become a newly industrialized nation which is part of the vision 2035 objectives. The last objective talks about becoming an emerging nation; the economy will be mainstreamed into the global economy in terms of trade (substantial exports) and finance (opening of local financial markets to foreign investments) all focused on the aspect of national innovation and development.

On the side of performance being part of the literature, it is also important for the government of Cameroon and her stake holders to know how the national innovation system is performing as a measuring stick to not only achieving her set objectives but also to be able to catch-up with other nations. Performance in this regard looks at all possible areas of the economy.

The answer to the first research question isn't fully complete without the introduction of the SWOT analyses of Cameroon's national innovation system which will go a long way to provide more answers to the first research question as well as provide a clearer view of stakeholders/ whoever this study might interest. It is also important to note that some of the issues that the SWOT will expose will be leading us into chapter five of this study going a long way to answering the second research question wherein recommendations and suggestions will be proposed that if properly followed up effectively and efficiently will help overcome the weaknesses and threats turning them into strengths and opportunities so as to make the national innovation system of top notch.

Table 4: Diagnosis of Cameroon National Innovation System with respect to development

Strength	Weaknesses
<ul style="list-style-type: none"> • Economically viable to make innovation work i.e. rich in natural and mineral resources • High level of intellectual capacity of Cameroonians • High number of researchers in diverse fields • Available and exploitable imported technology • High affinity for new products by the citizens • Presents of OAPI • Institutional policies and structures in favour of research and innovation • Proactive nature of the youths 	<ul style="list-style-type: none"> • Lack of concrete actions to support the enacted policies on innovation • Lack of incentives to motivate an innovative environment • Low financial backing to the organs in charge of innovation • No clear definition of an innovation system with all actors joint together • Lack of material and equipment to foster research and innovation • Education, R&D or knowledge centres poorly developed • Absence of statistics on innovation • Lack of experts in the domain of innovation and development • Incompetence and aging nature of administrators • Lack of collaboration and partnership between public, research centres, universities and other consumers of innovation
Opportunities	Threats
<ul style="list-style-type: none"> • Spirit of reawakening in prioritizing innovation by the state and government • Participating and being part of international conferences and events on innovation development • Putting in charge and enlarging the role of structures/ministry in charge of research and innovation • Growing proactive youths • Presence of a good number of international organizations to foster research and innovation 	<ul style="list-style-type: none"> • Not backing policies with actions • Exporting only raw materials • Signing of economic partnership agreements with nations far ahead of Cameroon in innovation e.g. the EU • High level of brain drains • Low level of GDP • Poor foundation of research and innovation • Inefficient energy and internet supply • Absence of motivation to researchers • Stereotype nature of aging and corrupt administrators as concerns change

	<ul style="list-style-type: none"> • Weak or lack of financial and human resources to support innovation
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Note: It is important to note that the SWOT table of Eloundou (2014) is originally in French. It was simply translated to ease the job of the readers who are not of French origin.

Source: Adapted from Eloundou, (2014)

Eloundou constructed this analysis by highlighting the challenges of implementing innovation in Cameroon which is made of strengths, weaknesses, opportunities and threats. He came up with this to see how the government can capitalize and exploit on her strengths and opportunities as well as know her threats and weaknesses to be able to manage everything. Cameroon has all it takes to do better in-terms of innovation, but still it is characterized by wide range of weaknesses which needs to be tended to. But with the opportunity she has, much could be done to bring down the threats presented by Eloundou (2014). Another great opportunity can be built on linkages as could be seen that some private as well as state organizations create partnerships with higher institutions to strengthen the innovation milieu which makes up part of the opportunities mention in the SWOT. Much time was taken trying to look back and forth from data to its analysis and back to the SWOT there is of course great conformity.

To add to what Eloundou already presented, on the side of strengths, more and more partnerships or collaborations are now coming up in Cameroon for example the partnership between the university of Buea and CDC delmonte. We also have the partnership between some state universities and Orange and MTN Cameroons and many others which are yet to be known. A major threat as at now is the current political instability raiding the north and south west regions of the country which has led to loss of life's and property slowing down economic progress (<https://www.hrw.org/world-report/2019/country-chapters/cameroon>). Also, Cameroon has a large pool of educated youths who

have no jobs and finally travel abroad for greener pastures through innovation more and more jobs will be created for this youth hence preventing high level out migration of the most intelligent ones.

In June (2018) a Cameroonian economic researcher in person of Dr Fuein published an online article in the journal du Cameroun.com titled can Cameroon become an emerging economy by 2035? (<https://www.journalducameroun.com/en/can-cameroon-become-emerging-economy-2035/>).

looking at the content of the vision 2035 manuscript, peace and stability is one of the main ingredients to this desired outcome but Dr Fuein in her publication explained that hope of emergence by 2035 is gradually burning down to ashes as in the past three to four years now there is a political crisis affecting the two anglophone regions of Cameroon (Ambazonia) which she says is leading to the loss of many life's and property with a massive slowdown in the economy of the entire nation. She concluded by asking how possible it is for there to be development when there is no peace and stability.

Chapter Four:

A closer look at Cameroon's 2035 vision

4.1 Data presentation and Analysis

After having an overview of different literatures, concepts and policies relating to the subject under study. Before moving the main and specific objective figures of Cameroon's vision 2035 plan, this chapter begins with a brief presentation of some secondary findings of Cameroon's national innovation system. This entire chapter is out to provide answers to our main research question providing discussions and counter discussions as well as analysis of findings and available data. Below are findings which present that which goes on in the economy of Cameroon and all observations carried-out. For a better understanding of the data analysis it will revolve around the main objectives Cameroon hopes to attain in its vision 2035 plans (Eradicating poverty taking it down to less than 10%, becoming a middle-income country, becoming a newly industrialized nation, becoming an emerging nation). It is very important this is mentioned in the analysis so that we see the current status of Cameroon's level of national innovation alongside what the government of Cameroon hopes to achieve by 2035 for a better and easy understanding. On the appendix section is a table titled the target summary table per indicator which indicates the various indicators which are the stated objectives of the vision 2035 plans of Cameroon. That table shows how are met over the years from when the vision was initiated till date and what the future holds with anticipated future figures to 2035. The table shows exactly the target objectives the vision hopes to attain at every given quarter of the calendar (2005-2007, 2010, 2015, 2020, 2025, 2030 and 2035) shown on figure 22 in the appendix section.

In order to arrive at and make a proper data analysis on the case under study (A closer look at Cameroons' vision 2035), important data was obtained from both the main and specific objectives of that said vision plan which was prepared by her head of state and all his cabinet ministers charged with the realization of that vision. In the above paragraph, the main objectives of this vision were listed out which is what holds this analysis together and then specific objectives so as to create more awareness and a better understanding of the entire study. Data for this analysis was gotten from the world bank (WB) records, the international monetary fund (IMF), trading economics, Cameroon's ministry of scientific research and innovation. It is important to note that it was difficult getting data

nor proxies linking to some of the specific objectives of the vision plan and hence, the research simply discussed in brief what exactly those specific objectives were and the role they play as concerns the vision 2035 objectives and Cameroon emerging to developed nation by 2035.

Table 5: Objectives of the vision

General Objectives	Specific Objectives
<p>1. Reducing poverty to a socially accepted level By bringing it to a minimal level that tolerable at the social level, i.e. income poverty should be below 10%</p>	<ul style="list-style-type: none"> - Make the population an effective development factor. - Reducing the gap between the rich and the poor by improving redistribution systems. - Improve supply and guarantee access of all to quality healthcare - Improve safety and social security. - Increase supply, quality and adequacy of training. - Promote generation of decent positions
<p>2. Becoming a medium income country With average per capita income above \$ 3900 (2007 figures) through strong and sustainable growth with improved distribution fallouts</p>	<ul style="list-style-type: none"> - Increase economic productivity by intensifying forest, agro-pastoral and fish farming, mining, exploitation etc. - Increase investment in infrastructure and production sector. - Maintain macroeconomic stability. - Promoting changes and professionalization of services. - Promoting, extending and making use of research results.
<p>3. Becoming a newly industrialized country By increasing industries in the economic pattern (most especially GDP and export figures)</p>	<ul style="list-style-type: none"> - Develop a sound, competitive and diversified manufacturing sector, that can transform the structure of external (export and import) - Collecting savings, finance growth and development. - Changing foreign exchange pattern and expanding markets - Getting absorbed in the international financial sphere and improving banking intermediation
<p>4. Strengthening national unity and consolidating democracy by promoting the ideas of peace,</p>	<ul style="list-style-type: none"> - Strengthen national solidarity.

freedom, justice, social progress and national solidarity	<ul style="list-style-type: none"> - Consolidate the state, guarantor of the general interest. - Promote the rule of law and the credibility of the justice system. - Ensure greater community participation of the population. - Consolidate social freedom (expression & association). - Reinforce the safety of persons and property. - Enhance decentralization and local development
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Source: Vision formulation project

4.2 Reducing poverty to a socially accepted level

In this section focus is on the general objective to reduce poverty to a socially accepted level.

<p>1. Reducing poverty to a socially accepted level</p> <p>By bringing it to a minimal level that tolerable at the social level, i.e. income poverty should be below 10%</p>	<ul style="list-style-type: none"> - Make the population an effective development factor. - Reducing the gap between the rich and the poor by improving redistribution systems. - Improve supply and guarantee access of all to quality healthcare - Improve safety and social security. - Increase supply, quality and adequacy of training. - Promote generation of decent positions
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4.2.1 Poverty

Poverty is a state or condition wherein a person or community lacks the financial resources and essentials for a minimum standard of living. Poverty means that the income level from employment is so low that basic human needs can't be met such as food, clothing and shelter. Poverty here goes as far as more than 50% of Cameroonians not being able to acquire the basic needs of life as food, clothing, shelter, healthcare and education. This indicator works in line with the objective of eradicating poverty or reducing poverty to a socially accepted level or better still to less than 10%. Poverty was the selected indicator here because it is directly linked to the objective of reducing poverty o less than 10% in that it is the most preferred economic variable that can be used to measure how well-off people are financially in a nation.

Figure 2: Poverty – Cameroon



Source: Poverty and Equity Database

The X-axis represents the years and the Y-axis represents poverty figures (%) in Cameroon over the years from 1996 to 2014 which indicates as the last year poverty figures were registered in Cameroon (poverty and equity database). As seen above, in 1996 poverty rate was so high standing at 48.10% at this period, very little was going on in the country in terms of investment especially foreign direct investment which helps in building most African economies. Five years later in 2001, the poverty rate experienced a sharp drop from 48.10% to 23.10% this was because of an increase in government interest in the affairs of the country and the welfare of her citizens at heart. She helped make the investment climate favorable to all thereby attracting foreign direct investments as well which agrees to what Toriman and Leviten-Reid (2003) in their article titled innovation and poverty went on to explain how nations or communities can help with various ways to reduce the poverty situation of the country so as to meet the main objectives of the vision 2035 plan . From 2001 through 2007 the level of poverty again took the wrong course. A news headline from the voice of America (VOA) explained that the world bank reports state that a slowdown in outside investment, depressing export prices for commodities and slashing remittances from Africans who are abroad for greener pasture to help their families back home. They added that in Cameroon, more than 3,000 people lost their jobs and there is an anticipation by the chambers of commerce saying that another 10,000 are at the verge of being jobless as well (<https://www.voanews.com/archive/cameroon-hit-global-economic-crisis>). When things seemed difficult, the government of Cameroon adopted the UN initiative of what was called the millennium development goals which was initiated in 2005 but took off only two years after that is the reason why the rate of poverty started falling again to 23.80% in 2014. This millennium

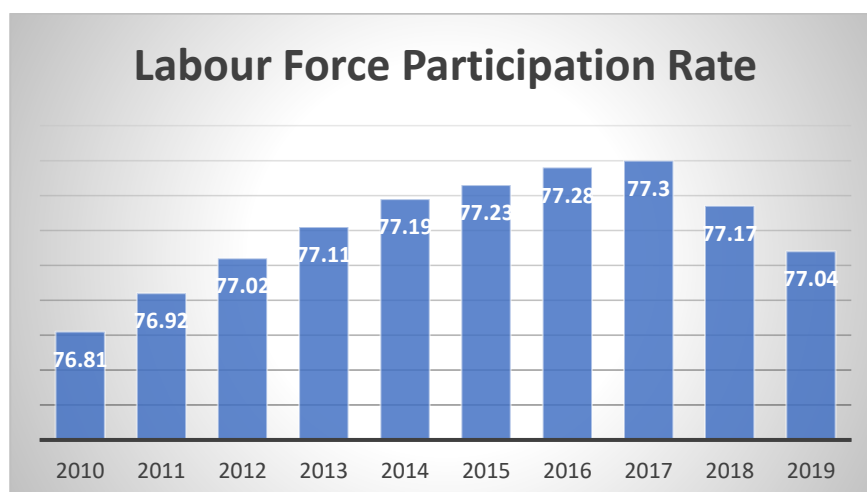
development goals had its objectives which are not too different from that of the current vision 2035 plans and they used what was called the poverty reduction strategy paper (PRSP) as an instrument to help fight out poverty in Cameroon. A further decrease to less than 10% by 2035 will mean Cameroon has attained the objective of reducing poverty to a socially accepted level.

Now using the main objectives of the vision 2035 and some specific objectives, data will be collected, analysed and discussed in line with the literature reviewed in the previous chapters. This part of the thesis will build more on the current status of what's going on in Cameroon so that necessary conclusions will be arrived at and possible policy recommendations will be proposed so as to help her arrive at all her goals in the vision 2035 plan.

