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Educational Policies, its Tensions, Agendas and Developments: What Can We Learn from the International Experience?

Theme of communication

The creation of technological sectors as a response to the crisis of socio-professional integration of graduates of higher education in Cameroon.

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Higher education in general, and the University in particular, in this context of globalization, are undergoing major changes. In the opinion of some, moreover, the University quite specifically, is experiencing a change of reference and perhaps even of nature[1]. According to the latter, as an enclave specializing in the training of senior and middle managers, it has become, in the knowledge economy and society, the place of choice for the struggles of globalization[2]. It should be noted that, although initially this observation of the transformation of the university is made in developing societies, where the link between the production of knowledge and the development of the nations has long been demonstrated, it can now be easily generalized

In developing countries, for example, the university, if it does not change its framework, is at least in profound evolution. This development is dependent on several factors. First, the rise of utilitarian philosophies which suggest the strengthening of the social and utilitarian character of goods, services, projects and institutions, and hence of the university. Second, on the one hand, the evolution of the world economy, which prioritizes knowledge as a factor of production, and on the other hand, globalization, which leads to fierce competition between nations, that is to say also between Education systems in general and universities in particular? Finally, community constructions and global policies that impose the convergence of production systems and harmonization with international standards or the most successful models of national public policies.

[1] VELTZ (Pierre), 2008, « L'université au cœur de l'économie mondialisée de la connaissance », p. 01
[2] *Ibid.*

This is the place to highlight the major role played by the Bachelor - Master - Doctorate (BMD) system in this global dynamic. Indeed, it should be noted that with the expansion of the BMD system, the whole world, through the university, lives a harmonization and a convergence of the educational processes. This system, on the one hand, promotes the professionalization of teaching and facilitates the empowerment of learners by stimulating scientific innovation; on the other hand, this system seems to increase the ability of the university to conceptually articulate the link between being - know - and possess, and thus between know – possess – and power, thus making the university the place of predilection for all the struggles of globalization initially deported to markets.

Africa in particular, from 2003 in Dakar, Senegal, became aware of the need for harmonization of national higher education systems. To do this, drawing on European experience, it decides on the adoption of the LMD system, which became widespread in Europe from 1999 onwards through the Bologna process, leading to the creation in 2010 of the European Higher Education Area.

Cameroon, a developing country with a high unemployment rate of its graduates, recognizes the importance of an effective system of higher education and research to accompany the construction of its economy that it expects to emerge by 2035. Inspired by an Education Sector Strategy and a Higher Education Guidance Law, it is committed to adapting higher education and research to the changes of the world. As a result, the country has started the creation of business incubators, the multiplication of innovation centers and technology sectors, notably through its Program of Support to the Technological and Professional Component (PRO-STPC)[3] of education superior. The aim of the Government of Cameroon is to make these technological sectors a source of jobs and opportunities in order to facilitate the socio-professional integration of graduates of higher education and ultimately to reduce their unemployment considerably .

This policy orientation is reinforced by the African Development Bank (AfDB) Cameroon 2010-2014 Country Strategy Paper, which specifies that higher education is the fifth (5th) pillar of the Global Competitiveness Index for today ranks as the leading factor in the efficiency of economies. Therefore, the question we propose to answer is **what assessment can be made today of this policy option?** This question has a double merit at least. The first is obviously to promote the evaluation of the effectiveness of Cameroonian public policies in higher education. The second is to highlight the link between national dynamics and international experience in higher education policy.

On the analysis, this reflection will enable us to point out that if the creation of the technological sectors appears as an innovative political option to respond to

[3] PRO-ACTP in the French version.

the crisis of socio-professional integration of graduates of higher education in Cameroon (I), it remains nevertheless, because of important limitations, an insufficient response (II).

I- THE CREATION OF TECHNOLOGICAL SECTORS: AN INNOVATIVE POLICY OPTION

The analysis of the dynamics of higher education in Cameroon shows that the creation of technological sectors constitutes a major axis for the government. In order to understand this political option, we must first find the foundations (A), and secondly, present the articulations (B).

A. The foundations of the policy option

Two types of foundations can be used here: the first type consists of the exogenous foundations, which underline the mimetic dimension of the project (1); the second, the endogenous foundations, namely the government's desire to bridge the technological gap and to reduce the crisis of the integration of graduates (2).

