Tampere University

TERENCE YUH YONG

The Knowledge Economy and Entrepreneurial University Policy Objectives in Cameroon's Public Universities

The Case of the University of Buea

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ACADEMIC DISSERTATION
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Responsible supervisor and Custos	Professor, Dr. Jussi Kivistö Tampere University Finland	
Supervisors	Dr. Anu Lyytinen Tampere University Finland	Professor, Dr. Seppo Hölttä Tampere University Finland
Pre-examiners	Professor, Dr. Attila Pausits Danube University Krems Austria	Assoc. Prof., Dr. Ronald Bisaso Makerere University Uganda
Opponent	Assoc. Prof., Dr. Ronald Bisaso Makerere University Uganda	

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ABSTRACT

Given the World Bank's global education policy agenda for economic development, some African countries have, since 1981, experienced a wide range of challenges in their education and development aid policies aiming to reach the set goals. This study sought to contribute to the research and debate on knowledge economy and entrepreneurial university policy objectives aimed towards the economic development of Cameroon. Specifically, it examined the responses, that is, the processes of the University of Buea in relation to knowledge economy and entrepreneurial university policy objectives aimed towards the economic development of Cameroon from 1993 to 2016. In doing so, the study paid attention to relevant gaps in the existing literature and examined the place of public expenditure in these education policy prescriptions. In addition to international regime and institutional theories, a discussion on neoliberalism and global education policy issues, in relation to both policy prescriptions, set the scene for the empirical inquiry conducted at the University of Buea.

Generally, a non-positivist (post-positivist) philosophical/theoretical approach—critical realism and historicism—subjectivity of the researcher and significance of context, informed the study. A case study design was applied, involving empirical inquiry of the policy objectives at the University of Buea, which was purposively selected in order to adequately capture the complexity of both phenomena at public universities in Cameroon. Data were collected through semi-structured interviews as well as reviews of documents and other publications. The interviews were conducted with identified respondents, including academics, top management and administrative support staff at the university. They focused primarily on funding, research, collaboration and general management processes and activities that are in line with the policy objectives under study. The exercise took place in the months of February and March of 2016. Data collected for the study were analysed through the use of both deductive and inductive thematic analytic approaches.

The research revealed that reduced and irregular public expenditure for the University of Buea has weakened its ability to effectively function within the framework of knowledge economy and entrepreneurial university policy ideas. The university's difficult financial situation has been fundamental for its lack of effective

capacity for knowledge production and its valorisation, dissemination and application. It is equally responsible for submitting much of its institutional processes under great influence of system-wide higher education policies enabled by a governance structure that has submerged its central administration, faculties and academic departments under the full control of the Ministry of Higher Education—leading to a constrain on its collaborative endeavours. Consequently, its engagement with the government is premised on a political dependency relationship for public expenditure. With external stakeholders, its partnership and collaborative endeavours are based on dependency for grants and other forms of support for its activities.

The study concludes that global education policy strategies for economic development could be a potential source of diversion and confusion in the national education systems of recipient countries. Knowledge economy and entrepreneurial university policy prescriptions have introduced a complex type of relationship between Cameroon's higher education governance structure and its public universities, giving rise to new and confusing dimensions in the character of the public university in the country. The interference of system-wide policies in the management processes of the University of Buea—on the basis of policy prescriptions of the World Bank, for example—have undermined the university's management processes and mission objectives (within the framework of its autonomy) aimed towards achieving its vision. Hence, this study creates an opportunity for re-examining the nature of the relationship between the public university management and the higher education governance structure regarding policy choices and institutional processes aimed towards economic development. It also suggests the need for the University of Buea to develop the desire to achieve internal organisational efficiency, with a focus on its internal and external circumstances, while striving to reach its specific vision and goals.

TIIVISTELMÄ

Ottaen huomioon Maailmanpankin taloudellista kehitystä edistävä globaalin koulutuspolitiikan ohjelma, jotkut Afrikan maat ovat kokeneet vuodesta 1981 lähtien monenlaisia haasteita koulutus- ja kehitysapupolitiikassaan yrittäessään saavuttaa niissä asetetut tavoitteet. Tämän tutkimuksen tavoitteena on edistää tutkimusta ja keskustelua tietotalouden ja yrittäjämäisen yliopiston politiikkatavoitteista, joilla pyritään edistämään Kamerunin taloudellista kehitystä. Tutkimus tarkasteli erityisesti Buean yliopiston tietotalouden ja yrittäjämäisen yliopiston politiikkatavoitteisiin liittyviä prosesseja, joilla tavoiteltiin Kamerunin taloudellista kehitystä vuosina 1993–2016. Näin tehdessään tutkimus kiinnitti huomiota relevantteihin tutkimuskirjallisuudessa oleviin aukkoihin ja tarkasteli julkisten menojen paikkaa näissä koulutuspolitiikan ohjeistoissa. Kansainvälisen regiimiteorian ja institutionaalisen teorian lisäksi keskustelu uusliberalistisista ja globaaleista koulutuspolitiikan kysymyksistä, liittyen kumpaankin politiikkatavoitteeseen, asetti puitteet Buean yliopistossa toteutetulle empiiriselle tutkimukselle.

Anti-positivistinen (post-positivistinen) filosofinen/teoreettinen lähestymistapa – kriittinen realismi ja historismi – tutkijan subjektiivisuus ja kontekstin merkitys ohjasivat tutkimusta. Tutkimuksessa sovellettiin tapaustutkimuksen strategiaa sisältäen politiikkatavoitteiden empiirisen tutkimuksen Buean yliopistossa. Buean yliopisto valittiin harkinnanvaraista otantaa käyttäen, jotta ilmiön kompleksisuus Kamerunin julkisissa yliopistoissa pystyttiin ottamaan haltuun asianmukaisella tavalla. Aineistoina käytettiin puolistrukturoituja haastatteluja, dokumentteja ja muita julkaisuja. Haastateltaviksi valittiin yliopiston opettajia ja tutkijoita, ylintä johtoa sekä hallinnollista tukihenkilöstöä. Haastattelut toteutettiin helmi-maaliskuussa 2016 ja ne käsittelivät ensi sijassa rahoitusta, tutkimusta, yhteistyötä, yleisiä johtamisen prosesseja ja toimintoja, jotka liittyivät tutkittaviin politiikkatavoitteisiin. Aineiston analyysissä käytettiin sekä deduktiivista että induktiivista temaattista analyysiä.

Tutkimustulokset osoittivat, että vähentynyt ja epäsäännöllinen julkinen rahoitus Buean yliopistolle on heikentänyt sen kykyä toimia tehokkaasti tietotalouden ja yrittäjämäisen yliopiston politiikkaideoiden kehyksessä. Yliopiston vaikea taloudellinen tilanne on vaikuttanut olennaisesti siihen, ettei yliopistolla ole ollut kapasiteettia tiedon tuottamiseen ja sen valorisointiin, levittämiseen ja soveltamiseen.

Se on yhtä lailla vastuussa siitä, että useat yliopiston institutionaaliset prosessit on alistettu järjestelmätason korkeakoulupolitiikan vaikutuksen alaiseksi hallintorakenteessa, jossa yliopiston keskushallinto, tiedekunnat ja akateemiset laitokset ovat korkeakouluministeriön täyden kontrollin alla – johtaen rajoitteisiin yliopiston yhteistyöpyrkimyksissä. Tämän seurauksena yliopiston sitoutuminen korkeakouluministeriöön perustuu poliittiseen riippuvuussuhteeseen julkisesta rahoituksesta. Yliopiston kumppanuudet ja yhteistyö ulkoisten sidosryhmien kanssa perustuu riippuvuuteen apurahoista ja muusta tuesta sen toiminnoille.

Tutkimuksen johtopäätöksenä on, että globaalin koulutuspolitiikan strategiat talouden kehittämiseksi voivat olla mahdollinen ohjauksen muutoksen ja hämmennyksen lähde vastaanottajamaiden koulutusjärjestelmissä. Tietotalouden ja yrittäjämäisen yliopiston politiikkatavoitteet ovat tuoneet kompleksin suhteen Kamerunin korkeakouluministeriön ja julkisten yliopistojen välille, saaden aikaan uusia ja hämmennystä aiheuttavia ulottuvuuksia maan julkisten yliopistojen ominaisuuksissa. Järjestelmätason politiikan sekaantuminen Buean yliopiston johtamisprosesseihin – esimerkiksi Maailmanpankin politiikkatavoitteiden pohjalta – on heikentänyt yliopiston johtamisprosesseja ja missiota (yliopiston autonomian puitteissa), jotka tavoittelevat sen vision saavuttamista. Tämä tutkimus loi mahdollisuuden tutkia uudelleen julkisen yliopiston johtamisen ja korkeakoulutuksen hallintorakenteen välisen suhteen luonnetta taloudelliseen kehitykseen tähtäävien politiikkavalintojen ja institutionaalisten prosessien suhteen. Tutkimus myös ehdottaa, että Buean yliopiston tulisi vahvistaa tahtoaan saavuttaa sisäistä organisatorista tehokkuutta, sisäisiä ja ulkoisia olosuhteitaan painottaen, pyrkiessään saavuttamaan visiotaan ja tavoitteitaan.

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ABBREVIATIONS

AAU	Association of African Universities
ACE	African Centers of Excellence
ASTI	Advanced School for Translators and Interpreters
AUC	African Union Commission
BSC	Balanced Scorecard
CDF	Comprehensive Development Framework
CFD	French Development Fund
CPA	Consolidated Plan of Action
CRC	California Research Centre
CUSS	University Center for Health Sciences
DRP	Division for Research and Publication
DVC/RC	Deputy Vice Chancellor in charge of Research and Cooperation
DVC/RCB	Deputy Vice Chancellor in charge of Research, Cooperation and Relations with the Business World
Fed	Faculty of Education
FHS	Faculty of Health Sciences
FS	Faculty of Science
FSMS	Faculty of Social and Management Sciences
FSRG	Faculty/School Research Grant
GDP	Gross Domestic Product
GEP	Global Education Policy
GESP	Growth and Employment Strategy Paper
GNP	Gross National Product
HE	Higher Education
HEI	Higher Education Institution
ICT	Information and Communication Technology
IMF	International Monetary Fund
IP	Intellectual Property
KE	Knowledge Economy

K4D	Knowledge for Development
LPA	Lagos Plan of Action
MCBL	Molecular and Cell Biology Lab
MINESUP	Ministry of Higher Education
MINRESI	Ministry of Scientific Research and Innovation
NEPAD	New Partnership for Africa's Development
NIS	National Innovation System
OAU	Organisation of African Unity
OEM	Original Equipment Manufacturing
PASET	Partnership for Applied Science, Engineering and Technology
PI	Project Investigation
PRSP	Poverty Reduction Strategy Papers
RA	Research Allowance
R&D	Research and Development
RI	Research Institute
RDI	Research Development and Innovation
RMA	Research Modernisation Allowance
RSRUB	Report on the Situation of Research at the University of Buea
S&E	Science and Engineering
SAP	Structural Adjustment Programme
SDG	Staff Development Grant
SRC	Scientific and Research Committee
STEM	Science, Technology, Engineering, Mathematics
TUNI	Tampere University
UB	University of Buea
UBRPMG	University of Buea Research Policy and Management Guide
UBSP	University of Buea Strategic Plan Document
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNIYAO	Bilingual University of Yaounde
WB	World Bank

1 INTRODUCTION

1.1 Research Background

Contemporary higher education in most African countries is less than 60 years old. Most universities in the region were created at the dawn of independence from colonial rule in the early 1960s and thereafter. Upon their creation, their most perceived mission was to educate and train people for nation building and economic development. Citizens received education and were also trained to conduct research that would influence economic development within the context of the needs, demands and aspirations of their countries (Elias, 1965; Woldegiorgis & Doevenspeck, 2013). This policy measure was crucial because, prior to independence, most citizens of these countries pursued university education abroad. The education they received abroad 'was poorly adapted to the needs of Africa in general', as in the case of Cameroon (Njeuma et al., 1999, p. 2). Consequently, upon gaining independence, those countries whose higher education (HE) systems were not completely influenced by their formal colonial powers were able to easily design education policies that targeted the economic needs, demands and aspirations of their specific societies. After all headings, quotes, tables and figures the style of first paragraph is TUD Body Text 1.

In this arrangement, HE was placed exclusively under the authority of national governments with all costs borne by the states (meaning that HE—knowledge—was entirely a public good). For example, in pursuit of its goal of nation building and economic development, the government of Cameroon embarked on a generous plan to increase enrolment into universities and lower the quota of students pursuing HE abroad. In this plan, tuition was completely free. In addition to free tuition, students received 'well-paid bursaries' with subsidised meals and accommodation (Njeuma et al., 1999, p. 3). Academics were also well motivated, until the period when enrolment into university surged against stagnated infrastructure and lack of other facilities to ease research, teaching and learning.

In line with the pursued post-independence education policy, much progress was made in the area of economic development until the late 1970s when the World

Bank (WB) reported on the economic recession that hit most African countries. The WB based the recession on the 'poor growth of the productive sectors, a declining level and efficiency of investment, waning exports, mounting debt, deteriorating social conditions and an increasing erosion of institutional capacity' (Heidhues & Obare, 2011, p. 56). After a careful consideration of the situation, the WB and the International Monetary Fund (IMF) intervened with a new liberal economic ideology (neoliberalism), which is detailed in the Berg report (see Section 2.1). The WB recommended the 1981 Berg report, Accelerated Development in Sub-Saharan Africa: An Agenda for Action, and adopted it as the blueprint for the development of African countries. Project members came from the African Strategy Review Group of the WB, consisting of Elliot Berg (coordinator), K. Y. Amoako, Rolf Gusten, Jacob Meerman and Gene Tidrick, as well as other WB staff members (WB, 1981). Also of relevance are the three successive WB policy research reports that advocated for the reduction of public expenditure for HE in Sub-Saharan Africa based on the claim that it was unnecessarily high, inefficiently utilised and portrayed profound social inequalities in comparison to allocations in other sectors (WB, 1986, 1988, 1994).

However, before the Berg report, the Organization of African Unity (OAU) produced an action plan document called, Lagos Plan of Action for the Economic Development of Africa 1980–2000 (LPA). The LPA was meant to restructure the economic base of African countries through a 'far-reaching regional approach based primarily on collective self-reliance' (OAU, 1980, p. 4). Among its priorities was the desire to improve in terms of human resource development and to institute science and technology as a foundation for development in order to realise 'sub-regional and regional internally located industrial development' and achieve self-sufficiency in food production and supply within the framework of state-driven development (OAU, 1980; Heidhues & Obare, 2011).

Notwithstanding, the WB and IMF overshadowed the LPA with their Structural Adjustment Programs (SAPs) presented as the only probable solution for the social and economic development of struggling African countries at the time (WB, 1981; WB, 1989; Heidhues & Obare, 2011). Through this endeavour, both organisations have continued—through global education policy (GEP), for example—to impact the organisation and management of African universities, as well as economic development policies, through their global economic development agendas (Molla, 2014). For example, James D. Wolfensohn (president of the WB from 1995 to 2005) piloted the comprehensive development framework (CDF), which stressed enhanced ownership of a country's development goals (WB, 2000, p. 5).

Subsequently, from the CDF, the WB developed Poverty Reduction Strategy Papers (PRSPs) and the New Partnership for Africa's Development (NEPAD), as inclusive endeavours aimed to increase Africa's global integration (integrating development initiatives between domestic holders and development partners, such as the WB and IMF) (Tarabini & Jacovkis, 2012; Owusu, 2003; WB, 2000).

Together with the Growth and Employment Strategic Papers (GESPs), the PRSPs also determined the vision and mission objectives of universities in Africa (Molla, 2014). Hence, the continent has, in general terms, experienced a wide range of challenges with education and development aid policies from the WB and its associates, which aimed to enable the socio-economic development for member countries. Regarding education policy in particular, the knowledge economy (KE), a GEP of the WB that was designed within the neoliberal economic framework, and the entrepreneurial university policy objectives constitute the basis for this study.

Accordingly, after studying the circumstances surrounding global education policies, Dale (2000) remarks that increased involvement of international organisations in education policies of nation states continues to mean that education policies for African countries continue to be shaped by a globally structured educational agenda. Additionally, Lindgard and Ozga (2007) argue that this kind of practice, which translates to policy borrowing and lending, promotes a wide range of activities that justify major shifts in national, institutional and individual practices and processes that, for the most part, remain decontextualised, unexamined and unspecific. These assertions spotlight the essence of this study, which investigates the KE and entrepreneurial university policy objectives (GEPs) at public universities in Cameroon that are within the neoliberal economic order and aim towards the socio-economic development of Cameroon.

Entrepreneurial university and KE policies within the neoliberal economic order (deregulation in public service delivery and economic liberalisation) mean, for instance, that universities can reorganise themselves within a particular framework of their capacities in order to obtain more resources for themselves and to incentivise their personnel and subsidise their academic activities towards greater socio-economic development (Jessop, 2017; Levy et al., 2011; Shattock, 2009; Rubins, 2007; Clark, 2001). Consequently, in this neoliberal dispensation, new dimensions that relate to the management and organisation of universities within the GEP framework (vis-a-vis the demands, needs and aspirations of societies) have emerged. University management and academics (especially in Western industrialised countries) now engage with different stakeholders in diverse ways. They seek to

improve their capacities (financial and otherwise) and the ability to effectively take care of their different academic activities and responsibilities.

For example, Clark (2001) acknowledges that the decision made by universities to pursue alternative revenue sources strengthens their funding bases and opens them to a third-stream of income from the business world. In addition, he opines that the desire of the university to interact and cooperate with external stakeholders reduces the gap between the demands made upon it and its capacity to respond than it would if it chose to remain in its traditional form. In spite of these policy prescriptions, including the successful outcomes in the Western world (most especially), most universities in Africa seem to continuously struggle with respect to the essence of their public responsibility towards the advancement of the socio-economic development of their societies (Cloete, Fehnel, et al., 2006; Cloete, Bailey, et al., 2011). This explains the motivation for this study—I was partly influenced by the plurality of research and growing criticism concerning the role of the WB in supporting the HE policy in Africa (see Shrivastava & Shrivastava, 2014; Molla, 2014; Obamba, 2013; Collins & Rhoads, 2010).

While focusing on the increasing popularity of the global knowledge-based economy ideology, Collins and Rhoads (2010) examine the role of the WB in advancing HE sectors in the developing world. Their main interest, concerning universities, is to determine how the actions and policies of the WB limit the ability of universities in developing countries to build capacities and generate knowledge within the context of a rapidly changing global economy and the role that knowledge production plays in situating a nation as part of this complex world order. Furthermore, they examine how the same actions and policies of the WB contribute to producing and reproducing forms of global hegemony in terms of neo-colonialism and neoliberalism. Their research employs very little empirically grounded analyses of how GEP affects developing nations. However, they used Uganda (a country that receives WB university support, struggles to strengthen its universities and faces difficult economic times) as their case study for the impact of GEP in Africa. With respect to Uganda, they assert that adherence to SAPs conferred on the WB the responsibility of being the single most important actor to define the parameters of policymaking in the field of education. Consequently, the WB acquired the possibility to impose 'stringent conditions without assuming responsibility for failed policies and subsequent consequences' (Collins & Rhoads, 2010, p. 193). However, the study does not focus on how Ugandan universities, within the national context, function in relation to KE and entrepreneurial university policy objectives aimed towards the country's socio-economic development.

Along the same lines, Shrivastava and Shrivastava (2014) research the situation of HE in South Africa on the basis of domestic and international trends that are redefining the nature and role of universities worldwide. Their research examines the role of universities in KE and the impact that the neoliberal ideology has had on the evolution of HE in South Africa and the world. Basing their research on the importance of HE for meeting the developmental needs of a society, they argue that the neoliberal idea of constraining education policy issues to market forces is synonymous to promoting inequality, socio-political instability and uncertainty in a society, both in terms of knowledge production and economic development. Complementing this study is the research of Obamba (2014), which examined the neoliberal economic ideology—the 'innovation systems' and 'global partnership' paradigms—as bases of WB's priorities and approaches to education and development policy in developing countries. On these, his findings assert that the neoliberal economic ideology of the WB and its narrow definition of 'rates of return' calculations amount to heavy investments in basic education at the expense of HE.

In addition, focusing on the nature and impact of WB's non-lending assistance to the Ethiopian HE subsystem, Molla (2014) examines the policy role of the WB in the contemporary HE reform process in Ethiopia. He also assesses the impact of WB's knowledge aid, which is in accordance with its neoliberal educational agenda, on the knowledge production capacity at the national level. Molla (2014) then asserts that such knowledge aid from the WB has a profound discursive effect on policy reform priorities in Ethiopian HE, undermining the country's knowledge production capacity. However, although these studies discuss the KE paradigm with respect to contemporary development context, they do not simultaneously examine institutional processes in relation to KE and entrepreneurial university policy practices on the national context of Ethiopia.

Therefore, based on the foregoing acknowledgement, this project uses case study design and qualitative research paradigm to examine the processes of Cameroon's public universities in relation to KE and entrepreneurial university policy objectives aimed towards the socio-economic development of the country, between 1990 and 2016. The investigation considers the fact that KE and entrepreneurial university ideas operate within GEP and neoliberal economic frameworks. Additionally, I analyse documents and other data within the framework of two main theories—international regime and institutional theories—as well as, more broadly, within the non-positivist (poststructuralist) theoretical perspective.

1.2 Research Problem Statement

Within the framework of the neoliberal KE and entrepreneurial university policy objectives, studies have established that between 1980 and 2006, the rate of knowledge creation and dissemination increased significantly, enabling economic development of the global economy. This phenomena is attributed to rapid advances in information and communications technologies (ICTs), which is responsible for enhanced research productivity and development towards new knowledge and technologies, reflected in an increased rate of patents (excluding in the United States) from 39 percent in 1981 to 47 percent in 2003 (Chen & Dahlman, 2005; Powell & Snellman, 2004) . Hence, within the KE and entrepreneurial university framework, universities are considered as the bedrock of the supply of knowledge and graduates (raw materials of the new economy) to maximize the competitive nature of countries and enable especially the poor ones to leapfrog stages of development and become globally competitive (Slaughter & Rhodes, 2004; Wright & Rabo, 2010; Obamba, 2014; Jessop, 2017). To this effect, researchers, institutions and international organizations including the WB, have ascertained through KE and entrepreneurial university policy objectives that knowledge development, cooperation and collaboration between different institutions and stakeholders constitute the basis for inclusive and appropriate development strategies and goals for the society.

Nevertheless, a casual comparison with universities in the Western world indicates that even though there is increasing awareness of the importance of public universities in the global context of KE and entrepreneurial university policy objectives, there is a lack of clarity and agreement about a standard development model and the role that universities play in this development at both the system-wide (government) and institutional (university) levels in some African countries (Cloete, Bailey, et al., 2011). Moreover, though the enhanced economic development trajectory of western countries is backed by clearly defined and well implemented KE and entrepreneurial university policy objectives within the practices/responsibility of universities, note must be taken that this professional arrangement does not necessarily characterise university practices globally.

In fact, a review of studies on the economic development situation in most of Africa suggests that although universities have the responsibility to address societal problems and to cultivate ideals necessary for its progress, as asserted by Sharma and Ghista (2008), there are still many factors and conditions that hinder the ability of some universities in Africa to contribute sustainably towards economic development (Cloete, Bailey, et al., 2011; Doh, 2012; Bilola, 2015). Consequently, universities in

these countries are still unable to manage and organise themselves effectively in terms of their socio-economic development role (that is, they are unable to meet their societal obligations effectively—i.e. the needs, demands and aspirations of their people). With particular regards to Cameroon, there is little evidence to suggest that there has been a corresponding level of socio-economic development albeit the considerable rise in the number of higher education institutions (HEIs) and consistent rise in enrolment rate within the neoliberal framework of the KE and entrepreneurial university policy objectives, including in public universities since 1993.

Generally, enrolment into higher institutions of learning grew faster in Africa than in any other region from 1970 until 2008 (UNESCO Institute for Statistics (UIS) Fact Sheet, 2010; Cloete, Fehnel, et al., 2006). Regardless, this trend does not seem to have produced the knowledge and capacity needed for the socio-economic development of the region. In 2009, the WB reported that there were already more than 250 public and 420 private HEIs in Africa (Woldegiorgis & Doevenspeck, 2013, p. 36). The student cohort numbers have also continued to rise albeit marred by access and other issues, coupled with 31.3% unemployment rate of tertiary graduates in Sub-Saharan Africa (WB, 2017). Also, a 2010 WB report, Financing Higher Education in Africa, confirmed that the total number of HE students in Africa increased at an average annual rate of 16% between 1991 and 2006. However, according to the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics (data as of September 2020), the current gross tertiary education enrolment ratio for Sub-Saharan Africa was 9.4%, which is well below the global average of 38%, but up from 9.1% in 2016.[1]

Additionally, note is taken of the fact that in spite of the increase in the number of universities and student cohorts, Africa registered a decline in research output from a 1% share in the late 1980s to 0.7% of total global research output share by the year 2000, indicating a loss of over 30% in its global research output share (Cloete, Fehnel, et al., 2006; Tijssen, 2007). Also, citing Bloom et al. (2006), Cloete, Bailey, et al. (2011) affirm that whereas the HE participation rates in most high-income countries are well over 50%, they are below 5% in most sub-Saharan African cases. This is in spite of the efforts being made by national governments and most universities in Africa at interacting and cooperating with diverse stakeholders/actors, nationally and internationally. They still seem unable—or are still lacking the capacity

[1] UNESCO Institute for Statistics (uis.unesco.org). Data as of September 2020.
School enrollment, tertiary (% gross), Sub-Saharan Africa:
https://data.worldbank.org/indicator/SE.TER.ENRR?locations=ZG

needed—to fulfil the socio-economic and development needs and aspirations of their societies because most endeavours seem to be mostly weak or symbolic in nature (Cloete, Bailey, et al., 2011). In relation to this, the WB (2010) has asserted that financing problems could be a major cause for this weakness, given that African universities have more acute financial problems than universities in the rest of the world.

If increased knowledge creation/research productivity, including in terms of graduate output, and knowledge dissemination maximize the competitive nature of countries and enhance economic development, and if these endeavours can mainly produce expected results in the western world and may not be adequately replicated in Africa for the same purpose, then there is need to investigate more how some universities in Africa perceive, conceptualise and implement both policy objectives (KE and entrepreneurial university policy objectives) towards economic development of their societies. Worthy of note is that these policy objectives are prescribed within the framework of the neoliberal economic order, apparently brought to African countries via WB's affirmative actions of SAPs in the 1980s. This assertion points to the conclusion of WB's 1981 Berg report that African countries would only regain growth and development through increased neoliberal efforts of deregulation, market competition and privatisation of social services, including education, which primarily paved the way for the establishment of the SAPs in these countries (Heidhues & Obare, 2011).

In addition, the WB influenced the entire education system with a series of direct and indirect development measures such as the comprehensive development framework (CDF), the Poverty Reduction Strategy Papers (PRSPs) and the Growth and Employment Strategic Papers (GESPs), which respectively stressed enhanced ownership (all stakeholders involvement) of a country's development goals (WB, 2000, p. 5) and determined the vision and mission objectives of universities in Africa (Tarabini & Jacovkis, 2012; Owusu, 2003; WB, 2000). Hence, through the KE idea, for example, the WB invested over US $1 billion in support of HE in Africa between 2000 and 2015 (Macgregor, 2015). These endeavours (cooperation with a wide variety of stakeholders, including international agents) hoped to enhance the socio-economic development level of African countries, especially with interest of the WB to support the role of universities in knowledge development and human capacity building within the new KE (Collins & Rhoads, 2010).

Presumably, the responsibility of the university—as a knowledge creation and development organisation with the ethos to respond to the socio-economic needs and aspirations of a society—equally depends on the nature of that society. This

nature includes variables such as the human, physical, fiscal and natural resources, the history, culture and traditions of the people as well as their needs and expectations. These variables constitute some of the building blocks that would determine both the organisation and management style of a public university towards the economic development of the society. They determine whether or not universities should concentrate on research, offer programmes leading only to first, major or advanced degrees, teach and disseminate knowledge simply for the sake of knowledge itself, brace themselves as centres of useful knowledge or even take on national or regional responsibilities (Clark, 1998).

Complementing the KE objectives in a general manner, the CDF advocates for an open and competitive system of tertiary education with developments in modern curricula, including effective teacher training and supervision, developments in science, technology and knowledge transfer towards new technological advancements and real needs of emerging local markets (Wolfensohn, 2000). By emphasising on all stakeholder involvement—extensive consultations with all stakeholders including civil society and the private sector on development issues, attributes which constitute some of the key components of the entrepreneurial university policy objectives propagated by Clark (1998)—the CDF recognised the importance of lessons from practice and history of indigenous peoples and communities as well as the application of these values towards meeting their relevant needs and aspirations. This construction is mostly coherent with Clark's (1998) five main category pathways to entrepreneurial universities, which describe an educational system that accounts for intellectual capacities and the optimisation of knowledge for purposes of socio-economic growth and other efficiencies (detailed in Section 2.4.2).

Therefore, the purpose of this study was to investigate how public universities in Cameroon responded to KE and entrepreneurial university policy objectives with the intention to highlight the importance of education policy actions based on specific country circumstances and needs. It was particularly motivated by both WB's irresistible concern for the socio-economic development of African countries through its KE policy objectives and the globally recognised ideals of the entrepreneurial university policy. Still, I hoped to highlight the impact of neoliberal tendencies in the processes of Cameroon's public universities in relation to KE and entrepreneurial university policy objectives in the course of the research. For instance, the SAP agenda liberalised the HE sector to lure in private investments. Under the same scheme and in consideration of WB's KE policy, presidential decrees of April 1992 and January 1993 respectively, transformed the HE landscape

of Cameroon by reorganising all public universities. The University Centre of Buea, for example, was transformed into a full-fledged public university. The decrees granted these institutions partial autonomy as well as the rights to raise income from private sources and broaden the participation of different stakeholders in the university management with the aim to achieve socio-economic development (Njeuma, 1999).

Accordingly, Article 4 of the general provision of Law No. 005 of 16th April 2001 to Guide Higher Education in Cameroon requires that all actors in society take part in HE policy formulation and implementation, according to laid down regulations. This provision reflects on the prescriptions of the CDF, NEPAD and PRSPs and is in line with KE and entrepreneurial university ideas, emphasising cooperation and collaboration between universities and different stakeholders for socio-economic development (Sam & Sijde, 2014; Klees, 2002; WB, 2000). The law encourages universities to engage in effective use of individual and collective capital towards the attainment of goals (demands, needs and aspirations) for their communities. Complementing this law is Article 22 of the Cameroon's University Standards document (2015) by the government of Cameroon, which states and emphasises in very clear terms that universities should develop and promote Income Generating Activities (IGA). Through this article, the government advises the diversification of study programmes and their adaptation to the job market and encourages collaboration with the private sector as well as the pursuit and exploitation of licenses and patents.

With particular reference to academics, Article 23 demands that teaching and research be associated with concrete realities and translated into marketable goods and services in order to improve the applicability of study programmes at universities (true reflection of the KE concept). Furthermore, Article 80 of the same document gives schools the responsibility 'to define the organisational model of the curriculum and propose study programmes whose contents are coherent, detailed and have a logical follow up' (University Standards, 2015). Therefore, this study highlights part of the autonomy granted to universities to determine their programme and pedagogic objectives with respect to the needs, demands and aspirations of their communities (in line with entrepreneurial university policy objectives). This includes course content, 'learning methods, modes of assessment, and assessment of lectures and lecturers' (Article 81, University Standards, 2015).

1.3 Aims and Objectives of the Study

Generally, the aim of this study is to examine the institutional processes of the University of Buea (UB) in relation to KE and entrepreneurial university policy objectives aimed towards the economic development of Cameroon from 1993 to 2016. That is, I intend to examine how (within this period) UB, as an organisation, had responded or reacted to KE and entrepreneurial university policy objectives aimed towards the economic development of Cameroon. This undertaking requires that I examine the dynamics and/or complexities of KE and entrepreneurial university policy objectives at UB, as economic development tools, within the system-wide HE policy frame of Cameroon.

However, in order to project a better understanding of the actions of this public university in Cameroon—in relation to the policy objectives aimed towards the economic development of the country—the study first explores and provides insight about the public university character in Cameroon from its independence in the 1960s up until the early 1990s. This is the period before education policy in Africa gained a global outlook with a compelling WB influence. Consequently, this study primarily focuses on the actions/activities of UB in relation to KE and entrepreneurial university ideas aimed towards the economic development of Cameroon from 1993 to 2016—albeit with an outlook that extends beyond the given period because these processes are ongoing. As its theoretical framework, the study examines international regime and institutional theories in order to lay the foundation that would determine the subsequent analysis of the empirical and document data collected for the study.

1.4 Research Questions

Following the aims and objectives of this research study, I am able to formulate the following research question:

- How did the University of Buea (UB) respond to knowledge economy (KE) and entrepreneurial university policy objectives from 1993 to 2016?

This question relates to the changing circumstances of HE in Cameroon from 1993 until 2016, following the institutionalisation of the new GEP trend—in this case, KE and entrepreneurial university policy ideas. Hence, the question addresses the organisational processes and activities of UB with respect to system-wide HE

policies of Cameroon, which were influenced by WB's GEP as well as by KE and entrepreneurial university ideas. In analysing the data collected for the study, I also take into consideration the characterisation of the international regime theory, which generally agrees on converging the expectations of constituent members in a given area of policy agreement (Krasner, 1982; Hasenclever et al., 2000; Tarzi, 2003; Amaral, 2010). Its intention is to enhance the ability of individual nation states to secure outcomes influenced by the efficient allocation of resources in specific issue areas of international politics, guided by the rules, principles and norms that are enforceable through partial orders (Krasner, 1982; Hasenclever et al., 2000).

Therefore, I examine the processes (actions/activities) of UB executed with the aim of fulfilling certain KE and entrepreneurial university concepts as part of the agreed policy position of the partners of WB's GEP idea aimed towards economic development. I also consider that, in the international dimension of education policies area, regimes do not have a strictly formal control system that is able to guide and enforce the rules (principles and norms) under which all member states are to act (Amaral, 2010). However, I understand that the agenda of the WB regime, in this case, is to enable practical endeavours aimed towards the economic development of all its member states.

Considering that a university is an organisation like any other, my data analysis also builds upon the knowledge and assumptions of the institutional theory. This is based on the understanding that the outcome of a policy depends on the internal structuring and functioning of an organisation in relation to the circumstances of its environment (Janićijević, 2015). Consequently, using both regime and institutional theories in my analysis, I intend to obtain better understanding of how UB manages its activities within the neoliberal framework of WB's KE and entrepreneurial university policy objectives, guided by system-wide HE policies of Cameroon aimed towards fulfilling its economic development goals for the country. By extension, these considerations give us a better understanding of how UB's activities towards these policy goals should be examined in the national context of Cameroon through the following two sub-questions:

1. How did the University of Buea (UB) respond to the knowledge economy (KE) policy objectives of knowledge creation, valorisation and application aimed towards the economic development of Cameroon?

2. How did the University of Buea (UB) respond to the entrepreneurial university policy objectives of collegiality, autonomy and educational achievement aimed towards the economic development of Cameroon?

1.5 Significance of the Study

In order to illustrate the significance of this study, I reviewed some other studies that have been conducted (directly and/or indirectly using an African case study approach) on the development role of universities in Cameroon. It is important to note that the review in Section 1.1 relates to what has motivated my desire for this research. The enthusiasm of governments of early independent African countries to take full funding responsibility for HE and maintain it as a public good, influenced the thought to investigate the role of public universities in Cameroon. This relates to the research question and the significance of this study on Cameroon. Thus, I reviewed a few studies on the role of universities in the economic development of African countries, including Cameroon, in order to demonstrate why it is important to study the processes of Cameroon's public universities in relation to KE and entrepreneurial university policy objectives. The choice of these particular studies is informed by the similarities of the study objectives, the limitations identified and the opportunities created for further research on the question of universities and their role in national economic development viz.:

- Cloete, Bailey, et al. (2011) is a publication on Universities and Economic Development in Africa;
- Cloete, Fehnel, et al. (2006) is another publication on Transformation in Higher Education: Global Pressures and Local Realities;
- Doh (2012) is a PhD dissertation study on The Responses of the Higher Education Sector in the Poverty Reduction Strategies: The Case of Cameroon; and
- Bilola (2015) is a PhD dissertation study on Evaluating the Strategic Objectives of Cameroonian Higher Education: An Application of the Balanced Scorecard.

In a broader context, Cloete, Bailey, et al. (2011) studied the relationship between universities and economic development in select African countries. Contextually, they focus on internal structures and dynamics of universities and their interaction with national governments. Specifically, the study identifies factors and conditions (at both national and institutional levels) that either facilitate or hinder a university's ability to contribute sustainably towards economic development. Hence, based on this aim, the study investigated the following:

- The nature of the pact between universities, political authorities and society at large;

- The nature, strength, size, quality and continuity of the university's academic core; and
- The level of coordination, effectiveness of implementation and connectedness in the larger policy context of universities.

It is important to note that the authors acknowledge the fact that globalisation and KE concepts have given rise to new socio-economic, political and cultural challenges to nation states and their HE systems. They affirm the claim that knowledge production and application within an internationally accepted framework is at the core of national development strategies—a major pathway to socio-economic development, determined by a country's competitive advantage position in the global KE. Although their study does not directly investigate the entrepreneurial university concept in Africa, they acknowledge that 'building indigenous knowledge capacity through huge investments in education and research' not only in HE but also in primary and secondary education (improving quality and access) is key to sustainable economic development, citing the cases of China and India (Cloete, Bailey, et al., 2011, pp. 2, 3). Although the study takes into account the KE concept with respect to university and economic development, it neither treats it as an integral part of the entrepreneurial university conception nor investigates how the university responds to it within neoliberal and GEP contexts. Therefore, my study takes roots from the foregoing acknowledgement and/or findings of their study.

Besides, the study results indicate that there is lack of clarity and agreement between governments and universities about a development model and what the role of universities is in development—even though government was increasingly aware of the importance of universities for the KE agenda. The results also show that these universities focused on traditional undergraduate teaching activities with limited research funds and other capacities to contribute towards economic development through knowledge production. Finally, this study also shows that there is no coordinated effort between governments, external stakeholders and universities to strengthen the latter's role in development despite the fact that there are traces of cooperation between universities and some external stakeholders.

In his study about the responses of Cameroon's HE sector in poverty reduction strategies, Doh (2012) examines the transformation processes adopted by the government of Cameroon, through the use of HE as a driver of its poverty reduction strategies aimed towards an emergent industrialised economy by 2035. Doh's (2012) study affirms that HE (universities in particular) possesses the potential to contextually address a country's economic problems, depending on how it acknowledges and manages the needs, demands and aspirations of its society. Using the national innovation system (NIS) theory, he asserts that the university in

Cameroon is yet to gain adequate recognition that should enable its integration into national research, innovation and production systems. Thus, its contribution to socio-economic development could be more significant if it is given strong macro support linkages. Without focusing on the role of the WB in education policy influence in Cameroon, Doh (2012) principally relies on the government-university-industry nexus for much of his analyses.

Consequently, his study draws the conclusion that, besides the lack of macro support linkages, the absence of a national strategic plan and a central funding system for university research are other major reasons that account for the university's inability to adequately drive the socio-economic development in Cameroon. The study uses the entrepreneurial university conception to examine the nature of the Cameroonian university and observes that, besides other traits, the Cameroonian university disposes of some degree of autonomy that enables its market-like interaction with other stakeholders. What the study does not examine is how the public university responds to the policy objectives of entrepreneurial university and KE constructions aimed towards the economic development of Cameroon, which then gives significance to this study.