4.2.2 Make the population an effective development factor

This specific objective talks about making the population to become an efficient development factor and this can be seen from data on Labor force participation rate of Cameroon. Data on Labor force participation rate best fits here because as many more people are employed it simply means many people have been given the opportunity to contribute what they have in mind to enhance nation progress as this specific objective talk about making the population an important development factor. The youthful population (15 years and above) is very important and makes up a larger proportion of the work force, thus put at risk savings and productive investments capabilities. If they are well trained, they can make a better tomorrow by investing more and spending less

Figure 3: Labor force participation rate of Cameroon



Source: Statista (2018)

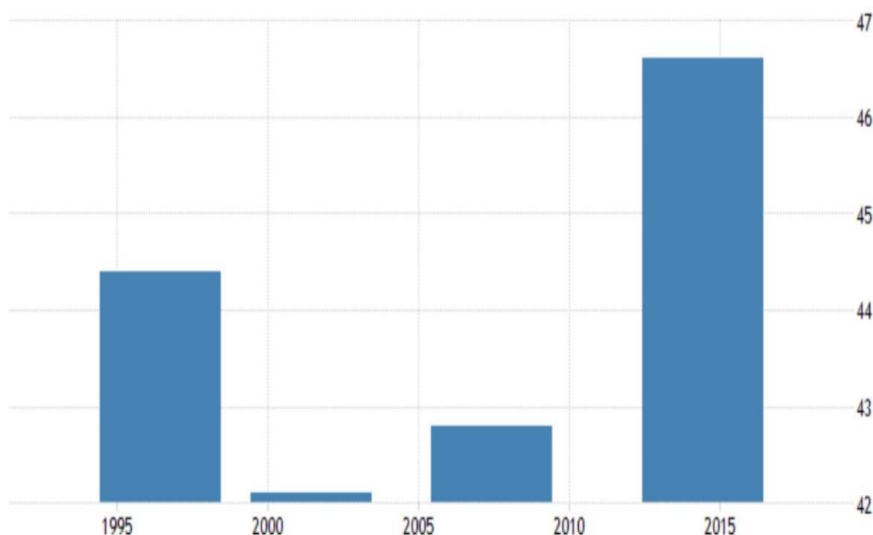
The labor force participation rate is that proportion of the population aged 15 to 64 years who are economically active (all those who supply labor that is used for the production of goods and services at a particular point in time). The X-axis represents the period (2010 to 2019) and the Y-axis is the labor force participation rate (%). The statistics show the employment rate of Cameroon from 2010 to 2019 as presented by Statista. From a simple cross examination of the graph above, in 2017 Cameroon recorded the highest number of people willing and able to work standing at 77.30% and the lowest in 2010 standing at 76.81%. it experienced a steady but slow increase in the labor participation rate from 2010 until 2017 and a slow downturn in 2018 which was exactly the time when the anglophone crisis became so serious with a lot of vibrant youths forced to stay at home because of numerous lock downs, shut down of some education institutions. The data on labor force participation rate here registers all those employed whether in their field of study or not i.e. whether skilled or unskilled. The sharp and continuous increase in employment is because of the government creating any more state universities and the creation of numerous private universities and professional schools. In terms of the vision, this population has a high-level training which allows for skilled labor that generates significant per capita income. Population growth is under control and the situation is more of a population growth compatible with economic growth and thus, ensuring coherence between the population and development. All forms of discrimination have been eliminated, particularly those against women, the youths, marginalized segments of the population and other existing vulnerable groups.

4.2.3 Reducing the Gap Between the Rich and the Poor by improving redistribution system (Gini Coefficient)

Another very important specific objective of the vision 2035 plan is bridging the gap between the rich and the poor as that is a serious issue plaguing most underdeveloped countries. Here, the Gini coefficient will be used to capture that. The Gini index provides a measure of how the national income of a country is distributed (or in some cases, consumption expenditure) among individuals and households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of the total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and the hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus, the Gini index of 0 represents perfect equality, while an index

of 100 implies perfect inequality. Below is a figure of how that of Cameroon likes like as recorded from 1995 through 2015 which was the last time it was recorded by the world bank.

Figure 4: Gini Coefficient of Cameroon.



Source: Worldbank; tradingeconomics.com (2020)

Figure 4 presents the Gini coefficient of Cameroon over a particular time period as reported by the world bank database. The X-axis represents the period and the Y-axis represent the Gini values as a percentage. According to the world bank (2020) is observed that the lowest value was recorded in the year 2000 standing at 42.1% and the highest in the year 2014 standing at 46.6% which is actually the last time these values were actually recorded. According to the world bank collection of development indicators, compiled from officially recognized sources. Cameroon – Gini index – actual values, historical data, forecast and projections were sourced from the world bank on March 2020. From the figures above, it is very true because as at now in Cameroon, there is a wide gap between the rich and the poor with more than half of her population living below the poverty line having very little or no access to the basic needs of human life.

4.2.4 Improve supply and guarantee access of all quality healthcare, safety and social security

Another specific objective of the Cameroon vision 2035 was improving health care, wellness and personal safety. The use of the social progress index of Cameroon will be used to capture both health care and personal safety because it will make things easier and provide a better understanding of both objectives. Appendix A includes the full Social Progress Index for Cameroon 2019.

Below is a part of the social progress index (2019) of Cameroon which provides information about these two important specific objectives.

Figure 5: Health, Wellness and Personal Safety



Source: Social Progress Index (2019)

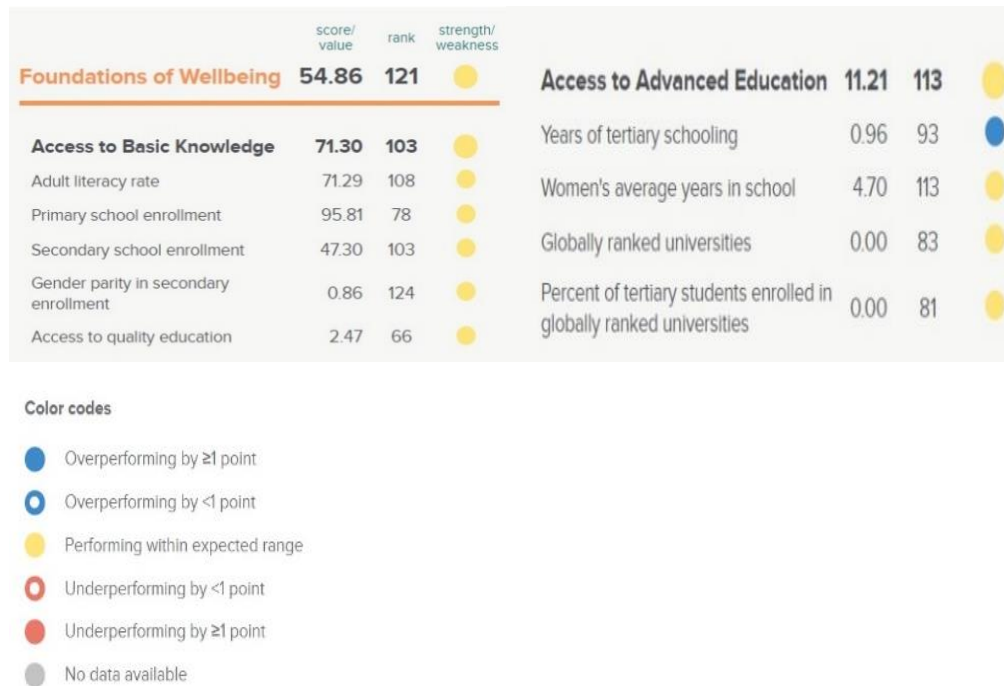
This figure as at 2019 presents the state of things in Cameroon as concerns health and wellness as well as personal safety. Using the color code as a key to access what is actually going on in there, we realize that as at now, wellness is just at its expected performance level indicated as shown by the yellow dot as well as other sub-items beneath it as seen on the figure above. As for personal safety on an average is also performing just as it's expected level but for two items under it which are under performing (perceived criminality and political killings and torture) as seen on the figure above. This particular objective is very important because health is wealth and if your personal safety is threatened it then possess so many problems to economic progress and innovation.

4.2.5 Increase supply, quality and adequacy of training

Another specific objective under the main objective of reducing poverty to a socially accepted level (10%) was increase supply, quality and adequacy of training which was gotten from two proxy from the social progress index of Cameroon for 2019 (Access to basic knowledge and Access to advanced education) Appendix A includes the full Social Progress Index for Cameroon 2019.

Below is a part of the social progress index (2019) of Cameroon which provides information about these two important specific objectives.

Figure 6: Increase supply, quality and adequacy of training



Source: Social Progress Index (2019)

Moving from the figure for both access to basic education and access to advance education to colour codes (key), it is observed from access to basic knowledge with score value 71.30, ranked 103 that all her component elements of adult literacy rate, primary school enrolment, secondary school enrolment, gender parity in secondary school and access to quality education are all performing within the expected range as at 2019 which is of course positive which indicates some degree of progress. Almost all the component elements (women's average year in school, globally ranked universities, percentage of tertiary students enrolled inn globally ranked universities) for access to advanced education with score value 11.21 and ranked 113 are also performing at the expected range except for years of tertiary school which is overperforming which is a total boast. This objective is particularly essential because it pays attention to education and training which is an essential part of development as its growth is an assurance of new innovation ideas to help achieve possible objectives of the vision plan.

4.2.6 Promote generation of decent positions

The last specific objective examined is promoting the generation of decent positions employing the proxy of personal freedom and choice gotten from the social progress index of Cameroon for 2019. Appendix A includes the full Social Progress Index for Cameroon 2019.

Below is a part of the social progress index (2019) of Cameroon which provides information about these two important specific objectives.

Figure 7: Promote generation of decent positions



Source: Social Progress Index (2019)

As seen from the figure, its component elements are vulnerable employment, early marriage, satisfied demand for contraception and finally corruption. It has a score/value of 40.30 and ranked 130. Its strength/weakness indicates it is underperforming as read from the colour code. Vulnerable employment and corruption are both underperforming but for early marriage and satisfied demand for contraception who are performing within the expected range which is why personal freedom and choice is underperforming as at 2019. The head of state and his cabinet ministers are all called up to take a closer look at these specific objectives and as well put in place necessary measures to help revamp the situation.

4.3 Becoming a medium income country

The aim of this section is to take a closer look at the second general objective of vision 2034, Cameroon becoming a medium income country. A medium income country also known as a middle-income country. According to the world bank classification, a medium (middle) income countries are defined as economies with a GNI (Gross National Income) per capita between \$1,026 and \$12,475.

As at now, MIC are home to 75% of the world's population and 62% of the world's poor masses. It is very important to note that MICs represent about a third of the world's global GDP and are the main engines of global growth.

The world bank group as its own support continues to partner with MICs, working closely with them as clients, shareholders and global actors. The world bank assists this group with personalised services i.e. financial products (loans, guarantees, risk management products) and information and advisory services (on reimbursable basis). This is done in order to support their global role as a means to solving their 2nd generation problems as well as facilitating knowledge exchange and the south-south cooperation.

4	Becoming a medium income country With average per capita income above \$ 3900 (2007 figures) through strong and sustainable growth with improved distribution fallouts	<ul style="list-style-type: none"> - Increase economic productivity by intensifying forest, agro-pastoral and fish farming, mining, exploitation etc. - Increase investment in infrastructure and production sector. - Maintain macroeconomic stability. - Promoting changes and professionalization of services. - Promoting, extending and making use of research results.
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Table 6: Ranking of Cameroon

Organization	year	position	Out of	
GII	2018	111 th	129	world
SPI	2018	127 th	149	world
GDP PPP per capita	2018	116 th	149	world

Source: World bank

Key

GII – Global innovation index

SPI – Social progress index

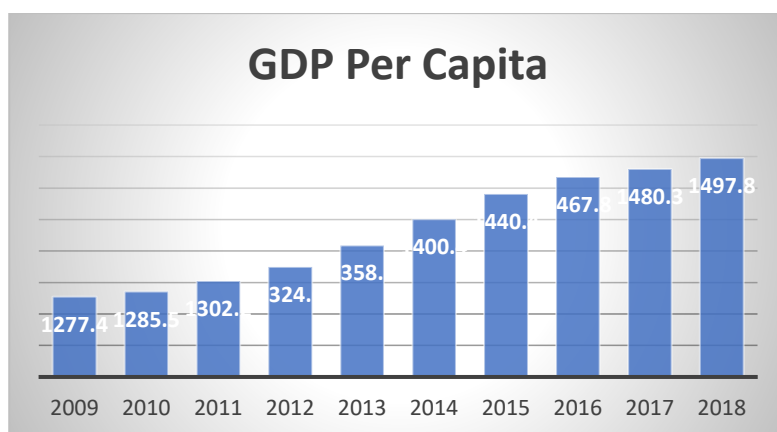
GDP PPP per capita – Gross domestic product purchasing power parity per capita

The above ranking circle of Cameroon clearly indicates that the innovation and entrepreneurial system of Cameroon is still taking baby steps with very little or nothing being done to help remedy the situation and make innovation the core of the economy.

4.3.1 Gross Domestic Product Per Capita

GDP per capita income or average incomes gives a measure of the average income earned per person in a given geographical location in a given year. It is obtained by dividing the total income by its population. This indicator is linked to the second objectives of becoming a middle-income country. Also, it could also be linked to the 1st objective of eradicating poverty in that when more people get paid, it does help to reduce poverty either directly or indirectly. GDP per capita was selected as the indicator for the objective of becoming a medium income country because about how much each person in an economy earns and hence, any average improvements can be seen from GDP per capita income figures.