1. <u>The exogenous foundations or the mimetic dimension of the policy</u>

The political option of the creation of the technological sectors in Cameroon finds its first foundations in the globalization of the BMD system throughout the world. Among the direct consequences of the adoption of the LMD by African countries in general, and Cameroon in particular, we can identify, besides structural reforms[4], the increase in mobility and the professionalization of teaching and training, which has encouraged the creation of new so-called innovation chains, among others, the technological sectors.

While the process of generalization of the BMD system at the global level is well known, it seems important to recall that, at the level of the African region, a combination of elements may explain, only some time after the start of the European experience, ownership of the BMD system. On the one hand, political elements, in addition to the initiatives of the United Nations Educational, Scientific and Cultural Organization (UNESCO), require the achievement of the Millennium Development

[4] IDIATA (Daniel Franck), 2008, *Les pays de la CEMAC sont-ils capables de renoncer à leurs prérogatives au profit d'une communauté d'intérêts ? Contribution à la construction d'un espace commun d'enseignement supérieur et de recherche*, Editions du CENAREST, Libreville, pp. 94 – 98. Voir aussi IDIATA (Franck Daniel), 2006, *L'Afrique dans le système LMD : la réforme de toutes les révolutions*, L'Harmattan, Paris.

Goals (MDG) in 2015[5], of which the issue of education in general is highlighted. On the other hand, there are managerial elements linked to the governance of African states and the various crises they face: the ever-increasing in the demand for education in a young continent[6]; the fall in state financing for education[7]; the inefficiency of education systems in the integration of their products into the labor market (**ibid**).

In this context, the reform of the university is presented as a solution to support and consolidate the economic growth of the continent[8]. Also, the echo of the Bologna process, amplified by the action of UNESCO, takes on a very singular aspect. Indeed, in its ambition to foster and support member countries for the achievement of quality education that is accessible to all, UNESCO adopted a *Framework for Action* in 2000 through the *World Forum on Education*, held in Dakar, Senegal[9]. This ambition will be confirmed by the Heads of State in their *Millennium Declaration* in September 2000[10]. Following are the advocates of other international institutions involved in education and research (University Agency of the Francophonie[11], the African and Malagasy Council for Higher Education (AMCHE)[12], CRUFAOCI, World Bank, etc.), for the necessary harmonization of the African higher education systems with the BMD, thanks to the organization of several seminars and workshops:

- in Dakar, Senegal, from 15 to 19 December 2003 on the theme "University Governance";

[5] NGOA TABI (Henri), 2009, « Décentralisation et Pauvreté. L'exemple du Cameroun », *La Revue Subsaharienne d'Economie et de Finance*, n° 1, pp. 63 – 91.

[6] From 100 million in 1900, the population of Africa rose to about 275 million in the years 1950-1960, to 640 million in 1990 and to 1.2 billion in 2016. According to demographic projections, 2050, the population of Africa will be between 2 and 3 billion, then 4.4 billion in 2100. Today, Africa has about 1,207,588,824 inhabitants, with a birth rate of 35.60%, Life expectancy of 53.20 years, a young population of which 41% is under 15 years.

[7] ATANGANA ONDOA (Henri), 2009, Analysis of the determinants of the efficiency and the efficiency of the educational system of Cameroon, Thesis for PhD in Economics, University of Yaounde II.

[8] HENAFF (Nolwen), 2006, « Education et développement Regard critique sur l'apport de la recherche en économie », *Défis du développement en Afrique subsaharienne : l'Education en jeu*, CEPED ; MALINVAUD (Edmond), 1994, « Éducation et développement économique », in Économie & prévision, n°116, Économie de l'éducation, pp. 1-15.

[9] World Education Forum, Dakar, Senegal, April 26 – 28, 2000.

[10] Declaration adopted by the General Assembly at the UN Millennium Summit in New York at the United Nations Headquarters from 06 to 08 September 2000. It should be recalled that this Declaration is followed by the adoption of eight (08) Millennium Development (MDG) to be achieved by 2015: (1) reducing extreme poverty and hunger; (2) universal primary education; (3) promoting gender equality and the empowerment of women; (4) reduce infant mortality; (5) improving maternal health; (6) combating HIV / AIDS, malaria and other diseases; (7) preserving the environment; (8) building a global partnership for development.