Bilola's (2015) study on the strategic objectives of Cameroonian HE examines the possibilities of using the balanced scorecard (BSC) approach in the management of strategic objectives of HE in Cameroon. It assumes that the public university's constant interaction with its environment (diverse stakeholders) determines the success of its mission-objectives, which represents the expanded developmental peripheral trait of the entrepreneurial university. Consequently, she uses the BSC to evaluate the achievement of strategic objectives regarding the relevance of public universities in the fulfilment of the expectations of diverse stakeholders in Cameroonian society. In essence, Bilola's (2015) study focuses on how to manage the strategic objectives of the Cameroonian HE system at both system and institutional levels aimed towards socio-economic development (arguably, the basic objective of the university).

The assessment of her study is conducted within the major theoretical framework of the BSC, including related concepts such as strategic objectives, performance management, new public management and strategic planning. This approach gives reason to broaden the assessment scope with other theoretical and conceptual considerations that may lead to additional understanding of more measures to be taken at both system and institutional levels of HE that are aimed towards meeting strategic objectives (the demands, needs and expectations of diverse stakeholders in Cameroon). This also explains why my study focuses on the institutional processes

of UB in relation to KE and entrepreneurial university ideas (within the GEP and neoliberal ideology aimed towards socio-economic development in Cameroon).

Generally, the results of Bilola's (2015) study indicate that there is disagreement among the HE personnel regarding both the relevance of strategic objective measures in the HE management system and their implementation approaches. The study also finds that not all HE personnel (respondents), at both system-wide and institutional levels, agree on the importance of all stakeholders. To some, the importance of stakeholders in HE is measured on the basis of their status and involvement as determined by state regulatory instruments, such as laws and decrees. Similarly, the age and amount of financial contribution by an individual towards university activities are also considered to be strong determining factors regarding the importance of a stakeholder. Hence, the state is the most influential of all stakeholders in the strategic objectives of HE in Cameroon based on preceding reasons. The study also finds that feedback procedures exist but that, at all governance levels, there are insufficient provisions and opportunities for the inflow of feedback about reforms.

Consequently, the essence of this study is equally to fill the gaps identified in the foregoing studies by examining, generally, how Cameroon's public universities respond to WB's KE and entrepreneurial university policy objectives aimed towards the socio-economic development of the country. Hence, this study aims to make significant contributions towards understanding the organisation and management efforts of Cameroonian public universities for socio-economic development through their vision, mission-objectives and goals with respect to the needs, demands and aspirations of their people. Furthermore, it seeks to provide insights on how the government of Cameroon and its public universities perceive and act on GEPs aimed towards the socio-economic development of the country. In addition, while assessing KE and entrepreneurial university policy objectives in terms of a particular context, the study also seeks to suggest how, at both system and institutional levels, Cameroon could harness knowledge support from development and donor organisations for the socio-economic development of the country. Finally, it is expected that all development stakeholders, including public universities, will gain some understanding about the kind of collaborative endeavours that are needed in order to enhance the socio-economic development efforts in Cameroon.

Overwhelmingly, it is in the interest of the study to advocate for some national policy considerations over GEP pressures, including from the WB. The vision is definitely to promote the socio-economic development of Cameroon within a national education policy framework that reflects the specific realities of the country.

Consequently, the goal is to exhort the government of Cameroon to focus on schemes that rigorously support actions that contextually design and/or adapt GEPs to the particular needs, demands and aspirations of the country. In other words, it explores the theory that education policies aimed towards socio-economic development or poverty alleviation are likely to be more effective when designed and implemented efficiently and in accordance with specific contextual references. Thus, I intend for the considerations, analyses and conclusions presented here to be useful to policymakers, management (both at system and institutional levels), academics and all other stakeholders involved in HE and socio-economic development of Cameroon.

1.6 Structure of the Dissertation

This study is organised into six chapters. Chapter 1 introduces the research project and provides background information about HE and the management and primary objectives of public universities prior to the introduction of KE and entrepreneurial university policy measures in the public university system in Cameroon. It briefly discusses the research problem statement of the study and states the aims and objectives, as well as the research questions of the study, which together formulate an explanation of the significance of the study. Chapter 2 reviews the key literature on particular policy objectives that influence the way in which public universities in Cameroon function in connection with their role in the socio-economic development of the country. Furthermore, it introduces the conceptual and theoretical frameworks that guide the study, focusing on different policy constructions that inform the general perceptions of the study. The review is based on six strands of literature, including GEP, neoliberalism (highlighting SAPs), KE policy objectives, entrepreneurial university policy objectives and international regime and institutional theories of organisations. Chapter 3 describes the methodology applied and discusses the methods used. In other words, the specific techniques of inquiry and investigative practices that were informed by the research problem statement and questions that guide the study. In essence, the chapter presents the philosophical assumptions that inform the research problem and elaborates on the design strategies (methods) used throughout the study process.

In order to draw special attention to the distinction in the way public universities were organised and managed after independence in 1960 and from 1993, when WB's neoliberal and GEP ideas gained recognition in Cameroon, Chapter 4 summarises

the management practices of universities from 1960 to 1993. Chapter 5 examines UB's response (its institutional processes) to KE and entrepreneurial university policy objectives through system-wide and institutional processes (organisation and management practices) of the same universities in the current dispensation of the neoliberal GEP ideas of the WB from 1993 to 2016. Before this, it highlights Cameroon's relationship with the WB, its education for development policy approach and the 1993 KE and entrepreneurial university reforms and vision in Cameroon's education public space. Ultimately, the chapter ends up with an analysis of the interview and document data obtained in relation to UB's response to KE and entrepreneurial university policy objectives.

Chapter 6, the concluding chapter, presents the main and general findings of the study and discussed the implications of these findings for both policy and practice. In addition, the contributions of the findings to those theories that informed the problem statement and research questions of the study are examined, including some limitations and suggestions for future research.

2 TOWARDS A CONCEPTUAL AND THEORETICAL FRAMEWORK

This chapter examines specific literature on particular constructs and theories that influence the organisation and activities of UB. In this particular case, the review is connected with the influence of neoliberalism and some GEP measures on universities that aim towards economic growth and development. Information sources for the literature are generally multidisciplinary (within the social science discipline) with focus on GEP, referring specifically to KE and entrepreneurial university policy constructions. Neoliberalism, KE and entrepreneurial university policy constructions, including international regime and institutional theories, particularly inform the literature sources. Hence, the sourced literature spans through the disciplinary spheres of global education and public policy studies, organisational and management theory studies as well as economics and development studies of the WB. I sourced and obtained, in English, information (data) from different literature strands obtained from the books and peer review journal articles available in the library data resources of the Tampere University in Finland. In other to ascertain the relevance of the topic and keep pace with changing HE and development policy circumstances, most preferable literature sources for the study are not more than 20 years old. Based on the above explanation, the specific different strands of literature include the following:

1. Global education policy (GEP).
2. Neoliberalism (highlighting Structural Adjustment Programs [SAPs]).
3. The knowledge economy (KE) concept.
4. The entrepreneurial university concept.
5. The international regime theory.
6. The institutional theory of organisations.

These six literature strands constitute the key categories of research studies that inform the research questions and define the background, the aims and objectives and the conceptual and theoretical frameworks included in the study. In the sections that follow, I review the literature from each of these strands with the aim of situating this study within appropriate perspectives on the role of GEP measures and the way in which they impact the actions of public universities in relation to their socio-economic development role in Cameroon. Generally, the review enables me to understand how best to examine and assess documents and analyse empirical data in order to establish how KE and entrepreneurial university policy objectives impact the actions of public universities in Cameroon in relation to their socio-economic development role. Alternatively, the reviews can provide insights on how GEP may impact the national HE policy in the case of public universities in Cameroon. The following table presents a summary of the six literature strands.

Table 1. Summary of Literature Strands

Literature Strand	Representative Literature	Relevance	Gap(s)
GEP	(Fulge et al., 2016; Mundy & Verger, 2016; Verger et al., 2012; Janićijević, 2015; WB, 2002, 2010, 2011; Nagel et al., 2010; Jacobi, 2009; Lingard & Ozga, 2007; Margison & Marijk, 2007; Ozga & Jones, 2006)	Similar education reforms within an international cooperative framework. Non-state actors gain political power and presence even in the national education policy field.	Relevance of traditional/indigenous knowledge capacities, circumstances and national identity (needs and aspirations) in policy formulation towards socio-economic development in Cameroon.
Neoliberalism (with highlight on SAPs)	(Fine & Saad-Filho, 2017; Mijs et al., 2016; Venugopel, 2015; Molla, 2014; Bockman, 2013; Heidhues & Obare, 2011; United Nations, 2010; Hwang, 2009; Davies & Bansel, 2007; Naomi Klein, 2007; Ross	Preference of private enterprise and free market over public endeavour towards socio-economic development.	The importance and capacity of public enterprises/corporations in responding to the needs, demands and aspirations of society.

	& Gibson, 2006; McChesney, 1998; WB, 1981;)		
KE Concept	(Jessop, 2017; Verger et al., 2012; Levy et al., 2011; WB, 2000, 2007, 2011; Brinkley 2006; Ozga & Jones, 2006; Powell & Snellman, 2004; Snellman, 2004)	Based on Western industrialised experiences, development is achieved via greater reliance on intellectual capabilities than on physical inputs or natural resources.	Comprehensive financial framework for enabling knowledge creation, development, dissemination and valorisation towards increased capacity for accelerated development of developing countries.
Entrepreneurial university concept	(Hoffman, 2017; Jessop, 2017; Coyle et al., 2013; NCEE 2013; Hoffman, 2012; Shattock, 2009; Rubins, 2007; Slaughter & Rhoades, 2004; Bouroche, 2001; Clark, 1998, 2001; Davies, 2001; Slaughter & Leslie, 1997)	Engagement of other stakeholders to enhance capacities needed to cope with demands made upon them. Innovative academic behaviour to generate non-state resources that can cross-subsidise and incentivise further independent academic activities.	The importance of public funding of universities and societal benefits of public good knowledge regime vis-a-vis the private good knowledge regime (knowledge privatisation).
International regime theory	(Fulge et al., 2016; Janićijević, 2015; Amaral, 2010; Kersbergen & Verbeek 2007; Knill 2005; Tarzi, 2003; Hasenclever et al., 2000; Meyer et al., 1997; Krasner, 1982)	International institutions-shared principles and norms to enhance ability of nations to secure 'Pareto-optimal' outcomes in specific issue-areas of international politics (relations and cooperation).	The importance of national strategy/policy, formulated based on particular demands, needs and aspirations of the concerned people.
Institutional theory of organisations	(Alvesson & Spicer, 2018; Greenwood et al.,	Organisations do not adopt new structures	The strength of the organisation based on

	2014; Kariwo et al., 2014; Meyer & Höllerer, 2014; Shadnan & Lawrence, 2011; Heugens & Lander, 2009; Scott, 2008; Zucker, 1987; DiMaggio & Powell, 1983)	and practices due to their effectiveness and efficiency, but due to need to gain legitimacy. Construct and develop their functional procedures based on social interactions rather than on 'rational decision-making' (nature determined by normative, internal or external pressures).	rationality; with respect to its vision, mission and objectives.

This review exercise predominantly examines existing scholarship on the GEP, neoliberal worldview, international organisations and organisational behaviour in relation to socio-economic development. It identifies the gaps in the literature that constitute the major objectives of this study. The review is based upon published secondary sources (print and electronic materials: books, journal articles and edited volumes). Given the necessity, literature from fields outside of education and development policy was consulted to give proper meaning to the diversity and breadth of some common concepts as well as to show how perceptions and perspectives overlap in their implementation. The interrelationship between different literature strands shows diverse links between neoliberalism, knowledge development and innovation at universities and the entrepreneurial role of universities in development (Fine & Saad-Filho, 2017; Fulge et al., 2016; Shattock, 2009; Rubins, 2007; Clark, 1998).

Overall, this chapter impresses on the view that there is a need for a critical study of the development and adaptation of neoliberal tendencies and policy objectives to the particular needs, demands, expectations and aspirations of nation states. Also, in conceptualising neoliberalism, I recognise that it forms the premise that informs the formulation of GEP and the knowledge regime of the WB for the socio-economic development of developing countries. This view advances my understanding of global education and policy dynamics with respect to national goals and gives us further insight into how empirical data should be analysed in relation to UB processes that respond to KE and entrepreneurial university policy objectives for the socio-economic development in Cameroon.

2.1 Neoliberalism

According to Bockman (2013), neoliberalism is the result of the devastation caused by the Great Depression of 1929 under the economic idea of liberalism—laissez faire capitalism, a phenomenon wherein private enterprise flourished without state intervention. Therefore, cognisant of the devastating effects of the great depression, considered to be a consequence of the excesses of liberalism, Friedrich von Hayek and a group of European liberals imagined and postulated neoliberalism as a new socio-political and economic world order (Bockman, 2013). According to Bockman (2013, p. 14), this endeavour was an approach that sought to determine new measures 'to big problems whether in the form of socialism, state planning of the economy, or some form of state regulation'.

The essence of this new order was merely to create a role for the state (otherwise termed a minimal state) within the preserve of the liberal order of the market. State involvement in the order would protect private enterprise, provide some protection for the poor and maintain order. In succinct terms, neoliberalism projects the idea that private companies and individuals, along with the free market ideology, are better for generating socio-economic growth than the state (government) (Rose & Gibson, 2006; Lazzarato, 2009; Bockman, 2013). Since the 1970s, neoliberalism has therefore remained discursive and has shaped diverse policies at international, national and local levels—including the corporatisation of universities and entrepreneurship, with different ideologies, and policies and practices, with different impacts and outcomes (Griffin, 2007; Bockman, 2013; Mijs et al., 2016; Fine & Saad-Filho, 2017).

In policies and processes, for example, powerful financial institutions, like the IMF, the WB and the Inter-American Development Bank, impose neoliberal principles, such as deregulation, liberalisation, competition and privatisation, within the free market concept with effects that render the rich richer and the poor poorer (McChesney, 1998; Ross & Gibson, 2006). Venugopel (2015) describes this phenomenon as a powerful and expansive political agenda of class domination and exploitation, the manifestation of capital resurgent and an overarching dystopian zeitgeist of late-capitalist excess. Apparently, the foregoing assertions about neoliberalism explain why it appears to be the most influential political economic paradigm in the world today. Hence, with respect to HE, affordability and access would be limited to the elite class, especially in settings in which there exist no loan support schemes for education. To this effect, while being dependent on market outcomes alone, McChesney (1998) considers neoliberalism to be an accomplished

attack on the endeavour to secure the means for everyone to live well. The implementation of SAPs in Africa, beginning in the 1980s, seems to give credence to McChesney's claim.

Influenced by the conclusions and recommendations of the Berg report, the WB instituted neoliberalism as a way forward for the economic development of African countries through its 1981 SAP. The WB advised that the governments of African countries would effectively achieve socio-economic development goals by reducing 'widespread administrative over-commitment of the public sector' and focusing more on private individuals and firms with the capacities to respond to 'local needs and conditions, particularly in small scale industry, marketing, and service activities' (WB, 1981, p. v). Consequently, SAPs obliged African countries to cut down on their public expenditure in favour of privatisation. The WB did this within the theoretical understanding that the welfare state was economically and socially costly to generate an economic performance worthy of sustaining the survival of citizens (Davies & Bansel, 2007). In this light, SAPs considered private sector mobilisation as central to government economic and social policies (Davies & Bansel, 2007). Consequently, institutions that were formerly classified as special and central to government policy for collective well-being, such as schools and hospitals, came under neoliberal influence. Governments reclassified them as if they were any other services and products traded in the free marketplace.

Overall, the Berg report suggested that instead of African governments examining ways of effectively and efficiently operating public sector organisations, they should examine the possibility of placing greater reliance on the private sector (WB, 1981). This insistence underlines the proposition that:

Like most Western developed countries in the world, developing African countries can only gain sustained economic development through the acceptance and implementation of the neoliberal idea of the WB, as advised by the Berg report.

Consequently, the WB embarked on a massive neoliberal project towards the socio-economic development of African countries by instituting SAPs based on the proposals of 1980 Berg report. The IMF and Western donors subsequently adopted it as a policy instrument to combat the economic downturn that most African countries faced in the 1980s, barely two decades after most of the countries gained independence from colonial rule. These SAPs advocated for and emphasised economic liberalisation policies, reductions in government spending through macroeconomic stabilisation, privatisation and free market development plans (Heidhues & Obare, 2011). According to the United Nations, its privatisation agenda for national governments was:

…generally aimed at channelling national and international private savings into investment, enhancing the offer and quality of services, ensuring the disengagement of the State from the productive sector by supporting the development of the private sector into a dynamic growth engine, and encouraging private initiative and technology transfer. (United Nations, 2010, p. 17)

Worth noting here is that SAPs gained legitimacy (in Africa) as a development perspective that was preferred to the Lagos Plan of Action (LPA), an indigenous African initiative for economic development of African countries. Initiated in 1980, the LPA was an economic recovery and development agenda aiming for a collective self-reliance and self-sustainable development of the continent, which was based on the principle of individual autonomy and collective self-sufficiency, albeit exogenous (having an external cause or origin) in nature (Hwang, 2009). Quoting the OAU (1980, para. 1), Hwang (2009) justifies the decision of the LPA on the basis of the fact that the involvement of African countries in global development strategies had more devastating consequences on the continent, such as rendering it more vulnerable to socio-economic crises than other regions of the world.

Nonetheless, some researchers, like Asante (1985), have pessimistically argued that the LPA was supposedly an elephant-initiative-project, on the grounds that optimistic African economic development schemes launched in the 1960s had mostly become moribund (almost dead), thereby posing institutional challenges to its success (Hwang, 2009; Heidhues & Obare, 2011). It remains probable that the initiative would have positively affected African development if it were suitably supported by the WB and the IMF. Conversely, the WB, IMF and Western donors denied support for any development endeavours that were out of the international economic order (capitalism) of the time (Heidhues & Obare, 2011). Through the Berg report and SAPs, they stressed the interdependence of countries in the world; mainly on their own terms. Most African governments described this approach as an attempt to keep them permanently in the structure of dependent capitalism, wherein they would continue to export primary commodities in exchange for manufactured goods and food requirements.

SAPs conditioned needy African countries to deregulate and liberalise economic activities, encourage competition and privatise social services as measures to guarantee social and economic growth. Even though Verger et al. (2012) assert that, in some cases, privatisation happened by default and, specifically, due to the lack of capacity of some states to respond to the education demand in a context of structural adjustment, he acknowledges that these policies were quite often introduced as aid conditionality and were thus perceived as external impositions of donor institutions.

In examining the trend of the donor doctrine, Klein (2007) argues that the introduction of neoliberal ideals into national public services was conditioned on reasonable economic shock experience and willingness of a country to accept conditional aid. Unfortunately, the governments that objected to the conditions imposed by international donor institutions had no other options for assistance in the economic development of their societies. Furthermore, some economic development programmes approved by the WB and IMF did not produce the required outcomes. For example, the 1998–1999 economic reform programme approved by the IMF, the WB and the French Development Fund (CFD) that implemented Cameroon's SAPs was prejudicial to socio-economic and cultural rights—it caused greater poverty and higher unemployment rates as well as exacerbated unfair distribution of income and led to the collapse of social services (United Nations, 2010). This illustrates the effects of undue and conditional acceptance and implementation of 'borrowed' policies. Consequently, my study pays attention to this dimension regarding institutional processes in relation to GEP for socio-economic development of Cameroon.

Additionally, although SAPs were repackaged in the late 1990s into the Poverty Reduction Strategy Papers (PRSPs) with focus on HE, they remained conditioned on some instruments of imposition that strongly relied on discursive dissemination in order to persuade national governments into compliance with WB's neoliberal policy prescription (Molla, 2014). Similarly, by encouraging and sponsoring a move away from a public knowledge regime to that of a private knowledge regime, the intentions of the WB and IMF regarding economic development of African countries remain questionable. Their perspective does not seem to encourage collective higher knowledge actions aimed at reducing poverty and generating growth and development for all in Africa. In addition, given the general financial and funding constraints in the African HE sector, there is a general perception of the lack of capacity and very little motivation for universities (including public ones) with autonomous financial statuses to produce quality research or operate within the relevance and needs of their society. Thus, the assumption is that universities in Africa will face enormous practical challenges to stimulate innovative activities for reducing poverty and generating economic growth and development.

In focusing on how public universities in Cameroon are striving towards sustained socio-economic development through GEP objectives, I take into consideration the role played by structural and sectoral adjustments in achieving this goal. I also take into consideration the assertion that education and training systems that have the capacity to produce a workforce that is self-reliant and resourceful are

significant instruments for economic and social change (Ozga & Jones, 2006). This assertion highlights the perception that investment in HE for the production of higher knowledge should take precedence over elementary or primary education that, in accordance with the agenda of the UN Millennium Development Goals, appears to be more relevant for the development of African countries. The empirical study will determine the importance of funding in public universities in Cameroon.

2.2 Global Education Policy (GEP) Discourse

GEP is a theory embedded in the global governance framework of globalisation. It explains how similar education reforms within the framework of a common set of 'education policy jargon' are accepted within an international cooperative framework (by agency) and implemented across parts of the world that are remarkably diverse in their socio-cultural, economic and political development processes (Verger et al., 2012). They assert that within this context, participants find different reasons to express ownership of education through funding and other support measures (to universities, for example). According to Nagel et al. (2010), the GEP phenomenon is due to new developments in the global governance sphere that have challenged the domestic public political mandate of the nation state over education policy (Nagel et al., 2010). Eventually, it results in redefining the relationship between education and the state.

Similarly, in their own assessment, Verger et al. (2012) have defined GEP as a governance strategy in which non-state actors (including international and supranational organisations) that operate at different scale levels gain political power and presence in the education policy field. In the same vein, other global education scholars have used various terminologies, such as policy diffusion, policy borrowing, policy transfer, policy travelling, isomorphism or convergence, policy lending, etc., to refer to the acceptance, adoption and implementation of education policies within the GEP framework (Jakobi, 2009; Exley et al., 2011; Robertson, 2012; Verger et al., 2012; Verger, 2014).

From a more general perspective, Jacobi (2009) affirms that through the influence of a network of partners, it is possible to identify different GEP processes, such as lifelong learning, as a GEP prescription. In agreement with Stone (2008), he contends that national education policy has increasingly turned attention towards an international level, ascertained by a network of partners, including all forms of non-state actors and international governmental organisations (intergovernmental

organisations)—for example, the WB and the Organisation for Economic Co-operation and Development (OECD). Additionally, he suggests that the increasing presence of international actors in global public policy measures on education is influencing national policies in a profound way. Through these same contentions, Jacobi (2009) notes that other than the influence of non-state actors and international organisations, national policymaking bodies/agencies and representatives of other national stakeholders, as well as research findings from at least an international scientific community, constitute the global policy formation processes.

In the same vein, Margison and Marijk (2007) assert that even though policies designed within the global education governance framework tend to render education more competent in the global arena, they also have a national development outlook. Also, citing the stage-heuristic technique of policymaking, Jacobi (2009) argues that even if a global policy dimension influences national policies, the policies are just as good at the national level as they are at the international level. Marginson and Marijk (2007) base their assertion on the claim that during policy formulation, when international organisations engage in agenda setting, decision-making, explanation and interpretation, they also take into consideration national interests. This aligns with the fact that rationalists, including governments, seek advice and strategic consideration from global actors (non-state actors and international governmental organisations) in a process that legitimises and drives global convergence of policies (Fulge et al., 2016). Furthermore, although global actors are more involved in agenda setting and policy formulation, it is common knowledge that policy decisions and implementation are literally the preserve of national governments.

Nevertheless, Fulge et al. (2016) admit that global actors do not simply fulfil the desires of these governments because they, too, have interests that they pursue and norms that they aspire to develop. Similarly, Verger et al. (2012) determine that external actors have the capacity and actually compel some national governments to take on particular education policies. For example, the WB has the human, material and financial resources, as well as the technical know-how, to convince countries to accept and implement particular policies (Verger et al., 2012). Consequently, the interactions between national governments and global actors quite often produce unpredictable results. In general, global policies have caused unintended negative outcomes for educational practice at the national, regional and local levels when met with contextual differences in terms of capacities and cultures of receiving governments (Verger et al., 2012). Otherwise, there is strong need for national

transformative capacities and national guiding principles in education policy to mediate the impact of GEP, where international education policy processes exert influence on national education systems (Nagel et al., 2010; Fulge et al., 2016). Still, even in situations in which contextual variables ('idiosyncratic national configurations') inform national endeavours, international and intergovernmental organisations continue to exert great influence in these countries (Fulge et al., 2016).

Similarly, Verger et al. (2012) maintain that for developing countries in particular, globalisation processes have induced far-reaching effects on their education policy landscape. Their assertion corroborates the findings of Lingard and Ozga (2007) that the attempt of global educational policies 'to harness education systems to the rapid and competitive growth and transmission of technologies and knowledge' challenges the 'traditional capacity of education systems to construct national identities' (p. 70). This means that schemes like this (determined within the international/global outlook perspective) come up against existing practices—a phenomenon that may largely affect the socio-economic and political priorities and aspirations of national governments. Consequently, since GEP ideals defeat the traditional idea of designing education policies within the national context, they pose enormous challenges to education policy analyses of some national governments. They may as well re-orientate national development priorities and thus induce varying outcomes, especially in developing countries. For example, WB's KE concept is a great source of influence on HE policy agendas in the developing world (Dale, 2000; WB, 2002, 2011; Ozga & Jones 2006; Molla, 2014).

Consequently, due to the purpose of this study, which is an examination of how public universities in Cameroon respond to KE and entrepreneurial university policy objectives, I intend to highlight the importance of education policy actions based on specific country needs. This is based on the assumption that there is a need to factor in the importance of traditional/indigenous knowledge capacities and to zoom into existing circumstances and national identities (specific demands, needs and aspirations of the people) in the process of policy formulation for socio-economic development in Cameroon.

Furthermore, the fact that national policies are increasingly turning attention towards an international level orientation, Mundy and Verger (2016) contend that the WB exerts authority in the settlement of global education agendas. They have determined that the WB has emerged as 'a key source of policy evidence and policy advice' to national governments of emerging economies and low-income societies. Ozga and Jones (2006) have also ascertained that WB's KE concept promotes the enhancement of skills and competences in adaptability, creativity, flexibility and

innovation on the basis that 'knowledge, not capital, is the key to sustained economic growth and improvements in human well-being' for developing economies (WB, 2011, p. 1). This influential position of the WB is attributed to its competitive advantage position in its staffing and internal resources vis-a-vis other international organisations and in its status as the largest single international provider of development and education finance to national governments. Thus, due to the convergent impact of globalisation at the dawn of the 21st century, the WB recognised the need to assist developing countries in their educational policy endeavours.

At the 2015 African Higher Education Summit, Claudia Costin, the Senior Director of Education at the WB (July 2014–June 2016), told the summit: 'I was very happy to discover that the WB now believes that HE is central for development. Because being a professor myself, I share this strong belief' (MacGregor, 2015). Her statement is justified by the fact that, since 2000, the WB has invested more than US $1 billion in African HE (MacGregor, 2015). It also upholds WB's assertions from 2000 and 2002 that it had become more interested in supporting the development of universities, thus signalling a policy shift from primary and secondary education, which was its previous practice (Collins & Rhoads, 2010). The idea is to enable African countries catch up with the global trend, which is characterised by increasing importance being placed on higher (tertiary/university) knowledge as a driver of growth and by the information and communication revolution (WB, 2002). Within the global HE context, this means that universities in developing countries had to undertake significant transformations, including in the area of finance and governance, curriculum reforms and technological innovations.

Also, based on a joint publication of the WB and UNESCO, Higher Education in Developing Countries: Peril and Promise (2000), the WB determined that developing countries face the greatest risk of missing out on the dynamics of the world economy (WB, 2002. p. xi). As a result, it expressed that there is a need for developing countries to sustainably expand their HE coverage, as well as improve access, outcomes, educational quality and relevance in line with the new global socio-economic emergent trend. Seemingly, therefore, all best practices for the creation and development of knowledge for economic development are contingent on the GEP perspective of the WB. However, one of the findings of WB's 2002 study (Constructing Knowledge Societies: New Challenges for Tertiary Education), suggests that the urgency of re-examining its policies and experiences in tertiary education is based on the rapid changes taking place in the global environment and

the persistence of traditional tertiary education problems in developing and transition countries (p. xviii).

Nevertheless, the overarching aim of WB's GEP regime is to encourage investment towards the development of human capital in order to promote economic development for countries around the world (Heyneman, 2003; Samoff & Carrol, 2004; Ozga & Jones, 2006; Joel, 2008; WB, 2010; Vally & Spreen, 2012; Blom et al., 2016). Prominent in the agenda is the endeavour to promote university entrepreneurialism and KE constructs through its neoliberal global market ideology—concepts that emphasise the importance of knowledge in creating economic growth and global competitiveness (Margison & Marijk, 2007). Thus, the WB designs its lending strategy to match the growing importance of HE for social and economic development, especially in the poorest developing countries (WB, 2002). This involves redefining the relationship between education and the state in order to provide solutions that are appropriate to the nature and orientation of national policies for the required development.

Both KE and entrepreneurial university policy objectives advocate the view that knowledge development should constitute the basis for strategies of development goals and that cooperation and collaboration between different institutions and stakeholders should constitute the basis for inclusive and appropriate development strategies and goals for the society. Within the neoliberal dispensation, the KE concept encourages entrepreneurial activities at universities aimed towards the creation, development and transfer of useful knowledge into social and economic practices (Williams, 2009). The explanation for this approach is that it aims at bringing together the interests of all stakeholders in order to create a shared national vision through their diverse contributions towards educational outcomes (Halme et al., 2014). Hence, informed by these education policy agendas within the neoliberal dispensation, this study examines UB's processes in relation to KE and entrepreneurial university policy objectives aimed towards the socio-economic development of Cameroon. The following sections explore both the KE policy construction of the WB and the entrepreneurial university policy construction in order to identify the variables that would impact institutional processes towards economic development—in this case, of Cameroon. They also highlight the main propositions that these policy constructions project towards the socio-economic development of developing countries.

2.3 The Knowledge Economy (KE) Concept

Daniel Bell (1973) had predicted that knowledge would replace capital as a major factor of production in the post-industrial era (see Jessop, 2017). Over the last few decades, the KE concept has gained popularity as an indispensable factor of economic development. In simple terms, the WB defines it as 'an economy in which knowledge is acquired, created, disseminated, and applied to enhance economic development' (WB, 2007, p. 23). Similarly, Brinkley (2006) explains that it is 'what you get when firms bring together powerful computers and well educated minds to create wealth' (p. 3). Powell and Snellman (2004) define it as 'production and services based on knowledge-intensive activities that contribute to an accelerated pace of technological and scientific advance as well as equally rapid obsolescence' (p. 201). It is 'more knowledge-intensive ways of working – towards activities which create value from exploiting knowledge rather than physical assets and manual labour' (Levy et al., 2011, p. 1). In a more comprehensive approach and with respect to universities, Jessop's (2017) definition sums-up the KE concept as the production, valorisation and application of knowledge as the leading factor of economic efficiency, competitiveness, profitability or effectiveness, not only in the private sector but also in the public and 'third economic sectors' (p. 854). His definition also includes the role of KE in the effectiveness of good governance and enhancement in the quality of life.

Based on the foregoing definitions, interpretations and overall debates surrounding the KE, it is now clear that the concept advocates for the use of intensive theoretical scientific knowledge and the application of information and technology in the production of goods and services for both private and public interests. Consequently, all KE discourses implicitly and explicitly point out the transformative role of universities within the neoliberal framework of the HE sector. Of course, besides the WB (most revered institution concerned with poverty reduction and global development), social science scholars have ascertained that greater reliance on intellectual capabilities than on physical inputs (capital) or natural resources is the most important component of the KE (WB, 2007; Powell & Snellman, 2004). More specifically, the concept considers education and science (intangible assets), new technologies, innovation and highly qualified labour force as the main determining factors of a country's long-term development goal. Implicitly, therefore, the concept postulates that contemporary universities and other higher institutions of learning have the mandate to create and develop knowledge and skills relevant for the advancement of science and technology, not necessarily just for the

accumulation of physical capital, labour and natural resources. Going by this assessment, the proposition of the KE concept is that:

African countries will achieve greater economic development through reliance on intellectual capabilities of knowledge exploitation than through the exploitation of physical capital, including manual labour capacities and the abundant natural resources they have.

Accordingly, WB's Knowledge for Development (K4D) report, published in 1999, suggests that the creation, dissemination and use of knowledge is the basis of the KE (WB, 2011). This justifies WB's definition of KE as an economy wherein 'knowledge assets are deliberately accorded more importance than capital and labour assets, and where the quantity and sophistication of the knowledge pervading economic and societal activities reaches very high levels' (WB, 2007, p. 14). Since the basic essence of the university is to create, develop and disseminate knowledge, WB's affirmation of the KE suggests that universities remain pivotal in the development and advancement of the concept as outlined in the K4D framework. Hence, going by this contention, Ozga and Jones (2006) determine that universities also engage in the training of highly educated people for the enhancement of skills and competences in adaptability, creativity, flexibility and innovation. This phenomenon is fostering the assertion of the WB that 'knowledge, not capital, is the key to sustained economic growth and improvements in human well-being' (WB, 2011, p. 1). Notwithstanding, the overall objective of the KE construct is to encourage nation states to enhance special skills and competencies in their human resources in order to strengthen their competitive advantaged positions in the global marketplace.

Contentious, nonetheless, is WB's unconditional neoliberal policy adoption for African countries as the best and only way through which economic development can be attained. Accordingly, the WB insists that national governments of developing countries have to deregulate education systems, maximise competition and integrate businesses in the education system because that is the best way to enhance human capital skills and competences through knowledge transfer activities (Ozga & Jones, 2006). This means that national governments of developing countries should adopt a governance strategy that involves all stakeholders (including multinationals) in the development process. I have no doubts that in the current HE and economic dispensation of African countries, the KE policy objective would act as a key driver of economic change by ensuring resourcefulness and inducing self-reliant capabilities. However, judging by context, I find the assertion problematic because the WB justifies its position on Africa with the example of the developed world,

where free market and competitive environment have enabled 'international exchanges, study tours, and pilot programs' for its success (WB, 2007, p. 51).

Given the seemingly unremitting predicament of the economic development of most African countries over the last three decades, there are concerns over the collaborative engagements between universities and private sector businesses (including multinationals) based on the sustained neoliberal policy of market competition across national sectors in the region. Similar concerns are expressed over the KE idea, asserting, for example, that it is just a policy option 'associated with an educational reform jargon based on the principles of quality, learning, accountability and standards' (Verger et al., 2012, p. 12). Similarly, after reviewing studies on the adaptation of HE and research to changes in contemporary capitalism through hegemonic discourses around the knowledge-based economy, Jessop (2017) ascertains that the KE is just an imaginary economic and social concept. Regarding HE, he opines that this 'economic and social imaginary' concept is, unfortunately, guiding the structural reform and strategic reorientation of HE and research to the emergence of an already endorsed, though uncertain, procedure towards the KE idea (p. 854).

Additionally, one would easily assume that the national priorities of developing countries, in relation to needs, demands and aspirations of their societies, are widely at variance with those of Western countries. Therefore, it would be arguable to judge the development of both African and Western industrialised countries on the same premises or based on the same factors. To the same extent, given the diversity in the nature of countries, one would imagine that the availability of abundant natural resources and massive availability of physical labour in Africa are major factors, whose consideration would determine a different policy agenda towards the socio-economic development of Cameroon, for instance. Furthermore, in order to better understand the dynamics of the KE concept, I find it compelling to review the entrepreneurial university concept, which I consider to be its most complementing factor. In fact, it is important to note that the KE conception has a transformative influence on the role of HE.

2.4 Entrepreneurial University Concept

2.4.1 An Overview

The entrepreneurial university idea is seemingly gaining worldwide recognition as a reference for international and African-level policy discussion for socio-economic development. Apparently, its role appears to perfectly complement the KE concept. Otherwise, the KE concept would have no significance in the absence of an educational system that accounts for intellectual capacities and the optimisation of knowledge for socio-economic growth and other efficiencies. In most countries around the world, the concept seems to largely be perceived as a business endeavour associated solely with the commercialisation of university intellectual property (particularly in the science and engineering fields) (Jessop, 2019). In the Western world, for example, one glaring characteristic of an entrepreneurial university is its ability to own intellectual property rights for its discoveries and inventions (Jessop, 2019). The idea matches with the expectation for universities to effectively engage in innovation with massive science and technology transfer activities. This involves building science and technology research parks, hosting incubators, enabling 'commercial spin-offs and spin-outs', providing consultancy services and intensifying global competition for talented and skilled knowledge workers among others—especially in science, technology, engineering and mathematics (STEM) subjects (Jessop, 2019, p. 855; Coyle et al., 2013). For universities, specifically, spin-offs are useful or valuable by-products of a research activity aimed at a different achievement. Spin-offs develop into inventions and transform into companies through academic expertise of universities.

In addition, Coyle et al. (2013) posit that the entrepreneurial university also focuses upon the development of the enterprising person, including their personal skills, attributes, behavioural and motivational capacities. They argue that these skills are needed for setting up new ventures or initiatives of different kinds, developing or growing them and designing them into entrepreneurial organisations. Fundamentally, they promote the understanding that entrepreneurial organisations are designed to encourage and support bottom-up initiatives; for instance, initiatives stemming from employees to management. Then, the organisations reward and empower these initiatives into becoming more productive ventures. In line with the WB's campaign for all stakeholders involvement in the development aspiration of the society, the entrepreneurial endeavour facilitates informal relationships that

enable network building towards harnessing individual and collective social capital for innovative ventures. Because of this practice, entrepreneurial organisations become more characterised by shared values and cultures than by formal control systems, subsequently becoming more informal, flexible and strategic in thinking and awareness than being highly formal in their planning systems (Coyle et al., 2013). This includes even mainstream public universities that seek to harness individual and collective capital through informal relationships, flexible and strategic procedures within the framework of shared values and culture in order to enhance their capacity base for success. This conception complements Clark's (2001) original assessment of the entrepreneurial university, as expressed in The Entrepreneurial University: New Foundations for Collegiality, Autonomy, and Achievement.

In that study, Clark (2001) reaffirms a demand—response imbalance, especially in public universities sustained by their national education institution. In such cases, he establishes that universities are not able to meet their aspirations or the demands and expectations of their societies primarily because of the growing institutional insufficiency caused by limited funding and formal control systems constructed in the earlier days of HE. Therefore, in order for universities to enhance their capacities and be able to cope with the demands made upon them, they have to engage with a wide variety of other stakeholders. In situations of limited funding, for example, university management and academics are encouraged into innovative academic behaviours that engage the university in wide-ranging partnerships with other stakeholders that are geared towards generating non-state resources that can cross-subsidise and incentivise further independent academic activities (Shattock, 2009).

In the case of most European universities, Davies (2001) elaborates that partnerships with other stakeholders involve municipalities in a very crucial way. The partnerships also extend to development agencies, private sector businesses, trade unions, employers' associations, banks, NGOs and so on despite being mired by organisational cultural differences. This phenomenon has created the impression that much of the entrepreneurial tendencies on today's university campuses have a connection with their need and desire to be more innovative and responsive to the market, requiring them to make money in certain ways, primarily as businesses would (Rubins, 2007, p. 8). Therefore, based on the ambiguity (diverse conceptions and perceptions) of the entrepreneurial university policy conception, I attempt to develop a more comprehensive perception of its characterisation.

2.4.2 Entrepreneurial University Defined

Burton Clark (1921–2009) remains one of the leading scholars to have extensively researched the nature and implications of the entrepreneurial university policy idea. In 1998, almost two decades after the adoption of neoliberal SAPs (a consequence of the 1981 African Berg report) of the WB into the educational policy frameworks of most African countries, he published his famous book, Creating Entrepreneurial Universities: Organisational Pathways of Transformation. In it, he studied (in the light of neoliberal dispensation) five European universities: the University of Warwick (the United Kingdom [UK]), the University of Twente (The Netherlands), the University of Strathclyde (Scotland), Chalmers University of Technology (Sweden) and the University of Joensuu (Finland). The essence was to determine the true nature, implications and consequent definition of the entrepreneurial university.