Figure 8: Gross Domestic Product Per Capita of Cameroon Measured in USD



Source: tradingeconomics.com (world bank)

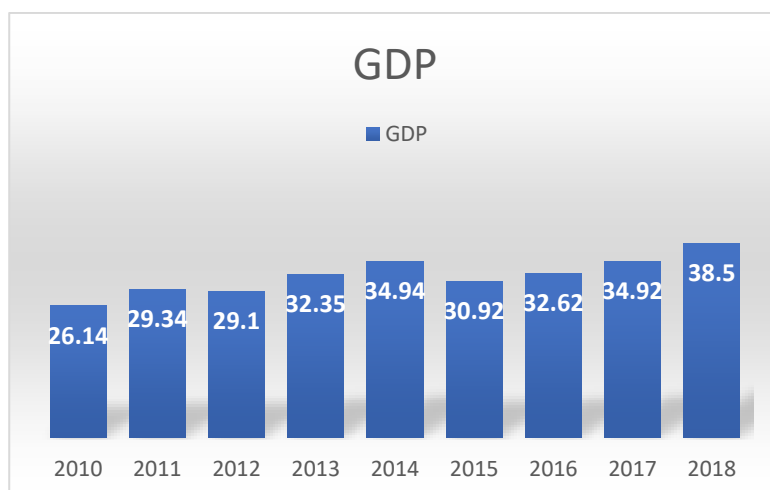
Figure 8 presents the gross domestic product per capita of Cameroon from 2009 to 2018 which is the economic output of the country which is out to measure living standards and tells us how prosperous a country feels to its citizens. The X-axis are the periods and the Y-axis are the GDP vales. According to the world bank's database, Cameroon had the highest GDP per Capita income in 2018 standing at 1497.8USD and the lowest in 2009 standing at 1277.4USD. It was found to be so low because at that time Cameroon was still battling with the financial crisis which plagued her economy from the 80's. to the early 2000s which affected the economy of Cameroon. From 2009 through 2018 Cameroon as any other growing nation experienced a slow but progressive increase in GDP figures. The GDP per

capita in Cameroon was last recorded at 1497.8USD in 2018. During that last computation, the GDP per capita in Cameroon was equivalent to 12% of the world's average. GDP per capita in Cameroon averaged 1230.05USD from 1960 until 2018, experiencing an all-time high of 1829.20USD in 1986 and a very bad year in 1967 standing at 871.20USD. Using GDP per Capita as a proxy to measuring income levels. Being a measure of an average of what each Cameroonian earns, an improvement or an increase in GDP per capita will help in eradicating poverty (reducing to less than 10%) this is so because people will earn more as incomes, making the country become a middle-income country. Increased GDP means more is being produced internally there by improving upon industrialization and helping the country to becoming a newly industrialized nation and finally becoming an emerging nation by 2035 which are the hopes and dreams of the reigning government. A further increase in per-capita income meaning people's salaries will increase and many more people will at the same time earn incomes to achieve the objective of a medium income country.

4.3.2 Increase economic productivity

Increasing economic productivity is a specific objective the main objective of becoming a medium income country. Here, Gross domestic product (GDP) will be employed as a proxy to measuring this indicator. GDP is a monetary measure of the market value of all final goods and services produced in a specific time period in a given nation. It will clearly show how GDP figures have progressed over the years up to and including 2019. This proxy (GDP) indicates that as its value increases over the years it simply means that there is an increase in economic productivity and a drop or decrease in GDP figures means a downturn in economic productivity.

Figure 9: Gross Domestic Product



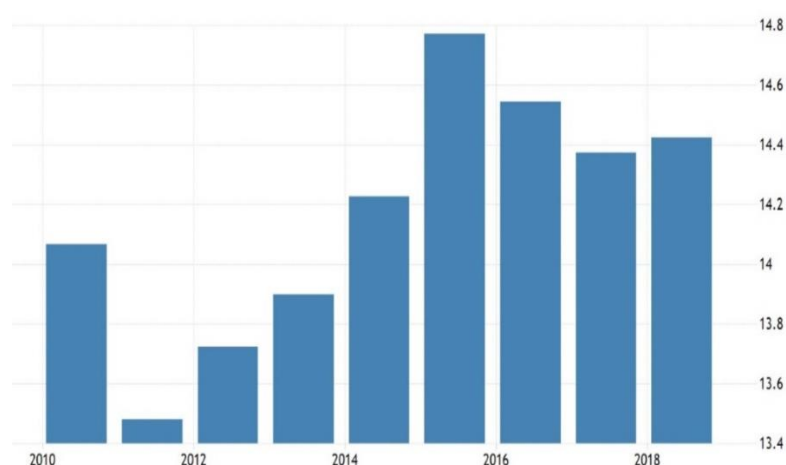
Source: Tradingeconomics.com (World Bank)

Figure 9 presents GDP values for Cameroon for the past 10 years (2010 to 2018). The X-axis represent the period (2010 to 2019) and the Y-axis represents GDP (Billion USD). As seen on the figure above, GDP figures have not really followed a steady part they have been good, fair and bad moments. The lowest was recorded in 2010 standing at \$ 26.14 billion and the highest in 2018 standing at \$38.5 billion and later dropped to \$38 billion in 2019. In order to maintain an increase in economic productivity, the government of Cameroon is called upon to implement economic policies that cause a positive impact of GDP e.g. fiscal and monetary policies.

4.3.3 Increase economic productivity by intensifying forest, agro-pastoral and fish farming, mining, exploitation

The proxy selected to represent the above specific objective is agriculture. Agriculture corresponds to the ISIC (international standard industrial classification) divisions 1-5 and includes forestry, hunting, and fishing including crop farming and livestock production.

Figure 10: Agriculture



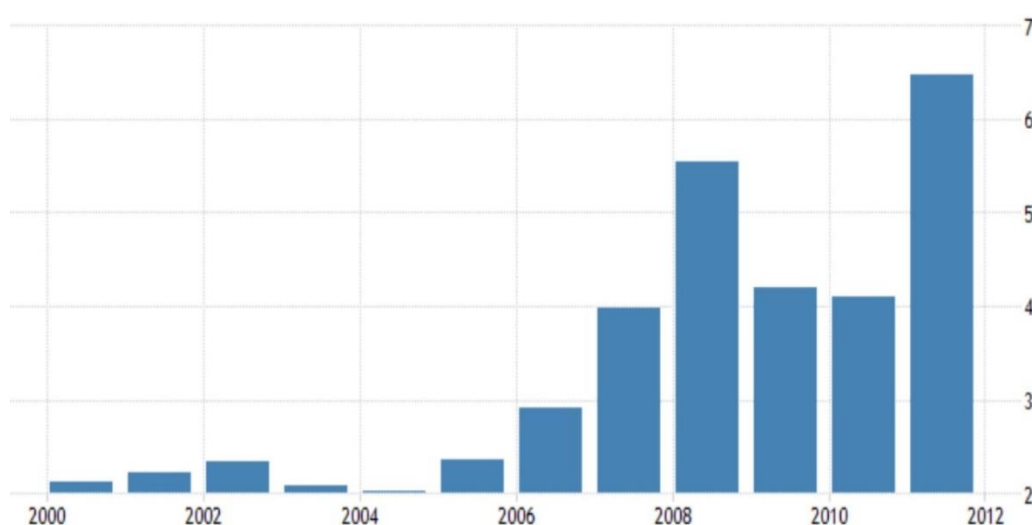
Source: Tradingeconomics.com (World Bank)

The figure above covers a period of 10years i.e. from 2010 to 2019. The X-axis represents the period and the Y-axis represent the percentage of agriculture to the GDP of Cameroon over the years (% value added). 2012 recorded the lowest percentage standing at approx. 13.45% and the highest in 2015 standing at approx. 14.77% and the actual percentage (2019) stands at 14.42%. it is important to note that agriculture is the backbone of the economy of Cameroon and the state is doing little or nothing to help support this sector with little or no financial support to the poor farmers who most often are able to get just what is sufficient to feed their families

4.3.4 Investment in infrastructure and production sector

Another specific objective is investment in infrastructure where we based our idea on gross public investment as the measure to investment in infrastructure by the government. Gross public investment can be defined as gross fixed capital formation by the government. These gross investments are the balance of fixed assets acquired and sold by the government. It is seen as a percentage. Public sectors' gross domestic fixed investment (gross fixed capital formation) is made up of all additions to stock of fixed assets (purchases and own account capital formation), less any sales of 2nd hand and scrapped fixed assets which are being measured at constant prices which is carried-out by government units and non-financial public enterprises. Most outlays by government on military equipment are omitted. Below is the figure which carried data about gross public investment in Cameroon.

Figure 11: Gross Public Investment



Source: Worldbank; tradingeconomics.com (2020)

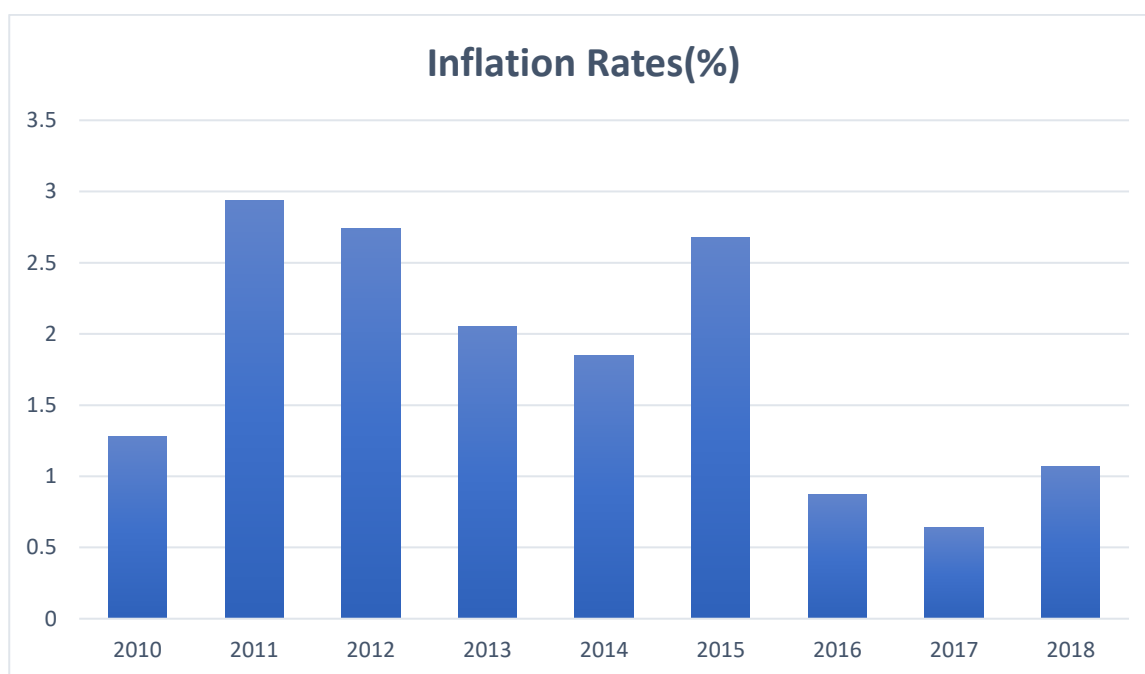
As seen from the figure above, the X-axis represents the year (period) and the Y-axis the gross public investment figures (%). From 2000 to 2006 the level of gross public investment by the state was very little. As is the case of most African countries before now, a lot of public funds meant for public investments/projects have been swindled by individuals for their personal use. But later on, various strategies were put in place in order to reduce misappropriation of public funds meant for investments and from 2006 to 2008 there was an increase in investment in the public sector of the economy. Around 2010/2011, the republic of Cameroon had some strike actions going on in the country which led to the destruction of lives and property which led to a slowdown in gross public investments. After 2011 till date, there have been a slight increase in levels of public investments. This part of the

analysis agrees to what Lundvall (2011) explained that major cities have as responsibilities to building the economy via public investments so as to help boost public investment in providing the needed resources for public and private investment in education, infrastructure and health, improved standards of living and alleviating poverty

4.3.5 Maintain macroeconomic stability (using inflation rate as indicator)

Economist defined inflation as the sustained increase in the general price level of goods and services in the economy at the given time period. While inflation rate is defined as the annualized percentage change in a general price index, usually the consumer price index over time. Economist generally believe that very high rate of inflation and hyperinflation are caused by an excessive growth in money supply.

Figure 12: Inflation Rate of Cameroon



Source: WorldData.info

As seen above, the X-axis represents the periods (2010 to 2018) and the Y-axis is the value of inflation over the years. The country recorded the highest inflation rate in 2011 standing at 2.94% and the lowest in 2017 standing at 0.64%. From 2010 through 2018, they existed series of fluctuations over the years and no steady increase or decrease in the inflation values.

4.3.6 Promoting changes and professionalization of services

The service sector is very important in the national economy as it accounts for close to 40% of the GDP of Cameroon over the years and thus, contributing to more than 60% of her total economic growth. The service sector provides 33% of the jobs most of which unfortunately are found in the informal sector. With such a structure, the service sector can not develop itself on a sustainable basis as this obeys more to the market needs rather development prospects likely to bring the productivity of its branches of activities (e.g. trade, transport, telecommunications, financial services, real estate and administration) to levels that can sustain economic competitiveness. An emerging Cameroon is marked by a service sector with an important place in the structured system, with the standards of scale economies, more consistent with other sectors in the production system and outward-looking, for example; financial transactions and tourism.