[11] Agence Universitaire de la Francophonie (AUF) in French.

[12] CAMES in French.

- in Yaoundé, Cameroon, from 1 to 3 March 2005 on the theme "African Universities in the Global Context of the Transformation of the University";
- in Niamey, Niger, on 15 July 2005, on the theme "Putting Higher Education Institutions in Africa at the heart of Knowledge-based Development Strategies";
- at the Marien Ngouabi University, Brazzaville, from 28 to 30 November 2006, on the theme: "The BMD system in university scientific education: assessments and perspectives, issues and challenges, contributions to pedagogical renewal".

These workshops have helped to raise the awareness of Francophone universities in Africa and the Indian Ocean about the need for the BMD reform. The sub regional integration organizations (Economic and Monetary Community of Central Africa (CEMAC), the Economic Community of West African States (ECOWAS), the Economic and Monetary Union of West Africa (UEMOA), etc.), and regional (African Union), also sensitized, have agreed in principle to financially support the implementation of the BMD system in the universities of the member countries. To this end, the *Declaration of the Heads of State of Central Africa of 11 February 2005* in Libreville on the construction of the CEMAC area for Higher Education, Research and Vocational Training, the *CAMES Resolution of April 2006* and the *UEMOA Directive of 2007* officially engaged the higher education institutions members of CAMES in the "*reconfiguration of university programs and the organization of universities and schools according to the academic model BMD*".

In this major transformative dynamic, it is possible to underline the African Union's firm determination to build a common framework for Africa, reflected in the draft African Regional Convention on the recognition of studies and certificates, diplomas, degrees and other titles of higher education in African states, which was discussed at the 4th and 5th Conferences of Ministers of Education of the Member States of the African Union, held in Mombasa from 22 to 26 November 2009, and Addis Ababa on 16, 17 and 18 June 2010.

Cameroon, like the majority of the countries of Central Africa, is building its trajectory within the framework of the CEMAC. It is the Conference of Rectors of Universities and Heads of Research Organizations of Central Africa (CRUROR / AC), in its 2003 session at the University of Yaoundé I in Cameroon, which initiates reflection on appropriation of the BMD System in the CEMAC sub region. On 11 February 2005, at the Summit in Libreville, the Heads of State of CEMAC decided to promote the harmonization and standardization of higher education, research and training measures as well as the database for the universities of Central Africa with a view to the adoption of the BMD system. The creation of an integrated higher education area, as harmonized and standardized, intervenes with the implementation of a legal framework defining the principles and mechanisms of

management, cooperation and regulation of this CEMAC area of higher education. It consists of two (02) directives adopted in 2006 by the CEMAC: Directive No. 01/06 - UEAC - 019 - CM - 14 of March 2006 implementing the BMD system in universities and higher education establishments of the CEMAC space; And Directive No. 02/06 - UEAC - 019 - CM - 14 of March 2006 on the organization of university studies in the CEMAC area under the BMD system.

To these exogenous foundations which testify to the mimetic dimension of the appropriation of the BMD and the creation of the technological sectors at a later stage, we can add endogenous justifications and foundations.

2. The endogenous foundations: the technological gap and the crisis of integration of the graduates

The endogenous foundations of the creation of technological sectors are diverse. However, two of them seem decisive because of their importance: on the one hand, the existence of Cameroon's technological gap, like the majority of developing countries, compared to developed countries, that need to be addressed urgently in a highly competitive global environment; on the other, the serious crisis of the integration of graduates of the Cameroonian system of higher education.

Indeed, Cameroon, like all other CEMAC countries, is experiencing major dysfunctions in its higher education system, which has a direct impact on the growth of this technological gap and on the unemployment of its graduates. Among these dysfunctions, we can note those which are of general order and those of specific order. As a general dysfunction, we can identify relatively low enrollment rates, despite the extension of the supply of higher education; the increase in the overall student-teacher ratio, which affects the quality of student follow-up; lower teachers' salaries, in real terms, resulting in demobilization and brain drain; the deterioration of working conditions (lack of space, lack of maintenance, etc.) and lack of teaching materials.

Specific dysfunctions affecting the growth of this technological gap and the unemployment of its graduates include: the predominance of general education courses, which are less costly in terms of operation and equipment, to the detriment of the scientific and technological sectors technological developments; the inadequacy, both quantitative and qualitative, of graduates with the labor market; the weakness of research and the imbalance between teaching activities and research activities to the detriment of the latter.