Based on this study, Clark (2001) conceptualises entrepreneurial universities within the emphatic recognition of university collegiality, autonomy and educational achievement. He assesses them as progressive organisations that combine the new and old worldviews (that is, the neoliberal and post-communist/socialist democratic orders) that influence them into a revised form of organisation. Consequently, entrepreneurial universities maintain the 'unique genetic features' of universities and rely on their 'generic trends and societal commitments', which project their 'developmental trajectories' and are able to reciprocally shape their environments (Clark, 2001, p. 10). By implication, entrepreneurial universities have the capacity to adapt on their own terms to changing circumstances in their environments. This simply means that, by nature, they are self-initiating, self-steering, self-regulating, self-reliant and progressive rather than just being business inclined (Clark, 2001).

In order to idealise his conception of the entrepreneurial university, Clark (1998) studied the transformational procedure of the same five universities (mentioned in the preceding paragraph) in order to identify the changes in their core structure and overall cultures over a given period of time (10–15 years). He paid little attention to changes in the teaching and research programmes because they remain isolated aspects in terms of the overall nature (structure and culture) of the universities. In his pilot study of these five universities, he established five categories as pathways of institutional transformation (into entrepreneurial universities). They included: 1) a strengthened steering core, 2) an expanded developmental periphery, 3) a diversified funding base, 4) a stimulated academic heartland and 5) an integrated entrepreneurial culture. Though these categories were broad and appeared specific enough to the universities studied, they have equally remained generic enough to be applicable to a

wide range of other (unexamined) universities and have the possibility to be broken down into parts that are more specific.

These categories are all building blocks of the core principles that make up the character and identity of the entrepreneurial university, summarised into collegiality, autonomy and educational achievement (represented by self-initiating, self-steering, self-regulating, self-reliant and progressive tendencies). The following are the characteristic descriptions of the different categories examined for all five case universities:

- **Strengthened steering core**: No matter the procedure, entrepreneurial universities exhibit a great capacity for an inclusive management style involving central managerial groups and academic department as well as the ability to consider both new and traditional managerial values in their endeavour to succeed. This is an indispensable feature that is in line with the capacity needed for the success of ambitious universities. This attribute renders them flexible and enhances their ability to respond quickly to changing circumstances of their environments. That is, ambitious universities and those concerned about their marginality and survivability become quicker, more flexible and, especially, more focused in their reactions to expanding and changing demands.

It is important to note that there is a strong correlation (complementary relationship) between the strengthened steering core and collegial forms of management approach in the entrepreneurial university context. Literally, the concepts represent both sides of the same coin. They both require the involvement of all internal stakeholders in the decision-making processes of the university towards accomplishing both university-wide interests and those of independent academic units. It is especially so given that independent faculties and academic units, based on their professional and disciplinary competence, have the capacity to determine whether or not desired changes take place (Clark, 1998, 2001). They constitute the heartland of the university, where policy objectives in relations to changes and innovative steps are initiated and brought to life. Consequently, irrespective of the patterns that they take in different case studies, national or local contexts, collegial forms (strengthened steering core) must function strongly around managerial forms of governance and eventually gain prominence over them (Clark, 2001). The bottom line is a process that would organise and enhance the programmatic approach of the university towards change for the general good and that of society.

- **Expanded developmental periphery**: Conscious of their developmental role, they become proactive in the endeavour to meet the demands, needs and aspirations of their societies. Therefore, they establish professionalised outreach units that are more aggressive than traditional departments in their urge to stretch out from their traditional boundaries and cooperate with other organisations and

groups. A portion of these units works on issues such as knowledge transfer, industrial contact, intellectual property development, continuing education, fundraising and even alumni affairs. Others are interdisciplinary project-oriented research centres for group academic work. They operate alongside departments in order to complement in handling the many assignments of the university. For instance, they link, with the university, serious practical problems of non-university orientations (non-disciplinary) that are critical in economic and social development. Consequently, they mediate between departments and the outside world.

- **Diversified funding base**: Constrained by limited state financial resources, they step up efforts for second major sources (research councils, grants, contracts, etc.) and expand their income scope to third-stream income sources (private sector corporations, foundations, royalty income from intellectual property, campus services, student fees, etc.). This endeavour enables them to learn faster from diverse interactions and enhances the opportunity for quicker actions than waiting for slow-paced and complex system-wide enactments that come with standardised rules attached.

- **Stimulated academic heartland**: Departments and faculties (individuals and collegial groups) become more involved in managerial affairs while being independent of the central administration at same time. This is because they remain the heartland of the university. That is, departments and faculties form the foundation on which the university evolves a stronger steering core, develops an outreach structure and diversifies its income streams. Academic departments determine the adoption, sustainability and success of disciplines, new and old, as well as some interdisciplinary fields of study because they are the bases of most academic work. Therefore, the success of promoted changes and innovative steps depend technically on them—which is the reason why, in entrepreneurial universities, collegial form of governance dominates the central administrative governance model. Consequently, departments and faculties have the possibility to become proactive and innovative in their programmes and structures as well as to engage with other stakeholders for third-stream income and other possibilities.

- **Integrated entrepreneurial culture**: Enterprising and proactive universities are wont to develop a work culture that embraces change. As they interact with other stakeholders, their ideas and practices also interact. Subsequently, the values and beliefs of the university may lead or follow the development of outside elements. Consequently, the university cultivates a new institutional identity and distinctive reputation. This highlights the assertion that we cannot consider organisational values independently of the structures and procedures that determine them, including the different stakeholders involved.

The distinct characteristics of the five universities examined in Clark's (1998) study point to their survival and the desires (needs, demands and aspirations) of their societies. Nonetheless, Jessop (2017) determines, through his review of KE and entrepreneurial university concepts, that contemporary universities now act more like rival enterprises that are more interested in achieving greater reputation and financial gains than being 'public-spirited institutions' (Jessop, 2017, p. 854). In quite lucid terms, Rubins (2007) confirms that they have become more profit-oriented and revenue-generating—an economic tendency that is threatening the core traditional academic tenets of teaching, learning and research (the pursuit for knowledge). With specific reference to the United States of America (USA), Hoffman claims that on-campus start-up companies are a common phenomenon, with many research-intensive universities engaging themselves in the business of developing technologies that guarantee them a market niche, revenue and legitimacy (Hoffman, 2017). This characteristic of the university, aimed at generating external revenues from education, research and services, was first termed by Slaughter, Leslie and Rhoades as 'academic capitalism' (Hoffman, 2012).

In their study of the transformative endeavours of revenue sources and allocations of public universities in four English-speaking countries (Australia, Canada, UK and USA), Slaughter and Leslie (1997) establish that the entrepreneurial nature of universities (including the five characteristics determined by Clark's [1998] study) that leads to profits and market-like behaviours is nothing short of academic capitalism. Their assertion is based on the premise that public service academics under the entrepreneurial dispensation are now acting as capitalists (albeit from within the public sector) due to the heavy reliance on external revenue sources. This is primarily because of the reduction in public transfer of undesignated revenue over increased use of designated public funds in higher learning institutions. Consequently, in search of more undesignated revenue, universities choose to align their activities with the needs of the marketplace.

Eventually, faculty and institutional searches for more funding bases coincide with the corporate quest for new products in the competitive global market arena. To this effect, Slaughter and Leslie (1997) refer to public service academics involved in these endeavours as state-subsidised entrepreneurs because of their efforts to incorporate market functions within the university. Corroborating this capitalist tendency of universities is the endeavour by national governments, as in the example of Slaughter and Leslie (1997), to continuously develop national education policies with the intention to enhance national competitiveness in order to increase global market shares by shifting attention from basic research (enhancement of knowledge

and understanding of theories and phenomena) to targeted/commercial/strategic research (see Bouroche, 2001). In conclusion, however, Slaughter and Leslie (1997) determine that no matter the transformative circumstances in the universities they studied, private and commercially oriented revenue relatively represented only a small quota of their budgets. Notwithstanding, they warned of the disruptive effects that these circumstances have on the structures of universities and their significant position in the role of power shifts within universities. Considering the importance of knowledge as a public good and the disruptive effects of privately- and commercially-oriented revenue, this study examines institutional processes of UB in relation to KE and entrepreneurial university policy objectives aimed towards the socio-economic development of Cameroon.

Whatever the dynamics involved in the entrepreneurial university policy setup, what appears more glaring is the gradual demise of extremely personalised forms of leadership in the central administration. On this issue, Clark (2001) emphasises that this form of leadership, which is characterised by the top to bottom approach, cannot endure—neither in contemporary universities nor as the basis for entrepreneurial universities. This is especially so because the entrepreneurial university hinges on the enterprise and entrepreneurial skills of academics for its success. This explains the need for a collegial form of governance. That is, collaborative interactions between the central management unit (that is working in the interest of the entire university) and academics, faculties, departments and other groups responsible for their specific interests. It involves strengthening authority positions of the vice chancellor (rector, president), faculty dean and head of department in order to enhance the steering capacity of the university.

Hence, in relation to Clark's (2001) entrepreneurial university assessment, faculty, departmental and other units would consider collegial forms of governance to be just as important as managerial forms of governance. In this case, management and academics of the university can easily achieve a collective sense of responsibility. The result of such governance procedure is strengthened management, proactive decision-making mechanisms and enhanced enterprise and entrepreneurial character of the university. Therefore, Clark (2001) establishes that a successful entrepreneurial university is one that combines managerial and collegial governance forms (strong central direction with strong academic and departmental steerage) in order to map out ways towards achieving their goals. In simple terms, collegiality promotes a general sense of responsibility among academics and management of the choices they make towards the achievement of their goals.

In spite of the diverse perceptions and formulations of KE and entrepreneurial university policy objectives, the main purpose of this study is to examine the processes of UB in relation to these policy prescriptions (within the neoliberal framework) aimed towards the economic development of the country. I base my assessment on the assumption that it would be extremely difficult for universities all over the world to completely identify with the same characteristics, given the complexities surrounding the values and cultures of different societies. Therefore, because of the different circumstances of different societies, I assume that universities would relate differently with their respective stakeholders. Consequently, their achievement levels would not be the same, although Coyle et al. (2013) have ascertained that the development of the enterprising person—including personal skills, attributes, behavioural and motivational capacities with respect to societal development—are the bases for measuring the success of the entrepreneurial university. This assertion of Coyle et al. (2013) points to the dynamic nature and application of the entrepreneurial university concept. In general, however, the concept presupposes that:

Even public universities have to engage in wide-ranging activities and partnerships with other stakeholders (private sector) and be more innovative in order to generate more resources to cross-subsidise their activities and be able to meet the demands and expectations of their societies for economic development.

2.5 Education Policy Analyses

With regards to analysing education policy, Verger (2014) demonstrates that education policy in the contemporary global governance scenario can neither be simply analysed based on agenda setting, policy formulation, decision, implementation and evaluation nor by looking at the different processes simply from a national perspective, given the variety of actors involved. He stresses the importance of the role that ideas play in policy decisions and outcomes with respect to their adoption. In addition, he argues that a more explicit conceptualisation and theorisation on the role of ideas in GEP would enable a better understanding of the nature, processes and outcomes of GEP. Additionally, he argues that we can get a better understanding of why individual nations adopt external policies if we assess 'contextual contingencies', especially those with an institutional and political disposition. Concomitantly, both procedures will enable us to determine what external policies can be adopted in particular country contexts.

The aim of this dissertation is to examine the processes of UB in relation to (that is, to understand how it responded to) KE and entrepreneurial policy objectives aimed towards the economic development of Cameroon. Based on GEP analyses, irrespective of the phenomena involved, I note with clarity the fact that education policy discussions hinge on strategic interests of all parties involved, where interaction between national governments and international organisations is concerned. I also note that there exists a domineering party within this cooperative structure with considerable competitive advantages as a result of its capacity to effectively package and enforce its own agenda above that of others. Most importantly, however, national governments are willing to engage with these organisations in order to 'pool their problem-solving resources' and to gain support at the national level (Fulge et al., 2016). On the other hand, the nature of the relationship is one where national governments seek to identify with the global polity network as true associates/members of intergovernmental organisations.

Therefore, in order to effectively analyse and determine the processes of UB in relation to global education KE and entrepreneurial university policy objectives, I seek insights from two theories in particular: the international regime theory and the institutional theory. In summarised terms, the international regime theory explains a phenomenon in which regimes coordinate the behaviours of individual (self-interested) states through cooperative actions in order to enhance their capacity to realise collective common and optimal outcomes. The institutional theory explains some detailed aspects of the complex nature of formal structures and organisations as well as the privileged positions of the latter as legitimate and dominant actors in modern societies (Zucker, 1987; Scott, 2008). The explanation highlights how organisations construct and develop their functional procedures based on certain concepts with regard to social interactions as opposed to rational decision-making (Janićijević, 2015).

2.5.1 International Regime Theory

Generally, scholars have considered regimes to be a pervasive characteristic of the international system. They consider them within the framework of an international system that independently influences the behaviours of states with varying consequences, both on interstate relations and international cooperation (Tarzi, 2003). Despite diverse conceptualisations, a common ground of agreement exists around the definitions that enable a profound understanding of regimes and the

processes involved in their change (Tarzi, 2003). Different studies have revealed that international regimes are a major type of international institutions, deliberately constructed with sets of implicit or explicit principles, norms, rules and decision-making strategies around which the expectations of the concerned actors converge in a given area of international relations (Krasner, 1982; Hasenclever et al., 2000; Tarzi, 2003; Amaral, 2010).

This basic characterisation of international regimes attests to the fact that they institute partial international orders on a regional or global scale with the intention to enhance the ability of individual nation states to secure 'Pareto-optimal' outcomes (outcomes influenced by efficient allocation of resources) in specific issue-areas of international politics (Krasner, 1982; Hasenclever et al., 2000). Rules and decision-making procedures create these orders, while principles and norms (constant variables of regimes) that are fundamental structures of a regime exist to guide them (Krasner, 1982). Overall, the idea of a regime amounts to endeavours that lead to shared expectations for appropriate behaviour and transparency in helping member states cooperate towards joint gains in particular issue areas. Notwithstanding their nature (based on principles, norms, rules and decision-making procedures), regimes do not have a strictly formal control system that can set the rules under which all participants are to act—for example, as observable in the international dimension of education policies (Amaral, 2010).

Even though the theory internationally presents as a system of functionally symmetrical and power-maximising states, within its nature there exist basic economic and power relations (Krasner, 1982). To complement this assertion, other regime scholars (Hasenclever et al., 2000) have ascertained that power is just as central in cooperation (e.g. in regimes) as it is in discord situations among nations. This premise points further to the theory of hegemonic stability, which postulates that international systems, such as regimes, cannot enjoy stability or succeed in the absence of a strong leader with a stake in them. Citing Gilpin and Grieco, Krasner (1982) upholds this argument with the assertion that the distribution of capabilities among actors critically affects the prospects to establish an effective regime that would sustain a particular issue-area and resultant regime nature (see Hasenclever et al., 2000). This assertion highlights the power dynamics among members of a regime. Moreover, the idea of hegemonic stability that interprets regimes as international public goods at the mercy of a hegemon (supreme leader) with the capacity to lead in its provision and enforcement corroborates it.

However, Hasenclever et al. (2000) admit that the power of the dominant state in the regime can become dispensable within a period of time, though factors such

as 'inertia, habit, or fear of instability', resulting from change will still work in favour of the redundant dominant state (p. 11). Accordingly, Kersbergen and Verbeek (2007) establish that international regime actors would respect regime norms over their strategic calculations for the simple reason to win a good reputation from other actors based on their behaviour (regarding observing or disregarding) towards instituted norms. This simply means that in the operations of international regimes, actors develop the habit of letting go of possible short-term advantages that they would have if they disregarded certain norms. This limitation of the international regime theory enhances the need for the assessment of national priorities, such as particular demands, needs and aspirations of the people, in the formulation of national strategy/policy aimed towards socio-economic development.

2.5.2 International Regimes and Education Policy

As already noted in the preceding section, although different agents/actors (political authorities) get together to collectively decide on the principles and norms that aggregate into some form of generally accepted law(s) towards a particular accomplishment, there are no restrictions as to whether the rules and decision-making procedures can be adopted and/or adapted by all regime members. In the field of education policy, for example, this assertion is justified by the results of multiple comparative education research studies pointing to isomorphism, policy transfer (policy borrowing/lending) and policy diffusion, all summed-up under the concept of policy convergence. In fact, Knill (2005) contends that policy convergence explains the outcome of a process of policy change in the direction of a common point over time, regardless of the causal processes, such as power, interest, agenda, values, etc. On this premise, Knill (2005) also asserts that any increase in the similarity between one or many characteristics of a particular policy (be they policy objectives, instruments or settings) that occurs over a given period of time and/or over a particular set of political authorities (such as supranational institutions, national governments, regions, local authorities and so on) accounts for policy convergence (p. 768). By implication, authorities who participate in global policy formulation may either be or not be able to adopt or adapt the rules and decision-making procedures of such policies due to other circumstances that may be country- or context-specific and may therefore not be obliged. Hence, as already observed, in the area of international dimension of education policies, regimes do not have a strictly formal control system able to set the rules under which all the

participants are to act (Amaral, 2010). This analogy, relative to the regime theory, is necessary in my analysis in order to determine the response of UB to KE and entrepreneurial university policy ideas.

Furthermore, the basis of this study is the conviction that GEP (based on the phenomena of globalisation and internationalisation, engineered by the activities of international agents such as the WB) is having immense influence on national education systems. This phenomenon is leading to the diffusion of certain norms and values maintained as rational principles, including in educational policy, that are increasingly being considered to be legitimate all over the world (Meyer et al., 1997). Based on these assertions and considering the nature and operational dynamics of international regimes, I found it relevant to use the theory in my assessment of how public universities in Cameroon would response to such global policy objectives. In my particular case, I reference WB's KE and entrepreneurial university education policy objectives with regard to the influence they have on the processes of UB—a public university in Cameroon. The processes of international regime theory enable us to understand how to relate and examine mandated global education policies to specific case studies. Therefore, the theory gives us greater insights on how to analyse empirical data in order to obtain the right conclusions about the processes of UB in relation to KE and entrepreneurial university policy objectives aimed towards the socio-economic development of Cameroon.

In addition, the international regime theory predisposes us to the understanding that we cannot exclusively understand education policy issues in the contemporary global world, especially relative to developing countries, from only a national perspective. The involvement of international agents in national systems of education, including transnational/multilateral arrangements between nation states, also provides appropriate reasons to analyse education policy from a much broader perspective. This would mean taking into consideration both the role of international agents and national actors in the interactive and dynamic relationship established for purposes of policy formulation and implementation, especially at the national level. In this particular case, the regime theory helps us to recognise the fact that the relationship between the national education regulatory body of Cameroon and the GEP agenda of the WB regime for developing countries is a true reflection of the dynamics in the international regime order. Within this framework, the use of the theory highlights probable complexities in the adoption and implementation process of WB's GEPs on public universities in Cameroon. The theory enables my analyses within the understanding that the WB regime is acting in a way that is practical and useful and relates equally to the common interest of all its actors.

Within the same framework, the theory also enables us to recognise the idea of hegemonic stability in the functionality of the WB. This alludes to the presence of a strong leader with a particularly high stake in the WB regime and the capacity to have the regime completely in its power—a phenomenon that affects the sustainability of the particular issue area in some way. I also bear in mind the fact that by being a partner of the WB, Cameroon accepts the responsibility to respect the principles, norms, rules and decision-making procedures that bind all actors in the WB regime on bases that guarantee its interests. This does not exclude the understanding that Cameroon is literally not obliged to respect all principles and norms of the WB regime. Overall, therefore, the nature of the international regime theory enables my analyses of WB's education policy provisions aimed towards socio-economic development in the context of Cameroonian public universities. Nevertheless, in order to widen understanding of the assessment of the outcome of the regulatory framework of public universities with regards to education policy of the WB regime, I also see knowledge of the institutional theory as relevant for my analyses. Its relevance enables the examination of the university's (institutional level) policy management attitude vis-à-vis the policy demands of the HE ministry (national system level) within the global policy framework.

2.5.3 The Institutional Theory of Organisations

The institutional theory of organisations is a popular explanatory tool in organisation studies that has developed over the years through different conceptual and perceptual trajectories and interpretations. According to Alvesson and Spicer (2018), a large amount of literature suggests that the theory was born through the publications of Meyer and Rowan (1977) and Zucker (1977). Subsequently (almost six years later), the classic isomorphism analysis of DiMaggio and Powell (1983) was published. Quoting Vogel (2012), Alvesson and Spicer (2018) ascertain that the theory has evolved from a very small college of thought during the 1980s, through a marginal college during the 1990s and into the second-largest theory in the field of organisation studies in the 2000s. Moreover, while others have actually maintained that the theory 'is creaking under the weight of its own theoretical apparatus', others hold the view that it is one of those theories with a long standing 'hegemony' over the years with little danger of new evidence against it (Alvesson & Spicer, 2018, p. 2). The central argument of the first three proponents of the theory is that organisations do not adopt new structures and practices due to their effectiveness

and efficiency but because of the need to gain legitimacy. They also argue that formal structures do nothing more than create an image of rationality and legitimacy (Alvesson & Spicer, 2018, p. 2).

To date, the theory generally explains some detailed aspects of the complex nature of formal structures and organisations as well as the privileged positions of the latter as legitimate and dominant actors in modern societies (Zucker, 1987; Scott, 2008). To some extent, it explains how organisations construct and develop their functional procedures based on 'interpretivism and social interactions' rather than on 'rational decision-making' (Janićijević, 2015). In general terms, the theory demonstrates explicit concern in the relationships between beliefs and actions, where they occur (organisations) and the 'collective social structures in which norms, rules and beliefs are anchored' (Shadnan & Lawrence, 2011). In lucid and objective terms, the institutional theory explains that the nature of organisations is either determined by normative or other pressures, either from the external environment wherein they reside or from the organisations themselves (Zucker, 1987; Janićijević, 2015). However, modern social theory considers the image of society as consisting of tightly and rationally coupled institutions (DiMaggio & Powell, 1983). In this case, the pressures they exert legitimise certain elements that predominantly guide the way in which organisations function—and have the potential to direct attention away from effectiveness in the execution of essential functions towards the goals of the organisation.

In the process of social resource allocation, Janićijević (2015) and other researchers of institutional theory also contend that organisations adopt institutional patterns as a legitimate norm over rationality in contemporary societies (see Heugens & Lander, 2009; DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 1987, 2014; Scott & Meyer, 1994). The adoption of these legitimated patterns enables the organisation to develop the same or similar processes or structures as others in the same environment in order to gain recognition—this ensuring a higher probability of survival. In quoting Donaldson (1995), Deephouse and Suchman (2008) and Heugens and Lander (2009) assert that the adoption of institutional patterns (isomorphism) is good for organisations. They claim that institutional isomorphism has a positive effect on 'organisations' symbolic performance' (the extent to which they generate positive social evaluations) and, to the extent that they avoid confusion, makes them intelligible and legitimate by 'giv[ing] them funding and [ability to] avoid coercive state sanctions' (2009, p. 63). There is an example of a study of Swedish municipalities, wherein the results illustrate the idea that organisations would engage in 'reform processes in an attempt to symbolically display that change has occurred',

just so that they may gain legitimacy (Alvess & Spicer, 2018, p. 3; also see Czarniawska-Joerges, 1989).

DiMaggio and Powell (1983) ascertain that even though most organisations pursue established and legitimated processes for their own legitimacy and survival, some will still demonstrate resistance to external pressures in favour of their own internal arrangements (informal organisation of work) informed by their visions and goals, under the guise of their own rationality. Examples of such organisations are those that have unambiguous, quite specific and direct visions and goals. In this case, such organisations are more likely to vary internally (referred to as loosely coupled organisations) and strive to develop more capacity for competitive advantage over others. They are quite the opposite of those with more ambiguous or disputed goals, a trait that would easily lead them to model themselves after those they perceive to be successful (DiMaggio & Powell, 1983).

To corroborate this assertion, Heugens and Lander (2009) agree with other researchers of institutional theory that some managers will not exclusively select organisational models simply based on their social acceptability because organisations are not 'slavish copies of the surrounding institutional system' (p. 64). In addition, while studying protestant churches in Brazil, an overwhelmingly catholic country, Nelson (1989) noted a variation that organisations may make while they strive for legitimacy through institutionalised patterns and processes (Alvesson & Spicer, 2018). He argues that in their building process, organisations could reject a dominant logic by substituting it with a blend of other models. Therefore, managers have the possibility to select, adopt and adapt organisational models and strategies on the basis that they will enhance 'symbolic and substantive' performance in order to guarantee a balance between 'competitive and institutional demand' (Alvesson & Spicer, 2018; also see Kennedy & Fiss, 2008; Donaldson, 1995; Chen & Hambrick, 1995; Deephouse & Suchman, 2017).

Additionally, Greenwood et al. (2014) also raise some concerns regarding the current approach to institutional organisational theory (see also Meyer & Höllerer, 2014; Heugens & Lander, 2009). Of particular essence is the argument that too much focus on 'isomorphism and similarity' has blurred organisational research to the importance of differences across organisations. In support of this view, Meyer and Höllerer (2014) argue that a formal organisation is a 'rationalised cultural product'. Hence, a focus on isomorphism and similarity (institutionalised patterns/structures) will most likely take us away from trying to understand alternative modes of organising and the dynamics currently transforming contemporary organisations into complex objects of investigation. Heugens and Lander (2009) add that the adoption

of institutionalised structures and patters that is meant to appease environmental factors may induce tensions with the internal organisational form of work. Furthermore, they contend that 'investments in isomorphism-enhancing behaviours or attributes' may be a waste of resources 'if the required resources have a higher investment value elsewhere' (p. 64). This is assertive of the pronouncements of DiMaggio and Powell (1983) that organisational homogeneity emerges from processes that seek to make them similar without necessarily making them more efficient. Therefore, even though organisations are becoming more and more homogeneous, they are less likely to be efficient because it is not competition that drives them.

The focus of this study is on public universities in Cameroon. Because they are public organisations within the governance arrangement of the HE ministry that regulates the education system of Cameroon, the assumption is that these universities are somehow constrained to operate within the rationalised framework of the regulatory system of the state. However, based on their relative autonomy status, I also expect them to be influenced by both the rationality of their visions and aspirations and by the pressure to gain legitimacy in the society. Thus, based on the explicit explanation of the principles of the institutional theory, I find it imperative to use as a basis for analysing the influence of GEP agendas on the socio-economic development at the national level—in my case study, Cameroon. However, the study also considers the strength of the public university based on rationality rather than on homogeneity. Consequently, I analyse the rationality of the public university with respect to its vision, mission and objectives.

2.5.4 Institutional Theory and Public University

Upon attaining independence, many African countries first set out (and have continued with this intention) to transform HE to meet their socio-economic development needs (Woldegiorgis & Doevenspeck, 2013; Kariwo et al., 2014). They based this decision primarily on their desire to achieve socio-economic development. Subsequently, they understood the fact that the European colonialists introduced an education system intended to foster their colonial ideology (Woldegiorgis & Doevenspeck, 2013). Cognisant of the fundamental differences in both worlds, African countries, among others, decided to use universities as an instrument to address the challenges of colonial impositions on African societies. Unfortunately, the vision and mission objectives of universities in these societies have largely been

determined by changing circumstances in the socio-economic world order since the early 1990s. Apparently, globalisation is now one of most influential phenomena in the nature of the contemporary world order. Joel (2008) confirms that it has finally entered the sphere of education policy discourse with emphasis on the importance of schools to meet global societal needs. Consequently, as a part of the global community, there is a need to premise the analysis of Cameroon's public university policy agenda on the institutional theory idea. This is informed by the fact that the theory enables a better understanding of how global institutionalised structures and processes of institutions (GEP) may influence individual institutional patterns (in this case, the organisation and outcome of public universities in Cameroon, Africa).

Therefore, I draw on the institutional theory as a basis for my analysis because of its explicit concern with the relationships that exist between individual beliefs and actions, the organisations within which these beliefs and actions occur and the collective social structures in which the norms, rules and beliefs are anchored in order to determine the course and nature of organisations. Generally, the assumption is that every newly created university would try very hard to copy the structures and processes of already existing universities and, at same time, to compete with them. At the national level (making reference to public universities), their first attempt would probably be to gain full recognition as a survival measure within the principles of the institutional theory. In this case, I also assume that they will try, as much as possible, to align their functionality with institutionalised patterns of structures and processes influenced by state regulations.

Equally, I expect that they will do much in terms of interaction with other public universities in order to gain collective meaning. I expect this interaction to create within them the same nature as that of other universities, determined by institutionalised patterns of the environment. Hence, like the others, the assumption is that they would function within the expectations of the environment and the world order within which they operate/run their activities. This means that, besides formal pressure from the education authority that regulates the education enterprise, the environment in which they operate also helps shape or develop the nature of their activities.

The principles of the institutional theory also provide us with the insight that, like all organisations, Cameroonian public universities should also have the desire to achieve internal organisational efficiency based on their specific visions and goals. Consequently, I understand that it is of essence to factor these aspects into my data analyses exercise. This includes the fact that the specific goals of public universities in Cameroon motivate them to compete for the diminishing funding support of the

government (Kariwo et al., 2014). Heugens and Lander (2009) assert that increased compliance with institutionalised structures and processes (isomorphism) 'lowers organizations' potential to meaningfully differentiate themselves from their competitors, thereby lowering their ability to realize sustainable competitive advantage' (p. 64) (see also Deephouse, 1999).

Thus, considering the relative autonomy status of public universities in Cameroon, I use the conception of the institutional theory to analyse my data. I take into account the fact that Cameroonian public universities should seek to examine both their internal and external circumstances with respect to policy formulation so that they can fulfil their own specific agendas as opposed to those of the global community. Going by this understanding, my analyses enables me to determine the kind of measures that Cameroonian public universities take to develop capacities for competitive advantage, especially when the intention is to acquire as much funding as possible for their own activities. To do so, data analyses for the influence of GEP on a country's public university outcome, informed by the neo-institutional theory, provides a strong indication for understanding policy dynamics with respect to context.

3 METHODS

3.1 Methodology

Methodology refers to the theoretical, political and philosophical backgrounds to social research and their implications for research practice and for the use of particular research methods (Petty et al., 2012). This definition is grounded in the assumption that all research is based on some ideas and beliefs (philosophical assumptions) that determine which methods are suitable for investigating a research problem for the creation or development of knowledge in any given study. In Philosophical Assumptions and Interpretive Frameworks, Creswell (2012) notes that whether researchers are aware of it or not, they always bring certain beliefs and philosophical assumptions to their research. He insists that these philosophical assumptions often inform the choice of theories that guide research, at a less abstract level. He summarises this perception with the argument that there is a clear relationship between the philosophies that one brings to the research act and how one proceeds to use a framework to examine his or her inquiry (Creswell, 2012). Consequently, wherever the aim is to achieve high validity results, there is relevance to always explain and highlight the philosophical assumptions that underpin any qualitative research.

Methods on the other hand, provide a clear and complete description of the specific steps undertaken to address the research questions of the study (Rudestam & Newton, 2007). Specifically, methods deal with certain data collection techniques that include how the researcher thinks about the problem statement and research questions of the study. For example, the act of identifying, soliciting or selecting participants and preparing research materials and tools for data collection, including the formulation of procedures, are all methods of data collection (Rudestam & Newton, 2007). This procedure explains in detail what is done and the thought that guides the links between the research problem statement, methods and results. In my case, I borrow some procedural insights from Denzin and Lincoln (2011) that place philosophy and theory into perspective (Creswell, 2012, see Appendix D). Hence, this chapter discusses the philosophical assumptions that informed the

research problem and elaborates the design strategies (methods) used in the entire process of the study.

It also explains how I identified respondents and other data sources as well as the methods used in collecting and analysing the data that contribute to the understanding of how and why public universities in Cameroon are struggling with the endeavour to meet the demands, needs and aspirations of their society. I begin with an explanation of what the researcher brings to the research in terms of my background, experiences and beliefs. It reflects on how my personal history, experiences and reasoning have influenced my interest for this study. I also make clear the philosophical assumptions (sets of beliefs, paradigms and perspectives) that are shrouded in the ontology (nature, reality and relations of being), epistemology (nature, methods, validity and scope of knowledge) and methodology (system of methods used) that underpinned the study. The research design strategies/approaches used in the inquiry are also explained. Methods of data collection and analysis are described and then other evaluations are done to ensure appropriate understanding of the entire process that led to the findings and conclusions of this study.

3.2 Reflexivity—The Researcher

Reflexivity is defined as the deliberate and intentional role of the researcher's beliefs and values that are considered in the selection of a research methodology for a study—that is, for the generation of knowledge and its production as a research account (Shacklock & Smyth, 1998). Similarly, Watt (2007) agrees with Russel and Kelly (2002) that researchers may become aware of what allows them to see, as well as what may inhibit their seeing, through a process of reflection. He contends that the process of reflexivity in qualitative research involves careful consideration of the issue under study as well as the ways in which the assumptions and behaviours of the researcher may affect the inquiry. Thus, reflexivity in qualitative research methodology is important on the premise that the primary instrument of data collection and analysis is the researcher (Glesne, 1999; Merriam, 1998; Russell & Kelly, 2002; Stake, 1995; see Watt, 2007).

In this study, I consequently make allusion to my beliefs and values both as a researcher and as an instrument of data collection. This is done in order to take into account the impacts that my assumptions and behaviours have brought to the inquiry/research. Considering that beliefs, assumptions and values influence

research based on the object of study, I begin with the experiences that informed the values I brought to this research. Alternatively, this is done in accordance with respect of the fact that the intellectual autobiography of the researcher is one of the key epistemological considerations in the research process that permeates the whole research endeavour, enabling ethical consideration throughout the process (Berger, 2015; Dodgson, 2019).

Until 1993, HE in Cameroon was exclusively the responsibility of the national government and included one university (the Bilingual University of Yaoundé [UNIYAO]), four small university centres (Njeuma et al., 1999) and a host of higher professional institutions of learning, designed for recruitment into Cameroon's public service positions. According to Njeuma et al. (1999), the 1993 HE policy reforms in Cameroon were triggered by the growing demand for HE studies and the need to decongest UNIYAO, which had 45,000 students on a campus with a capacity for only 5,000 students. Consequently, government created six public universities from UNIYAO and the four university centres. In line with the decongestion process, there was also the plan for the government to decentralise public universities to other regions of the country. This coincided with access issues and WB's request to African countries to reduce public expenditure in HE, promoting private universities in order to diversify funding sources and enable private income mobilisation (WB, 1986, 1988). Hence, the 1993 reform policies eliminated student bursaries, instituted substantial fees and reduced public expenditure on universities. However, this came at a time when Cameroon, like many other African countries, was experiencing a severe economic crisis (Njeuma et al., 1999). The situation weighed on the availability and quality of staff and the inadequacy and quality of infrastructure needed for surging enrolments.

At the time of new reform measures, in 1994, I enrolled as a student at UB. While at UB, I experienced strike actions from academics and students, relating to salary and fees issues, respectively. I experienced and witnessed the difficulties faced by both students and academics in relation to the management processes and activities of the university towards academic achievements and student output. Besides the non-availability of research facilities, including laboratories, computer labs (ICT) and other inadequacies, students found it extremely difficult to do and hand in their assignments in printed form. For example, there were claims at the time that the university library was poorly equipped for research, that staff offices had limited computers and that access to the internet was quite inadequate for academic purposes—as well as neither available for students on campus nor affordable for them off campus. Upon completion of my first degree, I later had the opportunity

to travel to Europe for further studies. Today, 25 years later and counting, Cameroon has 8 public universities and a good number of private ones that are still facing similar and recurrent challenges.

As a master's degree holder in HE management and as a doctoral student in the sphere of HE management and policy issues, I bring a diverse set of experiences and knowledge of university processes and activities in Cameroon and three European countries (Sweden, Norway and Finland) to bear in this study. At Tampere University (TUNI), where I have had the opportunity to practice doctoral research activities, I have first-hand experience of the dynamics involved in teaching, research and publication by academics and students alike. I have also experienced the pattern and essence of collaboration between universities and other stakeholders, the ethos of entrepreneurial university practices and the benefits that come with such practices. My basic knowledge and understanding of the existence and distinction between universities and applied science universities in Finland had a huge influence on my beliefs and philosophical research assumptions. For example, as a degree student, I have taken part in a work placement scheme as part of an international exchange programme for graduate and degree students in the European Union area. Put together, these experiences provided me with the opportunity to understand the complexities involved within the relative autonomous framework of the university and in the organisation and management of activities towards meeting the demands, needs and expectation of communities through university output. These experiences bring real life examples and perceptions to this study of the ways in which universities could interact with other stakeholders to meet the aspirations of KE and entrepreneurial university policy measures.

Additionally, the decision to research the processes of UB in relation to KE and entrepreneurial university policy measures in Cameroon's public universities and their development role came through the consideration of other diverse thoughts and experiences. Quite revealing amongst them was the role of supranational organisations, such as the WB and IMF, on the economic growth and development of some African countries. When I studied global education governance policies and neoliberal politics, I marvelled at the interest of supranational organisations in the economic growth and development of third world countries. I learnt about the overwhelming influence they have over such countries with respect to policy borrowing, learning or imposition. On the one hand, I noticed the unconditional relationship existing between these countries and the WB—for example, in terms of their allegiances to it. On the other hand, I noticed the conditional relationship between them and the WB regarding loans and grants. Consequently, the SAP and

KE programmes of the WB are examples of certain policy influences on some African countries that urged and guided my thought in relation to the importance of this research.

The entrepreneurial university concept is another phenomenon that also caught my attention in the course of my study period. Most important to me is how this phenomenon enables university stakeholders to overcome certain financial and related challenges through research activities and special interactions with communities, including industries and corporate businesses. Even though Shattock (2005, p. 17) contends that the term Entrepreneurial University is debated in Europe, he admits that Clark's (1998) definition of this creation of his is positive. From his analyses of some case study universities, as illustrated in Chapter 2, Clark (1998) defines entrepreneurial universities as those breaking away from the constraints imposed upon them by restrictive funding regimes or bureaucratic conventions of state-run higher education systems. With his explanations of how some universities could manage themselves away from financial and related constraints, Clark ignited in me the urge to examine the case of public universities in Cameroon. Further readings on university entrepreneurialism gave me greater insights of how university management could harness the different qualities and capacities of its stakeholders (academics and students) for greater achievements and benefits to the community—that is, be able to meet the demands, expectations, needs and priorities of their communities with respect to development. Inspired by these theories and beliefs, the intention of this study was to contribute to knowledge that would motivate university stakeholders in Cameroon to revise their strategies in order to better fulfil their mission as well as the needs of their communities.

3.3 Philosophical/Theoretical Perspective - Philosophy of Science Paradigm

According to Koro-Ljungberg et al. (2009), there is a possibility for gaps and unclear connections in the research process that can complicate the outcome of sound or appropriate methodological decisions if the purpose/problem statement of a study does not sufficiently align with the theoretical perspective of the researcher. Citing the American Educational Research Association (2006), they concur with the fact that epistemological awareness is an important and informative part of the transparent research process required for the readers' understanding. In addition, to broaden the understanding of this aspect of qualitative methodology, they maintain

that while a theoretical perspective is a philosophical stance informing the methodology, epistemology is a theory of knowledge embedded in the theoretical perspective (Koro-Ljungberg et al., 2009).