4.3.7 Promoting, extending and making use of research results (Investing in R&D)

Scientific research in Cameroon is carried-out by the ministry of scientific research and innovation which came into existence in 2004. In 2005, different divisions were created for promotion and innovation under decree number No2005/091 of 29th March 2005. This body which came into existence in Cameroon in the 20th century owes huge appreciation from three very important actors (Fouda, 2005) public research with over 500 permanent researchers (agricultural research institute for development, mineral and geology research institute, medical research institute and medical plants study institute, national education centre, national technology development committee and the national radioprotection agency. Another major player are state universities, private/mission universities as well as numerous professional schools which go over 30 in number with more than 200,000 registered students (bachelor, master and PhD with the goal of producing well educated national elites who will in the course and after their study contribute to national, regional and international development. And the third and last being international research organs with Cameroon being a host to quite a whole lot of them for example; research and development institute (RDI), African centre for research on banana and plantains etc.

A survey was carried-out in Cameroon demonstrated that 93,969 enterprises that could be found in the entire national territory but only 11.2% employees make use research and innovation avenues. This clearly explains why the country was poorly ranked by the world economic forum (WEF, 2013) ranking Cameroon 115 out of 148. According to Eloundou (2014), for Cameroon to emerge as a

developed nation by 2035 (the view of the reigning government), the government must place innovation at the core of all policies drawn up and it should strictly and properly follow up by innovation experts. He went on to add that Cameroon as a state as well as its nationals are not giving innovation that pride of place probably due to ignorance of its importance or lack of basic tenants to promote innovation. Also, the backbone of innovation is solely on new discoveries through research findings and it has been realized that a whole lot of Cameroonians shy away from any form of research work and very few people knowing about the existence of the ministry of scientific research and development (MINRESI). Eloundou concluded by saying that the government of Cameroon in her yearly budget assigns less than 1% for research and innovation as will be seen on the figures below simply indicating that innovation in Cameroon is still taking very short baby steps.

From the time of independence till date, the country has been fighting with growth figures to boast innovation in the nation but as seen in the table and figures above, not up to 1% of her national budget has ever been programmed for innovation. In as much as the present government see a brighter future in their vision 2035 dreams. It is important to note that the government of Cameroon sets goals which finally end up in books on shelves which will one day be destroyed for example they came up with very strong millennium development goals and still nothing was done as planned and nothing was achieved. Before long, they have now turned to a new vision of growth and emergence by 2035. The reigning government has now become unpopular in the quest for development and hence in the last 3 years there have been an un-going political tussle which has not only led the loss of the skilled and educated nationals but the destruction of infrastructure and a slowdown in the economy with numerous days of lockdowns. Hence, it has been realized that the government places little or no emphasis on demand and supply as well as social policies of a national innovation system.

Fouda (2005) explained that most multinationals who are established in Cameroon have no R&D centers which causes them to import R&D and innovation from abroad which is quite costly, and it doesn't help Cameroon grow in anyway because if they owned this research centers in Cameroon they will make use of numerous amenities thereby strengthening innovation and help in moving the nation forward. From further observations and on-ground discussions it is important to know that for the process of national innovation systems to grow and flourish innovation actors have a great role to play to move their dreams, believes and visions which is what accounts for what goes on there in.

4.4 Becoming a newly industrialized country

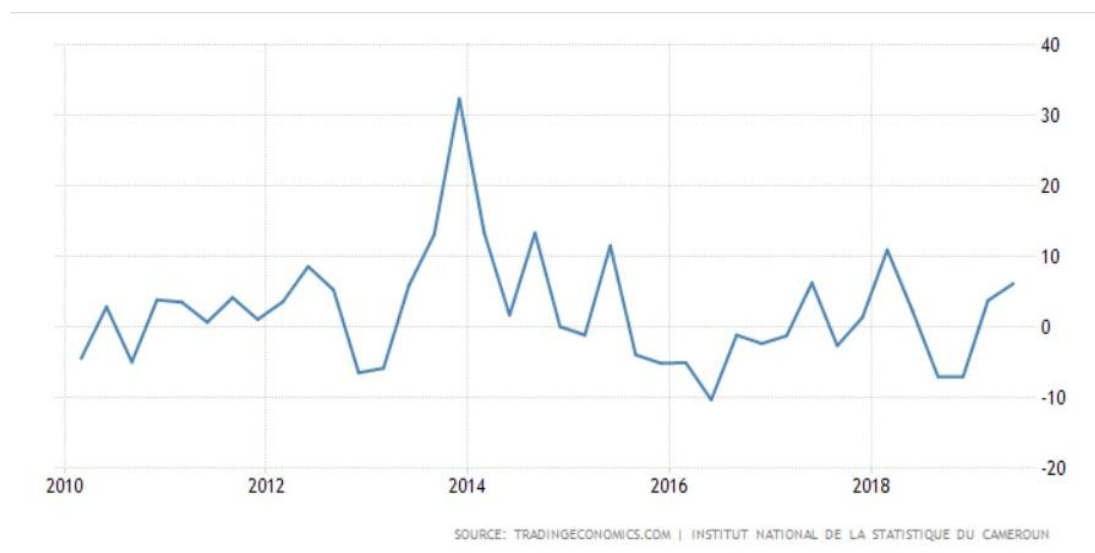
The aim of this section is to take a closer look at the second general objective of vision 2034, Cameroon becoming a newly industrial country.

3. Becoming a newly industrialized country By increasing industries in the economic pattern (most especially GDP and export figures)	<ul style="list-style-type: none">- Develop a sound, competitive and diversified manufacturing sector, that can transform the structure of external (export and import)- Collecting savings, finance growth and development.- Changing foreign exchange pattern and expanding markets- Getting absorbed in the international financial sphere and improving banking intermediation
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4.4.1 Industrial Production

Industrial production is a measure of output of the industrial sector of the economy. The industrial sector is made up of manufacturing, mining, and utilities. Although these sectors make up only a very small part of gross domestic product, they are highly sensitive to interest rates and consumer demand. Industrial production is strongly linked to the objective of becoming a newly industrialized nation. This goes on to be linked to the last objective which is becoming an emerging nation. As explained by the vision 2035 paper, becoming an emerging nation meant opening the doors to receiving foreign direct investment. When industrial production increases, it attracts investors most especially foreign direct index. Industrial production is linked to industrialization and hence, becoming industrialized means increase in production outputs and hence can be observed from industrial production figures.

Figure 13: Industrial Production



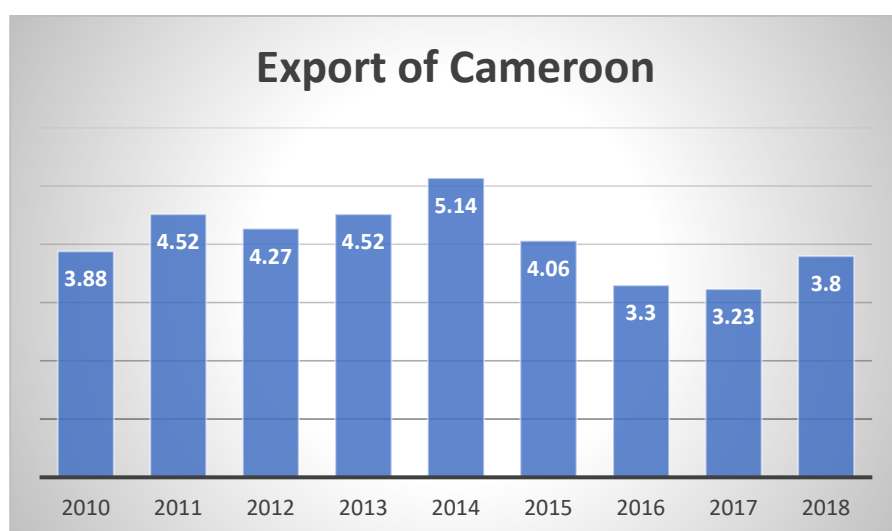
Source: Tradingeconomics.com

Figure 13 is on industrial production which is linked to one of the vision 2035 objectives of the republic of Cameroon (becoming a newly industrialized nation). The X-axis represents the year (2010 to 2018) and the Y-axis represents industrial production (%). Industrial production was highest in 2014 standing at 33.70% and lowest at the end of 2016 standing at -14.48%. In November 2009 the republic of Cameroon had some huge strike actions because of increased in fuel and food prices (<https://www.voanews.com/archive/cameroon-transport-union-ends-strike-violence-continues>). Around this same time Cameroon was still fighting with the global financial crisis (<https://www.voanews.com/archive/cameroon-hit-global-economic-crisis>) which caused a slowdown in industrial production which led to some after effects until 2013 after which by 2014. As seen on the figure above, there was slight decrease in industrial production and much lower around 2016 going to 2017 when the two anglophone regions were facing some crisis asking for independence from the French speaking part of the country. It is important to note that these two English speaking regions is involved in a lot of industrial production. Example of industry you can find in this area are the Cameroon oil refinery (SONARA), supermont (mineral water and soda), banana, oil palm & rubber (CDC delmonte), brasserie du Cameroun (brewery). An increase in industrial production will make the country become an industrialized nation and also improve on incomes earned.

4.4.2 Develop a sound, competitive and diversified manufacturing sector, that can transform the structure of external (export and import)

The first specific objective under becoming an industrialized nation is export and import levels. This section of the research will pay particular attention to export levels. If the industrial sector of a country is doing well, it will be able to cater for both the local and international market and hence, export levels could be adopted as a proxy to this specific objective.

Figure 14: Export of Cameroon



Source: Statista (2018)

The figure above present export values for Cameroon over the years. The X-axis is the denoted period (2010 to 2018) and the Y-axis export values (in billion U.S Dollars). Agricultural products and oil are predominantly in Cameroon's exports sheet. Petroleum accounts for more than 50% of the nation's total exports. Others include natural gas, cocoa beans, coffee, cotton, aluminum, iron ore, timber, rubber, banana and gold. Cameroon's main export partner is the European Union (45% of total exports). Others include: China and the United States. The values have been fluctuating and not taking a particular flow or pattern. The lowest value of 3.23 billion U.S dollars was registered in 2017 and the highest was registered in 2015 with an amount of 5.14 billion U.S dollars. The years 2011 and 2013 had same value of 4.52 billion U.S dollars. And the last year it was recorded was in 2018 standing at 3.8 billion U.S dollars as seen on the figure above.

4.4.3 Collecting savings, finance growth and development.

The low levels of investment are mainly caused by the challenges the country as concerns mobilizing domestic and external savings. This is attributable to: (i) insignificant public investments (ii) low level of mobilization and poor use of local savings (iii) lack of national capacity to attract foreign direct investments (FDI).

An emerging Cameroon is mainly marked by a very dynamic and diversified system of finance which is capable of accumulating scattered household savings effectively and preferably channeling them towards high-yielding sectors of the economy. A financial partnership and a particularly favorable institutional framework to attract capital from abroad. A total mastery of government spending on public procurements is reflected on public investment projects who experience a considerable increase in size and quality.

4.4.4 Changing foreign exchange pattern and expanding markets

Imports here is concerned with almost all consumer products, whereas exports are limited to oil products which make up more than half of such exports and just little cash crops. This structure makes imports less flexible and export revenue too volatile, leading to the high level of dependency on international market conditions.

As an emerging nation, the foreign balance of trade on manufactured goods is more favorable and their large export quantities give them great flexibility. Natural products are still explored and exploited, although economic prospects are more focused on international production sectors and the control of productive segments in which the nation asserts some kind of regional, and even global hegemony

4.5 Strengthening national unity and consolidating democracy by promoting the ideas of peace, freedom, justice, social progress and national solidarity

4. Strengthening national unity and consolidating democracy by promoting the ideas of peace, freedom, justice, social progress and national solidarity	<ul style="list-style-type: none">- Strengthen national solidarity.- Consolidate the state, guarantor of the general interest.- Promote the rule of law and the credibility of the justice system.- Ensure greater community participation of the population.
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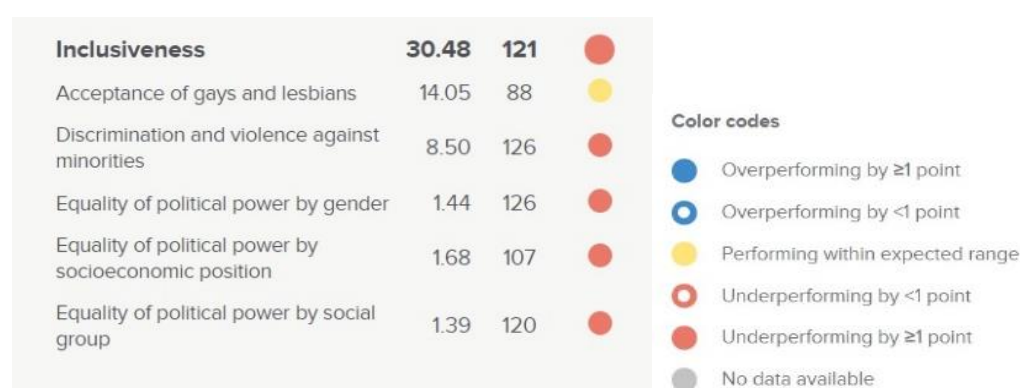
	<ul style="list-style-type: none"> - Consolidate social freedom (expression & association). - Reinforce the safety of persons and property. - Enhance decentralization and local development
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This particular objective looks mainly at how Cameroon as a state alongside her patriating nationals should strive maintain national unity no matter the language and cultural diversities, making sure there is peace, and everyone enjoys political, cultural, and socio-political freedom. With all this in place, they will social progress and finally the goal of becoming an emerging nation. Data on a couple of specific objectives will be analyzed below to see how this section of the vision 2035 as been progressing over the years.