These dysfunctions inevitably have an impact on the quality of education, cause dissatisfaction among all stakeholders and justify the need to reform higher education in order to meet societal expectations and achieve harmonization with the international education higher system. To achieve this, the Cameroonian government

finds in the creation of technological sectors, both a source of salaried jobs and opportunities for entrepreneurship and self-employment for graduates of higher education, and a lever that can boost industrialization from the country.
However, how is this public policy option implemented?

B. The articulation of the policy option

The articulation of the policy option for the creation of technological sectors, that is to say its implementation, addresses two main dimensions: the first is macro-political (1); the second is institutional and managerial (2).

1. <u>The political macro dimension</u>

Implementation of this policy has required significant political and economic results in terms of improving the quality of the macroeconomic framework that has enabled the country to reach decision points completion of the heavily indebted poor countries initiative of the World Bank in 2000 and 2006. In drawing lessons from the implementation of its first Poverty Reduction Strategy, the Government has undertaken to formulate a long-term development Vision. This ambition aims to make the country by 2035, an emerging country, democratic and united in its diversity. The specific objectives are to: (i) reduce poverty to a socially acceptable level, (ii) reach middle-income countries, (iii) become a new industrialized country, (iv) consolidate the democratic process and strengthening national unity.

These specific objectives have inspired the orientations of the Strategy Document for Growth and Jobs (SDGJ) for the 2010-2020 period covering the first ten years of the long-term Vision. The major issue in the implementation of SDGJ is focused on accelerating growth, creating formal jobs and reducing poverty[13]. To achieve these objectives, the Government intends to implement a growth strategy in a coherent and integrated manner; an employment strategy and a strategy to improve the governance and strategic management of the state.

It is at this level, in this case the first two strategies (growth strategy and employment strategy), that this reflection should be placed. Indeed, the SDGJ recognizes the importance of education in general, higher education and research in particular, in achieving the country's economic objectives. It refers to point 3.3.2 of its Chapter 2 in a clear way: "in particular, to give the human resources of the Nation the capacity necessary to build an emerging Cameroonian economy in the horizon". To

[13] Accordingly, it is envisaged to:
- increase annual average growth to 5.5% during 2010-2020;
- reducing under-employment from 75.8% to less than 50% in 2020 with the creation of tens of thousands of formal jobs per year over the next ten years; and,
- reduce the monetary poverty rate from 39.9% in 2007 to 28.7% in 2020.

do this, in the case of higher education, specifically, the government integrates the need to "improve the efficiency and quality of education or training".

It is based on the Education Sector Strategy; on the Higher Education Guidance Law and is supported by donors such as the African Development Bank (AfDB) whose Cameroon Country Strategy Paper 2010 - 2014 supports the country in this direction of its System of higher education.

Consequently, after the 1993 reform, the Cameroonian Universities adopted the BMD system at the academic year 2007/2008 in accordance with the sub region regulations. The general objectives assigned to this reform are, inter alia:

- to ensure that all the parties involved (students, parents, professionals, employers, etc.) are better able to read the training grades and levels of professional integration;
- put in place a training system characterized by flexibility and international comparability;
- reforming programs and diversifying pathways in promising niches;
- to create flexible and efficient training courses, of an academic and applied nature, offering the student, at all levels, opportunities for professional integration;
- to promote the student's mobility at national and international level;
- offer the student the opportunity to restructure his / her course during training;
- to facilitate the equivalence of diplomas;
- to create a new generation of polyvalent graduates able to adapt to a changing global context.

It is easy to point out that this macro policy framework, which favors the advent of new pathways, as well as the socio-professional integration of graduates, constitutes the main anchor of the policy for the creation of technological sectors. However, what about the institutional and managerial dimension of the policy option?

2. The institutional and managerial dimension

The institutional and managerial dimension of the option of creating the technological sectors allows us to highlight the different institutions, mainly national, which contribute to the implementation of this policy, and the interactions that exist between them. From this perspective, we can distinguish, on the one hand, the leading institutions and, on the other, the secondary institutions.