3.3.1 Non-positivist Philosophical Approach

Accordingly, the research questions and problem/purpose statement for this study were informed by the non-positivist (post-positivist) philosophical view with particular attention to critical realism and historicism. These influenced the interpretive/critical perspectives of the study. According to Trochim (2020), critical realism as a philosophical view acknowledges that there is a reality to whatever phenomenon we study that is independent of our thinking about it and that science can study. In this context, reality is conceptualised as being subjectively constructed. In other words, reality is derived from particular situations and circumstances of the particular context of a phenomenon. Similarly, as a philosophical view, historicism asserts that 'knowledge develops in context, such as historical period, geographic place and local culture' (Savin-Baden & Tombs, 2017).

Correspondingly, Hope (2016) asserts further that this non-positivist approach to research further implies the formation of knowledge based on three main things: the subjectivity of the researcher, the significance of context, and the critical-theoretical paradigm that engages profoundly with ideologies that restrict human freedoms. Subjectivity of the researcher is in relation to the variety of interpersonal skills that the researcher brings to bear on the entire research process, beginning from gaining access to real-life research environment/contextual setting (Taylor & Bogdan, 1984). This involves skills that enable good, trusting and prolonged relationship between the researcher and participants, especially given that researchers rely on themselves as major data collection instruments. Additionally, complementing the non-positivist research paradigm is the assertion that social context is very important to meaning creation (Neuman, 2014).

On their part, Clarke and Braun (2013) broaden the understanding of the non-positivist approach to qualitative research with the contention that it builds (in a fundamental way) on the idea that there are multiple versions of reality, which are closely linked to the context in which they occur. As such, referring to context of data generation, the broader socio-cultural and political contexts, they contend that 'we should not, even must not consider knowledge outside of the context in which it was generated' (Clarke & Braun, 2013, p. 4). Accordingly, the design focuses on

the observations and interpretations of the perceptions of people of phenomena in a natural setting (Guba, 1990; Guba & Lincoln, 1994; Newman, 1994; see Khan, 2014, p. 225). Otherwise, there is a huge validity issue with the attribution of knowledge to a setting, whereas its formation is determined by data that is collected, interpreted, analysed and discussed with respect to a different setting.

Consequently, based on these epistemological propositions, I was able to adopt poststructuralism as my interpretive paradigm for the study. As a theoretical perspective, it represents the philosophy of Science that embodies the preceding epistemological propositions (realism, historicism, relativism, subjectivism), including objectivism, constructionism, scepticism and pluralism (Koro-Ljungberg et al., 2009). Besides informing the research problem statement and questions, it also guided the analysis of my data and contributed to the understanding of how KE and entrepreneurial university policy measures affect the way Cameroon's public universities function towards the economic development of the country. For better understanding, the following section gives an etymological insight of the poststructuralist philosophical paradigm.

3.3.2 Poststructuralism

Poststructuralism (postmodernism) emerged as a concept to critique structuralism (modernism), as defined in the Seminal Course in General Linguistics of Ferdinand de Saussure (1983, see Radford & Radford, 2005). Using the language example, de Saussure's structuralism describes language as a scientific form of a 'closed system of elements and rules that could be described quite independently from the psychological subjectivity of any particular user of that language' (Radford & Radford, 2005, p. 61). That is to say, the language system can be explained in an objective and scientific manner without any considerations to certain particularities. This is an idea in alignment with the modernist ideology, which asserts that reality can be ascertained through a set of formulae inasmuch as there is only minimal or no 'human contamination of its comprehension' (Lincoln & Guba, 2000, p. 176). Alternatively, poststructuralism posits for relativism and suggests that descriptions of language systems are always highly contextual, given that there is no unified truth but rather many truths and systems (Radford & Radford, 2005; Dillet, 2017). Hence, poststructuralism, in this particular instance, urges for linguistic codes and structures that can help researchers uncover appropriate knowledge (Radford, 2004; Savin-Baden & Tombs, 2017).

Additionally, poststructuralism questions and rejects 'the idea of an observable, independent (singular and universal) reality, with humans understood as responding to external and internal influences' (Clarke & Braun, 2013, p. 6). Instead, it pays attention to specific social and material contexts in opposition of structuralism, which assumes that we can describe phenomena in an objective and scientific manner. Similarly, Dillet (2017) affirms that the poststructuralist philosophy challenges the idea of validating as reality a stance that is adopted from outside the appropriate context. On the contrary, reality, in a poststructuralist view, must be determined through a procedure that allows us to 'subjectivise' rather than 'objectify' knowledge or, in order to know it, we must participate in it (Dillet, 2017). In other words, we can know or determine reality only if we engage contextually or examine, in particular context, the phenomenon under review. This is in assertion of the fact that rather than maintain a gap between science and reality, there should be a continuum of engagement between both (Dillet, 2017). Consequently, since this study seeks to investigate and/or establish a theoretical implication regarding KE and entrepreneurial university policy measures in Cameroon's public HE system, I found it imperative to ground the methodology of the research on poststructuralism. The study thus assumes that there are many truths but that the contextual truth or reality is that which is guided by the experiences and expectations of researchers as well as research participants. The analyses that led to the conclusions of the study were influenced by the epistemological propositions of the non-positivist/poststructuralist philosophical/theoretical perspectives.

Hence, informed by the non-positivist/poststructuralist approach to research, I focused this research endeavour within the framework of its natural setting. That is, I built a complex and holistic picture of the setting, made detailed reports of respondents from same setting and analysed their responses with careful consideration of the circumstances in the setting (Cresswell, 1998). I made sure that all primary data stemming from first-hand experiences, perceptions and university processes in relation to KE and entrepreneurial university policy ideas be sought at UB, the natural setting. This approach justified my desire to get detailed insights of the dynamics involved in the public university setting in Cameroon with respect to the objective of the study. Therefore, using this approach, I was able to generate very detailed information from the interview data collected from some university stakeholders (academics, top management and administrative support staff members). The approach was also quite essential in my determination to accomplish a detailed and contextual analysis of university entrepreneurialism and the KE idea on the public university (UB) in Cameroon.

3.4 Case Study Design of the Research

Yin (2002) defines a case as 'a contemporary phenomenon within its real life context, especially when the boundaries between a phenomenon and context are not clear and the researcher has little control over the phenomenon and context' (Yazan, 2015, p. 138). Based on this definition of a case, he concludes that a case study is an empirical inquiry that investigates a contemporary phenomenon by addressing the 'how' or 'why' questions concerning the phenomenon of interest (Yazan, 2015). Considering that a case study design draws together a 'palette of methods', Stake (1995) defines case study research as 'an investigation and analysis of a single or collective case, intended to capture the complexity of the object of study' (Hyett et al., 2014, p. 2). Complementing these definitions is the contention of Merriam (2009) that a case study research approach maintains profound connections to key values and intentions and is particularistic, descriptive and heuristic in nature. Briefly, these definitions assume that context and other complex conditions of a phenomenon are the main variables that determine the validity of case study research.

By subscribing to this approach, the general intention was to cover a broader range of contextual and complex conditions regarding KE and entrepreneurial university policy measures in the context of Cameroon. I chose UB in order to study, in particular, the nature of these concepts in relation to Cameroon's public universities' goals for the economic development of the country. Considering the post-positivist perspective of the research, I developed a clear case protocol (a comprehensive set of procedures for data collection) with careful consideration of increasing validity and decreasing potential bias. First, I chose UB after a careful and thorough consideration of common and particular variables of public universities in Cameroon. For instance, like other public universities, it functions almost exclusively under the direct supervisory authority of Cameroon's Ministry of Higher Education (MINESUP) in accordance with the Presidential Decree 93/027 of 19th January 1993 defining common conditions for the operation of universities in Cameroon. This means that, like other universities in the country, the functions and mission objectives of UB are guided by the regulatory framework and stipulations of MINESUP (public authority), which provides guidelines and mission objectives (including institutional and system-wide policy perspectives) constituting the essence of HEIs in Cameroon (University Standards, January 2015, 19).

Consequently, I made the single case choice of UB in order to be able, in a very detailed manner, investigate KE and the entrepreneurial university policy

prescriptions in a real-life context and in relation to their already well-formulated propositions, respectively, as follows:

- Development is achievable via greater reliance on intellectual capabilities than on physical inputs or natural resources.

- The engagement of other stakeholders is necessary at the university to enhance the capacities needed by the university to cope with demands made upon them, which will, in turn, stimulate innovative academic behaviour to generate non-state resources that can cross-subsidise and incentivise further independent academic activities (elaborated in Sections 2.3 and 2.4 and illustrated in Table 1).

I adopted this approach based on the assertion that when there is a clear set of propositions, as well as circumstances, that form the basis of a theory, a single case study may be appropriate enough to confirm, challenge or extend the theory (Yin, 1994). In other words, a single case can present as a strong premise for determining the strength or validity of a theory's propositions and for ascertaining whether an alternative explanation is more appropriate.

Second, the working language (which is English) of UB particularly motivated its choice for the case study from among the other public universities in the country. Although Cameroon is officially a bilingual country, with both English and French as official national languages, the decree that created UB specifically designated it as an Anglo-Saxon university. This decision aimed at creating a balance for English-speaking Cameroonians, whose only study option until then was UNIYAO, the lone French language-dominated university in Cameroon (1960–1993). Consequently, all academics at UB have professional proficiency in the language. I found the choice most appropriate because the researcher, as an Anglophone with professional proficiency in the English language, could effectively collect interview and document data respectively from both staff and archives of the university without the need for a translator. Furthermore, this spared the researcher the challenge of interpreting the concepts and perceptions of interview participants—in comparison to the situation at a Francophone university. Also, in developing the case protocol of data collection, I measured and adequately described all elements of the case study area as advised by experts (Yin, 2009, 2012; see Hyett et al., 2014). In the course of analysis, I sought for a positive relationship between the post-positivist perspective and the facts explored in the data.

The approach also took into consideration the historical background of public universities, the circumstances and enthusiasm that led to the creation of six new public universities, including UB, in 1993 (see for example, Section 3.1). For instance,

UNIYAO, the lone university that existed before 1993 was split (transformed) into two new universities in order to decongest it, provide more access for student cohorts and enhance economic growth and development of the country in accordance with Presidential Decree No. 93/026 of 19th January 1993. Combined with neoliberal policies, the education sector was liberalised and even public universities had relative levels of freedom. Hence, like any other of the five public universities created in 1993, UB stood out as a good case study example for evaluating or estimating the nature, ability or quality of KE and entrepreneurial university policy measures in the face of reduced and irregular funding support.

With these considerations, it is reasonable to refer to analytical generalisation of the findings at UB with respect to the other public universities in the country. That is to say, there are certainly some aspects from the set of findings of the UB case that will most probably apply to other public universities within the context of Cameroon. This is in line with the argument of Halkier (2011) that generalisation based on qualitative studies must be generally more specific and context-bound than universal in consideration. That is, analytical generalisation is a means to illustrate context-bound characteristics. The ground for the Cameroon case is the fact that all public universities fall under the mandate of MINESUP in accordance with laws No. 98/004 of 4th April 1998 and No. 005/2001, which respectively provide orientation of education in Cameroon and also provide the Cameroonian educational system with new orientations (University Standards, January 2015, p. 19).

Another reason for choosing the case study approach, defined by depth, breadth and rigour within a post-positivist paradigm, was to explore the thought that different circumstances, history and cultural heritages may have different implications on policy measures. Accordingly, Simons (2009) argues that particularisation as in case study approach is necessary because it presents 'a rich portrayal of a single setting to inform practice, establish the value of the case and/or add knowledge of a specific topic' (p. 24). By implication, a case study approach provides an opportunity for us to learn a great deal from single cases and the possibility for its results to permit us to make inferences that would be applicable to other contexts (Patton, 2002). Besides, for the purposes of this research that is guided by a post-positivist perspective, building on the particularities of a single case helps to inform of inevitable biases involved in GEP practices. Hence, with particular reference to my case, I thought it appropriate to use the paradigm to demonstrate tacitly the importance of context as a considerable factor in policy design and practice. In other words, I used it to highlight, contextually, the effects

of KE and entrepreneurial university ideas on the way Cameroon's public universities function in relation to the development of the country.

However, despite profound consideration of variables and other attributes of a case study research approach, there is the contention that without adequate description for methodological justification, the approach can appear to be dishonest or inaccurate (Hyett et al., 2014). Concerning methodological integrity and enhanced credibility in the case study approach, Rose et al. (2015) suggest, as measures, enough efforts and careful attention given to the phenomenon and context to prove that evidence supports the conclusion reached. It could also be very challenging to determine whether the settings and characteristics or attributes of a chosen case study identify correctly for the entire study frame. Consequently, if the case study approach is void of the technicality and appropriateness of the chosen case, it is hard to generalise the results obtained in a particular case to the entire study frame—even when rigor (methodological integrity and credibility) is attained in the approach. This is because of probable nuances in distinct variables within the study frame. Consequently, the study results would have validity issues. Notwithstanding, I built my case study approach on Cameroon's government regulatory framework and relative autonomy of public universities as main attributes/variables for judging KE and entrepreneurial university practices in the country, with UB as the case study. I considered other variables (facilities: infrastructure, laboratories, equipment, etc.) in the study as subsidiary to the outcome of KE and entrepreneurial university policy measures in Cameroon.

3.5 Data Collection Methods and Sources

Generally, data collection is a systematic approach to gathering and analysing information from different sources in order to create or develop knowledge about existing phenomena. Collected data enables researchers to provide answers to phenomena through analyses of the data. Thus, data collection and analysis methods, as well as other research techniques, do not exist in a vacuum. In other words, they exist in a context. The procedures that often guide these approaches are of an epistemological nature—in other words, they are 'outgrowths' of particular knowledge theories on how to study phenomena and, therefore, make room for different ways of knowing (Koro-Ljungberg et al., 2009). This study was built on a qualitative case study design, 'an approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources' explored through a

'variety of lenses' so that 'the topic of interest is well explored, and…the essence of the phenomenon…revealed' (Baxter & Jack 2008, pp. 544, 545). Therefore, based on the purpose, research questions and chosen theoretical perspective of the study, I generated the data for this study through interviews, reviews of documents and published materials.

3.5.1 Interviews

Generally, interviews are a qualitative research tool that seeks to examine and give a detailed account of the 'quality' and 'nature' of how people behave, of their beliefs and experiences and of how they understand phenomena or issues (Alshenqeeti, 2014; Neuman, 2014; Schostak, 2006; Boyce & Neale, 2006; Rubin & Rubin, 2005). In other words, interviews allow researchers the opportunity to extensively investigate the views of respondents in order to elicit from them answers, facts or meanings that they bring to the issues or phenomena under investigation. As a data collection method, the interview assists in building a holistic picture of a phenomenon as well as in conducting analyses and reports on the views, beliefs and experiences of respondents. Holistically, it is characterised by intensive individual conversations meant to explore the perspectives of a selected number of respondents on a particular idea, programme, issue, phenomenon or situation. Emphatically, it is a purposeful conversation between a researcher and particularly selected respondents based on their knowledge and/or experiences of an issue or phenomenon under study. In the 'broadest sense', it involves asking questions, listening to respondents and recording their responses in order to find out what perspectives they have about the phenomenon or topic (Edwards & Holland, 2013). Consequently, when people with experience and practical knowledge of a topic of study give their responses to the researcher, they contribute to building a holistic snapshot of the phenomena under investigation.

I used the semi-structured interview method as a data collection tool for this research. Semi-structured interviews are characterised by high levels of flexibility in the nature and design of the questions intended for the interview (and without a particular structure) (Edwards & Holland, 2013). However, based on the topic and/or phenomena under examination, the semi-structured interview method allows for an interview guide, which permits that the questions intended for discussion between the researcher and the respondent be organised in a particular way (for example, in themes). Importantly, this interview type allows much space for

respondents to answer on their own terms and gives researchers the chance to examine answers and forge a dialogue. The idea is to get a clear understanding of the experiences of the respondents on the topic under discussion. Concerning flexibility, the researcher seeks to attain a profound meaning to attach to the conversation with purpose, to develop unexpected themes and to adjust the content of the interview—and, possibly, to develop the emphasis of the research because of issues that emerge during the interviews (Edwards & Holland, 2013).

These explanations are in line with Buck's (2005) submission that qualitative research interviewing has moved away from the format in which questions were asked in a particular order and adhered to even when they had been answered in preceding interviews. She affirms that qualitative researchers only use an interview format as a guide to ensure that particular topic areas are covered. Purposely, they 'leave room to follow feedback idiosyncratically so as to explore more particular meanings with research participants' (Buck, 2005, p. 4). Therefore, qualitative research interviews not only give desirable information but they also, quite often due to their effects, provide valuable insights into the construction of new propositions for further exploration of the research purpose. Since my research purpose was to examine how public universities in Cameroon implement KE and entrepreneurial university policy measures, it was logically imperative to get the subjective views and experiences of some university stakeholders.

3.5.2 Selection of Respondents

Given that the goal of the qualitative research method is to deepen understanding about a phenomenon, process, relationship, community, etc., the relevance of the research topic determines the selection criteria for interview respondents (Neuman, 2014). Based on the topic of this study, I used purposive sampling to select respondents. Also known as judgemental sampling, it is a valuable sampling technique used for special situations in exploratory or field research that relies on the judgment of an expert/researcher to select particular respondents with a specific purpose in mind. This is because, in such a case, the purpose of selection is not simply for representation reasons but for particular cases that are 'especially informative' (Neuman, 2014, p. 274). In my case, I used it to select special respondents with the capacity to give me the information I was seeking regarding how public universities in Cameroon administer KE and entrepreneurial university policy measures. Respondents were selected from amongst

academics/researchers/teachers, administrative and support staff, and top management personnel. The aim was to acquire information and understanding of their experiences in the changing circumstances of the overall university processes in relation to KE and entrepreneurial university policy objectives.

The selection criteria aimed at exploring to understand how university internal stakeholders perceive, conceptualise and manage KE and entrepreneurial university ideas within the public university setting in Cameroon. Therefore, before selecting respondents for the study, I examined the different disciplinary areas with respect to schools, colleges, faculties, and departments in order to ascertain how they connected directly to applied science studies (studies connected with providing immediate solutions to societal issues). I also assessed how connected these different units were, in terms of structure and design, to the entrepreneurial idea of the university, based on the conceptualisation of Clark (2001), within the framework of autonomy, collegiality and educational achievement as reflected in self-initiating, self-steering, self-regulating, self-reliant and progressive tendencies of the units of the university (as analysed in Section 2.5.2). For instance, I looked into the academic disciplines of the different academic units at UB as well as their independence and involvement in managerial affairs of the university. Consequently, I identified those units having a direct causal relationship with KE and entrepreneurial university ideas and then selected respondents from them. The units included the following:

1. Faculty of Veterinary Medicine and Agriculture
2. Faculty of Education
3. College of Technology
4. Faculty of Health Sciences
5. Faculty of Engineering and Technology
6. Faculty of Science
7. Faculty of Social and Management Sciences

These units offered academic studies within the following disciplinary areas:

- Hard-pure life (number 6);
- Hard-applied life (numbers 1, 3, 4 and 5);
- Soft-applied life (number 2); and
- Soft-applied non-life (number 7).

I examined and based the categorisation of the academic disciplines, outlined above, on Biglan's (1973) three dimensions (hard/soft, pure/applied, life/non-life) scheme, as shown in Table 2 below. Accordingly, the table illustrates all disciplinary areas of the faculties and colleges presented above.

Table 2. Three Dimensional Clustering of Academic Tasks Areas

Task Area	Hard		Soft	
	Non-life system	Life system	Non-life system	Life system
Pure	-Astronomy -Chemistry -Geology -Math -Physics	-Botany -Entomology -Microbiology -Physiology -Zoology	-English -German -History -Philosophy -Russian -Communications	-Anthropology -Political Science -Psychology -Sociology
Applied	-Ceramic Engineering -Civil Engineering -Computer Science -Mechanical Engineering	-Agronomy -Dairy Science -Horticulture -Agricultural Economics	-Accounting -Finance -Economics	-Educational Administration and Supervision -Secondary and Continuing Education -Special Education -Vocational and Technical Education

Source: Biglan (1973a, p. 207).

As already indicated in the foregoing paragraphs, respondents from amongst the stakeholders of the university were chosen through a purposive sampling method.

In addition, due to the nature of research questions and overall research design, the emphasis of the study was on qualitative rather than quantitative inquiry. The objective was to become 'saturated' with information on the topic and not to maximise the number of respondents (Bowen, 2005). In my case, I identified three categories of stakeholders in UB from the ranks of academics/researchers, top management personnel and administrative support staff members. Then, based on knowledge of their positions and responsibilities (including academic/professional qualification and experience) in their different units, I selected particular respondents from each of the categories. In addition, I got recommendations from some respondents (in the course of interview) about other persons that I could interview. Snowball sampling is the terminology that vividly describes this selection procedure.

In explicit terms, snowball sampling happens within a network mechanism in which a researcher, for example, choses a particular respondent based on direct or indirect recommendation from within the connection system. Neuman (2014) defines it as 'a nonrandom sample in which the researcher begins with one case and then, based on information about interrelationships from that case, identifies other cases and repeats the process again and again' (p. 275). In other words, he likens it to network, chain referral, reputational and respondent-driven sampling, all referring to a process during which the researcher gets the opportunity to select cases from within a network mechanism. Simply put, it is a sampling method through which the researcher gets cases by referrals from one or a few other cases, then more referrals from those cases and so on (Neuman, 2014). In the course of the interview process, some respondents referred other respondents, whom they knew were also very resourceful or directly concerned with the subject matter under investigation. Through such an interactive process, I was able to recruit other participants for the study.

Table 2 is a representation of the interview chart. For reasons of anonymity, backed by informed consent and confidentiality agreements with respondents, I have chosen not to indicate details pertaining to particular positions held by respondents from the school, faculties and central administration of UB. However, it is important to note that some respondents had dual capacities, serving as academics as well as in top management personnel ranks.

Table 3. Number of Interview Respondents at UB

No	Level	Respondents	Code names	Category	Respondents by Disciplinary fields
1	Top Management	6	M1 - M6	Overall planning and direction responsibilities	N/A
2	Academics/teachers	10	R1 - R10	Researchers	-Hard-pure life: 2 respondents -Hard-applied life: 5 respondents -Soft-applied life:2 respondent -Soft-applied non-life:1 respondent
3	Administrative/ support staff	9	A1 – A9	Heads of basic units and support staff	N/A
Total		25			10

'Top management' level refers to officials at the institutional level who participate in formulating and governing university-wide policies. They also ensure the execution of system-wide policies through their management processes. 'Academics/teachers' level represents the corps of teaching staff who are actively involved in research and teaching activities. Sponsorship of their research activities is either from internal university sources or from external sources, that is, government through MINESUP and other stakeholders (e.g. students, businesses, etc.) or through collaborative partnership agreements between UB and other stakeholders. 'Administrative staff' refers to the heads of basic units and support staff working in different faculties, departments and central administration of the university, including from the Research and Publications as well as Cooperation units. I used the open-ended interview technique to interview these different.

The idea that influenced the decision to interview a cross section of different category members of the university community was the fact that both academics (members of the teaching and research unit) and administrative personnel of the central administration are involved in decision-making at the university, albeit at different degrees. For instance, both academic staff members and top university management officials constitute the university senate, which decides on major institutional level policies of the university. Therefore, I interviewed top management personnel and members of the teaching and research unit because of the fact that their leadership, teaching, research and outreach experiences, respectively, form a strong and reliable foundation from which they could make valuable contributions. Furthermore, the collaborative interaction between management and academics at UB provides a platform for the university to be able to adopt, for its own interest, appropriate conceptions. Thus, I deemed it necessary, as a means of collecting appropriate data, to interview respondents from these different categories of UB community members.

I chose respondents from the category of academics at different faculties/colleges based on the academic disciplines that they offered. As indicated above and illustrated in Table 3, I chose the respondents from the hard-pure life, hard-applied life, soft-applied life and soft-applied non-life academic disciplinary areas. Guiding my decision to interview respondents from these disciplinary areas was the rationale of the academic programmes that they offered, which directly targeted societal issues (e.g. demands, needs and aspirations of the people). Second, taking into consideration that academics are involved in teaching, research and outreach, I thought that their experiences and perceptions of KE and entrepreneurial university tendencies were a necessary tool for examining and understanding the processes of UB in relation to policy objectives. Third, the study purpose was to determine how KE and entrepreneurial university policy measures affect the way Cameroon's public universities function towards the development of the country. The main reason for the creation, adoption, inclusion and development of applied science disciplines in universities is to create and develop knowledge needed to solve societal problems. This also explains why I chose respondents from these faculties and college of UB, whose objectives reflect the aspirations of KE and entrepreneurial university policy constructions.

3.5.3 The Interview Process

As suggested in Section 3.5.1, semi-structured interviews were conducted with 25 staff members working in different capacities at UB. The interviews took place between 17 February and 31 March 2016. They involved 25 main questions, which were informed by the assertions of the need of intense theoretical scientific knowledge (as in KE concept) and skills development through stakeholder involvement in shared values for more flexible and strategic thinking and awareness (as in entrepreneurial university concept) (Coyle et al., 2013) for economic development. The aim of the interviews was to get clarifications about the processes of UB in relation to KE and entrepreneurial university policy objectives, as analysed in Chapter 2 (Sections 2.3 and 2.4, respectively), as well as to examine the propositions explained in the literature/document sources. The intention was to gain an in-depth understanding of the way in which public universities in Cameroon respond to these policy objectives. This way, I would be able to make sense of their outcomes and the implications they have for the economic development role played by the university. Consequently, the topic question areas were summed-up under three thematic categories (see Appendix B) with similar questions asked to every respondent within the framework of the organised themes. With respect to interviewees at the faculty and department levels, I asked questions within the limits of particular concerns of these units.

Although in line with the concepts under investigation, the questions were also rooted in the research problem statement, the research questions and my personal knowledge of and experiences with the African and European HE systems (as detailed in Section 3.2). Here, a categorisation of the three thematic strands of inquiry areas are presented, along with key questions:

A. Mission of the university and research priority area(s):
1. What are the functions (mission and purpose) of the UB?
2. What are the priority areas of research adopted by the university?
3. Does the university have research laboratories/facilities or special research units?

B. Funding sources—Research, collaboration and funding criteria:
1. Who sponsors research at the university?
2. How much research has been sponsored by the private sector and industry?
3. What percentage of private sector funding has accounted for the research and/or university budget?

C. Knowledge management and transfer:
1. Does the university own knowledge transfer offices?

2. Does the university coordinate knowledge transfer activities in partnerships?
3. How do you understand knowledge transfer partnerships and networking? What do they involve and what are the benefits?

Based on these questions, I engaged directly with respondents in order to obtain information, including their experiences and perspectives of KE and entrepreneurial university policy objectives at the university. To faculty personnel, my inquiry centred on the importance of their faculty in relation to the mission and purpose of the university. I equally asked questions relating to faculty research facilities, types of research and priority research areas adopted by the faculty or college. With respect to funding criteria and research collaboration, I asked questions relating to funders and research funding criteria at the faculty. They also answered questions relating to private funders, their interests and the benefits that such funding bring to the faculty and university as a whole. At the level of publication and dissemination of research results, they answered questions pertaining to patents, royalties and intellectual property (IP) rights. They also answered questions pertaining to the direct contributions of the faculty and university to the economic development of Cameroon (see Appendix C1).

Prior to the interviews, I wrote to ask for and obtained authorisation to conduct research at UB. I obtained it from the Deputy Vice Chancellor in Charge of Research and Cooperation with the Business world (see Appendices A and B). Then, I prepared another document 'Request for Interview' (see Appendix C) with details of ethical concerns, an interview guide and questions. I delivered the documents to respondents, in their respective offices, before the interviews. In some instances, some respondents spontaneously agreed to the interview upon receipt of the document. In each case, the interview was conducted face-to-face between the researcher and a respondent and took place in their respective offices. Before each interview, I reminded them of the reasons for the interview and reassured them of my commitment to confidentiality and respect for good conduct of research practice.

In every instance, the conversation centred on the themes indicated in the interview guide. It suffices to note that the use of the interview guide in qualitative inquiry is important for creating a structure for interviews (Bowen, 2005). Bowen (2005) emphasises that the use of the interview guide strategy is one way of providing more structure to the 'completely unstructured, informal conversational interview, while maintaining a relatively high degree of flexibility' (p. 217; also see Rubin & Babbie, 2001, p. 407). In addition, more structure makes it easier for the researcher to be able to organise and analyse interview data (Bowen, 2005).

In the course of the interview exercise, I used the conversational approach to make further inquiries from interviewees depending on their responses to prepared questions (interview guide); then, based on these, fresh questions were asked for a more in-depth exploration of the topics under. Even though I took notes, I also made sure to record the interviews with a digital voice recorder (Samsung Galaxy S4-Phone) in order to avoid leaving out some important responses and I stored the recordings in a digital file format. The average time for each interview was one hour. The minimum time spent for each interview was 46 minutes and maximum was 1 hour 21 minutes. Generally, the time spent on each interview depended largely on the interviewees—how much time they had, how much knowledge they had on the themes covered and how much information they were willing to provide. I find it imperative to note that some of the interviews had interruptions—for example, duty calls; and considered in the time slot. In the follow up process, I performed a verbatim transcription of the recordings.

Generally, empirical data generated from the interviews were analysed (see details in Section 3.6.2) by taking into consideration the information and conclusions of published materials and sourced documents, which included policy documents (both at the system and institutional levels) relating to HE in Cameroon. Through this procedure, I was able to develop better understanding of the influence of KE and entrepreneurial university policy ideas (within the framework of neoliberal principles and GEP pressures on public universities in Cameroon).

3.6 Document Reviews

Non-technical literature, including reports and internal correspondence, were classified under documents. Like interviews, they were equally 'a potential source of empirical data for case studies' (Bowen, 2009, p. 29) that could 'help the researcher uncover meaning, develop understanding and discover insights relevant to the research problem' (Merriam 1988, p. 118; see Bowen, 2009, p. 29). In summary, they provided background and context, prompted additional questions during an interview exercise (for example), provided supplementary data, a means of tracking change and influencing development as well as enhanced verification of findings from other data sources (Bowen, 2009). Therefore, in addition to interview data, I drew more data for the study from WB document sources as well as system and institutional level policy documents from MINESUP and UB. These documents included circular and service notes, reports and internal correspondences, ministerial

and presidential decrees (see Appendix E and Official/Policy Documents, Media Sources, Web Resource Documents and Government Portals in the Reference Section).

The term policy documents, as used in the study, refers to documents that spell out HE policies and procedures for universities in Cameroon. They included those that were written and developed by the university itself, based on internal policies, vision, mission objectives, and particular expectations of the university. In the study, I also allude to them simply as 'system and institutional level policy documents', depending on whether they were produced by MINESUP, other government agencies or the university itself. I accessed the documents either as hard copy prints or as electronic materials. Amongst them were diverse reports, such as funding reports, UB research and collaboration reports, newsletters and other publications. I reviewed the documents as a data collection method for assessing the local response of KE and entrepreneurial university policy measures within the framework of neoliberal and GEP tendencies in the public HE sector in Cameroon and for the purposes of corroborating interview data for the study.

The documents reviewed from WB and United Nations (UN) sources included diverse publications of country reports for Cameroon and Africa. For example, UN's Economic and Social Council - E/C.12/CMR/2-3 and the 2010 GESP-IMF Country Report No. 10/257 were some of the important documents consulted. Reviewed MINESUP documents included diverse publications of the ministry between 2014 and 2015. They included relevant data and policy statements based on presidential decrees and ministerial circulars on HE, dating as far back as 1993. Amongst them are the January 2015 University Standards Applicable to all Higher Education Institutions in Cameroon and Law No. 005 of 16th April 2001 to Guide Higher Education. At the level of the university, the documents reviewed also included memos, communications, special text documents and reports. Examples of such include annual UB reports, the Strategic Plan Documents (2007–2015), Faculty Reports (FSMS, Research Report 2014), Research Policy and Management Guide of UB (2007–2012) and UB Research at Glance (2013/2014, 2014/2015) texts. I obtained the documents from varied sources. I downloaded some from websites on the internet and obtained others under strict conditions from resource persons at the university. Those obtained under strict conditions were provided to us in confidentiality because they contained records and information considered to be personal, sensitive and not good for public consumption. In order to guarantee validity and accuracy of information in some documents, some resource persons

were also interviewed in relation to the context in and purpose for which some documents were produced.

Since Lincoln and Guba (1985, p. 276) contend that documents are 'contextually relevant and grounded in the contexts they represent', I reviewed the diverse documents and texts collected for the study based on the themes identified under the study topics. For instance, I reviewed, side by side, the policy documents from both system and institutional levels. The idea was to determine the level of institutional response to system-wide policies in relation to their own interests. Another reason was to ascertain the relationship between MINESUP and the public university based on the supervisory role of the government over public universities, on the one hand, and the relative autonomy of these universities, on the other. This was still in relation to the response on KE and entrepreneurial university policy measures.

I interpreted document information in pretty much the same way as I analysed interview transcripts (see Section 3.6.2). Information extracted from them was categorised into separate themes and the interpretation was performed according to the themes. This was done in order to maintain rationality and consistency in the exploration process. In addition, I took into consideration the propositions obtained and the conclusions drawn from the review of the documents and texts in the analysis of data generated from conducted interviews. After I sourced, selected, appraised (making sense of) and synthesised document data, I was able to find a connection between the information contained in some documents and interview data. This procedure was in consonance with the idea that 'the qualitative researcher is expected to draw upon multiple (at least two) sources of evidence; that is, to seek convergence and corroboration through the use of different data sources and methods' (Bowen, 2009, p. 28). Also, this procedure brings to light the essence of reviewing documents for qualitative research.

In particular, I reviewed system and institutional level documents in order to understand how Cameroon's education policy objectives and the experiences and objectives of its public university align with KE and entrepreneurial university policy objectives. The goal was to ascertain the acceptance (adoption or adaptation) of these policy options at the public university to determine how these affect the university's activities aimed towards development objectives and goals. The idea was also to determine the gap in policy conceptualisation between WB's KE and entrepreneurial university policy objectives and realities in particular contexts. The review exercise of institutional documents also gave us a better understanding of the way in which Cameroon's public universities function within the framework of their organisation

and management practices. Such knowledge was an asset for the researcher, which also guided the formulation of certain interview questions for the study.

There are however a number of disadvantages associated with the use of documents for data collection in qualitative research. In addition to potential challenge of irretrievability, documents are generally produced for some purpose independent of a research agenda and, therefore, would normally contain biases and provide insufficient details needed to answer a research question (Bowen, 2009). Also, there is a cloud over the accuracy of some documents given that 'even public records that purport to be objective and accurate contain built-in biases that a researcher may not be aware of' (Merriam, 1998, p. 125). To evade these biases, I took particular care in identifying and choosing which documents to consider for the study. Consequently, all acquired documents contained fixed policy and regulatory information that was particularly valid for the period of the study. Even though some of the information contained in some documents was incomplete, I was able to source out some that I considered to be important. In the most part, however, I considered them as records and used them carefully to corroborate the interview data.

3.7 Data Management and Analysis

3.7.1 Data Management

In the course of the interview exercise, I took notes and recorded the interview sessions. The reason for field notes was to complement audio-recorded interviews. Generally, they give the researcher room to contemplate on non-verbal cues, including the behaviour of respondents and other variables that may not be captured adequately through audio recordings (Sutton & Austin, 2015). Hence, field notes constitute an important factor that can provide context to the interpretation of audio-recorded data and determine a more holistic approach to data analysis (Sutton & Austin, 2015). In the same manner as with the recorded audio files, I transferred the notes from my notebook and secured them in a Word document file format for easy complementary use with transcribed recorded interviews. When I transcribed the responses, I organised the data in files and folders that were mapped out and organised into suitable categories or themes in accordance with different interview

priority areas. Subsequently, I analysed them using the respondents anonymously and only for the purposes of the study.

3.7.2 Data Analysis

Data analysis is a combination of clear and specific analytic strategies in interpreting raw data in a manner relating to phenomena or concepts in order to draw a conclusion or establish an assertion/claim. It consists of a series of considerable actions taken towards reaching a conclusion on a topic or about a phenomenon. The process includes the theoretical perspective of the researcher on the phenomenon under examination, the strategies employed in data collection and the overall understanding of the researcher of the data that is relevant in answering the research question (Thorne, 2000).

As already suggested in Section 3.3.1, besides other considerations, the data analysis of this study factored in international regimes and institutional theories and was guided by the post-positivist philosophical view—poststructuralism. I used these theories because, respectively, they help illustrate the causal connection of the role of international organisations (in this case, the WB) in specific issue areas and the nature of organisations (with respect to my case, UB) relating to how they construct and develop their functional procedures within specific circumstances. For me, these theories formed the base from which to make a proper assessment of the relationship between constructs as general principles towards particular achievements and the way organisations respond to them within particular contexts. Therefore, in my analysis, I considered the importance of the propositions of both theories as a standard for illustrating the institutional response to KE and entrepreneurial university policy objectives (as neoliberal GEP measures) at UB and in the local context of Cameroon.

For instance, the international regime theory postulates that international institutions share principles and norms to enhance the ability of nations to secure best outcomes in specific issue areas in international relations, cooperation and governance (Krasner, 1982; Hasenclever et al., 2002). On the other hand, the institutional theory of organisation suggests that, besides other dynamics, organisations do not adopt new structures and practices due to their effectiveness and efficiency but because of their need to gain legitimacy (Alvesson & Spicer, 2018). Consequently, in analysing the data on KE and entrepreneurial university policy objectives at UB, I took into consideration the characterisation of both theories

(institutional and international regime theories) that underpinned the study. I also considered the development processes of both policy objectives as successful practices in particular Western universities. Thus, the knowledge of and general assumptions about both theories, as well as the propositions of both policy objectives, guided my thinking and induced a deductive analytic approach to the data, which sets out to measure the level of data consistency with theories, conceptions, prior assumptions, propositions or hypothesis of a study (Thomas, 2016).

In conjunction with the deductive approach for my data analysis, I used the inductive systematic thematic procedure. This approach to research facilitates the emergence of research findings from frequent, dominant or significant themes inherent in raw data, without imposed restraints from structured methodologies (Boyatzis, 1998; Thomas, 2016). For example, by examining information collected from document analysis, I was able to corroborate them with findings across datasets, a measure that reduces the impact of potential biases in a single study (Bowen, 2009, p. 28). Three conceptually distinct but overlapping stages constitute the process that characterises the thematic analytic approach of data. They include the transcription of textual material, the analytic effort of the researcher and the identification of themes and sub-themes (Howitt & Cramer, 2001; Thomas, 2016). The process highlights the nature of the thematic analytic approach for generating codes and themes from available qualitative data. With respect to qualitative studies, the approach identifies, analyses and interprets patterns of meaning within the data, guided by the research question (Guest et al., 2012; Clarke & Braun, 2017). It also establishes clear, transparent, demonstrable and defensible links between the research objectives and findings derived from the raw data (Thomas, 2016).

Worthy of noting here is the flexible nature of the approach. It is conveniently available across a range of theoretical frameworks and research paradigms and, therefore, is not restricted for use with only theoretical commitment (Clarke & Braun, 2017; Howitt & Cramer, 2011). For example, it is applicable for both positivist and post-positivist paradigms. Thus, while the inductive thematic analytic approach helped me identify, analyse and report patterns (themes) within the data, the deductive approach enabled me to factor in the knowledge and general assumptions of both theories, including the GEP and neoliberal conceptions as well as the propositions of both policy constructions (KE and Entrepreneurial university) in the analyses. I backed this with the poststructuralist philosophical view within the framework of reality based on a specific context. This is connected with the understanding that, besides having the responsibility to organise data into suitable categories or themes and determine its consistency with theories, assumptions,

propositions or hypothesis of study, it is of utmost necessity for the researcher to be able to make sense of it within a particular context (Creswell, 2012).