4.5.1 Inclusiveness

Inclusiveness (social inclusiveness) is all about making people who feel the society doesn't want them to be felt wanted in could be people with physical or mental disabilities. It is important to note that even with their impediments they are still very important to the society and have a role to play n matter what. This part of the analysis goes on to strengthen the main objective as well as the specific objectives the Cameroon's vision 2035 plans which was put forward by HE President Paul Biya and his cabinet ministers.

Figure 15: Inclusiveness



Source: Social Progress Index (2019)

As seen above on figure 15 of SPI of Cameroon for 2019, inclusiveness was scored 30.48 and ranked 121. Reading from figure to color code and back to figure, inclusiveness for Cameroon is underperforming meaning that the society doesn't fully accept those who many see as abnormal

(gays, lesbians, women fitting in political seats and a lot more). Acceptance of gays and lesbians is performing just within the expected range. The rest of the components of this figure are underperforming meaning that there exist a wide range of discrimination which still exist till date. There is a believe that everyone has a whole lot to contribute to the growth and development of his or her nation no matter whatever social, gender differences.

4.5.2 Ensuring greater community participation of the population

Talking about this will be some sort of repetition and hence refer you to 4.2.1 of this thesis which talks of the same thing (making sure the population is activity participating in the vision 2035 plans)

4.5.3 Consolidating social freedom (expression & association)

Social freedom here talks about giving everyone equal opportunities to express themselves the way they want. From the social progress index (2019) figure for Cameroon, two components will be selected which will act as a proxy to the above specific objective the selected components are personal and personal freedom & choice. Appendix A includes the full Social Progress Index for Cameroon 2019. Below is a part of the social progress index (2019) of Cameroon which provides information about these two important specific objectives.

Figure 16: Personal rights and personal freedom & choice



Source: Social Progress Index (2019)

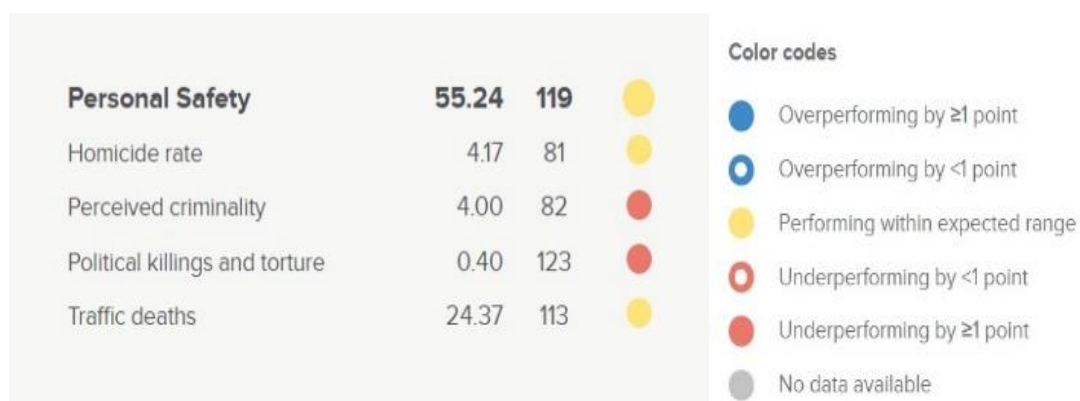
As seen from the figure above, opportunity as of 2019 had a score/value of 34.39 and ranked 130. Working from figure to color code and back to figure, personal rights in itself is underperforming

meaning that people's personal rights are greatly violated. Under personal rights, political rights, freedom of expression and access to justice are all underperforming meaning that there is little or no political freedom, no freedom of expression and a poor justice system which is exactly what the poor masses face back home. Freedom of religion and property rights for women are both performing within the expected range meaning that people are free to worship anywhere and also it is not so much of an issue for women to own property unlike in some other African societies. Now to personal freedom and choice which is also underperforming. Beneath that we have vulnerable employment and corruption which are also underperforming meaning there exist a lot of people with indecent and inadequate working conditions and there is high degree of corruption in the economy of Cameroon especially in the public sector. Early marriages and satisfied demand for contraception are both doing well.

4.5.4 Reinforce the safety of persons and property

This can be captured under the heading basic human needs as seen on the social progress index (2019) for Cameroon. As we all know, the safety of persons and property's is just as important as any other basic human need. Personal safety is the proxy that will be used to represent the next specific objective of the vision 2035 plans for Cameroon. Appendix A includes the full Social Progress Index for Cameroon 2019.

Figure 17: Personal safety



Source: Social Progress Index (2019)

As seen above, personal safety as at 2019 had a score/value of 55.24 and was ranked 119. Reading from figure to color code and back to figure, it is observed that personal safety is performing just at

its expected range. Beneath it, homicide and traffic deaths are performing at just the expected range but for perceived criminality and political killings & torture which are both underperforming.

4.6. Summing up

The main findings were simply revolved around the main and specific objectives of the vision 2035 of the republic of Cameroon. Observing the level at which the selected objectives she hopes to achieve are right now and proposing policy recommendations as to what can be done to help the situation. From the above figures, it is seen that the country is facing serious development issues and it is through building a good national innovation system that things will get better. The main and specific objectives of the vision 2035 plan is exactly what the leaders see as an escape route to emergence which they hope to achieve within a projected anticipated period (by 2035). The objectives just presented the many things which the leaders and her nationals have to take into consideration as to look forward to the new face they hope to achieve. It is important to note that not all the objectives could get proper analysis but with some cases, proxies could be employed for the analysis to be done even though not all totally fits but with the figures and analysis the research presents, a lot still has to be done to be able to make 2035 that year of economic turnaround for the democratic republic of Cameroon.

Chapter Five

Policy Implementations

5.1 Introducing National Innovation Policies

This chapter of the thesis deals more on what the government of Cameroon is to do to achieve her vision 2035 plans in terms of what policies to adopt. Here, we talk about the demand side innovation policy which explains what the government needs to put in place as concerns policies so more of innovation will be demanded. The next is on supply side innovation policy which talks on the use of fiscal incentives by the state to manage her innovation systems. Then to social innovation which looks more at social challenges and how innovation policies can help take care of that. And finally, the chapter ends with the vision 2035 objectives of the republic of Cameroon and her plans on how things will be sorted out.

5.1.1 Demand Side Innovation

These are instruments used communities to help improve upon innovation demand and make innovation commitments better and innovation dispersions. Meaning that the goal for demand-side innovation policy is finding out new ways to create innovation demand in any given society. Elder and Georghiou (2007) defined demand side innovation policy as public measures used to induce innovations and/or catalyse the spread of innovations via an increase in the demand for innovations. The major impacts of demand upon innovation include:

Selection: demand as a `selecting mechanism` in an evolutionary process.

Feedback: users/markets always provide feedbacks to be used as a mirror to improve on innovation.

Stimulation: expected markets which help stimulate the creation and spread of innovation.

Innovation/co-innovation: consumers as innovators / co-creators.

Schmookler (1996) added that large scaled markets can cause a reducing effect on the uncertainties of the process of innovation thereby making suppliers enjoy economies of scale i.e. the benefits you get when you produce in large quantities. Malerba, Nelson et al in (2007) there exist a mix between demand structures and the innovation process in a more dynamic/changing way. The organization for economic cooperation and development (OECD) explained that it is not much of a challenge to creating innovation with the use of theories of demand-pull innovation but for it to function as it should, the demand for innovation is of uttermost importance meaning that for any given market

opportunity created, market demand is out to set a clear path in such a way that resources are going to be allocated to different innovations that will be accepted and liked by all. These policies are employed to bring together innovation mediators as well as societal gains and common benefits. According to Aho et al (2006) demand-side innovation policies has in the past been an important concept used by many. In 2006, the Finnish presidency group of experts headed by Mr Esko Aho documented some very important points on why the initiative of the demand-side innovation should be protected and of course supported by governments/stakeholders and lead market creations. After looking at the demand-side innovation policy it is time to move on to the supply-side innovation policy and then finally to the social innovation policy thereby touching all angles of innovation policies.

5.1.2 Supply-Side Innovation Policy

Supply side innovation policies involves the use fiscal incentives (e.g. tax credits on raw materials, supplies and semi-manufactured products, additional deduction from taxable income for labour expense etc.) and a direct support to R&D and innovation, support to access to finance of innovative ventures, skill upgrade and human resource policies, entrepreneurship policy, technical service and advice. Cluster, collaboration and networking policies. Miles and Rigby (2013) “explained that technology push and market pull accounts for the oldest schemes in innovation studies. Technology innovation on the one hand lays emphasis on research findings as well as firm’s innovative activities, wherein producers in all means possible seek to satisfy consumers’ insatiable wants and needs. On the other hand, market pull presents another idea that the call for innovation is mainly from consumers’ needs which is expressed via market demands.”

Miles and Rigby (2013). They said that it is the main engine that drives the concept of innovation but of course contributes differently in the types and outcomes of the innovation process. They pointed out that technology push ties to radical innovation (doing what you used to do but now doing it completely differently) and market pull has elements of incremental innovation (doing what you used to do but this time around a little better)

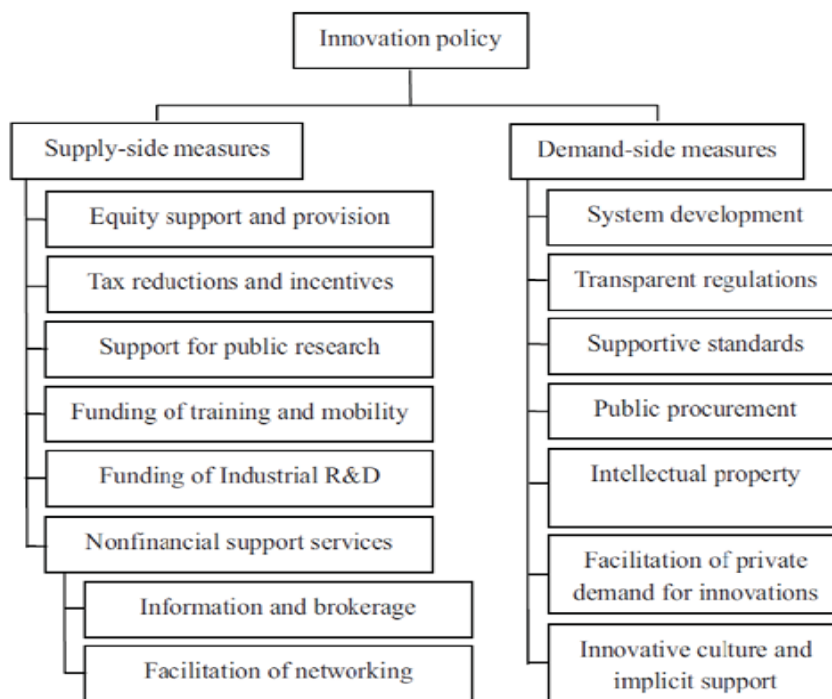
5.1.3 Social Innovation Policy

Social innovation policies are the new social practices that target social needs in a preferred way than existing solutions which are outcomes from working conditions, education, community development and health. This body of knowledge came to the lamplight with the primary objective of extending

and strengthening civil society. According to the Stanford social innovation review (2015), social innovation is seen to be all the efforts put forward to completely wipe out social problem (famine, poverty) which is more effective and efficient whereby the impact it creates and spreads to the entire public and not just to private individuals. Hochgerner (2012) explained that this concept possesses a lot of uncertainty as what it really is, how it came into existence and what they present. Hence, very little has been documented about this concept.

Conclusively, the above presents some selected national innovation system policies and this policies act as roots to locating innovation pattern to help promote national innovation system performance. Below, figure 8 presents innovation policies as a two-sided arm of demand and supply-side innovation policies.

Figure 18: The division of innovation policies



Source: Aho et al. 2006; Edler, Georghiou 2007.

According to Chaminade, Lundvall and Haneef (2018) in chapter 9 of a book section titled innovation policy and national innovation systems. They explained that innovation policies are of paramount importance in any innovation system since in most cases innovation policies are aimed at fostering new technologies. Another great contribution on innovation policies came from Mazzucato (2016) in her 35-page article titled “from market fixing to market-creating: A new framework for innovation policy”. She came up with a couple of innovation policies that most economies who plan on

innovating must take into consideration. For the purpose of this research just a few will be looked at. The first she made mention of was on societal challenges and opportunity driven investments where she explained that most innovation agencies are charged with the increasing burden to coming up with innovation policies that go a long way to eradicate most societal challenges such as cancer, climate change, as well as an aging demography. She went on to add that this so-called innovation agencies are charged with the duty of implementing innovation policies that will take care of this societal challenges and opportunity driven investments. Another point on innovation policies by Mazzucato was on market failure wherein she explained that the public contributes to its correction if it has something to offer (innovation policies) but it is most corrected by the government putting in place different innovation policies to help revamp the situation.