Among the leading institutions we have three ministerial departments, the first one in charge of higher education, the second in charge of scientific research and

innovation, and the last one in charge of industry and technological development. The former plays the leading role in this context. Indeed, the Ministry of Higher Education is in charge of the implementation of the government policy[14] in the field of higher education[15]. In this context, he created the PRO-STPC, whose main role is to accompany the implementation of the new technological and professional sectors created by the government.

The Ministry of Scientific Research and Innovation is responsible for the development and implementation of the Government's policy on scientific research and innovation. It is responsible for coordinating and supervising scientific research activities with a view to promoting economic, social and cultural development; development, extension and exploitation of research results; international cooperation in scientific research and innovation, in connection with, inter alia, the Ministry of Higher Education[16].

The Ministry of Mines, Industry and Technological Development is responsible for the development of industrial development strategies through the development of the country's natural resources and mines and technological development in the various sectors of the economy.

To these important institutions, we must of course associate universities, public as well as private, which also participate in the creation of these sectors, and more in their management and their animation. Other institutions, although not of the first rank, play a decisive role in the articulation of this policy. The Ministry of Economy and planning responsible for the overall coordination of the national development policy in general and the implementation of the Strategy Document for Growth and Jobs in particular.

However, although the creation of technology sectors is undoubtedly an innovative policy option, it nevertheless has important limitations.

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[14] In accordance with the Operational Strategy of the New University Governance. A vision for Cameroonian university - Horizon 2020, Synoptic presentation, March 2009.

[15] The missions of MINESUP as well as those of the Universities have been defined successively by several laws of which the most recent date of 16/04/2001. This Higher Education Guidance Act sets out (article 1) the legal framework and the basic tasks of higher education institutions. It makes it possible, and it is a new element, to open higher education to private institutions more widely (Articles 1, 4, 22-27) and defines the institutional framework for the operation of these private institutions. The fundamental mission of Higher Education aims (according to Article 6 of the law of 16/04/2001): "the pursuit of excellence in all areas of knowledge; The promotion of science, culture and social progress; Social advancement, with the participation of socio-professional circles; Support for development activities; Training and development of managers; Strengthening the ethical sense and national consciousness; The promotion of democracy and democratic culture; The promotion of bilingualism ".

[16] See Presidential Decree No. 2 0 1 2/3 8 3 of 14 September 2012, Organizing the Ministry of Scientific Research and Innovation.

II- THE CREATION OF TECHNOLOGICAL FIELDS: AN INSUFFICIENT PROPOSAL

The creation of the technological sectors, although constituting an innovative political option, remains an insufficient proposal to resolve the issue of socio-professional integration of graduates of higher education in Cameroon. Indeed, if the question of socio-professional integration calls for a plurality of measures, the one envisaged through the creation of technological sectors already knows a myriad of limits which are both political (A) and structural (B).

A. Political boundaries

The first order of boundaries consists of those that can be called political. These include, first, the incoherence of the national higher education system (1) and, secondly, the fragility of the link between the university and the enterprise (2).

1. <u>The incoherence of the national system of higher education and research</u>

The creation of technological sectors cannot produce relevant results, in this case with regard to the socio-professional integration of graduates, only under certain conditions. The most important of all seems to be the coherence of the national system of higher education and research. Indeed, the incoherence of the Cameroonian system of higher education and research can be attested at two levels at least: at the material level, that is to say substantial, and at the formal level, in other words, structural.

Material or substantive incoherence results from the development of national higher education and research policy, its consistency with national development objectives, its implementation and its ongoing evaluation. All that is lacking in the Cameroonian context, where one can regret, among other things, the illegibility of higher education and research policy; the lack of articulation between the public policy of higher education and research and the overall development project; low visibility of the linkage between this public policy of higher education and research and other public policies, such as economic policy or agricultural policy; the inadequacy between the teaching and research objectives and the means required for their implementation.

Formal inconsistency, that is to say also structural, is more related to the organic separation between the Ministry of Higher Education and the Ministry of Scientific Research and Innovation, in a context nevertheless marked both by a strong inclination towards institutional compartmentalization and by a weak coordination of institutions and public policies.

These inconsistencies considerably limit the effectiveness of the policy option for the creation of technology sectors. First, because they question both the appropriateness of the types of sectors created, and secondly because they question the approach taken in the process of their creations and obviously the imperative participatory dimension (the ministries concerned, Universities and research centers, companies and industry, etc.) that it involves; finally, these inconsistencies highlight the limited financial, material and human resources mobilized for the deployment, functioning and dynamism of these sectors.