Fundamental in my analysis procedure was the understanding that data collection and analysis should overlap in interpretive case study research. Lawrence and Tar (2013) explain that the essence is to allow for flexibility in the collection procedures in order to leave the researcher open to new ideas or patterns that may emerge (see also Bogdan & Biklen, 1982; Spradley, 1979; Miles & Huberman, 1984). Consequently, I adopted the system of concurrently analysing some data during the collection process. This was executed in accordance with the systemic practice that allows for feedback to inform and shape further enquiry, an approach that gave me the latitude to modify, from time to time, the format of the interviews so as to be able to explore certain concepts more extensively (Burck, 2005). However, although the procedure is complex, time consuming and quite exhaustive with iterative actions and generative questions (Trochim, 2006), I considered it to be thorough and worthy of use.

The next thing I did at the end of the interview was to read the data very closely, taking into consideration the theoretical propositions that led to the case study (Yin, 1994). The intention was to systematically reduce the complexity of the information generated from the interview data and transform it into a form that supports a pattern that can enable appropriate explanations with connections to conditions, effects and mechanisms (Gläser & Laudel, 2013). This idea coincides with the contention that the analysis of case study evidence depends on a researcher's style of rigorous thinking as well as on the sufficient presentation of evidence and careful consideration of alternative explanations (Yin, 1994). Through these considerations, I was able to identify and extract the information that I deemed to be relevant for verifying KE and entrepreneurial university policy objectives. Including documentary evidence and memos, I came up with relevant data from interview quotes that I organised into themes. I developed the themes from the data that I collected from UB based on the responses to KE and entrepreneurial university policy objectives. I developed them into patterns of meanings from data with respect to the nature of the policy objectives. Then I established categories as outcomes of the university's response to these policy objectives.

In Table 4, I present the themes developed from the data and illustrate how they were analysed based on my thinking, data evidence, theoretical perspectives and other considerations.

Table 4. Themes and Analytical Research Dimensions

Research Questions	Theme	Analytical Dimension
How did UB respond to KE and entrepreneurial university policy objectives?	Vision (KE and entrepreneurial university) of UB.	In consideration of the conceptual underpinnings of the policy objectives and in relation to institutional and international regime theories (conceptual and theoretical frameworks).
	Funding KE and entrepreneurial public university—UB.	Higher Education Reform measures, 1993–2016. In relation to the conceptual and theoretical framework.
1. How did UB respond to KE policy objectives of knowledge creation, valorisation and application, towards economic development of Cameroon?	KE endeavour: Teaching, Research and knowledge dissemination and application, 2000–2016.	Within regime's conceptualisation of knowledge development and creation for the advancement of science and technology, as well as within institutional development of special skills for the valorisation and application of knowledge.
2. How did UB respond to the entrepreneurial university policy objectives with regard to collegiality, autonomy and educational achievement towards the economic development of Cameroon?	UB entrepreneurial endeavour—Cooperation and collaboration with other universities and stakeholders, including business enterprises, 2000–2016.	In relation to all stakeholder involvement, Clark's (1998) conceptualisation of expanded developmental periphery of the university and institutional practice: how UB engages with other stakeholders towards enhanced capacities to meet socio-economic expectations and other efficiencies (innovation with massive science and technology transfer activities).
	UB entrepreneurial Management endeavour, 2000–2016.	In accordance with the WB's all stakeholder involvement and Clark's (1998) conceptualisation of the strengthened steering core stimulated academic heartland and integrated entrepreneurial culture of the university (collegiality).

	UB entrepreneurial funding endeavour, 2000–2016.	Within the context of diversified funding based and institutional response.

The deductive approach was applicable for this case study because, in general terms, the study aimed at examining UB processes in relation to KE and entrepreneurial university policy objectives aimed towards the economic development of Cameroon from 1993 to 2016. For instance, I used the experiences of different UB stakeholders (academics, management and administrative support staff) through a coding process in order to generate themes and categories pointing out the complexities involved in education policy borrowing, adoption/adaptation and imposition (KE and entrepreneurial university). I also used quotations from documents to support the identified themes. Therefore, the descriptive and interpretive patterns generated from the interview and document datasets helped in developing an understanding of the contextual factors that would inform the nature of education policy actions across national, regional and international spheres. Furthermore, the gap between the patterns and categories generated from collected data and KE and entrepreneurial university policy ideas within the GEP and neoliberal frameworks, helped me draw a clear line between GEP ideas and particular institutional responses or reactions towards them. In addition, it suggested a way forward for education policy across the national, regional and international spheres.

3.8 Trustworthiness of the Study

Trustworthiness is the one way through which researchers can guarantee that their findings are reliable or based on good evidence or reasons (Nowell et al., 2017; Lincoln & Guba, 1985). Deconstructed into credibility, transferability, dependability and confirmability, trustworthiness consists of major realistic choices that researchers must make to ensure that that their research is acceptable and useful to a variety of stakeholders (Nowell et al., 2017; Lincoln & Guba, 1985). This is because knowledge, in itself, is an indispensable tool in the equation of the growth and development of humanity. Consequently, owing to the responsibility of humankind to ensure appropriate growth and development of its existence, measures are put in place (as adopted through scientific procedures) to ensure trustworthiness.

Credibility addresses the suitability between the views of the respondents and the way in which the researcher represents them (Nowell et at., 2017). This assertion highlights the importance of the relationship between the researcher and

respondents or data collection environment. Hence, describing the distinctive nature of credibility includes various actions, such as the prolonged engagement of the researcher with respondents and data collection environment (e.g. with persistent observation) as well as the self-description/reflexivity of the researcher (Nowell, 2017; Hadi & José Closs, 2016; Morse, 2015). This case study clearly meets aspects of this criterion. The researcher is an alumnus of UB (the data collection environment) who has maintained keen interest in the happenings at the university and has adequate knowledge of how the university operates. Nevertheless, the position of the researcher was guided by the fundamental principles of research integrity with particular emphasis on honesty in the research procedure and respect for participants. Consequently, the researcher was privy to some valuable information/data sources that required a comprehensive account of the research process and analysis method. Consequently, the credibility of this study is justified by the empirical data sources, the logic of the data analysis approach adopted for the study and the personal beliefs and training of the researcher (reflexivity), as explained in Sections 3.5, 3.6.2 and 3.2, respectively.

Holistically, transferability refers to the generalisability of research findings, which refers to case-to-case transfer in qualitative research. That is, the degree to which a study's results are generalisable to other contexts or settings, times or institutions (Nowell et al., 2017; Morse, 2015; Trochim, 2020). Data collection triangulation, peer debriefing and audit trails are characteristics that ensure quality of research and transferability of results in qualitative studies. Hadi and José Closs (2016) explain peer debriefing as a discussion between the researcher and a qualified/skilled researcher on methodology, data analysis and data interpretation. They explain data triangulation as the use of at least two related data sources with the aim of reducing biases associated with a single source. Audit trail points to a detailed description of data collection sources, techniques and their analyses, including interpretations and inferences that illustrate truth in the findings (Hadi & José Closs, 2016). Concerning my case, besides the use of interviews and document data sources, I have clearly stated and defined the philosophical assumptions and research contexts that underpin the study. Consequently, judgment regarding the degree of transferability of study results across most public universities is positive—especially as I factored in the role of the regulatory framework guiding the management of Cameroon's HE system through MINESUP.

Another factor that determines the trustworthiness of a study is dependability. As preferred by other researchers, dependability is reliability in other words (Morse, 2015). This basically suggests that a study is trustworthy if it is determined to have

the ability to generate the same results after its data collection, interpretation and/or analysis processes are repeated (Morse, 2015). The ability of a study to generate the same result is certain if the study goes through a logical, traceable and clearly documented process (Nowell et al., 2017), or it otherwise demonstrates, in its nature, those characteristics (including data sources and analysis methods) that ascertain credibility. In addition, dependability is determined based on the audit trails of the study (Nowell et al., 2017). This refers to evidence of the decisions and choices made by the researcher and the rationale concerning the use of theory and methodology throughout the study. For this empirical case study and its analysis, dependability was largely ascertained through the empirical data sources, the philosophical assumptions made and the theories used. Document sources, for example, are available for public verification. The use of international regime and institutional theories, as well as the poststructuralist interpretive paradigm, are all perceptible in the study and open for scrutiny. Judging from the use of the institutional theory that illustrates the nature of organisations as determined by normative, internal or external pressures in the context of analysing collected data within the MINESUP framework, it is possible to suggest that a repeat of the study will generate the same results.

The last issue in connection with the trustworthiness of a research study is confirmability, otherwise referred to as objectivity (Morse, 2015). The confirmability of a study is dependent on the degree to which its interpretations, findings or conclusions are determined by the data collected from respondents and not by researcher bias (Nowell et al., 2017; Sutton & Austin, 2015). Given that interpretations and conclusions are based on the theoretical, political and philosophical backgrounds of research, the reasons for these choices also help others understand how and why certain decisions, results or conclusions were reached. Additionally, Morse (2015) maintains that confirmability is achieved using strategies such as triangulation and audit trail. This implies that if a study has already successfully achieved credibility, transferability and dependability, then confirmability is also achievable. With respect to this study, I have clearly stated its theoretical perspective and philosophical background—i.e. the logic of reasoning used in the analysis. I have also carefully explained the policy objectives examined in the study. In addition, I have referred to and cited as much as possible, excerpts from the data that informed my interpretations and determined some of my conclusions.

3.9 Ethical and Political Considerations

It is a rule of thumb for researchers to consider whether there are ethical issues to ponder in a research project. With respect to this research, I considered three main issues: the right to collect data in UB, informed consent and confidentiality of respondents.

Before conducting the interviews, I obtained a Research Permit from the competent UB authority (Deputy Vice Chancellor in charge of Research, Cooperation and Relations with the Business World). The permit (see Appendix A) ensured that ethical issues were considered at every stage of the interview process. It particularly emphasises strict adherence to the Research Policy and Management Guidelines of UB. All respondents were notified and the requirements served as a reminder for the respect of good research conduct. The Research Permit, in itself, gave us the leeway to collect data at the university, a mighty step away from data fabrication or the use of data that are based on assumptions.

Second, I explained to each participant the purpose of the research—that is, that its purpose is to understand UB processes in relation to KE and entrepreneurial university policy objectives aimed towards the economic development of Cameroon. Once they understood the purpose of their interview responses, I also obtained permission to record the interviews on a digital device. Due to the political nature of the university, the way it functions and reacts to objective opinions with political implications, I assured my respondents about their confidentiality. Consequently, I anonymised the respondents when I transcribed and quoted excerpts of their responses, building a certain level of trust between the respondents and us.

4 CAMEROON'S HIGHER EDUCATION (HE) SYSTEM BEFORE 1993

Before presenting and analysing the data presenting the results of this study, I think it necessary to highlight the fundamentals of the education system of Cameroon before 1993. This refers to the period from independence in 1960 up to the advent of a more neoliberal and entrepreneurial set-up of Cameroon's public university system in 1993. As the premise for highlighting the fundamentals of Cameroon's HE system before 1993, I conducted a general appraisal of the way in which African governments, as an entity, perceived and conceptualised HE after independence and before the unconditional intervention of the WB. Very important to note here is the fact that this endeavour laid the foundation for the economic development of African countries through different meetings and, subsequently, under the auspices of the OAU established on May 25, 1963 in Addis Ababa, Ethiopia. Hence, this chapter asserts how these newly independent African countries expressed their aspirations and demonstrated their willingness and capacity to develop and create knowledge, train, produce and enhance skill sets and greater capacities, aiming towards the economic development of their respective countries as well as on the African continent in general.

The endeavour hinges on the basis that the general purpose of this study is to examine the processes of public universities in Cameroon in relation to KE and entrepreneurial university policy objectives as GEP measures of the WB (and their effects) towards the economic development of the country. In perspective, it highlights the case of Cameroon in order to create appropriate ground for a better follow up and understanding of the results generated from the study data. In addition, it sets out to ease enquiry towards the findings of the study by providing a platform from which to monitor the evolution of Cameroon's public HE system from the post-colonial period prior to the early 1990s, as the basis for judging the neoliberal and entrepreneurial era from 1993 to 2016. The focus on the period prior to the 1990s is meant to highlight the capacity of an African country to design and implement appropriate (contextual) education policies towards its own economic development, ceteris paribus. In this regard, therefore, I begin with a discussion of

the foundational motivation behind the immediate post-colonial education system adopted by Cameroon.

4.1 The Aspiration of Independent African Universities

The first major ambition of newly independent African governments was to create an educated and skilled human capital stock that was needed to lead the economic development endeavour of their countries. This is evident in two very important meetings on the subject of African HE that took place shortly after the independence of most African countries. These meetings were respectively held in very quick succession, in 1961 and 1962. The first one (May 1961) brought together, for the first time, African heads of states and governments in Addis Ababa to discuss the nature of Africa's HE. The second (September 1962), organised in cooperation with the United Nations Economic Commission for Africa, was the Conference on the Development of Higher Education in Africa (UNESCO, 1963). Both meetings discussed the development agenda of African countries in the light of their cultural, social, economic and technological needs (UNESCO, 1963, p. 4). Consequently, the HE policies of most post-colonial African countries in the 1960s and through the 1970s were apparently conceived, designed and implemented within the context of the socio-economic development of its people.

It is important to note that the character of the new African HE was adopted against the backdrop of the colonial education system that was designed for specific Western purposes, interests and colonial ideologies, which did not aim for the development of the African environment and its people (Abrokwaa, 2017; Woldegiorgis & Doevenspeck, 2013). For instance, the British colonial indirect rule system required Britain to educate Africans and develop in them those skills that were needed in the three main areas of British interests. First, they needed skills in colonial administration and services for the purposes of tax collection, law courts, public works, agriculture and health. They also needed specific skills in the areas of mining, finance, commercial enterprises (such as farm establishments), production of raw materials and collection and distribution of produce, including import and export trade. Finally, they needed to adapt Africans to the missionary activities of evangelisation, alongside the very provision of Western education (Abrokwaa, 2017). With particular reference to this system, Abrokwaa argues that it neither established any meaningful and effective working links between HE and industry for national development and economic growth nor made it relevant to the societies and peoples.

The situation was worse with the French, Belgian and Portuguese direct rule system, wherein Africans were not really needed in administrative or any other positions.

Consequently, in May 1963, 32 African heads of state gathered in Addis Ababa, Ethiopia where they created the OAU. At this meeting, they agreed to coordinate, harmonise their general policies and cooperate, especially in the area of education and culture, towards attaining a better life for their citizens as stated in Article 2(1&2) of its charter (Elias, 1965, p. 247). The emphasis on cooperation in education and culture highlighted the importance of the developmental role of the university in the eyes of the African. Therefore, the OAU assumed the role of the vanguard and most popular and powerful uniting force of the educational and developmental aspirations of post-colonial African countries. It remained at the helm of encouraging and enhancing the creation and development of education at all levels as well as the training of a skilled people for the development needs of the continent.

Besides the aspiration to educate their masses towards a skilled human capital stock and development agenda, African national governments also aimed at Africanising their citizens (Woldegiorgis & Doevenspeck, 2013). This was meant to engineer an intellectual paradigm shift that would complement the political decolonisation of Africa. The concept was premised on the idea of decolonising the mind and rehabilitating the African cultural values. It involved educating Africans and skilfully training them in the new African worldview (philosophy) so that they take over responsibilities in universities and other institutions from the Europeans, and chart a new and appropriate course towards the development of the continent. This idea was reiterated and made central to discussions during the All African Meeting of University Leaders and Policymakers that was organised and held in Accra, Ghana (July 1972) by the Association of African Universities (AAU) and at which the need to constantly identify and realise an African identity in an independent Africa was emphasised. In connection to that, Tanzania's post-independence president, Julius Nyerere, stressed that it was of absolute necessity that a sense of total commitment to the community be inculcated at every level of post-independence education in Africa, helping students accept values that were appropriate to their kind of future and not those of the colonial past. Sustaining this argument was the proposition that higher knowledge (HE) acquired by few, was meant for the general interest of the community/society/country (Ochwa-Echel, 2013).

Under this political dispensation, African countries considered research as the main instrument for the contextualisation process of Africanising their universities (Woldegiorgis & Doevenspeck, 2013). They adopted this idea from the experience

of the American/German Humboldtian HE model (that emerged in the early 19th century) premised on the holistic combination of research and studies/teaching, which differed in many aspects from the long-standing European (French, British, Belgian and Portuguese) experience on the continent. Therefore, besides their teaching responsibilities, national governments designed policies that encouraged universities to do research in order to address specific societal challenges. Knowledge created and/or developed through national frameworks ended up for public consumption through teaching and publications. Additionally, they expanded the disciplinary base of their university academic programmes. From the mere arts and social science disciplines of colonial establishments, they added, developed and enhanced other disciplines—including applied sciences, sciences and pure sciences. Subsequently, they also offered academic programmes in engineering, medicine, marketing and technology (Zeleza, 2006).

4.2 The Post-Colonial African University Before the 80s and 90s

Based on the African aspirations, as indicated in the previous section, the new independent African countries demonstrated, as their major preoccupation, the desire to create, develop and/or expand (for those countries that already had European established universities), accordingly, their HE systems. Pre-occupied with building Africa in the aspiration of the African, national governments undertook the responsibility to develop universities on the basis that they were a part of an overall process of nation building (Zeleza, 2006). Fundamental in this thought was the idea to build a university system that would respond to their socio-economic development aspirations. Therefore, citizens were educated and trained with skills necessary for managing their own affairs and administering their countries towards socio-economic development.

In this regard, the African university adopted, as its very first important role, the responsibility of training professionals in different disciplinary areas that were relevant to the needs and aspiration of their different countries. Consequently, national governments assumed full responsibility of promoting access and making university education as affordable as possible to qualified student cohorts. They provided 'full scholarships, travel expenses, local transportation, health care, boarding, lodging, and monthly living expenses to all students who were qualified to attend' (Ochwa-Echel, 2013, p. 2). With respect to development efforts, the university undertook an active role as a major stakeholder in articulating the national

development agenda, as well as deciding on its own terms how to implement them (Ochwa-Echel, 2013). This was in contrast with the desires of colonial powers to groom African universities towards European standards with full control of both the personnel and curriculum that trained Africans within a framework acceptable to the colonial authorities (van Rinsum, 2002). According to van Rinsum (2002), the British colonial educational policy, for example, was designed to train and produce a lower echelon of colonial civil servants. Overall, colonial authorities developed HE more as an instrument to control African elite by educating them in the Western intellectual traditions of Western universities but within a limited threshold.

Upon independence, the Tanzanian government, for example, expressed the interest (as a public policy objective) to achieve essential self-sufficiency in manpower at all skilled levels by 1980. With the scarce resources of that country and as poor as it was at the time, the government undertook the challenge to almost exclusively invest in education according to its needs and aspirations. This government adopted that scheme as an endeavour with the aim of providing the skills that the country needed for its economic and social development programme. The policy objective defeated the idea of selling secondary and higher education, irrespective of the value argued for it. It stressed he fact that no matter the social and cultural importance attached to education, it would hardly be relevant if the outcome was unable to fully enhance its economic development efforts (Samoff & Carrol, 2004).

This policy idea was also in accordance with WB's request for African countries in the 1960s to consider the development of special skills that they needed for their economic development as their primary task. In addition, the WB emphasised and advised that they could only accomplish this primary development objective through the investment of significant public resources (Samoff & Carrol, 2004). Consequently, most African countries funded all HE activities that enabled them to be able to train, develop and possess human capital for purposes of achieving their economic development goals.

Worth noting here is the fact that in the 1980s and early 1990s, due to the economic crisis that hit the world, many African countries ran into financial difficulties and were unable to sustain their investments in developing the role of the university. However, according to Cloete, Bunting, et al. (2015), although these African governments agreed (as a policy measure) to use their universities as drivers of economic development, they were unable to adopt a coherent model of how to execute and sustain the development agenda of the university. They claim that the African endeavour for establishing the development role of the university was mere

rhetoric. At the same time, they claim that the endeavour did not attain its goal partly because of the broader political and socio-economic struggles of the Cold War, having to do with the communist and capitalist world orders prior to the 1980s. In addition, they claim that the endeavour did not fully materialise because of the agendas of funding agencies, the WB 'playing a particularly pernicious role' (Cloete, Bunting, et al., 2015, p. 18).

Complementing the economic crisis assertion and agendas of funding agencies (such as the WB) are the propositions of El Bouhali and Rwiza (2017). They claim that the national debt of many African countries rose and import income declined while reliance on foreign aid increased. At the same time, their Gross National Products (GNPs) were increasingly supported by outside funding, especially in the 1980s due to the intervention of international organisations like the WB. Corroborating these assertions is the idea that the donor-client dependency relationship has consequently hindered the development of African universities and their ability to individually develop education policies imbued with socio-economic relevance and backed by financial feasibility (Woldegiorgis & Doevenspeck, 2013). Eventually, the role of HE in Africa has now become ambiguous—i.e. the development orientation framework of the international regime is currently blurring country-specific development agendas. In addition, the high oil import cost for some African countries in the 1980s, including debt-servicing obligations, destabilised their public expenditure priorities and, for this reason, education lost its priority position in the public expenditure scheme. In perspective, the share of GNP apportioned for education decreased from 3.8% to 3.1% (Woldegiorgis & Doevenspeck, 2013) in all of Sub-Saharan Africa. The outcome was dire because many professionals left the sector for better remunerating ones in which income prospects were higher. Therefore, a considerable amount of concern was diverted from education and human resource development to other sectors.

4.3 Cameroon's Public University System 1961–1993

Until the early 1970s, Cameroons HE system (after independence) remained largely under the auspices and influence of the French government (Doh, 2007; Gwanfogbe, 1995). Post-colonial HE actually began in 1961 with the National Institute for Universities Studies, which transitioned into the Federal University (FU) of Cameroon (July 1962) following the establishment of the Federal Republic of Cameroon between the former French colonial territory of La Republique du

Cameroun and former British colonial territory of the British Southern Cameroons. Prior to the establishment of the Federal University, the Federal Ministry of Education, Youth and Culture had emerged through a Presidential Decree on March 12th, 1962 as an oversight structure for education in the Federal Republic of Cameroon (Njeuma et al., 1999; Gwanfogbe, 1995). However, the plan of action for the ministry remained within the framework of French influence because they provided the bulk of the funding meant to sustain the development of education in the country. Hence, it was difficult for the HE department of the ministry (responsible for co-ordinating and applying government policy on HE with focus on developing university education) to reorganise the education system of Cameroon to meet the new socio-political and economic realities and aspirations of the country.

Also worth noting is the fact that before the establishment of FU in July of 1962, the French colonial government, with UNESCO's assistance, had already set up a foundation for the new educational aspirations of Cameroun. This was the establishment (in 1961) of a Higher Teacher Training Institute. Preceding this was the establishment of the Cameroon School of Administration in 1959 (on the eve of independence) and the National School of Agriculture in 1960 (Njeuma et al., 1999; Gwanfogbe, 1995). French expatriates who headed the administrative hierarchy of the FU and its institutions and exclusively determined the curricula of the different courses and academic disciplines of the university until 1975, sustained the structural, organisational and administrative changes. Gwanfogbe (1995) points out that two main faculties were involved in the degree programmes: the Faculties of Law and Economics (that started in June 1962) as well as Arts and Humanities (that started in October 1962), which were linked to French universities and HE institutions. This endeavour designed the country's HE system on the French model and maintained and executed it under French administrative influence. This means that before the early 1970s, when France lost measurable financial and policy influence on Cameroon's HE system, it was not feasible for Cameroon to practically contextualise the development role of its lone university, the FU of Cameroon.

4.3.1 Cameroon's Higher Education (HE) in the 1970s

New dynamics emerged in the HE system of Cameroon in the 1970s. A series of seminars on the subject of education reforms held in the country, including the involvement of UNESCO and other multilateral and bilateral funding organisations (for primary education). Concerning reforms in the HE sector, a meeting involving

a one-week session of the Council for Higher Education and Scientific and Technical Research took place in December 1974. For the first time, the government of Cameroon was able to articulate its aspirations in a more determined manner, through its own established structure in charge of HE, scientific and technical Research. The whole idea of the reforms was to emphasise the developmental role of HE and, therefore, to adapt the system to the economic needs and aspirations of the nation. It also aimed to replace the less profitable literary aspects of education with more practicable and adaptable content to the specific situation of Cameroon, with the capacity to enhance skills development and to ensure that students were able to earn their livelihood without necessarily relying on the state for employment (Gwanfogbe, 1995).

In addition, the reforms enabled the enforcement of the agendas of two institutions affiliated to the FU: the University Center for Health Sciences (CUSS), for medical training, and the Institut de I'Administration des Entreprises (IAE Management Institute), for management and commerce programmes, created in 1969, with relevant training capacities in the applied sciences. Following these, came the National Advanced School of Engineering (Ecole Nationale Supérieure Polytechnique [ENSP]), created in 1971 (Njeuma et al., 1999). Furthermore, in response to three education reform meetings held between March 1973 and April 1977, the government of Cameroon created four other institutes (called university centres) to cater to specific socio-economic needs of the people of Cameroon. They included the Buea University Center that catered to translation and interpretation, the Douala University Center that catered to business studies and teachers training, the Dschang University Center for Agricultural Science and the Ngaoundere University Center for Food Science and Food Technology (Njeuma et al., 1999). This endeavour enhanced economic development and provided a huge access possibility for qualified student cohorts from a small population of about 5.6 million people in 1962 and about 8.2 million people in 1977 (Population Pyramids of the World, 1950–2100).[2] Consequently, even though created with French support and influence, the FU (which, according to Njeuma et al. [1999], became the University of Yaoundé after 1967) with its many schools, institutes and centres trained enthusiastic Cameroonians who eventually gained the required skills to contribute to post-colonial nation building and socio-economic development of a new independent Cameroon.

The foregoing assessment points to the fact that by 1977 Cameroon had already established two principal types of academic disciplines (task areas), the basic and

[2] https://www.populationpyramid.net/cameroon/1960/

applied science disciplines, for the socio-economic development of the country. In brief, with French support and influence, the government used the period between 1961 and 1967 to create general university education structures—that is, the traditional university faculties modelled mainly after the French HE system. Then, between 1968 and 1971, the same government created several professional and technology schools informed by the needs, aspirations and realities of the country. Subsequently, within two calendar years, 1976 and 1977, it created more professional schools for more disciplines in the applied sciences. These are the types of appropriate measures that were taken by the government in a bid to train its citizens in the skills and competences that were needed by public service corporations for service operations and delivery and by the private sector for the same, and other, development goals.

In order to realise these goals, the government adopted a very generous student welfare scheme that aimed to increase affordability and enhance access of qualified student cohorts into the university. The policy also aimed to reduce the number of its citizens seeking education in foreign universities, especially given the fact that France, Germany and Switzerland had set the pace for offering them study opportunities at their universities. Consequently, the government of Cameroon bore the entire cost of HE, including the payment of good bursaries and provision of subsidised accommodation and meals for its students (Njeuma et al., 1999). Undoubtedly, these measures enhanced the rate of return on Cameroon's initial investment in HE. Consequently, graduates from the different university units contributed enormously to the socio-economic development of Cameroon in the period leading to the economic crisis that hit almost the entire continent. These actions of the government of Cameroon towards a huge public HE sector suggest that it intended and was committed to building a strong and developed economy for its people. This is more evident in the evolution of its education policy—from a university complex, through the FU, to affiliated schools and university centres for applied science disciplines.

Very worthy of note, however, is the fact that these developments were also mired with challenges. Before the reform period that stretched between 1974 and 1977, the demand for university education continued to surge (in relation to available space offered per year) and posed a threat to the lone university, the University of Yaoundé. At each time in the growth period, the number of students seeking admission in the traditional faculties, for example, surpassed by far the number of available teaching staff and infrastructure capacity (Njeuma et al., 1999). This resulted to a crowded university with insufficient teaching and learning space, poor

student/teacher ratios, increased workloads for teachers and inadequate facilities for both the students and teachers. According to Njeuma et al. (1999), these problems worsened because of the difficulty of some categories of teachers, especially those who did not obtain their doctorate degrees in France, to get direct employment into the different academic ranks at the lone university. In addition, it was even more difficult for teachers in professional schools because, while promotion depended on a terminal degree and research work, most of them were hired based on the practical orientation of their professional programmes.

However, while the main faculties of the university faced congestion and other challenges due to high demands and enrolments into traditional disciplines, the special schools and university centres that the government created between 1967 and 1977, which offered professional and applied science disciplines, were under populated. For example, until 1991 even, the Buea University Centre had only 60 students even though it had a capacity for 2,000 students (Njeuma et al., 1999). These specialised institutions (CUSS, IAE Management Institute and ENSP) and University centres (Buea, Douala, Dschang and Ngaoundere) were under-utilised for a myriad of reasons. First, due to the high demand for civil service personnel at the time, the traditional disciplines offered at the university were good enough to have graduates employed immediately into positions in the civil service sector. This is because of the urgent need to replace expatriates as teachers and administrators in public and parastatal establishments. Consequently, there was the need to employ special efforts in order to enrol the required student cohorts for the professional programmes (food technology, agriculture, translation and interpretation as well as commerce and technical education) of the university centres, which Njeuma et al. (1999) have attributed to the limited scope and nature of the programmes that they offered. Specialised institutions were under-populated because intake depended on actual openings for recruits into public service positions (Ngwana, 2001).

This scenario points to the fact that most of the challenges facing HE in Cameroon before the 1980s were mainly administrative, not structural or policy based. They included, in some instances, the lack of adequate university space, lack of enough personnel, recruitment and promotion criteria of faculty/teaching staff, etc. Funding was first mentioned as a challenge in the 1980s and, according to Cloete, Bunting, et al. (2015), it was exacerbated by the role of some international organisations, including the pernicious role played by the WB—as already indicated in Section 4.2. In fact, before 1986, Cameroon's economic growth rate was quite high, with an annual Gross Domestic Product (GDP) of 8%, which allowed for a high level of per capita income for the country despite a high population growth rate

of 3% (Amin, 1998, p. 1; WB, 1989). Consequently, it is important to note that the post-colonial education policy measures of the government of Cameroon towards socio-economic development did not have any direct causal links to the challenges faced by the HE sector of the country at that time. Consequently, before GEP pressures engulfed the sector, it was clear, at least through its education policy measures, that the government of Cameroon was heading towards the right economic development path. However, this does not mean that the government was able to avail itself of other problems, such as administrative challenges indicated above. For instance, the congestion problem in the traditional faculties of the University of Yaoundé continued well into the 1980s and 1990s.

4.3.2 Cameroon's Higher Education (HE) in the 1980s and 1990s

Even though most of the challenges facing HE in Cameroon before the 1980s were mainly administrative, not policy based, there still emerged the need for a new dispensation in the management of HE in the country in order to address these challenges going forward in the 1980s. On the other hand, even though the country achieved a very high economic growth rate before the mid-1980s, also attributed to its HE workforce planning policy, the WB still expressed concern over its HE funding policy based on public expenditure. Astonishingly, it asserted that public expenditure on HE, particularly on student stipends and bursaries (for accommodation, meals, transportation, etc.) were a misdirection of resources rather than a contributory factor to development (WB, 1989). Therefore, while the country was aiming at relieving the congestion problem of its lone university, the WB was concerned with enforcing a new funding mechanism (neoliberal) on the country's HE sector. This came only a decade after it established that higher knowledge was an indispensable tool for economic development. Consequently, WB's convoluted idea about student stipends and bursaries became a strong determining factor of the HE and funding policies of the Cameroon government.

Following the release of the 1981 Berg report: Accelerated Development for Sub-Saharan Africa: An Agenda for Action, the WB changed its HE policy position in favour of basic education. Using the human capital theory and rate of return analysis in the 1980s, it claimed that African societies would benefit more from heavy public expenditure on basic education rather than HE. Thus, it advised for the reduction of per student cost, substantial increase in student fees and a privatised HE sector. Consequently, instead of focusing on its preferred challenges at the time, the

government of Cameroon faced a dilemma of dealing with both the congestion problems and revising its education funding mechanism within the neoliberal economic policy of the WB. While this pressure set in to bear on the country, the University of Yaoundé, which had a student capacity of 5,000, reached an enrolment level of about 18,000 students by 1984 and about 45,000 in 1991 (Ngwana, 2001; Njeuma et al., 1999). These increasing numbers illustrated an exponential increase in the demand for HE in the country (at the time). On the contrary, funding systematically declined as an effect of WB's influence on the funding mechanism of education through its Berg report and its emphasis on basic education funding. For example, between 1986/1987 and 1992/1993 (when the Buea University Centre gained full-fledged university status—UB), the income of the institution reduced systematically and eventually fell by 80% (Njeuma et al., 1999). Also worth noting is the fact that between June 1986 and June 1988 (a period of only two years), Cameroon's net foreign assets moved from a whopping CFA Francs (FCFA) + 128 billion to FCAF –147 billion (WB, 1989).

With decreased public expenditure on education in comparison to increasing demand for higher knowledge (university education) and coupled with changing socio-economic situations, the HE system of Cameroon started facing new challenges starting in the mid-1980s. The first of such challenges was the relevance of its HE programmes to its socio-economic development needs. The most visible indicator for the perception of this challenge was the increasing rate of unemployment, especially amongst university graduates. As the capacity of the government to employ people for public service positions dwindled, the number of graduates without possibility of employment increased. Many factors could account for this phenomenon. One would have expected the idea and institution of SAPs to reduce unemployment rates for graduates, given the number of private sector businesses induced by WB's neoliberal approach to development. However, it turned out that (in general terms) African graduates were too numerous by the end of the 1980s and too poorly equipped for the job market. According to the WB, the HE system graduated too many teachers but very few professionals in lucrative fields with appropriate skills needed in the private sector, which was considered to be critical for development (WB, 1989; Samoff & Carrol, 2003). These and many other economic challenges in the eyes of the WB were responsible for its SAP on Cameroon.

Agreed in 1989, the WB granted a loan of US $150 million to the government of Cameroon through its SAP programme in order to address its key macro-economic and sectoral issues over the medium-term (WB, 1989). Among the basic objectives

of the programme were the need for reorientation of policies in the education sector, control over government salaries and an increase in non-oil tax revenue. Concerning education, the WB advised the government to fully link the objective of poverty alleviation with the central priorities in the education sector that, according to its assessment based on the rate of return, favoured primary education. It pointed out that there was an inadequate provision of trained teachers, a situation that affected vital educational inputs. There was consequently the need for an education policy that would adjust the curricular and training approaches and enhance the production of graduates with adequate managerial and technical skills to reflect the economic needs of the time. Entrenched in these challenges, especially in the second half of the 1980s and despite the availability of underutilised special professional institutions, including its university centres, the government of Cameroon embarked on a new set of reform measures in line with the suggestions of the 1989 SAP report on Cameroon in 1993.

Although the SAP generally aimed to increase production and expand export towards a better economic output for Cameroon, the WB considered the development of entrepreneurial skills and human resources as one of priority areas in the endeavour (even though it favoured greater public investment in primary education). Thus, in the following chapter, I examine the implication of WB's HE policy influence towards Cameroon's development endeavour.

5 UB WITHIN THE KNOWLEDGE ECONOMY (KE) AND ENTREPRENEURIAL UNIVERSITY POLICY FRAMEWORK—1993 TO 2016

This chapter uses primary and secondary data to concurrently examine UB processes in relation to KE and entrepreneurial university policy prescriptions aimed towards the economic development of the country. The analysis is equally informed by the propositions of the different conceptual and theoretical underpinnings examined in Chapter 2. However, prior to this, I set the bases on which these policy measures were adopted and/or adapted by giving a general perspective on the economic development plan of the WB towards African countries, in general, and Cameroon, in particular. Within the framework of the international regime theory, I spotlight the Berg report, GEP, SAPs and other policy research reports of the WB. These reports point to the education for development approach adopted by the WB for the development of (mainly) African countries in the Sub-Saharan region. It is on this approach that I base the essence of this study.

5.1 Cameroon's Relationship with the World Bank (WB)

In the previous chapter, I have established that, due to the nature of their relationship with Cameroon, international development organisations like the WB and IMF have (beginning with the Berg report in 1981) determined much of the country's education policies since the early 1980s. Many of these education policy actions, though premised on the international regime of the WB, have been contingent on its financial role, especially owing to the economic crisis declared in the country in the mid-1980s. Consequently, due to the financial principle of the WB regime, Cameroon continues to experience a series of GEP pressures towards its economic development. This is traceable starting with the Berg report of 1981, followed by the SAPs of 1989 and between 1997/1998–1999/2000, all of which are illustrative examples of compliant measures for regime members.

The fundamental principle of these WB schemes was for African countries to minimise HE in favour of universal primary education, on the basis of the claim that social and economic returns of primary education, whether private or public, were higher in comparison to HE (Obamba, 2013). This is the notion that shaped WB's approach to HE on the entire continent from the 1980s until 2000s as justified by its policy shift from primary and secondary education to HE (Collins & Rhoads, 2010). The proposition was that investment in universal primary education was an appropriate measure for concerned African countries aiming for optimal economic development output. Consequently, public support for HE declined at the same time during which there was heightened demand for innovation systems that eventually gained prominence within the KE setup (science, technology and entrepreneurship studies) (Obamba, 2013).

In order to examine this new WB's approach to HE in Africa, I make reference to three successive policy research reports of the WB, which highlighted both the Berg report and SAPs as its regime principles between 1980 and 2000. They included, Financing Education in Developing Countries: An Exploration of Policy Options (WB, 1986), Education in Sub-Saharan Africa: Policies for Adjustment, Revitalization, and Expansion (WB, 1988) and Higher Education: Lessons of Experience (WB, 1994). All three of these policy documents highlighted the fact that the public HE cost for Sub-Saharan African countries was unnecessarily high, mired by funding inefficiencies and characterised by deep social inequalities. Nevertheless, judging from the premise of WB's neoliberal policy inclination, it is probable that its conclusion was simply in line with the assertion of Fulge et al. (2016) that global actors do not engage to simply fulfil the desires of receiving countries but for the interests that they pursue and norms that they aspire to develop.

Emphasising the lower rate of socio-economic returns of HE in comparison to that of primary education, the same successive reports insisted on public expenditure reduction in HE, promotion of private universities and diversification of funding sources as well as private income mobilisation (WB, 1994). The first major set of such reform measures in Cameroon came through in 1993. They were holistic in approach and factored in a variety of concerns beyond the main administrative challenges (congestion, academic staff concerns, etc.) experienced prior to the mid-1980s. They mainly targeted challenges experienced after the economic crisis was declared in 1986 and were based on sectoral adjustment policies demanded by the WB. This is in line with the contention of Verger et al. (2012) that, with human, material and financial resources, as well as the technical know-how, non-state actors

like WB have the capacity and do actually compel some national governments to take on particular education policies without proper consideration of context.

5.2 The World Bank's (WB's) Education for Development Policy Approach

It is important to note that the principles and norms of the WB regime that propagate its education policy stance for developing member countries rely on models that have primarily worked in developed economies. For instance, Powell and Snellman's (2004) study points out the fact that the link between technology and labour productivity in the USA had a great influence on the 1981 Berg report and the first SAP plan for developing African countries. Furthermore, they found out that prior to the 1980s, there was already a strong correlation between increases in the science and engineering (S&E) workforce and employee performance capabilities in the USA. While non-academic S&E jobs more than quadrupled the rate of the total US labour force between 1980 and 2000, actual S&E employment increased by 159%, with an average growth rate of 4.9% in comparison to 1.1% for the entire labour force of the country. This confirms the emergence of S&E (the bed rock of the KE idea) as the new dispensation mechanism for economic development and growth prior to the 1980s. Consequently, the WB quickly adopted it in its economic development plans for African countries, with emphasis on the production of graduates in S&E disciplines without necessarily taking into consideration the contextual differences in terms of traditional capacities and cultures of receiving governments (Lingard & Ozga, 2007; Verger et al., 2012).

Complementing this trend was the discovery, towards the late 1990s, of the very strong positive relationship between technology investment and growth in labour productivity in the Western world. The trend developed from the experience of information and communications technology (computer technology) use in the US economy since 1973 (Powell & Snellman, 2004). Based on these phenomena, Powell and Snellman (2004) characterise the KE as consisting of knowledge-intensive activities that speed up technological and scientific advancement for the production of goods and services.