5.2 Vision 2035 and Innovation Policy in Cameroon

After looking at the level in which Cameroon stands now as per its performance indicators as well as the proposed possible SWOT analysis by Eloundou (2014) it is high time we look at what the Cameroon government has in stock for its nationals. In December 2008 after numerous deliberations by President Paul Biya and his cabinet ministers and policy makers, they finally arrived at certain conclusions as concerns the country's growth and emergence by 2035 (innovation) as a new year wish on the 31st of December 2008 the president addressed the nation and promised them greater things ahead with 2035 being the period whereby all or almost everything will finally materialise and emergence will be the final outcome. In February 2009 the ministry of economic planning and regional development produced a working paper which carried every adoption of the version 2035 and it was titled Cameroon Vision 2035. It was a 10-page document with four major headings (stakes, the vision and its objectives, implantation strategies and threats, risks and obstacles). It ended up with some government declarations. For the purpose of this research our focus will be on the vision and its objectives.

The vision 2035 of Cameroon becoming an emerging nation by 2035 isn't the hope of just the president but the entire nation. The main goal is for the country to be an emerging, democratic and united in diversity as we all know Cameroon is a country with over 25 million persons who are bilingual with 250 ethnic groups who have different languages and cultural diversities. The vision will be built on past research findings, knowing the needs of the people, what they aspire for and most especially that which is needed by all to making life comfortable. Below is a list of items that the government of Cameroon hopes to achieve for her citizens:

- A united and indivisible nation enjoying peace and security
- A true, strong and fair democracy
- A decentralized administration at the service development
- A prosperous economy with good infrastructure
- An economy based on sub-regional, regional and global integration
- Controlled population growth
- A nation that promotes gender parity in electoral processes and equality in elective positions
- A socially and economically empowered woman
- A stable and harmonious family
- Access to basic and quality social services by all
- Independent and accessible judiciary
- Minimal poverty, illiteracy and social exclusion rates
- An attractive Cameroonian culture united in diversity and assertive at the international level
- Low unemployment and underemployment rates
- Well trained youth exalting merit and country's expertise
- A fair distribution of resources between urban and rural areas and between various regions of the country.

Conclusively, governments initiative does not directly relate to the innovation policies but a few of her objectives both main and specific objectives has some aspects of either the demand side innovation policy, the supply side or the social innovation policy. So, one can conclude by saying that the objectives of the vision 2035 plan partially relate to the innovation policies.

Chapter Six

Conclusion and Recommendations

6.1 Conclusions

This study had principally 2 main research questions i.e. what is the current state of Cameroons' vision 2035 plans? And What is the way out/forward (Recommendations). This section of the conclusion will be in two separate parts i.e. presenting and discussing of main findings from the main objectives of the vision 2035 objectives and the last section is just a general conclusion on the entire research work.

As seen in the analysis chapter, the planned objective is left with just 15years to go but a lot is still left to be done. As at now, many of the objectives are far from being realized partially because they are not given proper attention and financing. With the current status, the country is yet to feasibly take off as concerns emergence a lot still needs to be done. As concerns the level of development, they have been some improvements in some sectors of the economy on the side of education and investment. Many more schools have been created with many more masters and PhD student who eventually add up the skilled labor force. The expectations of the government are captured in the 4-main objectives of that vision as well making Cameroon one and individual despite her cultural diversities.

As concerns poverty reduction to a socially accepted level (less than 10%), that particular objective hasn't fully taken a positive slope yet as it is marked by series of ups and downs. Things are seeming more difficult with the recent out-break of the covid-19 which is making Cameroon envisage a virtual 3% drop in GDP because of a fall in oil prices. But we all know, we still have 15 years to go and the government of Cameroon is hoping for the best before 2035. The next main objective was becoming a medium income country which was captured with GDP per Capita for Cameroon from 2009 to 2018. Over the years, GDP per capita values have been increasing slowly but steadily which gives a positive impression of the country emerging by 2035. Even a that, more needs to be done so as to get better values to be able to achieve growth and emergence by 2035. The third objective is becoming a newly industrialized country. This was captured with data on industrial production. The data was recorded from 2010 to 2018, it is was realized that before 2014 industrial production was still suffering and took a sharp increase in 2014 and later started declining after 2015 and since then has

not done so much this is partly because of the current and un-going anglophone crisis which has affected a great part of the industrial region of Cameroon. And the last main objective is strengthening national unity and consolidating democracy by promoting the ideas of peace, freedom, justice, social progress and national solidarity. This last objective simply looks at how Cameroonians are to look out for their fellow man from state officials to the common man respecting people's needs, wants and social values. It was concluded that so many people are not at all respected especially the common man.

In conclusion, it has now been 10 years and a few months into the vision 2035 plans which was designed for Cameroons' emergence plan (implanted January 2009) with 15 years still to go, but till date very little has been done as seen above knowing what the nation carries within and what it is capable of producing with the available resources but human and natural resources. In the last couple of years, the country has been investing in heavy war weapons to fight the terrorist boko haram and now they are fighting another war against the separationist group called AMBAZONIA which has already lasted for three years now. With this war going on, the areas affected are facing serious economic crisis because of countless lock downs with a high level of destruction of both infrastructure and inhabitants especially the youths who are the future of the nation. But with the way things are going on in the country especially with the present political uprising plaguing the only two English speaking regions which has slow down economic growth and loss of many lives with the destruction of important facilities like the Cameroon oil refinery (SONARA), the banana, plantain and palm farm (CDC delmonte). According to OEC 2019, 30% of Cameroon's GDP is gotten from crude oil and 7.2% is gotten from banana which have been greatly tampered with over this 3 year of the anglophone (English speaking) Cameroonians. With all this going down, it takes along with-it employment levels since most CDC and SONARA workers lost their jobs, GDP per capita is also greatly affected along others. Even though the other regions have no major issue, the two anglophone regions under crisis is the home to most of the country's natural resources, wildlife, natural seaport, agriculture.

As we know, the government of Cameroon, her institutions and firms (private, parastatals) who make up the actors of the national innovation system have as an obligation or a duty of making sure that the national innovation system is well fed and is functioning properly but with the case of Cameroon until 2019 only 1.6% (Government of Cameroon, 2019: Bill No. 1041/PJL/AN on the Finance Act of the Republic of Cameroon for the 2019 financial year. Yaoundé: National Assembly.) of her budget was set aside for innovation which is not sufficient. R&D is one of the key facilitators to innovation

and it is very much lacking in Cameroon with very few Cameroonian leaders being patriotic and concerned about the national innovation system of the country most of them are good at just swindling public funds meant for research & innovation, state projects and a lot more.

According to shitang and binla (2019), *“all hope is not lost as Cameroon remains the giant in central and west Africa in terms of natural resources and standard of learning being the only bilingual nation in Africa. For her to attain her desired level when it comes to a strong and efficient national system. It should be noted that for Cameroon to attain the level of development worthy of her status and natural resources, there is need for a performing and productive institution, a good and solid educational system and the encouragement of a win-win collaboration or partnerships amongst actors and other states which is the trend out there in the world with the present state of globalization”* (p.42). For Cameroon to attain the level that matches her resource availability, skills present in the country her leaders need to think of welfare of the citizens more than themselves to increase quality of life using social progress index as the measuring stick. Leaders and actors also have to focus on resource management to improve on gross domestic product per capita and as income earned per head increases it only means poverty levels are going down and hence there will be a push in demand causing industries to produce more and hence, pushing the country to becoming an industrialized nation. The selected objectives are what the leaders feel is lacking for the country to move from where it is right now to where they hope to be by 2035 (growth and emergence). It is important to note that realizing the stated objectives shouldn't be seen as the affairs of just the leaders but also a national affair meaning that all Cameroonians but at home and abroad have to put in their all so as to make this dream come through.

6.2 Recommendations

The second research question is: What is the way out/forward (Recommendation). This part of the recommendation is a direct response the second research. After looking at the results obtained and its analysis as well as the SWOT table designed for this case, it is time we get to look at possible policy recommendations which stakeholders are to adopt. A well-structured research work ends with recommendations on what can be done to obtain better results on the subject under investigation. Based on the challenges observed in the course of the research process which acts as a hindrance to performance indicators of a national innovation system to function properly so that the economy moves forward. In line with the SWOT analysis, inspiration and knowledge gained from national systems of innovation by earlier writers like Lundvall (1992, 2007), Fouda, (2005) on the role of

foreign direct investors in scientific and technological capacities of developing economies, Gregersen and Johnson (2006) innovation system performance, Eloundou, (2014) innovative competition amongst Cameroonian enterprises and the development of innovation in Africa. Performance indicator figures of the national innovation system of Cameroon would have been better if much was done to help improve on the national innovation system of Cameroon.

National innovation system as a concept has gained large contribution from different authors. It is important to note that Cameroon is still wanting, and this explains why the country is still underdeveloped until now almost 60 years after her independence which is solely because the key actors of national innovation systems in Cameroon are doing little or nothing to help improve on the system. Eloundou in his 2014 research work explained how the government of Cameroon in 2004 created a ministry in charge of scientific research and innovation whose main goal was to oversee and make sure that all useful research carried-out should be used to improve on the sectors involved with innovation practice. Hence, the above and many more made me go on to proposing some recommendations to the various actors which if properly implemented will almost if not completely shut down the obstacles slowing down innovation processes in the national territory and of course guarantee an emerging Cameroon in the year 2035. The possible points to be considered to build a proper policy recommendation will be obtained from policy implications, NSI-OECD figure (figure 1) and some points from the SWOT table. Below are a couple of points to be considered:

➤ **Demand - side innovation policy**

It is out to support and increase the involvement of the society in innovation activities. They can involve legislation increasing consumer confidence in innovative products, safety regulations, standards or public procurements. This demand-side tools goes on to complement the supply policy tools e.g. public funding schemes.

➤ **Supply - side innovation policy**

Here involves the use of government fiscal policies and direct R&D support, access to innovative ventures, entrepreneurship policy. When states have this in mind it will go a long to help her build bridges and make the struggle for innovation to thrive.

➤ **Social innovation policy**

Social innovation is based on how states use social innovation policies to solve social problems as famine, poverty. If the government of Cameroon wants to succeed with its innovation plans it must consider social innovation.

- **Employing some elements from the OECD figure:** As seen on the OECD figure of 1997, if Cameroon intends to strengthen her national innovation system so it operates at full or almost full capacity, she has to focus more on universities and research institutions for new information (knowledge innovation), also focus on intermediary organizations for service innovation, the government is also an important factor i.e. system innovation and finally enterprises where we look at the international environment, innovation environment, innovation resources and innovation mechanisms.
- **SWOT Analysis:** Using the SWOT table of Cameroon to build on some policy recommendations i.e. if the government of Cameroon can identify her strengths, weaknesses, opportunities and threats taking into considerations the points mentioned in the SWOT table in chapter four of this research work, she will go a long way to improve the performance of her national system of innovations hence making the country a target for foreign investments and emergence by 2035.
- **The private sector:** The private sector of any economy is very important, and they play a vital role in economic progress and development. The government of Cameroon in her support to the private sectors growth should provide an enabling environment for them (tax reduction/holidays, supporting their R&D plants, providing them with government subsidies)
- **Base for knowledge creation:** innovation is an outcome of continuously learning and wanting to know new knowledge and ideas. As educated persons we are made to understand it is only through an educational milieu that more knowledge can be created and diffused. Knowledge can be created in educational institutions especially higher institutions of learning as well as research centres. It is also important to note that these higher institutions of learning as well as the research centres need funds to support their smooth running. Cameroon is very much lacking behind because the government fails to motivate her researchers there are frequent strike actions which take place in our home universities just because lecturers research allowances have not been paid for many years and the almost absence of research facilities. If the government of Cameroon could better manage their knowledge base by fully paying research dues in time, provide proper research facilities (science labs for the science students, well equipped libraries for the arts and social science students, providing a body that

assist students get internship programs easily in the course of their study program so they can easily merge theory with practical.). if this is well sorted, development will be the next thing to talk about.

6.3. Further research

For the purpose of further research, other researchers can also look more into other performance indicators I didn't mention here. The most important thing to note is that globalization brings in competition from abroad. With this, it is quite difficult for Cameroon to become innovative and catch-up with the likes of Denmark, Sweden, Britain etc they are quite far ahead, and Cameroon is still right far at the back and as she strives to catch-up, they go further. So, competition is the main part of globalization that affects the NSI of Cameroon. Also, more research should be carried-out at the level of comparing Cameroons' level of emergence and economic with those of other nations with same resource type and statue.

Appendix

Concepts

So far, much has been presented from two very important chapters of this research work (General introduction of the topic and Case and Methodology i.e. how the research collected data, how it was analyzed to obtain results). This new chapter goes ahead to present different concepts and bodies of literature that was reviewed which will be used in the later chapters for analyses. Researchers review literature in order to get different ideas from their predecessors who had already worked on similar topics so it acts as a torchlight in the dark and of course make their own research work come out outstanding as well as what can be relied on and considered valid by readers, other research and stakeholders and organizations. For the purpose of this work and time with page number being limiting factors, just a couple of NIS concepts will be talked torched, and a few but very important literature was identified which had a lot to tell concerning the topic under investigation

Poverty

Poverty is not having enough material possessions or income for a person's needs. Poverty may include social, economic and political elements. Cathkin High School Modern Studies in an artwork titled poverty in developing countries defined poverty as the state of someone lacking some amount of money and/or material possessions. The United Nations defined poverty as *"the inability to getting choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic to go to, not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living in marginal or fragile environments, without access to clean water or sanitation."* According to the habitat for humanity Great Britain (2017) in an online release (<https://www.habitatforhumanity.org.uk/blog/2018/09/relative-absolute-poverty/>) defined poverty as not being able to have enough financial resources to having a decent standard of living; be the lack of access to healthcare, education or water and sanitation facilities. This body added that in the UK, poverty was defined as being primary and secondary. The primary definition looked into as those who just have the means to meet the basics needs of livelihood which can be termed living below the poverty line. The secondary poverty occurs when people just earn that which is sufficient for the basic needs of life but spend it on "coping mechanisms" so as to deal with financial and work-related stress.