These inconsistencies are amplified by the advent of the BMD system, whose optimal ownership and implementation require substantial and structural reforms, both at the sub regional and national levels. At the national level, ongoing evaluations of the implementation of the BMD provide information on the existence of serious dysfunctions which limit the effectiveness of the new system. At the sub regional level, it is well known that the implementation of the texts and the implementation of sub regional projects within the framework of community policies are part of the framework for sectoral policies (here, Education / higher education sector policy). Unfortunately, the reception of the BMD has some difficulties in the States of the sub region in general, and the universities and establishment of the CEMAC in particular. These difficulties are of various kinds: structural, organizational, textual, financial, etc. Furthermore, the lack of a report on the state of play of the implementation of the BMD system at the level of the CEMAC (at the level of the CEMAC Commission or simply the Directorate of Education and Culture) does not allow us to have an overall view of the level and quality of the structuring of the academic space integrated into creation.

These inconsistencies are also amplified by the fragility of the link between the university and the company.

2. The fragility of the link between university and businesses

The fragility of the link between the university and the company also considerably limits the effectiveness of the policy option for the creation of technological sectors in order to resolve the crisis of socio-professional integration of graduates. Indeed, it should be recalled that graduates from the technological sectors are intended to carry the government's innovation policy, but rather to boost the growth of companies that are the first users. The quality of training received by these graduates in the technological fields is therefore fundamental, as is the participation of user companies in the selection of sectors, in the development of their content and in their entire training process (participation of professionals Teaching, practical work, directed and all forms of experimentation, supervision during company stays and internships, etc.).

Unfortunately, despite government initiatives[17], the link between higher education and research and the corporate world remains weak. This has various consequences that are well known. First, there are far too many sectors not suited to the needs of companies; secondly, these technological sectors, which require large amounts of financing to equip themselves with technological platforms and advanced equipment, are lacking the support and financial, material and human support of companies. Thirdly, these companies do not recognize themselves in the graduates from these sectors that they have difficulty recruiting, thus favoring the crisis of their socio-professional integration.

The renewal of the link between the worlds of higher education and research and that of business seems therefore fundamental. However, the fragility of the link found and the incoherence of the system are not the only type of limitations. Apart from these political limits, there are also structural limits.

B. Structural limits

Several structural limitations can be identified under the inefficiency of the policy of creating technology as a solution to the problem of unemployment of graduates. However, we will focus on the weak industrialization (1) and the inefficiency of structural policies (2).

1. <u>The weak industrialization</u>

The weak industrialization of the country constitutes a major structural limit to the efficiency of the technological sectors in the fight against the unemployment of the graduates of the higher education system. It should be recalled that industrialization is a major political and economic objective for many States, especially those in development[18]. Obviously, in the case of Cameroon, this objective is recalled both in its Strategy Document for Growth and Jobs and in its Vision 2035[19]; its Investment Charter[20] and its Law of 18 April 2013[21]. For the record, Cameroon adopted a self-centered development strategy, with industrialization

[17] For example, the Universities - Businesses Forum, held annually under the aegis of the Ministry of Higher Education in partnership with the Inter-employer Group of Cameroon (GICAM).

[18] See the descriptive analysis of the national industrialization policy, in BASSINGHA (Jonas), The Legal and Tax Regime of Foreign Investment in Cameroon, Thesis of the 3rd Cycle in Law, op. Cit., Pp. 16-19.

[19] One of the priority objectives of Cameroon, included in its Vision 2035, is to "become a New Industrialized Country" before this deadline. See Vision 2035, p. 08.

[20] See Article 2 of the Investment Charter of 19 April 2002.

[21] The Private Investment Incentive Law of 18 April 2013 establishes in its Article 14 a series of specific incentives that can be granted to undertakings which would make investments to achieve priority objectives such as industrialization, Agro-industry, manufacturing industries, heavy industry, construction materials for the steel industry, metal construction for maritime and navigation activities ... ".

focused on the development of its internal market, as soon as it achieved full international sovereignty on 1 January 1960[22].

Unfortunately, after two decades of growth, the economic and financial crisis that began in 1986 contributed to the deterioration of some of its macroeconomic indicators, plunging the country into a situation of cessation of payment, degradation of the majority of social services, and calling into question both its policy and its industrialization choices. The recent inclusion of industrialization at the heart of the SDGJ, Vision 2035 and the main texts governing private investment underlines the continuing objective of this objective for public authorities.