Apparently, the WB adopted its KE definition from the early experiences of the American and Korean economic development and growth models, which date as far back as the 1970s. For instance, in the 70s, Korea developed knowledgeable (sophisticated) production in heavy industry, acquired and developed skills related

to needed technology through licensing and original equipment manufacturing (OEM) contracts. Additionally, the Korean government supported such businesses and their initiatives through research and development (R&D) activities, training, technology upgrades, import restrictions, etc. (WB, 2007). Thus, inspired by these, the WB espouses that the KE is dependent on an educated and skilled workforce, smart and up-to-date information technology, an effective innovation system and a government structure that motivates the creation, dissemination and application of new and existing knowledge. In other words, it is an economy in which the enhancement of economic development is mainly dependent on the application of acquired knowledge.

Eventually, the urge to create, acquire, disseminate and apply knowledge in production activities gradually ignited a new spirit, the entrepreneurial spirit, in the HE sector. The spirit emerged from challenges within the KE scheme, including financial and other limitations that continue to hinder universities from effectively pursuing their goals to this day. Within this new dispensation, universities–mainly in the West–began (in a gradual manner) to adopt a management system that permitted them to pursue opportunities beyond the means available to them in pursuit of their goals. Clark (2001) uses Harvard Business School as a classic example to illustrate this mid-1980s phenomenon in light of university collegiality, autonomy and academic achievement. He cites the case of the school's branch campus being established in Silicon Valley in 1997—that is, the California Research Centre (CRC)[3] —as a place in which the School's professors could write case studies about their start-ups and other entrepreneurial firms. Affirmatively, Davies (2001) intimates that between the 1980s and end of 2000, European universities went out of the traditional mainstream university culture (research and education) and developed significant capabilities in other fields with the intention to defeat the challenges encountered towards their aspirations. For example, they engaged in industry related R&D, consultancy, technology transfer and fixed capital asset commercialisation (e.g. halls, residences and sports facilities) for external use.

Accordingly, and still in a bid to maintain pace with its development approach to developing countries, the WB Institute's K4D programme published a book in 2007, Building Knowledge Economies: Advanced Strategies for Development, which premised on the idea that countries at all levels of development should consider embarking on a knowledge-and innovation-based development process. Comprehensively, it espoused the adoption of KE and entrepreneurial tendencies, with roots in universities, for the sake of knowledge-based development. Therefore,

[3] Harvard Business School website: https://www.hbs.edu/global/about/Pages/california.aspx

taking advantage of these new developments in the education policy sphere of western countries, the WB simply challenged the domestic public political mandate of African countries to adopt the same policy objectives, thereby redefining, for these countries, the relationship between education and their state—as asserted by Nagel et al. (2010). However, this is only possible within strong institutional structures that can guarantee the transformation of such knowledge into wealth as well as adapt and disseminate it for economic development. Therefore, using primary and secondary data, I assess how UB responded to KE and entrepreneurial university policy objectives aimed towards the economic development of Cameroon.

5.3 1993 Knowledge Economy (KE) and the Entrepreneurial University—Higher Education (HE) Vision and Reforms in Cameroon

Responding to WB's demands for HE sectoral adjustments in pursuit of economic development, the government of Cameroon embarked on its first HE reform measures in 1993. This happened within the framework of shared neoliberal international education policy objectives (KE and entrepreneurial university) intended to enhance the ability of individual nation states, in the prism of international regime theory, to secure 'Pareto-optimal' outcomes (outcomes influenced by efficient allocation of resources) in the specific area of GEP (Krasner, 1982; Hasenclever et al., 2000).

Hence, through Presidential Decree No. 92/74 of 13th April 1992, harmonised by Decree No. 93/034 of 19th January 1993, Cameroon transformed its lone university (the University of Yaoundé) into two new universities: University of Yaoundé I and University of Yaoundé II. It also transformed its four university centres into full-fledged universities: University of Buea (UB), University of Dschang, University of Douala and University of Ngaoundere. Within the vision was the desire to broaden different stakeholders' participation in the financing and management of HE as well as the will to professionalise university studies. The goal was to enhance special skills and competencies of the country's human resources, leading it towards a strengthened competitive advantage position in the global marketplace (Fonkeng & Ntembe, 2009; Ngwana, 2001, Njeuma et al., 1999; also see Obamba, 2013). To that end, and as an international policy measure for socio-economic development, the following objectives were set for the vision:

- Some degree of financial and academic autonomy to universities (diversification of funding sources), substantial registration fee increase, promotion of private universities and private income mobilisation.
- Expand access to HE opportunities.
- Widen the scope of academic disciplines with respect to societal needs and market demands.
- Encourage cooperation and collaboration between universities and private sector businesses.

Notwithstanding, as the HE oversight institution, Cameroon's MINESUP continues to play a supervisory role in both public and private universities. It is responsible for enforcing the principles of law that guide the operations of universities and for reorienting them towards specific assignments relating to the needs, aspirations and expectations of the society. While the oversight role of MINESUP is important for enabling appropriate institutional processes towards accepted international level education policies, ascertained by a network of partners, including the WB as contend Jacobi (2009) and Stone (2008), both document and field data suggest that this role frequently overlaps and infringes on the autonomy rights of public universities as stated in the vision above. For example, on university academic autonomy, Respondent M2 asserted:

> Even though we have freedom to do certain things, we cannot just go about them without due consultation with the hierarchy. You know, we have a management structure. For example, the Council is the supreme governing body of this university and may override any decision we make here. By the way, we rely mainly on government for our funding. What do you want us to do?

Corroborating his assertion are the following well-known laws under the direct management responsibility of the MINESUP, established between 1993 and 2016:

- Presidential Decree No. 93/027 of 19th January 1993 defining common conditions for the operation of universities in Cameroon.

- Law No. 005 of 16th April 2001 to Guide Higher Education, signed by the president of the Republic of Cameroon. Applicable to universities in Cameroon.

- Law No. 2005/342 of 10th September 2005 to modify and complete certain dispositions of Decree No. 93/027 of 19th January 1993 to define common conditions for the operation of universities in Cameroon.

- Presidential Decree No.2005/383 of 17th October 2005 to lay down financial regulations applicable to universities in Cameroon.

Apparently, these decrees overshadow the KE and entrepreneurial vision of public universities, which requires cooperation and collaboration between institutions and stakeholders, among other things, as the basis for inclusive and appropriate development strategies and goals for the development and transfer of useful knowledge into social and economic practices—that is, educational outcome (Williams, 2009; Halme et al., 2014). This situation highlights Fulge et al.'s (2016) GEP contention that although global actors are more involved in agenda setting and policy formulation, it is common knowledge that policy decisions and implementation are literally the preserve of national governments.

Also important to note here is that the Ministry of Higher Education and Scientific Research, which managed both HE and scientific research between 1984 and 1992, was split into two entities in 1992. This came alongside the reform measures announced in same year, confirmed by Decree No. 92/074 of 13th April 1992 and consolidated in January 1993. The reason for the split was to ensure a strong focus on research in order to scale up its impact within the framework of WB's GEP KE and entrepreneurial university policy ideas. Therefore, the government placed institutional research under two separate ministries. It charged the Ministry of Scientific Research and Innovation (MINRESI) with eight research institutes and assigned it the responsibility for drafting, implementing and assessing government policy regarding scientific research and innovation. On the other hand, it charged the MINESUP with the responsibility of sustaining the traditional HE mission and with the promotion and dissemination of academic research (Gaillard, van Lill, Nyasse & Wakata, 2014).

Research Institutes under MINRESI:

- Institut de Recherche Agricole pour le Développement (IRAD);
- Institut de Recherche Médicale et d'Etudes des Plantes Médicinales (IMPM);
- Institut de Recherches Géologiques et Minières (IRGM);
- Mission de Promotion des Matériaux Locaux (MIPROMALO);
- Agence Nationale de Radio Protection (ANRP);
- Institut National de Cartographie (INC);
- Comité National de Développement des Technologie (CNDT);
- Centre National de l'Education (CNE).

The consequence of the aforementioned state policy on research and innovation contradicts its desire for a KE and entrepreneurial vision of public universities. By creating and placing eight research and innovation institutes under MINRESI, the

government clearly downplayed the vision and mission of its public universities towards the same goal. In addition, the government's action of charging MINESUP with the responsibility of sustaining the traditional mission of universities, points to a contradiction of the true reason why it subscribed to WB's KE and the entrepreneurial university policy objectives. This is because the traditional role of the university is to teach, conduct basic research and provide services to the community. The MINRESI role also further complicates the government's public expenditure responsibility for research and innovation at public universities. Corroborating this is the following declaration from Respondent M4:

> The Ministry of Scientific Research and Innovation is funded by the state…most of the research in the university here is also sponsored by the government. We do have here what is called research allowance, which is given every semester to all academic staff who occupy permanent positions. It does not apply to part time academic staff.

In addition, Respondent A2 declared that:

> Less than 5% of total annual budget of UB is assigned for research activities…No clear criteria for funding research activities since the university has very little resources, especially financial, to fund research. However, they can support part of research with a high potential for impact.

These declarations point out a strong misconception by the state mechanism of the KE and entrepreneurial university role regarding its vision for the economic development of the country. The declarations confirm Verger et al.'s (2012) submission that the interactions between national governments and global actors quite often produce unpredictable results as they are wont to cause unintended negative outcomes for educational practice at diverse levels when met with contextual differences in terms of capacities and cultures of receiving governments.

The ascription of the scientific research and innovation role to MINRESI and not MINESUP—and thus taking it out of the sphere of influence of public universities—contradicts the vision of the government for the KE and entrepreneurial role of these universities, further affecting its capacity to engage effectively in its public expenditure responsibility to them. The decision still does not tie with Article 23 of the University Standards of 2015, which demands that teaching and research be associated to concrete realities and translate into marketable goods and services in order to improve the applicability of study programmes at universities. Validating this assertion is Ministerial Circular No. 03/0001/MINESUP/CAB of 8th January 2003, which stipulated that the

government's funding expenditure to public universities prioritises only teaching and research. On the other hand, the management of UB is yet to fully equip itself with the ability to harness its capacities towards becoming a financially self-reliant public university that is able to pursue its mission objectives for the vision intended for it by the state regulatory mechanism under the neoliberal GEP of KE and entrepreneurial university policy objectives.

This is primarily because of the nature of the state regulatory framework and the interference in the production of higher knowledge in Cameroon. Accordingly, the situation aligns with the assertion of the discursive nature of the neoliberal concept that has, since in the 70s, shaped diverse policies at international, national and local levels—including the corporatisation of universities and entrepreneurship, with different ideologies, and policies and practices, with different impacts and outcomes (Griffin, 2007; Bockman, 2013; Mijs et al., 2016; Fine & Saad-Filho, 2017). Consequently, this explains why though eager to pursue established and legitimated processes for its own legitimacy and survival, UB is unable to resist state regulatory pressure that comes with capacity that rather contradicts and disrupts its own internal arrangements, informed by its own vision and goals. Hence, this situation affects the vision of UB within the expectation to engage effectively in innovation with massive science and technology transfer activities as enabling spin-offs, providing consultancies and other actions within STEM. Implicitly, the KE and entrepreneurial vision of Cameroon's public universities within the framework of education, science, new technology, innovation and highly qualified labour force for the country's long-term development goals is constrained by an ambiguous state regulation, which has transferred responsibility and part of HE funding to MINRESI.

5.4 University of Buea (UB) Knowledge Economy (KE) and the Entrepreneurial University Funding Mechanism 1993–2000

While Decree No. 93/027 of 19th January 1993 defined common conditions for the functioning of Cameroon's universities, Decree No. 93/034 of same date organised UB under the supervisory role of MINESUP. In addition to its Advanced School for Translators and Interpreters (ASTI), UB started off with three faculties. These included the Faculties of Sciences, Arts and Social and Management Sciences. By November 2009, it had five faculties, also including Health Sciences (1997/1998 academic year) and Education (1998/1999 academic year) (Signing & Nguiessi,

2009). The fact that some other faculties, established by the decree that created and organised UB, did not become operational until after 2010—17 years later—is noteworthy to say the least. These include the Faculties of Engineering and Technology, Agriculture and Veterinary Medicine and the College of Technology. Nevertheless, within 6 academic years within the new dispensation, student enrolment rose steadily, from 768 in 1992/1993 to 5,380 in 1998/1999 and from 7,283 in 2002/2003 to 10,295 in 2006/2007, exceeding 12,000 in 2013, through a selective approach based on admissions quotas (UB, 2013).[4] In 2013, the university still had five faculties though the number of departments had gradually increased to 25, with 32 academic programmes under them (UB, 2013).

The foregoing statistics are more revealing of the contention that the implementation of GEPs (such as the KE objectives) are based on the capacity of the WB with its human, material and financial resources, as well as the technical know-how, to convince countries to accept and implement particular policies (Verger et al., 2012). Such is apparently the case with the 1993 university reform measures adopted by the government of Cameroon in line with WB's imposed neoliberal principles of deregulation, liberalisation, competition and privatisation within the free market concept with worrying effects (McChesney, 1998; Ross & Gibson, 2006). Hence, the public expenditure reduction scheme turned out to be most radical reform measure introduced in 1993. It is clearly controversial that while developed countries focused on heavy public investments and support for R&D, training, technology upgrades, etc., developing countries that sought economic viability (through the KE approach) for a competitive advantage position (especially among developed countries) were forced to reduced public funding support for their universities. Noteworthy is that the WB's KE policy objectives were apparently informed by the American and Korean economic development models, which dated as far back as the 1970s and had adequate public expenditure support. This should have served as perfect examples for developing countries at the time.

More worrying is that even though the Cameroon government reduced public expenditure for universities, it also made its availability irregular (especially between 1993 and 1997) with a rate of receipt that was less than 30% of the anticipated amount. This made budget allocation for research, for example, disproportionately very small (Njeuma et al., 1999). Nonetheless, in situations in which universities are unable to meet their aspirations, as well as the demands and expectations of their society, through their singular efforts, the expectation is for them to become

[4] Updated UB website, August 9, 2013: http://www.ubuea.cm/about/brief-history/; https://www.ubuea.cm/about/

innovative in their behaviours—be self-initiating, self-steering, self-regulating, self-reliant, and progressive (engage in wide-ranging partnerships with a variety of other stakeholders) (Clark, 2001). This engagement should enable them to generate non-state resources that can cross-subsidise and incentivise further independent academic activities (Clark, 2001; Shattock, 2009). Unfortunately, this was and is not exactly the case at UB—consistent with Slaughter and Leslie's (1997) declaration that no matter the transformative circumstances in some universities, private and commercially oriented revenue relatively represented only a small quota of their budgets. Consequently, in UB's case, inadequate public funding appears to be worsening its ability to galvanise itself towards the entrepreneurial university aspiration that should enable it to strive towards the fulfilment of its vision. Backing this assertion is the expression of Respondent R8 in the following statement:

> As a lecturer, I am being paid by MINESUP. But if I am a part timer, it is the college that will pay me. So the money that the government gives for subvention that would have been used for other things, we have to be paying part timers with. So you see that it actually slows the rate at which we want to evolve because you need these people to teach and we have to pay them. Three of the permanent staff are still working on their PhDs and only two are PhD holders. So we also want them to complete their PhDs.

With regards to the finance situation at UB, secondary data reveals that—between 1993 and 1996—investment per student at UB fell by 37%, amounting to only FCFA 187,000 (about EUR €285), leaving a very minimal amount for research and other things; far less than WB's recommended about EUR €820 per student per year (Njeuma et al., 1999). Additionally, these universities did not have the authorisation to charge tuition fees. This kind of finance measure is unable to sustain the university's KE and entrepreneurial policy objectives, characterised by the endeavour to enhance education and science, build new technologies within the framework of innovation and train a highly qualified labour force as the main determining factors of the country's long-term development goals (Powell & Snellman, 2004; WB, 2011). Therefore, even though the agreed neoliberal WB GEP (specifically for African countries) informed the reform measures to aim towards the economic development of Cameroon, system-wide processes suggests that the state government adhered to the recommendations only in a bid to win good reputation even if they came at the expense of Cameroon's own strategic calculations as contendsVerbeek (2007).

For example, Table 5 (according to secondary data) illustrates an example of the government's irregular disbursement of subventions to UB in connection to budget

requests. It shows a percentage of irregular subventions received by the university in comparison to budget estimates for academic periods between 1993 and 1996.

Table 5. Degree of State Funding of UB, Cameroon

Year	Budget Request*	Disbursement*	Share Received (%)
1993/94	1,250,000	240,000	19%
1994/95	1,960,000	258,852	13%
1995/96	1,266,000	285,996	23%

*In thousands of CFA Francs (EUR 1 = FCFA 656). Culled from Njeuma et al. (1999, p. 14).

The table above illustrates that the amount of yearly state subventions contributed to UB in terms of percentage of the requested budget to run the university between 1993 and 1996 did not go beyond 23%.[5] The percentage of state subvention, as opposed to requested budget, declined from 19% for the 1993/1994 academic year to 13% for the 1994/1995 academic year. It then rose to 23% for the 1995/1996 academic year. This, however, does not mean that the university was able to raise the rest of the required budget. In fact, by way of comparison, the table indicates that the government actually provided only 23% of the budget request made by UB. This illustrates a deviation in the state's responsibility for HE due to its adherence to neoliberal GEP measures over its own contextual policy aspirations, validating Fulge et al.'s (2016) contention that even in situations in which idiosyncratic national configurations inform national endeavours, international and intergovernmental organisations continue to exert great influence in these countries. Table 6 throws more light on government's initial funding involvement at UB.

[5] Worthy of note is that, due to the political dynamics involved, it was not possible for me to obtain detailed financial information about the operations of the university for the entire period of the study (1993 to 2016) as equally indicated in Section 5.6.1.3. The financial information presented here about state subvention to UB is thanks to a publication championed by the former VC of same university. Notwithstanding, partial provision of information about state subvention to the university does not necessarily obstruct meaning, essence and outcome of analysis as it is mainly for illustrative purposes.

Table 6. Sources of Income of UB, Cameroon (in Thousands of CFA Francs)

Year	Total Available	University-Generated	Percentage (%)	State Subsidy	Percentage (%)
1993/94	*523,000	145,125	28%	377,875	72%
1994/95	*754,000	207,145	27%	546,855	73%
1995/96	*742,000	199,498	27%	542,502	73%

*Income includes salaries of teaching staff. Culled from Njeuma et al. (1999, p. 15).

The statistics indicate that the government's highest donation—23% of requested budget between 1993 and 1996—constituted as much as 73% of UB's total available income. This would mean that UB's contribution to its own budget requirement was far less than 23% of the amount that came from government's contribution. Although this difficulty resulted from UB's entrepreneurial inability to raise funds for its activities through different income streams in the short run, it put to question its ability to galvanise itself effectively towards assessing and understanding GEP dynamics as well as planning and adjusting its processes accordingly in order to meet policy objectives. This was evident in UB's inability to recruit enough qualified academics with appropriate research and innovation skills as a result of the public expenditure reduction for public universities.

Furthermore, evidence from Njeuma et al. (1999) suggests that, before 1999, UB accomplished very little in relation to its research endeavours. In addition to the lack of adequate funding, they determined that majority of its academics did not have terminal degrees and that assistant lecturers (those with a master's and PhD degrees but without teaching experience and publications) constituted up to 69% of the staff in that category. Worthy of note here is the fact that the creation of private universities equally exacerbated the level of competition over the limited number of academics with required qualifications, including those with terminal degrees and appropriate research and innovation skills. This situation, which followed the implementation of the 1993 neoliberal reform measures, attests to the fact that although government based the reform measures on WB's economic development agenda (research and innovation), its public universities lacked the skills and competences needed to properly adopt or adapt them to their own circumstances, especially leading up to 1999. This attests to the fact that there is strong need for

national transformative capacities and national guiding principles in education policy to mediate the impact of GEP, especially where international education policy processes exert influence on national education systems (Nagel et al., 2010; Fulge et al., 2016). Later on, in Section 5.6, I discuss the funding measures taken by UB in an attempt to adapt on its own terms to the changing circumstances in its environment.

Nevertheless, regarding the early funding challenges, Respondent A3 intimated that, 'the Journalism and Mass Communication department has never gone beyond staff strength of six permanent staff since 1993'. In the same vein, Respondent R10 expressed a similar concern in the following words:

> As I am talking to you, we have, we have only about, only about five permanent staff in the college and, and so you see that, [sic] and we run four options. We are planning to start running the fifth. So we depend fully on part timers.

By every measure, the situation equally highlights the institutional theory assertion that organisations do not necessarily adopt new structures and/or practices because of their effectiveness and efficiency—quite often, they do so just to portray a sense of rationality in order to gain legitimacy (Alvesson & Spicer, 2018). Just as the state of Cameroon adheres to GEP arrangements, especially those of the WB, based on financial incentives in the form of loans, so too, its public universities adhere to system-wide governance policies under the auspices of MINESUP and act in conformity with one another for the sake of public expenditure support. This is so despite the financial autonomy status granted them in the 1993 reform measures, aiming to enable them to make up for inadequate public funding (Decrees No. 93/027 and No. 93/034 of 19th January 1993). For example, in the early years of its operation, UB adhered to the decisions of the HE minister that, in August of 1993 and June of 1995, respectively, stopped the increment of registration fees from FCFA 50,000 to 200,000 (about EUR 305) and the Parent Faculty Association (PFA) fee of FCFA 20,000 (about EUR 35).[6] Notwithstanding, in the following section, I examine the aspiration of UB to create and develop knowledge and produce a highly qualified labour force (relevant for the advancement of science and technology) for determining the long-term development goals of Cameroon.

[6] UB: The dissolution of UBSU would put an end to the incessant strike strike actions. A news item from the Ministry of Territorial Administration, published on Thursday, 16 May 2013 12:23, Hits: 1519. http://www.minat.gov.cm/index.php/en/en/component/content/article/23-contenu/actualite/693-university-of-buea-the-dissolution-of-ubsu-would-put-an-end-to-the-incessant-strike-actions

5.5 University of Buea (UB) Knowledge Economy (KE) Endeavour 2000–2016

Until UB published its strategic plan for 2007–2015, its KE endeavours relied much on the vision and objectives set out for it upon creation, through Presidential Decree No. 92/74 of 13th April 1992, harmonised by Decree No. 93/034 of 19th January 1993 as indicated in Section 5.3. Its first strategic plan for 1998–2003 did not elaborate any attempts at a systematic approach to define policy guidelines for implementing a national research policy (Signing & Nguiessi, 2009). In contrast, its 2007–2015 strategic plan document was more elaborate in its endeavours at a more systematic approach concerning the creation and dissemination of knowledge towards application for enhanced economic development in Cameroon. The focus, amongst others, was to strengthen different stakeholder participation in the financing of the university, to professionalise its academic programmes in order to enhance special skills and competencies and to consider research as an indispensable tool for teaching and outreach towards economic development within the principles and norms of the WB regime.

For its KE endeavour, UB (in 1999) created the post of Deputy Vice Chancellor in Charge of Research and Cooperation (DVC/RC), which illustrated a sense of consciousness and desire to develop its research, teaching and outreach endeavours through science and technology in order to reach the development goals of Cameroon. It created the impression that the foundation of a new beginning was set in the direction of strengthened efforts by the university, allowing it to adjust itself within the new dispensation of the KE. In the same vein, the government, through its MINESUP supervisory role and in accordance with KE prescriptions of the WB regime on education, continued with efforts to influence (in a profound manner) the organisation and management of university activities.

In furtherance of the education policy of the WB regime, the president of the Republic of Cameroon signed Law No.005 of 16th April 2001 in order to reiterate certain issues and reorient universities towards specific assignments within the KE framework (knowledge creation and acquisition, dissemination and application) for enhancing the economic development of the country. In terms of KE issues, Article 6(1) of the law emphasises:

- The quest for excellence in all domains of knowledge;
- The promotion of science, culture and social progress;
- The assistance for development activities;
- The training and further training of senior staff;
- The training of intermediate and senior staff for scientific and technical domains;

- The ease of innovation as well as individual and collective creativity in the domain of arts, letters, science and techniques;
- The deepening of ethics and national consciousness.

Therefore, I examine the KE endeavour of UB—the production, valorisation and application of knowledge aimed towards economic efficiency, competitiveness, profitability or effectiveness (Jessop, 2017)—based on the essence of the Office of the DVC/RC, the prescriptions of Law No.005 of April 2001 as well as expectations of the 2007–2015 strategic plan document.

5.5.1 Teaching, Research and Knowledge Dissemination 2000–2007

Upon creation of UB, teaching and infrastructural development were the principal concerns of the state mechanism in terms of the goals of the university. Understandably, this measure intended to take care of the rising academic demand of the period and to provide the needed infrastructural capacity to complement the demand. Consequently, even though teaching and research were fundamental in the mission objectives of the university, the latter (for obvious financial and capacity reasons) did not get the attention it deserved (Signing & Nguiessi, 2009). By 2003, UB was still struggling to meet international standards in relation to research, teaching conditions, curriculum development and pedagogical equipment even though it achieved very little in terms of the quality of teaching and educational output between 1993 and 2000 (Njeuma et al., 1999; Ngwana, 2003).

Irrespective of the provisions of Law No.005 of 16th April 2001, the same infrastructural, financial and other capacities issues that beset the progress of the university prior to 2001 determined the teaching and research outcome of UB from 2001 to 2007. This reality gives credence to the claim that though international regimes promote endeavours that lead to shared expectations for appropriate behaviour and transparency in helping member states to cooperate towards joint gains in particular issue areas, actors eventually develop the habit to let go some possible advantages that they would have if they disregard certain norms (Kersbergen and Verbeek, 2007). In relation to this, the quality and distribution of academic staff and students by faculty/school for 2006/2007 academic year (in Table 7) provides us with the basis for assessing the teaching and research capacities of the university within the KE framework prior to 2007 and beyond.

Table 7. Distribution of Teaching Staff and Students by Faculty/School for the 2006/2007 Academic Year

No	School / Faculty	Teaching Staff			Grade				Staff / Student Ratio	Students
		MSc	PhD	Total	Prof	Ass. Prof	Lecturer	Ass. Lecturer		
1	ASTI	3	4	7	1	1	5	0	1:5	32
2	Arts	11	29	40	4	2	2	12	1:34	1,343
3	Education	3	9	12	3	0	6	1	1:89	1,060
4	Health Sciences	4	7	11	1	0	4	4	1:36	391
5	Sciences	43	65	108	3	7	41	45	1:25	2,643
6	Social and Mgmt. Sciences	40	24	64	1	3	31	22	1:76	4,826
7	**Total**	**104**	**138**	**242**	**13**	**13**	**107**	**84**	**1:45**	**10,295**

Source: University of Buea Strategic Plan for 2007–2015.

5.5.1.1 Teaching

In response to Article 1(2) of the general provisions of Law No. 005 of 16th April 2001, which requires that public universities should offer all approved HE training courses, UB increased the number of academic programmes and departments to 32 and 25 between 2001 and 2007, respectively, up from 13 and 11, respectively (Njeuma et al., 1999; UBSP, 2007). Within the same period, the number of faculties/schools increased from 4 to 6 (UBSP, 2007). The overall student

population increased from 7,283 in 2002/2003 to 10,295 in 2006/2007 against an academic staff number of 242. This portrays a move from a teacher to student ratio of 1:16 in the 1992/1993 academic year to 1:42.5 by 2007—an indication of a situation of rising enrolment in relation to a small number of academic faculty members. In line with basic assumption of the regime theory, the outcome of increased academic programmes indicate that while the government of Cameroon institutes system-wide policies for national HE on the basis of its commitment to WB's partial international orders towards economic development, it pays little or no attention to its own strategic calculations. For example, while it tasked its universities to offer all approved training courses, it did not factor in the recruitment and/or training of teachers to meet the exigencies that come with increased academic programmes and enrolments.

Besides the poor teacher to student ratio, class sizes varied between 300 and 1,000 students for common courses of different programmes, especially in the first 2 years of the undergraduate study period (UBSP, 2007). In addition to the poor teacher to student ratio, the table also illustrates a situation of inadequate academic staff quality. There is, for example, the predominance of a high number of academic staff with master's degrees in some faculties. Of the 242 academic staff members in the 2006/2007 academic year, only 138 had terminal degrees, while 104 of them had master's degrees—whereas I note a very strong correlation between educational qualification, teaching experience and educational outcome. This assessment is based on the processes of UB in relation to the 2001 system-wide policy and points to the institutional theory assumption that in order to gain legitimacy, organisations sometimes act on the basis of government pressure and not their own rational decision-making processes (Zucker, 1987; Janićijević, 2015). If UB was mindful of its teaching and infrastructural capacity between 2000 and 2007, it most probably would not accept to offer all approved academic programmes in accordance with Article 1(2) of Law No. 005 of 16th April 2001 without adequate resources to handle the exigencies that come with this.

Generally, the preceding analyses suggest a situation of challenges in the teaching and training activities of students towards a highly qualified labour force with required intellectual capacities as most important component of the country's KE objectives as asserted by Powell and Snellman (2004). For instance, UB had only moved from 3 academic faculties (including the Faculties of Sciences, Arts and Social and Management Sciences) in 1993 to 5 faculties in 2007, excluding ASTI. The additional two faculties included the Faculties of Health Sciences (1997/1998 academic year) and Education (1998/1999 academic year) (UBSP, 2007). There were

25 departments that constituted the 5 faculties and offered a total of 32 academic programmes in 2007, up from 18 departments that offered 24 academic programmes in 1993. This means that for a period of 14 years (1993–2007), UB was only able to make provision for a couple more academic programmes in the face of the rising demand for university education against rising economic development challenges.

In addition, the number of academic programmes rose against inadequate capacity of lecture halls and laboratories as infrastructural development remained a crucial challenge for the university. This posed serious challenges to the teaching and learning activities of both academics and students. Large class sizes were organised with as many as 250 students sitting in for lectures against acceptable teacher to student rations (UBSP, 2007). The response of teachers to these changes that imposed new requirements for teaching methodologies remains ambiguous at UB, with most teachers maintaining the traditional and most common form of teaching—the lecture—which mainly constitutes a teacher-centred approach with a focus on adequate coverage of material but has limited capacity to help learners (Mavroskoufis, 2012). This did not change even when admissions quotas were imposed; for instance, in the 2006/2007 academic year when only two-thirds of qualified applicants were accepted (UBSP, 2007). However, given that most of the new academic programmes within the 2000–2007 period were in the Health Sciences and Education disciplines, they enabled the training and production of an educated workforce in both the applied sciences and traditional disciplines. See Appendix F for details of the faculties, departments, academic programmes and degrees offered at that time.

5.5.1.2 Research and Knowledge Dissemination

The office of the DVC/RC at UB, created in 1999, took on a series of pragmatic measures. This is evident in a series of decisions made that are in line with the KE and entrepreneurial university objectives aimed to strengthen and sustain the culture of scientific research (creation and development of knowledge) for economic development. In response to Law No.005 of 16th April 2001, the DVC/RC could barely attempt to define a policy for research because it was considered to be of low priority in the face of other urgent needs, including undergraduate teaching (Signing & Nguiessi, 2009). However, in July of 2003, UB established scientific committees at the level of departments, faculties and ASTI. This measure enabled the creation of research teams in the faculties and ASTI as an empowerment strategy of the academic heartland of the university as determined by Clark's (1998) and (2001)

entrepreneurial university assessment. In addition, the DVC/RC issued Service Note No. 3021/UB/DVC/RC of 13th August 2004 that empowered the faculties with rights to rationalise the disbursement of research funds—but at the behest of the central administration under MINESUP supervision. This nevertheless meant that faculties had some say in determining allocations for different research options.

In the same vein and in accordance with the propositions of the regime theory, state regulation of HE in Cameroon continued in accordance with the WB's KE development strategies for African countries. Accordingly, Presidential Decree No. 2005/142 of 28th April 2005 to guide HE, reorganised MINESUP in greater pursuit of the same goal. It created the Division of Planning, Research and Cooperation, charged with elaborating the processes of government policy relating to HE research. Within it, a unit was created that was charged with coordinating and monitoring university research activities, among other things. Consequently, the office of the DVC/RC of UB created an Intellectual Property Committee and put in place measures to regulate research activities at the university through Service Note No. 143/UB/DVC/RC of August 2005 and Service Note No. 1497/UB/DVC/RC of 22nd November 2005, respectively. In line with both regime and institutional theories, UB made the decision to implement a measure to align itself with the shared expectations of the national policy in order to win government legitimacy and preference over the scarce and competitive public resources for public universities. This assertion is backed by Ministerial circular No. 03/0001/MINESUP/CAB of January 8, 2003, which instructed that insufficient and irregular public expenditure for public universities gives priority only to teaching and research. This definitely influenced UB's endeavours at teaching and research.

Notwithstanding, in an attempt to mediate the unexpected impact of accepted GEP, the government established different motivational funding allocations to academic staff members of its public universities in a bid to enhance capacities to match the demands and expectations of education policy change (Nagel et al., 2010; Fulge et al., 2016). These included a Staff Development Grant (SDG), Research Allowance (RA) and Research Modernisation Allowance (RMA). Alongside the Faculty/School Research Grant (FSRG) scheme instituted in 1999 and running under the management of the vice chancellor, the government established the Staff Development Grant (SDG) in same year. Regarding the SDG, following is the assertions of Respondent A3:

> The Staff Development Grant was to encourage team research and collaborative research amongst university staff members. In fact, it was for many things. It was to facilitate the mobility of academic staff members and even students…academic publications, and to

> encourage seminars for the writing of grants….The grant was also to provide support for doctoral students employed as instructors at the university and for the improvement of our general welfare, like our living and working conditions.

According to the state regulatory mechanism (through MINESUP), this plan was actually an ambitious and motivating project to encourage universities in the production, valorisation and dissemination of knowledge within the framework of the KE project in the interest of the public, private and third economic sectors and aimed towards general economic efficiency as ascertained by Jessop's (2017).

However, neither the university nor the state took any concrete measures (by 2007) to pragmatically demonstrate a roadmap in the direction of knowledge-intensive activities in the STEM arena for accelerating the pace of technological and scientific advancement as well as rapid obsolescence in accordance with the KE policy objectives (WB, 2007; Powell & Snellman, 2004). Much emphasis was instead placed on the advancement of the teaching and traditional research roles (basic research activities) of the university. This is visible in the emphasis of both MINESUP and UB placed on areas such as internal collaboration among university staff members, the general welfare of academics and the enhancement of research and teaching capacity of junior staff members (instructors and assistant lecturers without terminal degrees) at the university. Consequently, much of the research activities of the university between 2000 and 2007 focused on basic research as illustrated in Appendix J: Research Themes and Major Research Findings (1998–2007). These research activities did not have immediate commercial effects and did not necessarily result in inventions or provide a solution to a practical problem.

Before the SDG, there was the RA. Created by Presidential Decree No. 76/472 of 10/10/76, its role was to motivate scientific research activities of academic staff members of public HEIs in Cameroon (Signing & Nguiessi, 2009). Article 14 of the decree demands that MINESUP makes an annual stated payment of a research allowance to academic staff members in order to encourage scientific research. The payment, however, is dependent on research reports from heads of institutions concerned with the activities of supposed beneficiaries. The allowance covers expenses relating to the supervision of research students, among others, and spells out the benefits in the following order:

- Professor FCFA 200,000 (about EUR 305);
- Associate professor FCFA 200,000 (about EUR 305);
- Lecturer FCFA 150,000 (EUR 229);
- Assistant lecturer FCFA 100,000 (EUR 152).

Unfortunately, the payment of the RA has been a subject of controversy in recent years. According to Respondent R7:

> The research allowance is not even something that we can count on for our research work [laughter]. First of all, it is too small to support any kind of research. Second, we have to fight for it to be paid. Sometimes, it takes several months for us to get it. How do you expect us to use it for research when our salaries as civil servants is too small to even support our living expenses?

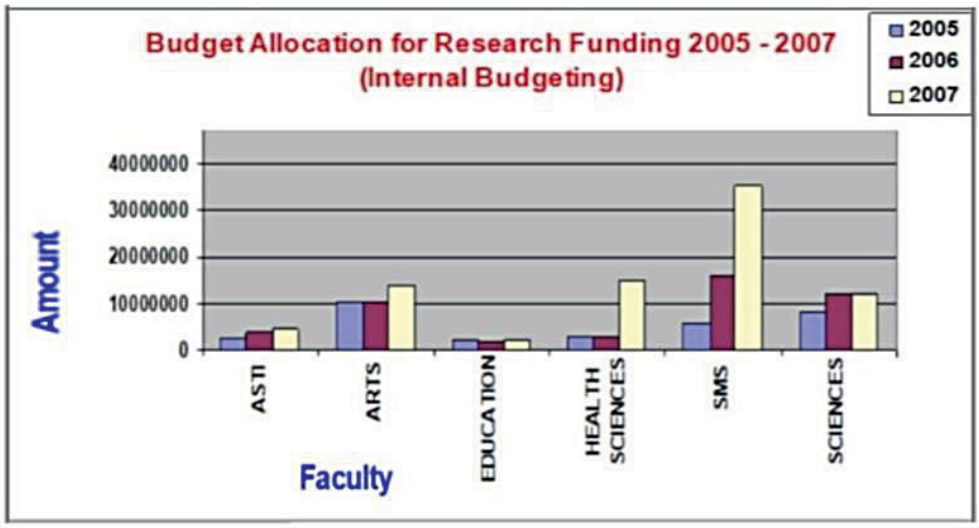
This assertion confirms reports of delays or non-payments of the allowance to deserving recipients and therefore highlights its controversial nature as well as the lack of concrete measures to encourage and enhance research capacity or support and sustain policy position. Corroborating the assertion is a University World News media report of October 31, 2010. The report confirmed that some lecturers at the University of Douala in Cameroon organised a strike action in 2010, claiming up to 10 years of arrear RA payments from MINESUP.[7]

The above suggests that MINESUP owed them an allowance dating as far back as the year 2000. What this assessment further suggests is that, in agreement with the regime theory, the government of Cameroon does not actually take into consideration very important aspects relating to processes towards achieving KE policy objectives at its public universities. It merely contends itself with policy positions of the WB regime in order to attain a good reputation based on instituted norms as determined by Kersbergen and Verbeek (2007). Otherwise, of what essence is a policy position that cannot enhance the capacities to enable universities to achieve more resources for themselves in order to incentivise their personnel and subsidise their academic activities towards greater socio-economic development? Visibly, the government failed to invest adequately in new technology, innovation and the production of a highly qualified labour force in order to achieve its country's long-term development goals in accordance with adopted policy stance. This fact supports the declaration that even though regimes promote endeavours that lead to shared expectations for appropriate behaviour and transparency in helping member states to cooperate towards joint gains in particular issue areas, they do not have a strictly formal control system able to set the rules under which all the participants are to act (Kersbergen & Verbeek, 2007). This explains why participants do implementation of policy concepts in whatever way they choose without fear of any

[7] Cameroon: Unpaid Teachers, Homeless Students. University World News, Africa Edition, 65 (31 October 2010). http://www.universityworldnews.com/article.php?story=20101029223846478

consequences. The following statistics, presented in Figure 1 (Internal allocation for UB research funding, 2005–2007), confirm this assessment.

Figure 1. Internal Allocation for UB Research Funding, 2005-2007



Source: Report on the Situation of Research at the University of Buea (May 2013).

The statistics show that for three years (2005–2007) the total internal research funding received amounted to approximately FCFA 140,000,000 (about EUR 213,429). Therefore, the average research funding received for each faculty/schools (six in number) for a three-year period at UB was about FCFA 23,166,667 (about EUR 35,317). In practical terms, the Faculty of Social and Management Sciences (FSMS) received the highest internal research funding in three years, amounting to about FCFA 55,000,000 (about EUR 83,847). The lowest recipient, the Faculty of Education (FED), received a total sum of about FCFA 6,000,000 (about EUR 9,147) for the same three-year period. Apparently, this may be visibly shocking for a university running on a KE policy objective aimed towards a country's economic development.