There exist two types of poverty:

- **Absolute or Extreme Poverty:** This occurs when household incomes go below a certain desired level making it impossible for a person or a family to meet the basics needs of human life; shelter, clothing, safe drinkable water, education and healthcare.
- **Relative Poverty:** This occurs when households receive 50% less than average household incomes, so they still have some reserve which in effect is still not enough to afford for the basics needs of life. It is important to note that unlike absolute poverty, relative poverty can change depending on the economic growth of the country.

Poverty is simply measured by observing people's income or consumption levels. If someone's consumption or levels of income falls below the minimum level needed for the necessary basics needs of life. This minimum is termed the **"poverty line"**. It is important to note that this poverty line varies with time, space and with different countries.

Gross Domestic Product-Per Capita (GDP)

Simon Kuznets (1950) used two different ways to express his understanding of real GDP which are accounting on national income and aggregate factor inputs. In 2008, the OECD a well-known organization defined GDP to be a standard measure of value of a country's final goods and serviced produced in a period subtracted from import. They went on to add that this sub-section of the national account has three distinct parts i.e. GDP values gotten mainly from the nation's output excluding exports (output GDP), that from national expenditure excluding imports (expenditure GDP) and finally GDP from income excluding income earned from abroad (Income based GDP). Worldometer went on to propose a definition as well as a table on GDP for different nations. They defined GDP Per Capita mathematically as GDP divided by the total population of a country at a time period. In general sense, GDP Per Capita is incomes earned per head by individuals in a nation but excluding all incomes from abroad.

Industrial Production

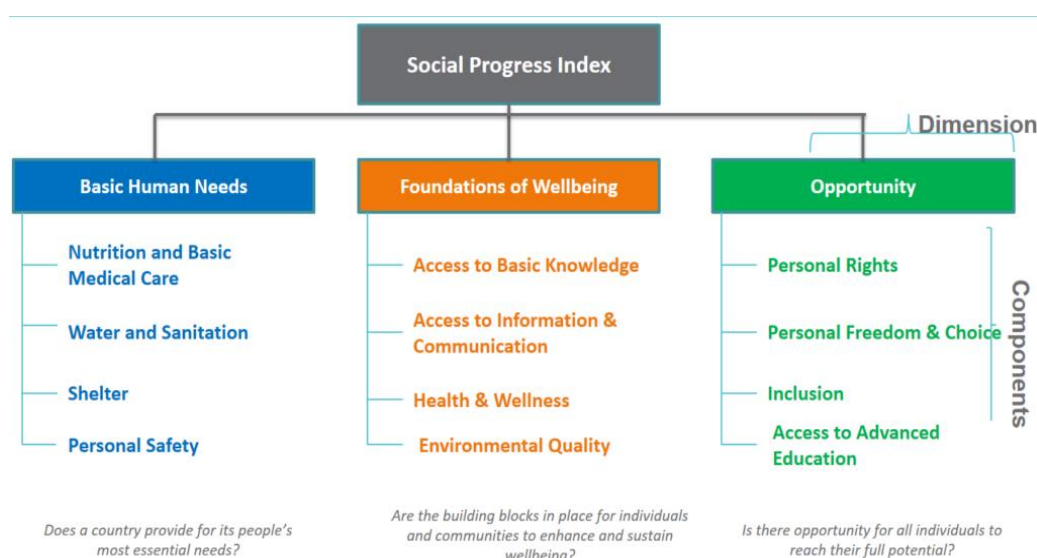
According to the organization of economic cooperation and development industrial production refers to the output of industrial establishments which covers sectors of manufacturing, mining, electricity, gas, steam and air conditioning. This indicator is measured in an index based on a reference period

that expresses the change in volume of the production output. (<https://data.oecd.org/industry/industrial-production.htm>).

Social Progress Index

According to Scott Stern & Tamar Epner (2019) defined social progress index “as the capacity of a society to meet basic human needs of its citizens, establish building blocks and allow citizens and communities to enhance and sustain the quality of their lives and create the conditions for all individuals to reach their full potential.” Porter and Keohane (2015) added that SPI is a unique and comprehensive framework which was employed for measuring social progress which was done independently of GDP and other economic indicators. This growth concept has been existing since 2013 and was out to speed-up improvements and steer stakeholder actions whereby data from social outcomes can be properly presented in a useful and reliable way. This concept can go a long way to tell the state of wellbeing of individuals independent of economic indicators meaning that it is an entire body of knowledge on its own and does not depend on economic indicators for decision making. Policymakers, businessmen, and citizens can employ it with the use of different facets of social progress comparing their nation with other nations not forgetting to always consider specific areas of strength or weakness. As seen in the figure below, SPI is made up of three major headings which are also called dimensions (basic human needs, foundation of wellbeing and opportunity). Going further, under each major heading are four subheadings called components.

Figure 19 Social Progress Index Component-Level Framework



Source: adapted from Scott Stern and Tamar Epner, 2019

Appendix A

Figure 20: Social Progress Index of Cameroon 2019

	score/ value	rank	strength/ weakness		score/ value	rank	strength/ weakness		score/ value	rank	strength/ weakness
Basic Human Needs	54.86	121	<div></div>	Foundations of Wellbeing	54.86	121	<div></div>	Opportunity	34.39	130	<div></div>
Nutrition and Basic Medical Care	63.25	121	<div></div>	Access to Basic Knowledge	71.30	103	<div></div>	Personal Rights	55.58	114	<div></div>
Undernourishment	7.30	74	<div></div>	Adult literacy rate	71.29	108	<div></div>	Political rights	7.00	121	<div></div>
Maternal mortality rate	299.47	134	<div></div>	Primary school enrollment	95.81	78	<div></div>	Freedom of expression	0.48	115	<div></div>
Child mortality rate	84.00	137	<div></div>	Secondary school enrollment	47.30	103	<div></div>	Freedom of religion	3.52	69	<div></div>
Child stunting	30.68	110	<div></div>	Gender parity in secondary enrollment	0.86	124	<div></div>	Access to justice	0.23	140	<div></div>
Deaths from infectious diseases	472.20	134	<div></div>	Access to quality education	2.47	66	<div></div>	Property rights for women	4.39	72	<div></div>
Water and Sanitation	50.75	122	<div></div>	Access to Information and Communications	47.69	122	<div></div>	Personal Freedom and Choice	40.30	130	<div></div>
Access to at least basic drinking water	60.38	133	<div></div>	Mobile telephone subscriptions	83.71	116	<div></div>	Vulnerable employment	73.75	123	<div></div>
Access to piped water	39.71	118	<div></div>	Internet users	23.20	115	<div></div>	Early marriage	22.00	117	<div></div>
Access to at least basic sanitation facilities	39.08	124	<div></div>	Access to online governance	0.33	116	<div></div>	Satisfied demand for contraception	48.00	116	<div></div>
Rural open defecation	14.06	94	<div></div>	Media censorship	1.73	112	<div></div>	Corruption	25.00	130	<div></div>
Shelter	50.21	122	<div></div>	Health and Wellness	47.95	119	<div></div>	Inclusiveness	30.48	121	<div></div>
Access to electricity	61.40	119	<div></div>	Life expectancy at 60	16.95	128	<div></div>	Acceptance of gays and lesbians	14.05	88	<div></div>
Quality of electricity supply	2.22	122	<div></div>	Premature deaths from non-communicable diseases	436.28	94	<div></div>	Discrimination and violence against minorities	8.50	126	<div></div>
Household air pollution attributable deaths	5718	106	<div></div>	Access to essential services	53.01	117	<div></div>	Equality of political power by gender	1.44	126	<div></div>
Access to clean fuels and technology for cooking	23.04	112	<div></div>	Access to quality healthcare	1.37	112	<div></div>	Equality of political power by socioeconomic position	1.68	107	<div></div>
				Environmental Quality	52.50	126	<div></div>	Equality of political power by social group	1.39	120	<div></div>
Personal Safety	55.24	119	<div></div>	Outdoor air pollution attributable deaths	54.99	138	<div></div>	Access to Advanced Education	11.21	113	<div></div>
Homicide rate	4.17	81	<div></div>	Greenhouse gas emissions	548.38	96	<div></div>	Years of tertiary schooling	0.96	93	<div></div>
Perceived criminality	4.00	82	<div></div>	Biome protection	9.80	99	<div></div>	Women's average years in school	4.70	113	<div></div>
Political killings and torture	0.40	123	<div></div>				Globally ranked universities	0.00	83	<div></div>	
Traffic deaths	24.37	113	<div></div>				Percent of tertiary students enrolled in globally ranked universities	0.00	81	<div></div>	

Key




Color codes

- Overperforming by ≥1 point
- Overperforming by <1 point
- Performing within expected range
- Underperforming by <1 point
- Underperforming by ≥1 point
- No data available

Source: Social Progress Index 2019

Social progress index is a measure of the degree to which a country provides for the social and environmental needs of her nationals. Fifty-four indicators in the areas of basic human needs, foundations of well-being and prospect to progress presents nations relative performance. The scorecard is an instrument employed to measure SPI by countries. The scorecard indicates the relative strengths and weaknesses of countries when they are compared to 15 other peer countries with a similar GDP per capita. For the case of Cameroon as seen on the figure above employing the 3 tiers, I will spot just the sub-headings directly beneath the 3 tiers of basic human needs, foundations of wellbeing and opportunity. As at 2019 under basic needs, Cameroon has a score/value of 54.86 and ranked 121 having a yellow dot meaning in 2019 Cameroon is currently running on normal performance as indicated by SPI. Under basic human needs we have nutrition and basic medical care with score/value of 63.25, ranked 121 with a yellow dot as well; the next we have is water and sanitation with score/value of 50.75 ranked 122 still yellow; next is shelter with score/value of 50.21 ranked 122 still yellow and lastly personal safety with score/value of 55.24 ranked 119 with a yellow dot as well. The next tier we move unto is foundation of wellbeing with score/value of 54.86 ranked 121 with a yellow do still indicating an average. Under it we have access to basic knowledge with score/value of 71.30 ranked 103 with a yellow dot; then to access to information and communication with score/value of 47.69 ranked 122 still yellow; health and wellness score/value 47.95 ranked 119 with a yellow ring still indicating and average; environmental quality score/value 52.50 ranked 126 with a red ring indicating a relatively poor performance. The last tier is opportunity with score/value of 34.39 ranked 130 with a red dot indicating a poor performance. Under it we have personal rights with score/value of 55.58 ranked 114 also red; personal freedom and choice score/value 40.30 ranked 130 also red; inclusiveness score/value of 30.48 ranked 121 still red and lastly, access to advanced education score/value 11.21 ranked 113 with a yellow dot indication an average performance. Within the lines, we have a couple of yellows, a good number of reds and blue in just one place level of tertiary schooling with score/value of 0.96 and ranked 93 indicating an overperformance level with no blue dot with the ring but one red dot with the ring at corruption with score/value of 25 ranked 130 indicating an underperformance. Relating this figure to the vision 2035 objectives, it talks more on welfare of the citizens offered to them by the government. If the government of Cameroon succeeds with her vision 2035 objectives of reducing poverty to less than 10%, becoming a middle income nation etc this will go a long way to increasing the social progress index figures because at that time the government through her national innovation will be able to offer more to her nationals.