This industrialization is envisaged as one solution to the achievement of the country's macroeconomic objectives, including stabilization of the external balance, the pursuit of economic growth and full employment. Hence, if the link between technology, business and industrialization has been established, it seems indisputable that the low level of industrialization of the country has a direct impact on the efficiency of these sectors. In this case, it concerns the socio-professional integration of graduates. Schematically, it can be said that Cameroon creates technological sectors without first having industries that will employ the graduates of these sectors. As a result, the country trains hundreds of graduates annually for the use of other countries, that is, for the development of other economies.

2. The inefficiency of structural policies

The other type of structural limitations to the effectiveness, in terms of socio-professional integration of graduates, of the policy of creation of the technological sectors, relates to the ineffectiveness of the structural policies of the government. Of these, we will only consider educational policy and employment policy, which negatively impact the economic growth of the country. Indeed, it has since been shown that without strong and sustainable growth, full employment cannot be envisaged[23].

After a decade of stagnation of Cameroon's growth between 4 and 5%, one of the ways envisaged to achieve a strong growth is the structural transformation of the Cameroonian economy. Among the sources of this structural transformation, technology-led productivity growth is high[24]. The agricultural sector, agribusiness and the mining sector are particularly targeted to benefit from this structural

[22] NGOA TABI (Henri), « Décentralisation et pauvreté au Cameroun », *Revue Subsaharienne d'Economie et de Finance*, *op. cit.*, p. 64.
[23] NGOA TABI (Henri), 2017, *Document de Stratégie pour la Croissance et l'Emploi (DSCE) au Cameroun. Comment atteindre une croissance à deux chiffres ?*, Afrédit, Collection Intelligentsia, Yaoundé, pp. 17 – 34 ; ATALA (Etienne), 2008, The contribution of education to economic growth in Cameroon, Thesis for the PHD in Economics, University of Yaounde II.
[24] *Ibid.*, p. 30.

transformation through technology and innovation. Indeed, the contribution of technology and innovation plays an important role in the growth objectives of the country. It is in this perspective that the promotion of technological innovation is envisaged by the Cameroonian government through the SDGJ, especially with regard to the development of the agricultural, agribusiness, agro industrial and mining sectors[25]. In order to achieve this goal, higher education has encouraged the multiplication of technology sectors in recent years. Obstacles to their optimal functioning have already been mentioned.

One consequence of this situation is that unfortunately the impact of technological innovation on this structural transformation is hardly perceptible. As an illustration of the contribution of technological innovation to the development of the country, Cameroon's ranking according to the Global Innovation Index (GII) globally shows a regression of the country between 2009 and 2013 in terms of innovation[26]. The analysis of this database reflects the gap between innovation spending and the resulting output, and raises, among other things, the problem of the resources allocated by the country to research and development of innovation[27].

To conclude, this reflection enabled us to evaluate the effectiveness of an important axis of Cameroon's public policies in the field of higher education, namely the modernization of the provision of training and higher education, and more precisely the creation of technological sectors. Through this analysis we have been able to verify the strength of the link between, on the one hand, Cameroon's public policy on higher education and research and, on the other hand, international experience in higher educational policies. This linkage brings about global harmonization, higher education and research public policies, and the convergence of educational systems and processes. In the end, it has to be recognized that while the creation of technological sectors is an innovative political option for responding to the crisis of socio-professional integration of graduates of higher education in Cameroon, this policy remains, because of important limitations, an insufficient response. Only an effort of coherence of the national system of higher education and research; an increase in human, material and financial means for a better deployment of these sectors; greater economic competitiveness and a real structural transformation of the Cameroonian economy will ultimately guarantee greater efficiency of these sectors in terms of the socio-professional integration of their graduates.

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[25] *Ibid.*, p. 143.

[26] Except for 2011 (where it ranked 103rd), Cameroon rose from 106th in 2009 to 125th in 2013 out of a total of 143 countries ranked (a degradation of 19 places).

[27] NGOA TABI (Henri), 2007, *Document de Stratégie pour la Croissance et l'Emploi (DSCE) au Cameroun. Comment atteindre une croissance à deux chiffres ?*, op. cit., p. 144.

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