Judging from the above statistics and the declaration of the VC that UB allocated less than 1% of its 2007 budget for research (UB Research Policy and Management Guide 2007–2012 [UBRPMG] 2007–2012), it is appropriate to suggest that finance is the university's main challenge in meeting its research and knowledge dissemination goals, besides most of its other academic activities. Additionally, this suggests that, in relation to the KE policy objective, UB lacks adequate capacity for

research activities (knowledge creation and development) and for the translation of research results into appropriate products and services 'that contribute to an accelerated pace of technological and scientific advance as well as equally rapid obsolescence' for its community (Powell and Snellman, 2004, p. 201). Accordingly, the document, Report on the Situation of Research at the University of Buea (RSRUB, 2013) demonstrates that further on in its research endeavours, intellectual capacity issues (research activities) at UB still account for its failure as a public university to adequately impact on its community.

Even in midst of the inconsistencies, funding challenges and other inadequacies in its action plans, UB proved to be resilient in its efforts at achieving certain goals of the KE. It developed and adopted a research policy document, UBRPMG 2007–2012. This document identified principal themes on which to focus the activities of the university for the period. Focus was on the health, food security, environment, gender and governance sectors. It envisaged university - industry (private sector) collaboration on the needs and aspirations of society and, consequently, the creation of Research Centres of Excellence through which to consolidate the links and enable the application of research findings across a broad spectrum of society. With this new development dimension in view, the position of DVC/RC transformed to that of Deputy Vice Chancellor in charge of Research, Cooperation and Relations with the Business World (DVC/RCB). Hence, the following section examines the extent to which UB was able to meet these goals between 2008 and 2016.

5.5.2 Teaching, Research, Knowledge Dissemination and Application 2008–2016

According to UB's strategic plan document for the 2007–2015 period, teaching and learning were the most fundamental concerns of the university's activities. However, the plan also declared research to be an indispensable tool for teaching and outreach as well as for sustainable development and enhancement of the quality of life of its citizens through knowledge dissemination and application in accordance with the KE policy prescription of the WB (WB, 2007, p. 23). For the same period, the plan envisaged the institutionalisation of 'professional degree programmes' for each department. It also emphasised on construction of a site to host the Faculty of Health Sciences (that became operational in the 1997/1998 academic year) and the creation of an Engineering Faculty and School of Technology in line with an accelerated pace of new technologies, innovations, scientific advance and highly

qualified labour force towards long-term development goals (Powell & Snellman, 2004) after completion of the Faculty of Health Sciences project. These were all measures aimed at applied science research with the intention to address local and national concerns, including those relevant to industry. Notwithstanding, these plans attest that, until 2007, UB had not been adequate enough in its processes relating to the KE agenda (policy objective).

5.5.2.1 Teaching

As indicated in its 2007–2015 strategic plan document, UB committed to professionalising some of its degree programmes. In line with this commitment, it diversified its academic programmes through the revision of syllabi and redefined the course credit system, allocating 10 contacts hours for one credit (Nalova, 2014). Regarding course content delivery, the strategic UB plan placed emphasis on lectures, tutorials and practicals on specific subjects based on student-centred learning strategies. It emphasised the importance of short courses, internship and production (that is, knowledge application activities). This approach to teaching and learning enables the transformation of theoretical knowledge into practical skills and knowledge applicability. The actions were in accordance with the prescription of MINESUP within the framework of the National vision for HE, as outlined in Article 6(1) of Law No. 005 of 16th April 2001 to Guide Higher Education, which was both in conformity with the WB's request for African countries to consider, as primary task, the development of special skills and competencies in their human resource for economic development and to strengthen their competitive advantaged positions in the global marketplace (Samoff & Carrol, 2004; WB, 2011).

In assessing the teaching-learning reform process of professionalisation within the framework of the bachelor's, master's and PhD academic programmes, UB registered limited success in just two out of four areas—that is, in the teaching-learning and assessment methods areas (Nalova, 2014). However, the quality of student-centred teaching and assessment was greatly hampered by the lack of key ICT components, qualified human resources and other didactic materials, suggesting the need for greater attention on the pedagogic aspect of the professional programmes. In this case, there is greater need for constant capacity building and other forms of trainings for academic staff. Regarding internships and production, it was not possible for UB to effectively achieve these goals of efficient professionalisation of its academic programmes due to its poor financial situation and deficient cooperative and collaborative undertakings with other institutions and

stakeholders. For instance, due to the lack of required financial and other capacities to ensure on-campus production activities that should enhance student internship possibilities with other stakeholders, UB fell short of showcasing itself as a potentially strong force to be reckoned with.

The above suggests that while implementing government policy action on the professionalisation of HE programmes, as stipulated in Article 2 under General Provisions of Law No. 005 of 16th April 2001, UB did not take into consideration corresponding measures to address the challenges of finance, human and material resources, growing disparity in teacher to student ratios, overcrowded classrooms due to inadequate infrastructural development, etc. Understandably and in line with the institutional theory assumption, it adopted the professionalisation policy position not necessarily because of its effectiveness and efficiency but for the need to gain legitimacy since conformity creates an image of rationality and legitimacy (Alvesson & Spicer, 2018). Also, in keeping with the convenience aspect of actors' respect for instituted regime norms for the sake of special favours as asserted by Kersbergen and Verbeek (2007), UB found it imperative to create an image of rationality and legitimacy within the governance structure in view of financial favours from the state, which in turn is influenced by WB's GEP for development.

Accordingly, it is quite evident that neither the state nor UB has been able to take any concrete actions to enhance research and teaching activities towards knowledge creation, development and valorisation, not even with applied science programmes. At the College of Technology (COT) in the Faculty of Engineering and Technology, which began operating in September of 2010, one respondent alluded to the fact that nothing really special was done beyond the traditional offering and teaching of full-time and part-time undergraduate programmes across a spectrum of engineering disciplines. This appeared to be a mere demonstration of dissatisfaction with regard to high expectations. Nonetheless, though the vision is to produce highly competent senior-level technicians with adequate productive and employable skills for critical development needs, they lacked adequate infrastructure, basic labs and other requirements necessary to boost research, teaching, productivity and other related activities. In reaction to the effectiveness of the professional programmes of UB, the following are the reactions of Respondent M2 regarding both the successes and challenges of the applied science academic activities at COT:

> Computer engineering is very relevant to society and I think that the society is already feeling the impact of this programme. We have graduated three batches, most of them working. They either have their own start-ups or are attached to some industries or companies in the community. On campus here, our students are doing many things. Our own online system that we are using for registration here, [sic] the security was guaranteed by our students.

On the question of the effectiveness of the academic activities of the COT regarding the quality of students that they graduate, Respondent M2 said the following:

> First of all we have monetary issues…Our labs are not well equipped and so we cannot really do much…we have for example MOU with other industries like ENEO, for the training of World-class linesmen for electricity, partly funded by ENEO. With this, we try to make sure that the students have hands-on experience on the things that they study.

Evidently, the lack of adequate funding is one major reason why education at the Faculty of Engineering and Technology is limited at the undergraduate level. Compounded with infrastructural and other capacity issues preventing them from achieving the vision and mission of UB, the production, valorisation and application of knowledge for development is affected directly, especially in situations where labs are ill-equipped. Notwithstanding, UB's acceptance of this policy position is apparently influenced by the institutional theory supposition of Heugens and Lander (2009), where conformist attitude of an organisation has direct positive effect on its symbolic performance, which eventually portrays it as intelligible and legitimate, gives it funding and avoids coercive state sanctions. In consideration thereof, it is probable that UB adopted this institutional pattern of the professionalisation of academic programmes as a legitimate norm in view of winning state-financing favours over coercive sanctions in other areas and this accounts for a higher probability of its general survival.

Consequently, the basis of the policy positions of UB suggest why the academic activities of the university do not align effectively with the KE conception of education and science (intangible investments), which includes new technology, innovation and a highly qualified labour force as the main determining factors of a country's long-term development goal (Powell & Snellman, 2004; WB, 2007; Wright & Rabo, 2010; Obamba, 2014; Jessop, 2017). Exacerbating the teaching challenge towards valorising knowledge is the fact that the state places more attention on its special research institutes under MINRESI, for economic development of Cameroon. For instance, as of 2005, MINRESI is in charge of valorising, vulgarising and exploiting research results in permanent liaison with all sectors of the national economy, ministerial departments and other concerned institutes/organisations (Signing & Nguiessi, 2009). This is consistent with Jessop's (2017) argument that, in relation to HE, the KE idea is apparently an 'economic and social imaginary' concept guiding the structural reform and strategic reorientation of HE and research to the emergence of an already endorsed, though uncertain, procedure towards development (p. 854).

5.5.2.2 Research

In order to enhance quality research, re-dynamize, and sustain a scientific research culture in UB, which is in line with Cameroon's national development aspirations, decision No. 2008/03449/UB/DVC/RCB of May of 2008 created UB Scientific Research Committee (UBSRC) (Signing & Nguiessi, 2009). UBSRC is at the helm of the research steering mechanism of the university. Upon its creation, it constituted 36 appointed members by the VC, who also is responsible (on recommendation of senior collaborators) for the appointment of members of the following committees that are under the watch of the UBSRC:

- Faculty Scientific Consultative Committees (FSC);
- Departmental Scientific Consultative Committees (DSC);
- Referees;
- Special Committees.

Following a meeting on February 25, 2009, the UBSRC created the Institutional Review Board (IRB) for monitoring policies on ethical conduct of research at the university on March 18, 2009 (Signing & Nguiessi, 2009). Worth noting is the fact that this happened almost two years after the strategic plan document (2007–2015) mentioned the intention of its creation. Besides, there is no guarantee that its creation had any meaningful impact on the ethical conduct of research by the end of 2009 (10 months down the line) and beyond. This is because by this time, consultations to appoint its first 12 pioneer members for a two-year term of service were yet to be completed (Signing & Nguiessi, 2009). This is indicative of the fact that the IRB did not even go operational in 2009. It further suggests that UB did not have the adequate governance, financial and academic capacity to get the board running, especially given the structural links that exist between UB's research mechanism and the government body charged with HE (MINESUP), its departments and agencies). This phenomenon affirms the underlying assumptions of both regime and institutional theories that actors and organisations would respect regime norms or adopt new structures and practices over their respective strategic calculations in order to gain a good reputation or legitimacy from other actors (Kersbergen & Verbeek, 2007).

Within the same framework, the Committee on Academic Integrity (CAI), intended to be the organ in charge of monitoring policy on academic misconduct, was also not yet in place by the end of 2009. More specifically, the role of the CAI was to guard against malpractices within the particular spectrum of data fabrication, research procedures, data management and analysis, plagiarism and other aspects

within the general conduct of research practice. Unfortunately, two years into research activities within a five-year plan (under the guidance and watch of the UBRPMG of September 2007–2012), UB was still struggling with setting up regulatory structures to monitor and evaluate the effectiveness and efficiency of its research activities towards economic development of Cameroon. Essentially, this circumstance is in line with the proposition that, in terms of contextual differences in capacities and cultures of receiving governments, global policies have caused unintended negative outcomes for educational practice at the national and other levels (Verger et al., 2012). Table 8 illustrates the capacity of research personnel at UB in 2009, which reflects on the ability of the university to enhance socio-economic development through the KE policy objective.

Table 8. Research Personnel of UB per Faculty and ASTI

Faculties	**Research Personnel**				**Total**
	Professors	**Assistant Professors**	**Lecturers**	**Graduate Assistants, Lecturers and Instructors**	
Faculty of Arts	5	2	22	20	49
Advanced School of Translators and Interpreters (ASTI)	0	1	5	2	8
Faculty of Education	2	1	6	6	15
Faculty of Health Sciences	1	1	5	9	16
Faculty of Science	4	9	39	71	123

Faculty of Social and Management Sciences	2	3	30	42	77
Total	**14**	**17**	**107**	**150**	**288**

Source: Report on the State of University Research Governance in West and Central Africa: Case of the University of Buea (November 2009).

The table indicates that the total number of research personnel at the university across the different academic career levels was 288 in 2009, spread across 5 Faculties and 1 School. They supposedly took part in research activities across a variety of disciplines, including in discipline-specific research, basic research, applied research and multi-disciplinary research. At this stage of its existence and in pursuit of its mission objective within the KE framework, the university organised its research activities into units of research teams, laboratories and research centres, which are only created by Decree, based on the recommendation of the Senate and Council (Signing & Nguiessi, 2009). Therefore, by the end of 2009, UB had three specialised centres: a Linguistic Centre, a Computer Centre and a Centre for African Languages and Cultures (CALAC), created by Decree No. 00367 /MINESUP of 7th December 2007 but going operational in 2008. The main activities of CALAC, for example, focused on interdisciplinary research on African affairs. It conducted research on African Languages, Literatures and Cultures and disseminated results through the publication of books and articles, besides guests' lectures, seminars, workshops and conferences (Signing & Nguiessi, 2009).

Besides research centres, research laboratories and units were created. The Report on the State of University Research Governance in West and Central Africa: Case of the University of Buea reports that by the end of 2009, UB had a total of nine laboratories/units as follows:

1. Biotechnology Unit
2. Geo Hazards Unit
3. Medical Plants and Pharmacology
4. Malaria Research
5. Infectious Disease Research Laboratory
6. Journalism and Mass Communications Laboratory
7. Inorganic and Organic Chemistry Research Laboratory
8. Plant and Animal Science Laboratory
9. Language Laboratory

These laboratories at this time functioned within the research mandate, vision and objectives of the UBRPMG (2007–2012), guided by Decree No. 93/034 of 19th January 1993, which emphasised that the university should encourage and conduct research in all fields of learning and human endeavours, promote social and cultural values and contribute to national development. Therefore, the mandate to contribute to national development and promote social and cultural values of the country remained fundamentally normative as reflected in the creation of the foregoing research centres and laboratories/units. Like within the period 1998–2007, the focus was on basic and some applied research towards local needs. Within this period, the university made strides in its attempt to answer some specific questions aimed at solving practical societal problems through the application of scientific methods, especially within the area of health and agriculture, going by the laboratories in the preceding paragraph.

Furthermore, in connection to enhancing research capacity and output following the strike action of the National Trade Union of Higher Education (SYNES) in early 2009, the government created the RMA through Presidential Decree No. 2009/121 of April 8, 2009. It constituted a special account for the modernisation of research in public universities. Under the managing authority of MINESUP, it aimed at enhancing the research capacity of academics of public universities towards knowledge production and outreach with an initial amount of FCFA 4.1 billion—equivalent to about EUR 6.25 million (Signing & Nguiessi, 2009). The amount was meant to either account for financial gains or aids to academics. Unfortunately, the endeavour has neither been consistent nor sustainable enough to meet its objectives The following is what Respondent R5 said about the RMA:

> I use research allowance for some of my research activities that are not sponsored by anyone. I use modernisation allowance, because the state gives us some allowance four times a year. You may not be able to use it for four publications a year even though people will try by all means to publish in order to rise in academic rank at the university. It is actually personal will to publish. I have publications with two students out of our personal contributions. I came back here in 2011. I did not even have the modernisation allowance because when you come, you need to make papers to have it. But I still succeeded to have two students and we contributed. I contributed about a million and they contributed about 250 thousands each. It was about 1.5 million and we bought reagents which we used for their work. So I think you can still use the modernisation allowance to do something. You do not need to do something so big. But I think it can also help to do something. People who have not used it to do something, I think it is their own decision.

Respondent A2 added the following:

> These are survey questions that lecturers have completed. All of this pack. We will soon send them back to the ministry. The ministry is trying to investigate more about the outcome of that support from the government. Whether are they [sic] actually using it for the research, and if they are actually using it for research, they should report on publications that have come out of it. (Administrator at UB)

From these responses, I deduce three main variables. First, that MINESUP loosely pays out the RMA to academics and so does not target research and innovation in particular research areas (not necessarily in line with the vision and mission of the Department, Faculty or University). This aligns with the report by Singing and Nguiessi (2009) that the RMA are funds allocated by the head of state to university academics and suggests that the initiative is not directly in line with promoting the rapid and competitive growth and transmission of technologies and knowledge to enhance economic development as expected of the KE global policy objective (Lingard & Ozga, 2007; WB, 2007).

The foregoing suggests that the presidential decree that created the RMA did not effectively constitute it within the framework of the KE development plan. This assertion brings us to the second point, which suggests that some academics do not necessarily consider the RMA for research activities. They see it as some form of presidential largesse for salary compensation. Thirdly, at the individual level, the allowance is not enough to spur research activities for new technologies and innovations within the transformative role of universities as defined within the KE policy discourse, which advocates for the use of institutional/organisational structures (like universities) for the pursuit of information and technology output in the production of goods and services for both private and public interests (Powell & Snellman, 2004; Jessop, 2017).

Still, on research, the data from UBSP 2007–2015 reveal that UB instituted the Faculty/School Research Grant (FSRG) in 1999 (as highlighted in Section 5.5.1). It is under the management authority of the VC and accountability for it came to the limelight only after the establishment of UBSP 2007–2015 and UBRPMG 2007–2012. Generally, the aim of the grant is to foster an increase in quality and visibility of research, research output and research impact on the community. Its focus therefore is on applied science research. With disbursement based on the research expectations and needs of the receiving faculty or school (UBSP, 2016), the grant has served mostly for the purpose of accomplishing research activities leading up to the completion of masters' theses and doctoral dissertations, as in the particular case of the FSMS (FSMS Research Report 2014). In 2014, the scheme allocated FCFA 22,630,000 (about EUR 34,448) as research funding to the FSMS. With this, the faculty was able to accomplish a total of 46 masters' theses and 7 doctoral

dissertations (FSMS Research Report 2014). However, the report does not state exactly how the faculty used the funds in this endeavour (whether as supervision allowances, data collection and management fees, students' allowances, etc.).

Notwithstanding, the faculty did not achieve any peer review publications and justified its failure on the suspension of the faculty's only journal, The Journal of Applied Social Science. On the contrary, the RSRUB (2013) suggests that the suspension of all UB journals was due to the lack of enough research and research support staff (both in quality and quantity) and the critical mass needed for timely and credible peer review responsibilities. This points to the crucial nature of the general research capacity of UB, which apparently, is exacerbated by its funding challenges, which also translate to its inability to hire and retain qualified academics for meeting its research capacity towards the KE policy discourse of the country's development goal.

The situation also reveals the government's inability to fund strategically its public universities in its KE development endeavour. For example, I find it extraordinarily surprising that rather than promoting and sponsoring research projects in line with their KE vision and agenda, both the government of Cameroon and the management of UB have put in place multiple cash reward schemes simply to motivate, in a loose manner, basic academic research (see Section 5.5.1.2). Literally, this type of management practice asserts that there is lack of adequate policy measures from both system-wide and institutional perspectives that are in line with the KE policy objective of HE in Cameroon. Therefore, there are doubts whether or not this is due to the inability of both parties (government and UB) to fully conceptualise the KE policy in the production, valorisation and application of knowledge in the economic development of the country. Eventually, this state of affairs seems to very much confirm the proposition that the KE idea is just a policy option 'associated with an educational reform jargon based on the principles of quality, learning, accountability and standards' (Verger et al., 2012, p. 12), especially in relation to collaborative engagements between universities and external stakeholders.

Despite the many challenges, UB has demonstrated strong will in its KE pursuits. I make allusion to a particular case in which a great stride was accomplished through a collaborative endeavour envisaged in the UBRPMG 2007–2012 under the guidance of UBSP 2007–2015. The vision reads as follows:

> Researchers at the University of Buea will employ both modern and classical biotechnology, drug discovery, photochemistry and agro-forestry approaches to document and preserve Cameroon's biodiversity, develop new tools for the control of endemic diseases, enhance agricultural output, protect the environment and spin off new companies.

Even though UB planned for this goal without possessing the necessary human and infrastructural capacities to effectively pursue it within the stated period, it apparently laid the right foundation (UBRPMG) for the production, valorisation and application of knowledge for economic development. This inspiration led UB to create an ultra-modern research laboratory by 2013—the Molecular and Cell Biology Laboratory (MCBL) in the Biotechnology Unit of the Science faculty. This was thanks to a five-year collaborative research and development grant awarded to the Université Libre de Bruxelles (Belgium) and UB. It came from Académie des Recherche et d'Enseigement Supérieur (Wallonie Bruxelles), Commission de la Coopération au Dévelopment. Even though realised after the first endeavour of UBRPMG 2007–2012, its role was in line with objectives of the 2007–2012 policy and management guide. The five-year project aimed at identifying common health problems in communities, designing strategies to overcome them and informing and educating communities for the sake of good health towards national development endeavours.

The first major activity of MCBL was a research programme to eliminate onchocerciasis, under the plan to develop new tools for the control of neglected tropical diseases in Cameroon, and to train Master of Science and PhD students in the area of molecular biosciences. It also organised workshops and courses on Molecular Biology Techniques for African researchers, and provided diagnostic and consultancy services to the community. Consequently, the laboratory carries out research in four main areas including: molecular diagnostic science, molecular epidemiology, biotechnology and molecular immunology. Through these activities, it also entered into collaboration with local and international partners (see Appendix G for details). Notwithstanding, the success of MCBL projects and those within the greater vision of the university can only be adequately measured within the framework of the KE plan, especially based on the impact of the research findings on the community. This is because knowledge dissemination and application determine the impact of research on a community.

5.5.2.3 Knowledge Dissemination and Application

With respect to knowledge dissemination and application, the following response from Respondent R1, which is corroborated implicitly with responses from Respondents R2 and R3 (Sections 5.6.1.1 and 5.6.1.3, respectively), throws light on the situation of research results:

> Most lecturers lack the means to do research, and even when they do, they lack the means to disseminate research results directly to the community. As a consequence, they limit their research findings/publications in journals that are not readily available to other stakeholders in the country.

A fundamental problem is that there are no proper mechanisms in place to facilitate the dissemination of research findings and their application in the general public domain. In relation to this, Respondent A1 intimated that even though some UB personnel have received training on the dissemination of research results in pursuit of economic development, there is still much to accomplish in the domain. He asserted as follows:

> We approached…SIDA grant…in partnership with SARIMA (South African Research and Innovation Management Association) and another organisation still in South Africa. They did a couple of training courses on…reporting research and on translating research results for community benefit. A couple of researchers, like some people in the public relations office, uh some people in journalism...were sent to train on that and they came back and did a kind of training of trainers, a little bit something like that.

However, it is important to note that the responsibility to disseminate UB's research results within the context of promoting socio-economic development of the community lies with the Division of Research and Publication (DRP) (UBRPMG 2007–2012). Generally, the DRP is assigned to assist in the advancement of the research goals of the university towards achieving the socio-economic development of the society in different ways, including:

- The management of research;
- The administration of internal research grants;
- The administration of national and international research grants;
- The enhancement of research capacity through training; and
- The collection and management of research data for external reporting and internal research management.

However, with respect to accomplishing its mission objectives, including the dissemination of research results, Respondent A1 reacted as follows:

> Well, I will tell you this, the research office is heavily understaffed, very, very heavily. To do all these things and uh (laughter), it wasn't easy my brother, honestly. We are really, really understaffed. So those are some of the issues. Besides administrative day to day work in the office and then having to run behind researchers who sometimes are like…you know. To me, even with the little budget, top management could try to achieve a little percentage towards these objectives, these goals.

Noteworthy is that, despite the challenge of inadequate staff at the DRP, there seems to be no measures taken to enhance staff capability in the discharge of the duties of the division, especially when the dissemination of research results is concerned. This gives the impression that there is adequate lack of knowledge that dissemination and application of research results constitute the basis of the KE (WB, 2011). For example, it is surprising that on matters of disseminating research results and translating them into community benefits, UB preferred to train some personnel of its Public Relations Office and Journalism and Mass Communications Department. This is clearly an indication of ineffective resource allocation according to priority. It also highlights ineffective display in the management of responsibility and use of capacities. Overall, this points to inadequate comprehension of the entire KE policy objective. Consequently, the general lack of adequate capacity at the DRP division has enabled them to rely exclusively on some print and online resources, such as The Buea University Newsletter (BUN), the university website, a few faculty journals and other international peer review journals for the management and dissemination of basic research findings towards the socio-economic development of Cameroon.

Also, with respect to identifying common health problems, designing strategies to overcome them and implementing findings towards national development endeavours, a lot of basic and applied research is done in the area of tropical disease management. In this area, the Science Faculty has engaged and succeeded in some research on the development of new tools for the control of neglected tropical diseases. The intention is to provide diagnostic and consultancy services to the community. However, for some reason, these services are not effectively available to the community. Alluding to onchocerciasis as well as other research endeavours, Respondent R1 made the following remarks:

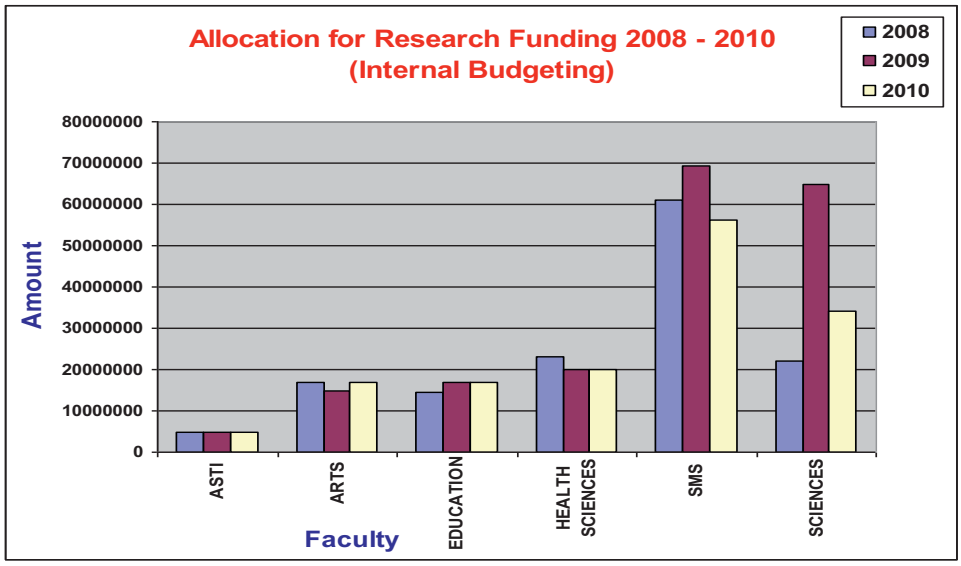
> We are hoping that in the nearest feature, although not exactly sure how, we shall be able to offer services to public in exchange for finance. There are small scale exercises we are involved in that fetch us money to help run our labs. For example, it's possible to do a paternity test here at a cost. However, we cannot boast of effective contribution to the socio-economic development of our society as we are not fully engaged in any form of business.

Yet again, I deduce that funding is fundamental in the production, development and application of knowledge at UB. For example, even when the science faculty was able to innovate on solutions to common health problems in 2016, due to limited funding, it was not possible for them to scale-up their activities and apply the knowledge towards meeting the very desperate and basic needs of the community. This of course had been a recurrent trend in the KE exploitation of UB prior to 2016, especially owing to recurrent inadequate government public expenditure, as

illustrated in Tables 5 and 6 (Section 5.4). Even though funding increased comparatively in the 2008–2010 period, as indicated in Figure 2 below, we notice that the situation did not change because the increase did not measure up to production, valorisation and knowledge application intended to solve basic societal needs. Hence, I deduce, in relation to knowledge dissemination and application, that system wide and institutional efforts did not quite align with the assertion of the WB that 'knowledge, not capital, is the key to sustained economic growth and improvements in human well-being' (WB, 2011, p. 1).

Regarding limited research funding, Figure 2 illustrates the levels of internal funding allocated for research from 2008–2010 in UB.

Figure 2. Internal Allocation for UB Research Funding, 2008-2009



Source: Report on the Situation of Research at the University of Buea (May 2013).

Compared to the 2005–2007 period, Figure 2 demonstrates a situation of general increase in internal research funding during the 2008–2010 period. Each faculty/school experienced an increase in total funding received over the period. There is also an illustration of marked disparities in terms of internal distribution of research funding for each faculty/school. The highest recipient, the FSMS, received in total of about FCFA 186,000,000 (about EUR 285,080), while the Advanced School of Translators and Interpreters (ASTI) received only about FCFA 15,000,000 (about EUR 22,867) in total for the same period (2008–2010). In total, all 6

faculties/school received approximately FCFA 482,000,000 (about EUR 734,804) with an average of about FCFA 80,333,333 (about EUR 122,467) per faculty/school.

Quite remarkable, however, are the frequent fluctuations in the yearly disbursement per faculty/school. An increase in total internal research funding from about FCFA 140,000,000 (about EUR 213,429) for the 2005–2007 period to about FCFA 482,000,000 (about EUR 734,804), represents over a 200% increase during the 2008–2010 period, indicating that there is progressive increase in the attention paid to research. However, the fluctuations and disparities in disbursement are determined by the 'relevance, need, soundness and financial estimates' in conformity with the faculty/school or university budget (UBRPMG 2007–2012).

The above analysis generally suggest that inadequate funding associated to policy decisions, especially for research activities, is one fundamental issue that affects the production, valorisation and application of knowledge through research structures and activities aimed towards achieving the KE goal. Judging by the actions of UB in the institutionalisation of research structures, it is apparent that, in agreement with the institutional theory proposition, it desires to conform to the complex nature of formal structures and organisations rather than adhere strictly to key KE principles and norms—that is, to rely on 'rational decision-making' (Janićijević, 2015) for the economic development of its community. Consequently, this approach simply limits KE actions of UB within the framework of traditional university research activities as it searches for legitimacy as a dominant actor in the educational sector (Zucker, 1987; Scott, 2008).

This phenomenon is worsened and sustained by the government's decision to maintain the responsibility of scientific research and innovation outside of its universities, under eight research institutes in MINRESI (as explained in Section 5.3). In addition, while UBSRC tried to supplement the production, valorisation and application of knowledge for economic development, it received government support that was insubstantial for it to set up structures for the development of new technology, innovation and a highly qualified labour force in the STEM arena. Generally, therefore, I infer that the government and institutions of Cameroon do not yet fully grasp the idea that in order to achieve a KE, they must deliberately accord more importance to knowledge than to capital and labour assets in a way that 'the quantity and sophistication of the knowledge pervading economic and societal activities reaches very high levels' (WB, 2007, p. 14).

5.6 University of Buea (UB) Entrepreneurial Endeavour 2000–2016

In preceding sections of this chapter, I determined that the HE landscape of Cameroon entered a new era in 1993 through Presidential Decree No. 93/026 of 19th January 1993. The decree laid the foundation for a series of measures to transform the country's HE into a hub for the creation of knowledge and human resources for economic development. Through MINESUP, the country pursued this development agenda based on WB's determination to promote economic development for all member states through KE and entrepreneurial university policy objectives. With respect to the entrepreneurial university policy conception, the idea prescribes a development trajectory that hinges on the general management capacity of the university and is based on harnessing the interests of all stakeholders for a shared national vision (Jessop, 2017; Coyle et al., 2013; Shattock, 2009).

According to Clark (2001), three fundamental variables—university collegiality, autonomy and educational achievement—form the basis of the general management capacity of an entrepreneurial university in view of the challenges that it faces. This involves the enhancement of self-initiating, self-steering, self-regulating, self-reliant and progressive standards, which constitute Clark's (1998) five broad categories of entrepreneurial universities: a strengthened steering core, an expanded developmental periphery, a diversified funding base, a stimulated academic heartland and an integrated entrepreneurial culture. Therefore, in the sections that follow, I examine the processes of UB between 2000 and 2016 in its developmental trajectories towards an enterprising and progressive character in accordance with the core variables of the entrepreneurial university objective. This is done within the broad categories of Clark's (2001) illustration of the way entrepreneurial universities would tackle their challenges through autonomy, collegiality and educational achievement. For the sake of clarity and perspective, I begin with a highlight on the governance system of public universities in Cameroon.

5.6.1 Public University Governance System in Cameroon

I have noted quite explicitly that Cameroon based its 1993 major HE reforms on WB's demand for increased participation of different stakeholders in the financing and management of universities. On this ground, the government sought to grant to its public universities more academic, financial and management autonomy with just

basic public infrastructural and public expenditure support (Njueman et al., 1999). By implication, the essence of these reform measures was to turn public universities into enterprising and progressive organisations (university entrepreneurialism).

In midst of this policy development and considering its public governance role towards national development, Law No. 005 of 16th April 2001 to Guide HE introduced the first visible steps in the entrepreneurial direction of the public university. For example, Article 19(2) of the law clearly emphasises some entrepreneurial tendencies for public universities. It stresses the development and enhancement of an ethos (special character/culture) for the university. It inspires and reiterates on academic incentives, opportunities, financial autonomy, and self-made gains for the university towards innovation with massive science and technology transfer activities, including the ability to own intellectual property rights for its discoveries and inventions, just as asserted by Jessop (2017) and Coyle et al. (2013).

Article 4 of the general provision of the same law reiterates the participation of all stakeholders in HE policy formulation and implementation in accordance with regulations. This simply means the pursuit of appropriate processes towards education policy objectives through state supervision—system-wide policies. In alignment with system-wide policies, Article 19(2) reiterates the availability of subventions from government and decentralised territorial units to public universities. Additionally, it mandates them to raise funds through the following means:

- University registration fees paid by students;
- Activities which produce goods and provide services;
- Gifts and bequests;
- Contributions from bilateral, multilateral or international cooperation; and
- Possibly, loans.

All these measures propagated by Articles 19(2) and 4 of Law No. 005 of 16th April 2001 to Guide Higher Education specifically account for the pursuit of an institutionalised ethos of the public university (as illustrated below) within the framework of the autonomy, collegiality and educational achievement of entrepreneurial universities as determined by Clark (2001). Therefore, in my assessment of UB's management processes towards an enterprising and progressive university, I take into consideration some of Clark's (1998) five broad categories that determine this developmental trajectory—an integrated entrepreneurial culture, strengthened steering core, diversified funding base, an expanded developmental periphery and a stimulated academic heartland.

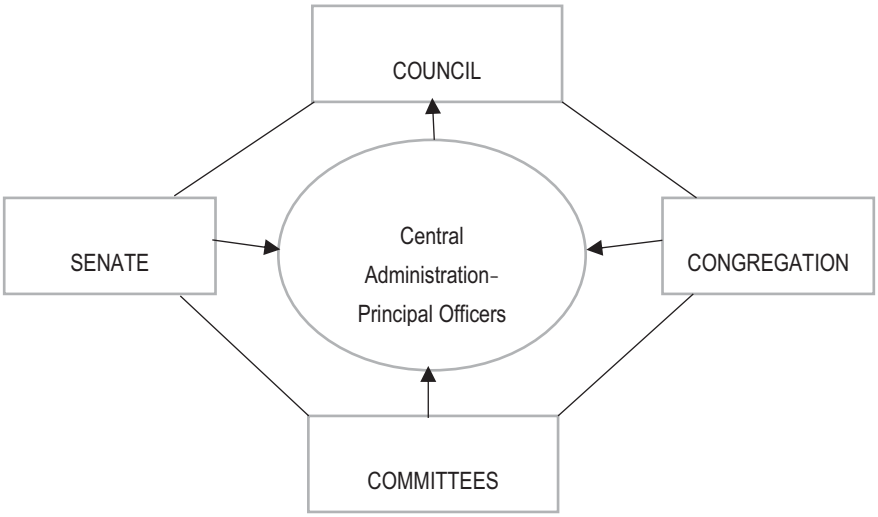
5.6.1.1 Management Structure of the University of Buea (UB)

The reiteration of Articles of HE reforms of Decree No. 93/027 of 19th January 1993 in Law No. 005 of 16th April 2001 to guide HE in Cameroon is an indication that, by 2001, public universities in Cameroon had failed to sufficiently respond to KE policy objectives. This necessitated the government decision to enhance them with the 2001 HE law, encompassing entrepreneurial university ideals towards the economic development of the country. According to secondary data from Njeuma et al. (1999), the limitations in UB's response to KE objectives were mainly due to huge inadequate management capacities at all levels in the university. This is justifiable, given that adequate management capacity is an important variable in elaborating education policy objectives. Therefore, in view of the entrepreneurial university objectives of collegiality, autonomy and educational achievement as detailed by Clark (2001), it was imperative for government to create opportunities for its universities that would enable them to respond in better ways to education policy objectives towards economic development. The 2001 HE law was thus necessary for UB to develop, establish and sustain an entrepreneurial university-wide culture (in Clark's conceptualisation) as an elaborate institutional identity at this time.

According to Clark (1998), in the course of transformation of a university, its identity or nature, the values of that university determine the potential needed to lead the development and achievement of its objectives and vision. Unfortunately, based on secondary and interview data, I was able to determine that weak management standards at UB, exacerbated by controversial state-imposed governance structures (system-wide policies), weakened the ability of the university to effectively establish its own values for the pursuit of its development objectives. Figure 3, for example, illustrates the governance structure of public universities in Cameroon that, according to the management of UB, is based on concertation and devolution of administrative power (UB website, 2020).[8] It highlights the dynamics of power flow between the state and university—central administration, faculties and academic departments of the university—which is the basis for the creation of an entrepreneurial ethos for UB.

[8] http://www.ubuea.cm/?s=leadership&submit=Search

Figure 3. Governance Structure of UB - Adopted from University Documents and Information resources



The Council is the supreme governing organ of UB. It constitutes two committees: the Finance and General Purposes Committee and the Physical Planning and Development Committee. It is chaired by the pro chancellor, who acts as deputy to the chancellor, the minister of MINESUP. It is composed to reflect a representative sample of stakeholders from socio-political and economic sectors of the society in reflection of WB's regime principle of all stakeholder involvement through informal relationships that enable network building towards harnessing individual and collective social capital for innovative ventures (WB, 2000). Its members include the VC and DVCs, one representative each of the Presidency, Prime Minister's Office, HE, Scientific and Technical Research, National Education, Finance, Labour, Public Service and Planning ministries. Four representatives of university teaching staff, four government appointed representatives of the private sector, president of the student union, two representatives of the congregation, two of the staff unions, one of the alumni and the director of financial affairs. Noteworthy is the fact that, with the exception of the VC, DVCs, four representative of teaching staff, the student union president, the director of financial affairs and two representatives each of congregation and staff unions, the rest are non-resident officials.

Seemingly, this management structure mimics Clark's (1998) idea of the entrepreneurial university ideals of strengthened steering core, expanded developmental periphery and an integrated entrepreneurial culture which is purposefully meant to render the university more informal, flexible and strategic in

thinking and awareness than just being highly formal in their planning systems (Coyle et al., 2013). Not surprisingly, membership of the council is predominantly representative of state ministries and appointed officials, including those of the private sector. This government's imposing attitude of singlehandedly deciding on membership of the council within the framework of the entrepreneurial idea and WB's (2000) principle of all stakeholder involvement in the development aspiration of the country portrays its desire to only impress on the GEP of education-for-development. This is equally assertive of the theory that regimes coordinate the behaviours of individual states through cooperative actions to enhance their capacity to realise collective common and optimal outcomes, though without firm and formal control systems to ensure strict compliance with accepted principles and norms (Tarzi, 2003). Furthermore, the attitude is also consistent with Amaral's (2010) conclusion that, although the intention of GEPs may be good, they can be adopted and/or adapted wrongly and with negative outcomes due to the lack of proper regime measures for ensuring or guaranteeing compliance at different national levels.

At the level of UB, for example, the system-wide management structure that is in place, although intended to enable all stakeholder involvement (management collegiality), does not practically reflect this purpose. For instance, the central administration that manages the affairs of the university on a daily basis has no control over the number and presence of private sector participants in the Council. The four are simply appointed by government to represent the private sector. This is in spite of the fact that the university is expected to equally engage with private stakeholders (businesses) at individual levels, especially with regards to stimulated academic heartland variable, which suggests that faculties and academic departments should develop a stronger steering core, establish an outreach structure and diversify their income streams as asserts Clark (1998).