Figure 21: Social Progress Index Summary

Cameroon	Score	Rank
	48.04	127
Dimensions		
		
Basic Human Needs	Foundation of Wellbeing	Opportunity
54.86	54.86	34.39
<hr/>		
Highest component scores		
Access to basic knowledge		71.30
Nutrition and basic medical care		63.25
Personal rights		55.58
Personal safety		55.24
Environmental quality		52.50
Lowest component scores		
Access to advanced education		11.21
Inclusiveness		30.48
Personal freedom and choice		40.30
Access to information and communication		47.69
Health and wellness		47.95
Source: Social Progress Index 2019		

TARGETS SUMMARY TABLE PER INDICATOR

N°	Indicateur	Moyenne 2005-2007	2010	2015	2020	2025	2030	2035
1	Poverty incidence rate (%)	39,9	38,0	31,0	23,0	17,0	13,0	10,0
2	Life expectancy at birth	50	51,0	55,0	58,0	62,0	66,0	71,5
3	Population growth rate (%)	2,6	2,6	2,5	2,4	2,3	2,2	2,1
	Human capital formation							
4	Primary school completion rate (% of corresponding age group)	58,8	63,2	78	95	99	100	100
5	Rate of students enrolled in scientific and technical courses in secondary school (%)	10	11	13,4	16,4	20,1	24,5	30
6	Rate of students enrolled in scientific and technical courses in university (%)	5	5,5	7,7	10,8	15,2	21,4	30
	Infrastructure and growth							
7	Percentage of tarred road network (%)	10	12	15	17	22	27	32
8	Energy consumption per GDP unit (%)	27,7	30,0	33,5	35,0	40,0	43,0	45,0
9	Digital access index	0,16	0,17	0,21	0,26	0,32	0,39	0,47
10	Number of fixed telephone lines and mobile telephone subscribers for every 100 people	10,3	15,1	25,9	40,5	51,2	59,7	67,8
11	Urbanization rate	55	55,6	56,6	57,3	58,2	59,1	59,8
12	Per capita income atlas method (\$US 2007 figure)	983,3	1 173,7	1 560,3	2 009,1	2 512,3	3 033,2	3 800
13	Growth rate (%)	2,7	4,2	7,1	10,3	10,5	11,2	9,9
	GDP structure							
14	Primary sector	44,0	41,8	33,2	26,4	21,0	16,7	13,3
15	Secondary sector	18,5	19,1	25,9	30,9	34,5	36,8	38,2
16	Tertiary sector	37,5	39,1	40,9	42,6	44,5	46,5	48,5
	Employment distribution							
17	Primary sector	55,7	49,3	43,7	38,7	34,3	30,4	26,9
18	Secondary sector	14,1	15,8	17,8	20,0	22,4	25,2	28,3
19	Tertiary sector	30,2	32,2	34,4	36,7	39,2	41,8	44,6
20	Investment rate (%)	17,4	19,2	22,1	25,1	30,5	29,3	29,5
21	Manufacturing added value in GDP (%)	9,8	14,1	15,6	17,7	20,4	22,3	22,8
22	Agricultural mechanisation (number of tractors per 100 square km of arable land)	1	1,5	4,5	17,1	30	45	116,5
	Exports sector structure							
23	Agricultural produce	20,5	17,1	12,7	12,2	10,8	10,3	9,8
24	Oil	50,7	41,7	49,7	36,1	27,0	20,4	21,9
25	Manufactured products	5,7	6,3	13,7	30,6	48,1	54,5	60,1
26	Others	23,2	34,9	23,9	22,1	17,2	18,8	12,8
	Imports sector structure							
27	Agricultural produce	2	3,7	3,3	3,2	2,9	2,5	2,3
28	Oil (energy)	26	25,0	23,3	19,6	18,1	17,2	16,3
29	Manufacturing products	53	55,2	59,5	66,5	71,2	70,1	69,8
30	Others	19	16,1	13,9	10,7	7,8	12,1	11,6
31	GDP-based exports (%)	21,7	26,1	30,6	35,8	42,0	49,2	57,7

N.B : This table is typical of the normative approach adopted, and it gives a picture of an emerging Cameroon in 25-30 years

CAMEROON VISION 2035: TENTATIVE STAGES FOR IMPLEMENTATION

Challenges	Phase one: 2010-2019	Phase two: 2020-2027	Phase three: 2028-2035
	Overall objective: modernising the economy and accelerating growth	Overall objective: becoming a middle-income country (per capita income between \$ 3706 and 11 455, 2007 value)	Overall objective: becoming a newly industrialised and emerging country (with the secondary sector accounting for more than 40 per cent of the GDP)
	Specific objectives: <ol style="list-style-type: none"> 1. increasing Cameroon's overall economic productivity significantly so as to address urgent sector crises (food and energy crises, financial crisis, employment crisis) 2. raising the investment rate significantly so as to attain a two-digit economic growth 3. bringing the poverty rate to less than 25 per cent 4. improving the business climate, as well as public and corporate governance 	Specific objectives: <ol style="list-style-type: none"> 1. consolidating growth and ensuring its sustainability 2. extending income redistribution 3. intensifying environmental protection and climate change control 	Specific objectives: <ol style="list-style-type: none"> 1. ensuring quality growth 2. bringing the manufacturing value added close to 25 per cent of the GDP and manufactured products value to more than 50 per cent of exports 3. strengthening exchange and outward-looking policies 4. bringing the minimal poverty rate to less than 10 per cent while raising life expectancy at birth to more than 60 years
ECONOMIC GROWTH	PILLAR I: Increasing productivity and accelerating growth <ol style="list-style-type: none"> 1.1 Increasing investment in infrastructure (energy, roads & bridges, ports, telecommunications, water) 1.2 Modernising the production system <ul style="list-style-type: none"> • setting the milestones for intensive agriculture (in broad terms) (intensifying agricultural research and development,...) • revamping commodities and market niches • developing extractive industries (bauxite, iron ore, nickel, cobalt) • upgrading enterprises and fostering the integrated development of production sectors • implementing specific competitiveness programmes for some sectors (Timber, ICT, tourism) 1.3 Enhancing human resource investment efficiency <ul style="list-style-type: none"> • adjusting the education and health maps (notably efficient breakdown of investments) • developing technical and technological education branches • upgrading education and training programmes • drawing up reference investment programmes 1.4 Mobilising funds and putting the financial system at the service of development <ul style="list-style-type: none"> • Promoting Foreign Direct Investments (FDI) 	PILLAR I: Maintaining strong growth and diversifying economic activities <ol style="list-style-type: none"> 1.1 Developing new infrastructure <ul style="list-style-type: none"> • Notably technology-intensive infrastructure: railways, telecommunications • making Cameroon a transport hub in Central Africa: with highways, airports, ports, oil and gas pipelines, electric inter-connections, etc, • strengthening regional communication and telecommunication infrastructure 1.2 Intensifying farm mechanization and developing irrigation <ul style="list-style-type: none"> • boosting the development of small and large-scale farms • intensifying irrigation, notably in the northern region • building the financing capacity of the rural world 1.3 Intensifying industrial processing of local products, notably through: <ul style="list-style-type: none"> • agro-industries • aluminium and steel industries • building industry • oil-derived product industries 1.4 Building the capacity of the education, training and research system to: <ul style="list-style-type: none"> • produce a critical mass of semi-skilled workers and 	PILLAR I: Increasing growth and economic industrialisation <ol style="list-style-type: none"> 1.1 Increasing infrastructure in order to consolidate Cameroon's role as regional transport hub 1.2 Strengthening the integration of the country's economic base <ul style="list-style-type: none"> • vertical integration of sectors • horizontal integration of branches 1.3 Pursuing regional economic integration <ul style="list-style-type: none"> • improving the efficiency of the single market in Central Africa • increasing the volume of manufactured products in exports to Central Africa • contributing to the strengthening of institutions and mechanisms of convergence and integration in Africa (economic and monetary integration) • strengthening regional solidarity 1.4 Strengthening and diversifying international exchanges <ul style="list-style-type: none"> • intensifying commodity trade • intensifying service trade, notably tourism 1.5 Strengthening human resources <ul style="list-style-type: none"> • diversifying research institutions

Challenges	Phase one: 2010-2019	Phase two: 2020-2027	Phase three: 2028-2035
	<ul style="list-style-type: none"> widening the tax base with an even, fair and equitable tax system establishing proximity banks and specialized financial institutions for an efficient mobilization of national savings developing an appropriate framework for the financing of the rural sector developing an appropriate framework for the financing of SMEs devising an appropriate strategy to capitalize on the resources of the diaspora controlling and containing currency appreciation <p>1.5 Consolidating regional integration and diversifying exchange</p> <ul style="list-style-type: none"> concluding and implementing a comprehensive and balanced regional EPA ensuring the establishment of a common market in Central Africa making sound use of the Trade Assistance Initiative, notably opportunities brought in by the AGOA building economic partnerships with Nigeria developing exchange with emerging countries, notably Brazil, China, India, Korea 	<p>second-line managers</p> <ul style="list-style-type: none"> foster the emergence of the knowledge economy <p>1.5 Increasing the share of non-oil exports</p> <ul style="list-style-type: none"> prospecting export markets promoting national private investments in export sectors promoting FDI in non-oil sectors controlling distribution channels increasing the control of standardisation <p>1.6 Accelerating financial market development</p> <p>1.7 Strengthening regional integration and international insertion</p> <ul style="list-style-type: none"> developing new partnership forms 	<p>1.6 Strengthening the capacity of the financial system to mobilize external resources indispensable for the funding of overall domestic demand , namely investments</p>
DEMOGRAPHY AND SOCIAL DEVELOPMENT	<p>PILLAR 2: Promoting employment and increasing income</p> <p>2.1 Addressing SMEs problems within the framework of the job creation strategy: realizing the SMEs development master plan (facilitating the establishment of SMEs, <i>FSD/PME, FAGACE</i>, etc.)</p> <p>2.2 Providing incentives for job creation</p> <ul style="list-style-type: none"> providing employment-friendly administrative and fiscal incentives Rendering the labour-intensive strategy (<i>HIMO</i>) operational redesigning the apprenticeship and insertion system Rationalizing and refocusing specific programmes on job creation (women, the youth and disabled) <p>2.3 Reviving income policies and redistribution</p>	<p>PILLAR 2: Extending income redistribution policy and strengthening regional development</p> <p>2.1 Strengthening SMIs/SMEs development</p> <p>2.2 Maintaining incentives for decent job creation</p> <p>2.3 Increasing social infrastructure</p> <p>2.4 Expanding the social security system</p> <p>2.5 Strengthening mechanisms for the fight against social exclusion</p>	<p>PILLAR 2: Consolidating income redistribution and social inclusion</p> <p>2.1 Consolidating SMIs/SMEs development</p> <p>2.2 Consolidating incentives for decent job creation</p> <p>2.3 Strengthening redistribution mechanisms</p> <p>2.4 Expanding and consolidating social security and protection</p> <p>2.5 Pursuing the fight against social exclusion and strengthening gender equality</p>

Challenges	Phase one: 2010-2019	Phase two: 2020-2027	Phase three: 2028-2035
	<p>mechanisms</p> <ul style="list-style-type: none"> reviving the management of the guaranteed minimum wage, and the overall wage scale readjusting the wage grid for technical professions <p>2.4 Strengthening social development</p> <ul style="list-style-type: none"> Improving access to quality social services nationwide Promoting the management, social inclusion and integration of women, the youth and vulnerable in economic channels 		
URBAN DEVELOPMENT, REGIONAL DEVELOPMENT AND ENVIRONMENTAL PROTECTION	<p>2.5 Developing a legal and regulatory framework for regional development (national and regional schemes on regional development, equipment standards, and land use plans, etc.)</p> <p>2.6 Initiating major programmes on housing improvement in view of controlling urban development</p> <p>2.7 Realizing border areas development programmes (including border markets)</p> <p>2.8 Drafting and starting implementation of a major policy for environmental protection and the fight against the harmful effects of climate change.</p>	<p>2.6 Developing a controlled urban development policy (metropolitan areas, new towns, secondary towns)</p> <p>2.7 Promoting complementarity and solidarity between big towns, average towns and villages</p> <p>2.8 Strengthening the bases for a territory-focused development (development poles)</p> <p>2.9 Stepping up the fight against the effects of climate change</p> <ul style="list-style-type: none"> Protecting and ensuring the sustainable management of forest ecosystems; Fighting desert encroachment; Promoting regional projects: the Niger Basin, the Lake Chad Basin 	<p>2.6 Consolidating production and consumption in growth poles for significant contribution to the development of neighbourhoods</p> <p>2.7 Consolidating urban development control</p>
GOVERNANCE	<p>Pillar 3: Promoting a sound business climate, good governance and strengthening the strategic management of the country</p> <p>3.1 Good governance and business climate</p> <ul style="list-style-type: none"> consolidating macroeconomic environment stability ensuring public debt sustainability intensifying anti-corruption drive providing for the country's new tax regime improving the functioning of the judicial system strengthening the security of people and goods nationwide 	<p>Pillar 3: Consolidating the business climate and governance, protecting the environment and intensifying climate change control</p> <p>3.1 Consolidating governance and the business climate</p> <ul style="list-style-type: none"> Strengthening the mechanism for FDI attraction Ensuring macro-economic environment stability Improving the State's capacity to foresee economic trends and structural changes (economic intelligence and technological monitoring) Strengthening result-based management principles Restoring Cameroon's image and credibility 	<p>Pillar 3: Maintaining the business climate and governance, furthering decentralization</p> <p>3.1 Maintaining governance</p> <ul style="list-style-type: none"> Promoting vote holders' merit and accountability Expanding the judicial system notably as concerns commercial law <p>3.2 Furthering decentralization</p> <ul style="list-style-type: none"> Building the capacity of local authorities and government devolved services <p>3.3 Strengthening the business climate</p>

Challenges	Phase one: 2010-2019	Phase two: 2020-2027	Phase three: 2028-2035
	<ul style="list-style-type: none"> Strengthening corporate governance (account publication, protection of minority shareholders, etc.) <p>3.2 Strategic management of the country</p> <ul style="list-style-type: none"> finalizing the public service reform (career profile, duty post profile, individual awards, etc.) finalizing the public finance reform strengthening strategic planning strengthening economic regulatory mechanisms strengthening Public/Private Partnerships strengthening the protection of the national economic space (against fraud, smuggling, etc.) strengthening the implementation of decentralization 	<ul style="list-style-type: none"> furthering decentralization (extending the application of the principle of subsidiarity) 	<ul style="list-style-type: none"> Maintaining Cameroon's image and credibility
NATIONAL UNITY AND DEMOCRATIZATION	<p>Pillar 4: Consolidating national integration and the democratic process</p> <p>4.1 Enhancing solidarity and national unity</p> <ul style="list-style-type: none"> intensifying sensitization and the fight against identity confinement promoting the development of Cameroon's culture as a whole introducing national languages in school curricula ensuring equitable representation of all segments of society strengthening solidarity in the decentralization process <p>4.2 Consolidating the democratic process</p> <ul style="list-style-type: none"> increasing transparency in the electoral process, and institution's credibility ensuring and strengthening the respect of individual and association freedoms promoting the development of civil society promoting a high turnout in elections strengthening the State's authority and credibility of the judicial system promoting gender parity in the electoral process 		

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