Next in the power structure is the central administration composed of principal officers of the university. They are drawn from among Council and Senate members. That is, they constitute a subset of both Council and Senate members. They include the chancellor (HE minister), pro-chancellor, VC and DVCS, registrar, director of physical plants and infrastructure, directors of academic, financial, administrative and students' affairs, deans/directors of faculties/schools, chief librarian, finance controller and accounting officer—all designated by ministerial decisions and presidential decrees. Responsible to the central administration are three major units—the Senate, Congregation and committees.

The Senate is the supreme organ in all academic matters but is under the auspices and direction of the Council, the supreme governing organ of the university. For

instance, the Senate makes recommendations to the Council for the approval of the creation of any faculties, schools, colleges, institutes or other teaching units or institutions of the university, including halls of residence even, in order to be able to establish, organise and control them. It is also responsible for organising, promoting and controlling research at the university and thus constitutes the Scientific Research Committee, Library and Publication Committee, the Tenders Board and an Academic Planning Committee. It is chaired by the VC and its members include the DVCs, deans/directors of faculties/schools, all heads of academic departments, the chief librarian, one representative of academics of each teaching grade, the president of students' union (as deemed fit by the VC), one full-time graduate students' representative from each faculty/school and any other persons deemed fit by the VC.

The congregation and committees are technically, the functional arms of the Council and Senate, constituting a cross section of members of the university community, with very strong representation of Council and Senate members who are the principal officers of the university. The congregation, for example, is an assembly of senior academic and administrative staff members for the purpose of addressing issues concerning staff welfare and university management within its competence. There is literally no data on how membership of the congregation is composed, and no information about the number that makes up the structure. On the other hand, the functions of committees are only temporary with the exception of UBSRC created in May of 2008 with sub-committees (FSC, DSC and Special Committees) and referees under the auspices of the VC, but directly under the supervision of the Deputy Vice Chancellor in charge of Research, Cooperation and Relations with the Business World (DVC/RCB). It is an integral part of the DRP, whose responsibility is to support the development, promotion and dissemination of research for development.[9]

In a nutshell, the governance structure imposed on UB is a reflection of the system-wide policy measure with a semblance to enhance the university's economic development role in accordance with the GEP regime of the WB's (2000) all stakeholders' involvement principle. It portrays the endeavour to promote processes that will enable increased participation of other stakeholders in the pursuit of education policy objectives through the use of diverse ideas and practices. This culture illustrates the desire to enhance the management capacity of UB to engage effectively in innovation with massive science and technology transfer activities, and to secure optimal knowledge outcomes for socio-economic development and other

[9] http://www.ubuea.cm/the-research-division/

efficiencies as determined by Coyle et al. (2013) and Jessop (2019). However, the governance groundwork is not one that is effectively open to private sector stakeholder involvement, except for four government appointed representatives of the private sector in the Council. This appointment procedure clouds the essence of fair representation of other stakeholders, and the will of government to enable UB to effectively develop a work culture that embraces change towards its economic development goals.

However, through its strategic plan document for 2007–2015, UB demonstrated the desire to pay considerable attention on strengthening governance through decentralisation of management. It aimed at a decentralised management system that would involve the participation of all internal stakeholders in decision-making (collegiality). The intention was to improve on the democratic principles of the university's management structures that included departmental and faculty boards, the Senate and Council. This is in accordance with Clark's (1998) proposition of the university's pathway towards a self-initiating, self-reliant and progressive character. Nonetheless, it is important to note that UB's commitment was somewhat at variant with certain aspects of the 2001 HE law.

In its general provision, Article 3(1) is emphatic on the position that the state shall grant the HE realm a national priority status. Article 8 actually states that in collaboration with socio-economic partners, the state decides the responsibilities of public and private university institutions. This means that the state heavily influences the organisation and management of its public universities, especially through presidential decrees meant to reiterate certain principles or reorient public universities towards specific assignments relating to the development needs of the society. Therefore, Law No. 2005/342 of 10th September 2005 and Presidential decree No.2005/383 of 17th October 2005, coupled with the 2001 HE Law, actually set the basis for the creation of an institutional ethos for public universities in Cameroon. In accordance with the expectations of GEP regime, they instruct public universities to professionalise and improve on the quality and relevance of degree programmes, create professional and technology academic disciplines within well-defined regulatory framework of government. This is a direct call for public universities to pursue socio-economic development in the perspective of system-wide imposed policies. Conversely, Clark (1998) points out that the institutional perspective of an enterprising university is very important in the development of its own character and so must be factored in organisational and management values of system-wide policies towards the fulfilment of the goals of the university.

Based on the foregoing indications and analysis, I judge that there is a conflict of interest between system-wide and institutional policies that generally affects the transformation process of UB and its ability to develop (upon its own volition) an entrepreneurial university-wide culture capable of adapting to the dynamics of its environment. For example, even though UB's Senate is supreme organ in all academic matters, it is politically composed of mainly state appointed officials of the university and is under the direct auspices and control of the Council, which is basically government presence at the university. This governance approach is justified by Article 7 of the 2001 Law to guide HE, which emphasises that it is the responsibility of the state to elaborate the HE policy and ensure its implementation, including in creating and disseminating scientific knowledge for development purposes. This illustrates the actual gap between the central administration of UB and the faculty and departmental boards. For instance, in relation to the conscious contributions of the latter to the design of academic programmes in line with professionalism and the development needs of different stakeholders in accordance with Decrees No. 2005/383 of 17th October 2005 and No. 93/034 of 19th January 1993. The gap is so evident because of the absence of a broad-base engagement possibility between these academic units and external stakeholders due to the latter's formal representation status in the Council.

5.6.1.2 Entrepreneurial Management Outlook of UB—Strengthened Steering Core

According to Clark (1998), a strengthened administrative core is a mandatory feature of a heightened capability for ambitious universities concerned about their marginality and survivability. It is the will to embrace central managerial groups and academic departments and the desire to reconcile new managerial values with traditional academic ones. This is needed to confront those variables responsible for imbalance in ambitious universities and to enable them to become more adequately responsive—especially to become more focused in their reactions to expanding and changing demands. It constitutes agents with major responsibility to engage the university with external stakeholders, and equally source for other income streams than just wait passively for public expenditure support. In all, it is needed to better organise the university and to enable it to enhance its programmatic approach to change, including the collective ability to make hard choices among fields of academic disciplines in view to shaping access possibilities and job-market connections. In their endeavour to subsidise new activities, agents must also make efforts to enhance old valuable programmes in academic units.

Data from Njeuma et al., (1999) illustrate that from creation right up to the adoption of the 2001 law guiding HE in Cameroon and beyond, UB demonstrated weak capacity to steer itself towards sustainable education policy objectives. The central administration, faculties and academic departments still functioned under the effective control of MINESUP and, quite often, through presidential decrees. The situation was the same prior to Decree No.2005/383 of 17th October 2005, which laid down financial regulations applicable to universities and determined the modus operandi for effectiveness, efficiency and management towards expected goals. This intensified bureaucratic tendencies, made it difficult for the management of UB to exercise flexibility and adapt quickly to its changing surrounding circumstances. Consequently, the university made attempts at reconciling new managerial values with traditional academic ones in its endeavours to succeed as a progressive organisation within the framework of its KE and entrepreneurial university pursuits (Clark, 2001).

The governance structure of UB illustrates a heightened desire for greater managerial capacity as exemplified within the framework of Clark's (1998) entrepreneurial characterisation. This, at least, is evident in the actual display of representation of departmental and faculty boards in the Senate of the university by the deans of faculties and/or directors of schools and institutions, even though without actual representation in the Council.[10] This is illustrative of the fact that system-wide policies affect institutional policy orientation at UB, complicating its actual day to day management processes and enabling strong elements of state traditional patronage over them. In accordance with laws No. 98/004 of 4th April 1998 and No. 005/2001, for instance, MINESUP determines and orientates the structure and function of Cameroon's educational system (University Standards, January 2015, p. 19). Also, decision No. 2008/03449/UB/DVC/RCB of May 2008 creating UBSRC in pursuit of enhanced quality research, concentrates management powers in the hands of a politically appointed VC. For instance, the VC is charged with the appointment of all 36 members of the UBSRC and those in its sub committees (Signing & Nguiessi, 2009). Generally, the VC is charged with the day to day management processes of UB but conscious of the fact that the powers of the pro-chancellor, a non-resident official of the university, take precedence over that of all members of the university except the chancellor, the minister of MINESUP.[11]

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[10] Senate of the UB: https://www.ubuea.cm/about/leadership-and-administration/senate/
Council of the UB: https://www.ubuea.cm/about/leadership-and-administration/council/

[11] Power structure at the UB: https://www.ubuea.cm/?s=congregation&submit=Search

Ministerial decisions and presidential decrees also determine appointments at the faculty and departmental administrative units for steering the activities of the university. Inevitably, this procedure jeopardises collective stakeholder interests for extremely personalised ones. For example, in this kind of status quo, decisions at the faculty and departmental levels are mainly at the discretion of appointed leadership that is largely accountable to the authority that appoints them than to the organisation whose interest they serve. It also enhances bureaucratic tendencies and stifles comprehensive exchanges of views between academic units and the central administration. Hence, judging by the 17th of October 2005 Presidential Decree on financial management of public universities, I determine that even before 2008, UB did not have the capacity for an effective and efficient inclusive management style that adequately involved central managerial groups and academics departments. In this situation and as determined by Clark (1998) in his assessment of the transformational pathways of traditional universities, system-wide governance policies constrained UB to remain unambitious, ambiguous and depend mainly upon government's political influence and its competitive status as an elite institution of the state for guaranteed resources. In this situation, the values and interests of academic faculties, departments and other units are suppressed at the central managerial space. This assessment is corroborated by the following declarations of Respondents M2 (Section 5.3) and A2 (Section 5.5.2.2):

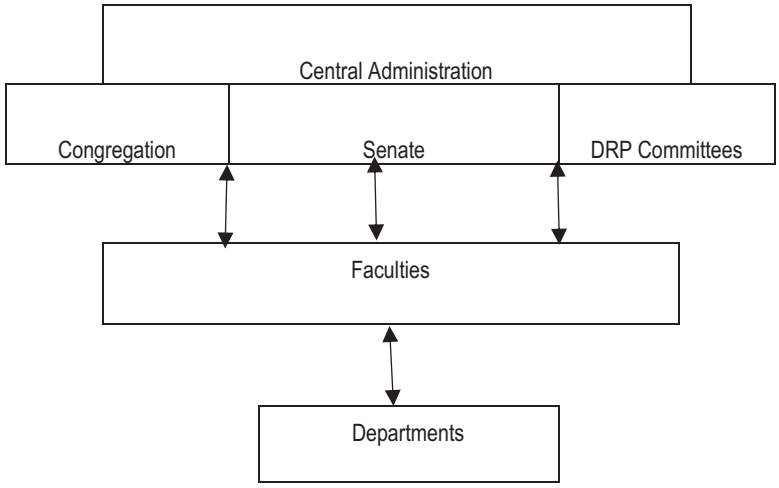
- Because UB relies mainly on government funding, its management members have no major or exclusive rights to decision-making.
- That MINESUP goes beyond the Central Administration of UB, including the Senate and Council (where it is highly represented, including other government officials), to investigate and decide on research allowance for academic staff of UB.

Normatively, the preceding management responsibilities of the Council are glaringly abhorrent to the responsibilities of the Senate—the supreme organ in charge of all academic matters in UB, whose assignment includes the responsibility for organising, promoting, and controlling research through its units, such as, the Scientific Research Committee, Library and Publications Committee, the Tenders Board and Academic Planning Committee. Therefore, the interference of MINESUP does not only demonstrate the lack of trust and proper accountability procedures but illustrates the incomprehensible nature of the management dynamics in the public university sphere in Cameroon.

Additionally, even though the university management structure consists of central, faculty and departmental administrations, Article 9 (1&2) of the 2001 HE law provides for a statutory instrument (government or executive order) that

determines the existence and nature of the Council. It is therefore apparent that Article 9 (1&2) provides it with overriding authority over the central administration of each public university, with main functional objective to protect the agenda of government—that is, project system-wide over institutional policies. The following figure illustrates the management structure of UB.

Figure 4. The Management Structure of the University of Buea



The interconnection between the departments and faculties and between the faculties and the congregation, Senate and DRP committees based mainly on representation governance, presents them as an integral part of the central administration, therefore, suggesting a network of a collegial form of management. The structure creates the impression of an ambitious university bound by the core principle of shared aspirations between the central administrative groups, academic faculties and departments. As Clark (1998) asserts, owing to the power interplay amongst central groups, faculties and academic departments, this kind of steering mechanism seeks to reconcile new managerial values with traditional academic ones. However, my assessment indicates that the interplay between the different administrative groups at UB, only creates a semblance of the free-flow of ideas from the central administration right down to the heartland departments and vice versa. This only gives the impression that the faculties and departments are part of the administrative daily business of UB whereas in the institutional theory perspective as ascertained by Heugens and Lander (2009), they are practically in strict compliance with institutionalised structures and processes that lower their potential and ability

to meaningfully realize their sustainable competitive advantage in terms of their values (see also Deephouse, 1999).

Nevertheless, my analysis (in the two preceding paragraphs, including the governance structure in Section 5.6.1.1) indicates, in line with the regime theory, that UB has very little chances against the imposition of system-wide policies over its institutional processes if it remains unambitious and unresponsive to the changing circumstances in its environments. The presence of the pro-chancellor and chancellor (HE minister) in the central administrative process of the university, with prerogative powers over Senate decisions as demonstrated in Section 5.4, completely deters the university of its autonomous rights. It also highlights the political relationship between UB and MINESUP (system-wide and institutional policies), one which hinders collegial managerial forms over personalised forms of leadership (the authoritarian type). According to Clark (2001) this approach cannot exist as a permanent feature in the management structure of a university with an entrepreneurial mindset. Therefore, for UB to become a self-initiating, self-reliant and progressive university, it must seek measures that would enable it to depart from the traditional old habits of management patronage. In other words, it needs to become quicker in its ideas, more flexible in its approach and, especially, more focused in its reactions to expanding and changing societal demands (Clark, 1998; Coyle et al., 2013).

Otherwise, the governance approach of public universities in Cameroon is the central factor restraining the responsive capacities of UB in face of the changing circumstances of its environment. In line with my assessment, the approach is technically characterised by the traditional top-down managerial approach with very limited possibilities for an integrated and participatory approach involving all managerial groups in the university. Even with the complexities borne by the increasing pace of socio-economic change and societal demands made upon universities, the governance authority continues to stream from top to bottom, especially through presidential decrees and the ministerial oversight role of MINESUP. This has enabled complacency in UB management affairs, relative to new demands and expectations of the academic heartland (faculty and departmental levels), rendering it less flexible and less responsive, especially given its status as a public university with, arguably, substantive public expenditure support. Consequently, the approach has limited the self-initiating, proactive and innovative capacities of UB to meet the ever increasing and changing demands of the society.

5.6.1.3 Financial Autonomy—Diversified Funding Base

Finance is fundamental in the pursuit of an enterprising and progressive character of a university, especially given the declining and inconsistent nature of public expenditure support available as a share of total budget for public universities in Cameroon. According to Clark (1998) and Coyle et al. (2013), enterprising universities should be able to recognise the trend and turn it into an advantage through diverse efforts to raise money from other sources. In particular, they can engage in more vigorous competitions for research grants and contracts from a wide array of third-stream income sources, including private sector stakeholders, royalty income from intellectual property, income from campus services, student fees, alumni fundraising, etc. Besides increasing the total funding base of universities, the money from these sources enhances, for them, the opportunity to make important decisions without system-wide constraints imposed on them as a loyalty condition for public expenditure support. However, no matter the challenges that come with these third-stream income, they are relative and limited to the expectations of donors—and enhance university discretion.

With declining public expenditure support for public universities in Cameroon, UB depended quite a lot on student fees. In line with a policy measure to increase the financial stream of public universities, Presidential Decree No. 93/034 of 19th January 1993 particularly demanded public universities to broaden and increase different stakeholder participation in their financing. Under this scheme, UB assumed direct control of students' compulsory registration fees of FCFA 50,000 (about EUR 76.2, increased from FCFA 3,500) per academic year. Prior to 2010, the only steady and sure sources of additional income for UB were the government-imposed registration fees, which remained minimal in relative terms (see Table 6, Section 5.4 for illustration). Faced with lots of funding challenges, UB indicated (in its strategic plan document for 2007–2015) for the first time, amongst a plethora of its major objectives, the desire to diversify its funding sources. Amongst other things, it intended to increase classroom, office and laboratory space by at least 50%, provide basic equipment and supplies to all laboratories and offices, including internet access to all faculties, as well as to expand the road network of the university.

Eventually, UB designed and offered paid professional and applied science programmes in the faculties of Health Sciences, Sciences, Arts, Education, Agriculture and Veterinary Medicine, Social and Management Sciences, Engineering and Technology and Advanced School of Translators and Interpreters.[12]

[12] https://www.ubuea.cm

Unfortunately, tuition fees for these professionalised academic degree programmes are still quite high by country standards and thus do not attract a deserving number of students. The fees range from FCFA 500,000 (EUR 762) to FCFA 1,560,000 (EUR 2,358) per academic year, depending on the study programme, and are not backed by any form of student loan schemes or bursaries. In addition, my analysis of interview and document data asserts that because the university lacked adequate training and research facilities—for example, research laboratories—as well as adequate collaborative activities with external stakeholders, the results of the activities of these programmes were not compelling enough for entrepreneurial ventures (production and services)—ability to create and own intellectual property rights for discoveries and inventions as affirmed by Jessop (2019). Coupled with high tuition fees, which accounted for low enrolment rates, the number of required qualified graduates from these disciplines remained marginal in comparison to the expected economic development needs of the society.

The COT is an example of UB's endeavour to diversify its funding base through tuition fees and the production of talented and skilled knowledge workers in science, technology and engineering subjects for the solution of practical problems of industry in accordance with the entrepreneurial university assertions of Jessop (2019) and Coyle et al. (2013). Though it admitted its first batch of students in September of 2010, it was created 17 years earlier by Decree No. 93/034 of 19th January 1993. Its non-operation until 2010 justifies the lack of adequate financial and other capacities that were needed to run the college as a constituent component of UB with professional programmes in the science, technology and engineering field. Its mission to develop knowledge for the practical problem of industry suggests that it could expand its financial resource base through research, consultancy and other activities. Furthermore, it looked towards creating enduring relations with industry for continuous dialogue on academic programmes and internships for its students, which helped cut the burden of cost on its activities. Nevertheless, MINESUP maintains a strong influence over UB's activities, its faculties, schools and academic units, making it difficult for them to explore and experiment opportunities (especially financial ones) in relation to internal and external demands. For instance, MINESUP's minister is the authority that launches competitive entrance examinations into professional programmes, decides on the number of available places and publishes the results of accepted candidates for the academic year[13] (see Appendix K).

[13] https://www.ubuea.cm/entrance-examination-into-professional-programmes-for-20182019-academic-year/

This kind of governance approach discourages the dynamism of academic units and damages their competitive capacities in response to diverse stakeholder demands. The consequence is the continuation of the status quo of ongoing dependence of the university and its traditional academic units on depleting public expenditure support (Clark, 1998). Still, I determined from interview and secondary data that no matter what the challenges are, some academic units, such as in the Faculty of Agriculture and Veterinary Medicine, are determined in their endeavour to make money (albeit on a micro-scale) from farm proceeds realised through the training of students in practical skills in the key areas of agriculture. The Department of Journalism and Mass Communication at the Faculty of Social and Management Sciences tried operating a radio and television station but failed in their endeavour due to bureaucratic and financial constraints. However, it succeeded in running a paid master's programme in cooperate communications since 2015/2016 (Respondent A3).

In continuous efforts to enhance its discretional power and the opportunity for significant capacity towards accomplishing the objectives of its vision, UB's Faculty of Science secured, in 2013, a five-year external collaborative grant for R&D with the Université Libre de Bruxelles (Belgium), which led to the creation of an ultra-modern Molecular and Cell Biology Lab (MCBL). It enhanced, for UB, the opportunity to make significant research moves without necessarily relying on system-wide financial enactments of the government of Cameroon that come slowly and with standardising rules attached. The grant encouraged short periods of stay for both graduate students and researchers in order to enable them gain specific knowledge skills, expertise and enhanced capacity in a wide range of research and training activities. Additionally, the worth and status of the MCBL at UB are within the recommended standards for a modern scientific laboratory and, therefore, it serves as a great source for building capacity and restricting dependence on the limited funding support base from the government.

Between 2005 and September 2015, the DRP recorded no less than 66 externally funded research projects (see Appendix I, List of Externally Funded Research from 2005 to 2015 at UB). These externally funded research projects are specifically those funded by outside agencies (external stakeholders) with no ownership claims (RPMG 2007–2012). In this case, the management of the funds and projects was exclusively the responsibility of the concerned central administrative unit and the faculty/department or principal investigators (IP) involved, under the auspices of the Grants Management Office (unit of the DRP). Therefore, the DRP (one of three central administrative units of UB) is responsible for research management and

innovation services and has co-managed the projects with respective faculties/departments/PI concerned. Even though funding agencies exercised no ownership claims in such cases, due consideration was given to the expectations that they needed in return, with or without constraints. Unfortunately, due to bureaucratic tendencies, it was not possible to gain access to the detailed financial information of the university. Consequently, it was not possible to determine the share of external research funding or make an assessment of its development for the period prior to 2016.

Additionally, with diverse external funding opportunities, UB academics engaged more effectively in diverse research activities without prior consideration of the mission objectives and vision of the university. This phenomenon jeopardises the request for research within specific interest areas of the university, particularly those aimed towards the development needs and expectations of society. In dealing with external funding agencies, UB needs greater self-consciousness in terms of where to draw the line between what they are and are not willing to do in order to give deserving consideration to their own interests. For this reason, there is need for a transparent collective will between system-wide and institutional policies to design new strategies that would enable access to third income streams that are genuinely profitable for its public universities and general economic development interest of the country. This mainly because some academics are using external funding for personal selfish gains, for example, seeking academic promotion. The following declaration from Respondent R3 indicate some of the downsides of external funding:

> Most of the research that is externally funded is based on the funder's research interest area. Sometimes it has very little uh, uh, improvement or impact on the nation of Cameroon…Before a lecturer is promoted from one rank to another he needs to show proof of publication and proof of research work. Therefore, those external grants are a whole lot to them in terms of showing proof of publication.

The situation is a consequence of funding exigencies overstretched by the growing need and demand for a better living standards of academics, for knowledge creation, development, dissemination and application but against regressing infrastructure and other capacity issues. It also relates to the government's reduction of public expenditure for its public universities and the interplay of power politics involving its interference in the entire management system of the university. The entire context is basically in line with the institutional theory proposition that organisations do not adopt new structures and practices necessarily due to their effectiveness and efficiency but because of the need to gain some form of legitimacy and that formal

structures do nothing more than just create an image of rationality and legitimacy (Alvesson & Spicer, 2018, p. 2). This is pretty much the case regarding UB's engagement with external stakeholders where implementation is skewed for other purposes.

Contrary to Clark's (2001) proposition, the foregoing assert that UB found difficulties in asserting itself (through its academic heartland) as a progressive organisation with the capacity to combine new and old disciplines into its competitive advantage. It asserts that its academic units were not proactive and innovative enough to excite the private sector with products and services that would determine and encourage adequate collaboration and partnership that is in the interest of both parties. Instead, they relied on the apathy of these outside stakeholders, whom they are supposed to influence in diverse ways for their own marginal survival. Because these units failed to assert themselves to these other stakeholders as a veritable force to reckon with, UB has not been able to access adequate third-stream income sources for its required activities. Consequently, much of the research activities of its academic units have depended largely on the insufficient university research budget. Respondent R6 made the follow remarks about the situation:

> You know that we do not have enough funding. That is a big problem for us in terms of our research activities. Some of us have struggled and failed to get our proposals through because of bottlenecks....You know, some of the research that is funded externally is based on the funders' research interest area. Sometimes, it has very little, uh, uh, uh, improvement or impact on the nation of Cameroon.

Regarding UB's influence on the business world, Respondent R6 maintained:

> We have done some business with some corporations like the CDC. However, there is a general lack of trust between the industry and university faculties. Many companies do not believe that we can help improve on their businesses, that is, they do not believe in the research capacities of our university.

The declaration of Respondent R6 suggests that the management situation at UB is not supportive of the aspirations of a progressive and adaptive university, as defined within Clark's (2001) framework of collegiality, autonomy and educational achievement. The inability of some academics to get to funding with their research proposals, especially at the central managerial group level, suggests that even though they are partially independent, UB departments and faculties are not adequately involved in managerial affairs aimed towards the achievement of their mission objectives and overall vision of the university. This further implies that even though

they are represented in central administrative committees, including the UBSRC, sub-academic units do not form a part of collegial authority and are not sufficiently recognised in the managerial line that stretches from principal officers to heads of departments and research units. If research grants for the faculties are particularly determined by UB's central administration, this suggests that no matter how proactive and innovative the academic heartland becomes, its academic units may not be able to fully exercise their autonomous rights. This results from the lack of a comprehensive management system that guarantees the traditional importance of the university's heartland.

Overall, my analysis has demonstrated that, until 2016, UB structured and shaped its organisational processes on the basis of 'interpretivism and social interactions' rather than on 'rational decision-making' (Janićijević, 2015). This means that its functional procedures were constructed and developed on the basis of behavioural and normative organisational patterns rather than on the basis of the complementarity between its internally consistent components and external factors (Janićijević, 2015). This is in line with the assertion that in its KE and entrepreneurial university exploits, UB's actions were very much influenced by its status as an elitist institution owing to its public nature as a state university with very little competition for public funding. This provides a reason for its submission to system-wide HE policies and the state's governance mechanisms, which were typically influenced by WB's GEP regime. Consequently, owing to recurrent (yet insufficient) public funding, UB still seems to be suffering under the weight of the lack of adequate research capacities, including infrastructural and other needs. These have weakened its ability to emerge as a progressive university with respect to its economic development role for Cameroon.

Additionally, as far as my analyses are concerned, government's actions at UB are in line with the international regime theory proposition that states will accept policies just for the sake of gaining reputation and benefits that come with it. At the same time, it is also in line with the institutional theory assertion that organisations are wont to accept certain policy objectives, not on the bases of some objective evaluation of their effectiveness and efficiency but simply to gain legitimacy for (Kersbergen & Verbeek, 2007). Otherwise, UB would resist system-wide policies that do not readily support its ability to effectively harness financial autonomy opportunities and other variables into its own advantage and interest of its values. If its understanding and acceptance of most system-wide policies were formulated on the basis of some objective criteria, then it would be able to effectively plan its processes and deal with most of its operational challenges with respect to

professional and technology academic disciplines, staff development programmes and enhanced cooperation and collaboration with all stakeholders as indicated in Decree No.2005/383 of 17th October 2005. Apparently, the government's processes in its public universities determine the cooperation outlook and outcome between external stakeholders and the public universities in Cameroon.

5.6.1.4 Cooperation with Other Stakeholders–Expanded Developmental Periphery

I have determined that the 1993 university reform measures, as well as the 2001 HE law of Cameroon, were respectively in line with WB's KE and the entrepreneurial university policy objectives. Both were meant as standards for the pursuit of Cameroon's economic development agenda. The entrepreneurial university character requires the university to be generally proactive towards autonomy, collegiality and educational achievement in order to meet societal needs (Clark, 1998). This includes the ability to create and develop formal structures for efficiency that is based on rationality rather than simply for the purposes of legitimacy. In connection to the 2001 HE law, the expectation is for UB to create academic units primarily to collaborate with other organisations and groups (other stakeholders) beyond UB's traditional boundaries for the sake of a comprehensive development outcome. This means engaging other stakeholders in the pursuit of innovation with massive science and technology transfer activities in order to positively impact all sectors of the society. However, its outreach mission became compelling with the creation of the DVC/RC post in 1999, which was later designated as the Office of the DVC/RCB.

Nonetheless, the only known registered engagement I found between UB and some external stakeholder from 2000 to 2007 was a joint seminar on HIV/AIDS with the Cameroon Baptist Convention (CBC), Mutengene Head Office, with the objective to counsel Level 500 nursing students (Division of Research and Publication, 2015, Appendix G). It planned to engage more external stakeholders and establish cooperation links with other institutions and enterprises for support in teaching, research funding and capacity building as well as for the practical training of students by the end of 2008 (UBSP 2007–2015). This highlights the university's attempt at developing an enterprising and progressive character in relation to collaboration and partnership with organisations and groups across its borders. By 2013, it was more proactive in its endeavours to meet the developmental needs and aspirations of the society (RSRUB, 2013). It illustrated a sense of awareness and

importance with respect to research within the framework of its tripartite function (research, teaching and outreach).

Consequently, within 2 decades of its existence (1993–2013), UB established 21 functioning laboratories hosted in 4 faculties, 1 college and 1 school (Appendix H). Data on the laboratories suggest that their activities cut across 7 disciplinary research capacity areas, including those in the sciences and applied sciences disciplines. The functional objective of these laboratories was to encourage, promote and conduct research (including interdisciplinary research) activities in response to the needs, demands and aspirations of the society towards socio-economic development. For example, besides training students at the graduate and postgraduate levels, the biotechnology laboratory (created through collaboration between Université Libre de Bruxelles and UB), in collaboration with external stakeholders, has been researching on new tools for the control of major tropical diseases that are prevalent in the community. It is also involved in diagnostic and consultancy services in accordance with the general provision of the research mandate of the university. Concerning this, I received the following reaction from Respondent R4:

> With the biotechnology laboratory which we acquired through our collaboration with the university in Brussels, we also do research on non-communicable diseases such as hypertension and diabetes, the genetic basis of these diseases in Cameroon….We want to see which are the genes in Cameroon that will predispose people to diabetes and with this, we can make mass screening of young people and tell the type they are predispose for.

The above interview excerpt illustrates the proactive nature of some of the scientific activities of UB (in this case, through the Biotechnology Unit of the Science Faculty) regarding its engagement with external stakeholders towards meeting societal needs and expectations even though without recourse to special professionalised outreach units as ascertained by Clark (2001) from the experience of universities in the West. This endeavour is, however, beset with challenges resulting from a lack of adequate means to effectively disseminate research findings for the consumption or use by the public. In this particular case of hypertension and diabetes, I realise that a lot of human, material and intellectual capacity has been invested in the production of knowledge that is yet to adequately meet its objective as expressed in the following interview excerpt, still by R4:

> We have many thesis from students who have defended on diabetes and hypertension ….Public means through publication of articles, which we have done. We expect many people to read, but considering that our population here is not the type that really reads, I do not think the knowledge will really reach the people out there, but for a few. So what we intend to do, we have not been able to do it because of the means. If I had funding, I would have

> really gone to the field and sensitised the people; even do mass screening to tell them whether they are predisposed to hypertension or not….So for now we have ended at the level of publication, and the people from whom we took samples, we have gone back to them and given their results and told them that, look, you are predisposed to this disease so take care.

This phenomenon raises the question of the inclusive and comprehensive nature of system-wide HE policies for the socio-economic development of Cameroon. It suggests that a lot more is needed to guarantee the applicability of knowledge within the entrepreneurial university policy setup in Cameroon.

It is important to note that collaboration focused on a wide range of issues, including on the nature and structures of academic programmes and their curriculum with the hope to exploit the opportunities of an increasingly globalised world (UBSP 2007–2015). According to the same document, cooperation with foreign universities focused on the exchange of staff and students, as well as on pedagogy and curriculum development (UB collaboration with other stakeholders, 2015, Appendix G), while collaboration with international organisations aimed at receiving assistance for the capacity building of staff and for research funding. At the national level, while cooperation with other universities provided support in terms of teaching and research, enterprises provided facilities for the practical training of students through internships. These internship engagements provided opportunities for the enhancement of the practical skills and competences of students, assisting them in meeting expected educational outcomes (in line with professional and technology-driven academic disciplines) within the framework of the development and transfer of useful knowledge into social and economic practices.

Apparently, the circumstances at UB are in agreement with the proposition of Woldegiorgis and Doevenspeck (2013) that the donor-client dependency relationship has hindered the capacity of African governments to develop education policies that are socio-economically relevant and financially feasible. Hence, Cameroon's dependence on WB's GEP regime is weakening the ability of its public universities, for example UB, to adequately develop itself into one that is capable of adapting, on its own terms, to changing circumstances in its environments. Also, UB's dependence on external stakeholders for grants, research funding assistance and for practical training of its students through internships, affirms its lack of necessary resources and capacities for attaining these goals. It also corroborates the assertion in Section 5.6.1.1 that the lack of adequate capacity in terms of research, teaching and infrastructure has caused its academic heartland to rather develop a dependency on external stakeholders' culture for financial and other forms of support in order to foster its economic development character.

Consequently, in its attempt to adjust to changing socio-economic and political circumstances in order to become self-initiating, self-steering, self-regulating, self-reliant and progressive, UB now finds itself in a more desperate situation. On the one hand, it entertains a political dependency relationship with the government's HE regulatory mechanism in view of recognition for purposes of public funding. On the other hand, it is dependent on external stakeholders for a wide range of support, as indicated in the preceding sections. Besides, UB's 2016 strategic plan document declares that its collaborative research activities with other stakeholders for purposes of its development role depend primarily on stakeholder apathy, which it blames on ineffective and irregular revenue allocation for public universities in general. Unfortunately, as attested by Clark (2001), this kind of dependency relationship cannot be a permanent feature in the management structure of a university that is seeking or has adopted an entrepreneurial mind-set.

Nonetheless, in a rare display of capacity, UB engaged in another form of outreach activity, where some private HEIs depend on it for mentorship. This is based on its status as a public institution, which qualifies it as an elite university in the Cameroon's national HE system. The status is projected by its exceptional privilege and political advantage over guaranteed public resources as opposed to the private institutions. According to the strategic document of 2007–2015, its outreach and mentorship process with private institutions of learning encouraged and promoted curriculum development for academic programmes that would produce graduates with skills corresponding to the needs of the job market in accordance with Cameroon's system-wide HE policies. Additionally, the mentorship process offers these private HEIs the opportunity to gain recognition for their study programmes and certificates.

I also ascertained that some academic units of UB have acted in accordance with Clark's (1998) proposition that they cannot (on their own) do all the things expected from a progressive and ambitious university that is trying hard to adjust to changing circumstances in its environment. Its success, in terms of social and economic development goals, is also dependent on its comprehensive definition of problem. In the case of UB, some units of the Science and Health Sciences faculties expressed tendencies towards non-disciplinary definition of problems through their engagement with certain external stakeholders. This means that they took into account the project orientation of some external stakeholders within the framework of their developmental role. For instance, the Faculty of Science cooperated in research work with the Cameroon Development Corporation (CDC) for research on diseases affecting rubber and palms. It also worked with the South West

Development Association (SOWEDA) on ecology and plant biotechnology (UB collaboration with other stakeholders, Appendix G).

According to the same document (UB collaboration with other stakeholders), the Faculty of Health Sciences collaborated with the University of Arizona on fostering training in reproductive health and establishing a postgraduate programme in obstetrics and gynaecology. They also collaborated with the World Intellectual Property Organisation (WIPO) on knowledge and innovation in the fight against neglected tropical diseases. There is also a UNESCO Special Needs Education Research Laboratory at UB for providing training on Special Needs Education and Assistive Technology in Visual Impairment (Research Laboratories and Facilities for Teaching and Research, 2015). Along the same line, the Faculty of Health Sciences collaborated with the University of Arizona on increasing human capacity for healthcare research and provision in order to reduce maternal and neonatal mortality. They pursued this objective with projects related to obstetrical issues such as haemorrhage, malaria in pregnancy and hypertensive disorders of pregnancy, as well as cervical cancer screening and prevention and quality improvement processes. However, in their involvement in such collaborative efforts in different disciplinary areas, including in laboratory science and clinical medicine, the expectation of UB, as declared in Section 1.9 of its strategic plan for 2007–2015, has been to benefit from both the training and capacity building of its students and academics as well as from overhead costs—research equipment and established laboratories.

5.6.1.5 Management and Faculty Autonomy —Stimulated Academic Heartland

The university heartland literally consists of traditional academic departments formed around disciplines, new and old, including any interdisciplinary fields of study where traditional academic values are most firmly rooted (Clark, 1998). They determine the nature of the university at all points in time, especially with respect to its transformational process. In essence, the university would not become enterprising and progressive (entrepreneurial) if its faculties, departments and other academic units do not develop the ability to engage more strongly with external stakeholders with products and services capable of generating for them third-stream income. For this to happen, the management structure of the university must be one that recognises stronger authority of both individual and collegial groups in the management process, stretching from central officials to heads of academic units (Clark, 1998). In other words, academic units need to be strongly involved in decision-making, as well as to be more independent and innovatively motivated and

cooperative with the outside world, if the university is to succeed in its economic development role. Summarily, the essence of an entrepreneurial university is its ability to be flexible and adaptive enough to its changing environment.

For over 16 years, UB's basic traditional faculties and units have, for varied reasons, remained limited in their endeavour to galvanise adaptive changes in their teaching and research activities. This means that the university has failed to engage adequately and innovatively with the society. In particular, it failed to adapt adequately to the changing circumstances of its environment. One reason for this is that the university's management structure remained glued to the system-wide governance system of HE in Cameroon, which is predicated on the traditional top-bottom management approach. This is automatically reflected in the university's management structure that, eventually, constrained its faculties and basic academic units to the same condition. Therefore, they lacked the opportunity to participate effectively in the management processes of the university. In their separate units, they also lacked the required opportunity to act consciously and independently towards their teaching and research objectives and to be innovatively motivated. Eventually, the situation impacted the transformation process of the university given that these basic units form its heartland and determine whether or not any change should take place at the university through their actions (cf. Section 5.6.1.2).

Nevertheless, with respect to its efforts in relation to its economic development role, UB embarked on the creation of specific (non-traditional) applied science faculties beginning in 2010 only (cf. Section 5.4, UB). Amongst them were the applied science Faculties of Engineering and Technology (created September 2010), Agriculture and Veterinary Medicine, and the College of Technology (COT). Together with traditional faculties, departments and academic disciplines, they now constitute UB's heartland, the foundation of its teaching and/or research activities, where most academic work is done (Clark, 1998). These new faculties and schools formed the basis of innovative academic programmes across engineering fields in line with meeting the development needs of the society. However, as determined in Section 5.5.2.1, Respondent M2 revealed that, with respect to the pragmatic essence of the academic discipline, the COT programmes were mostly limited to traditional education activities. The practical training (actual skills development) aspects of these programmes were only enhanced thanks to the new internship possibilities and related assistance offered to students through the apathy of some external stakeholders, resulting from some collaborative efforts (UBSP, 2016). By implication, due to the absence of specialised/professionalised units—for example start-ups for Faculties—with a more aggressive urge to stretch out from traditional

boundaries and cooperate with other stakeholders as established by Clark (2001), the COT and other academic units did not have the capacity to graduate students with hands-on-skills that were beneficial to local industries, businesses and the general economic development climate of the community.

Furthermore, I deduced that the lack of capacity to develop start-ups or render services to other stakeholders towards generating non-state resources to cross-subsidise and incentivise further independent academic activities for its sustainability as well as for the development of society (Shattock, 2009) was borne out of insufficient financial and material resources. This suggests why it found it difficult to adequately engage private sector stakeholders in the character of its professional degree programmes and to develop itself into a more enterprising and progressive university. As a result, it barely survived in its activities by depending on external stakeholders for added capacity for the development of the right skills and expertise of its students and academic staff, and not necessarily for cooperation and collaboration on the basis for inclusive and appropriate development strategies and goals (social and economic practices) for the society (Williams, 2009) as indicated by Respondent A1 in Section 5.5.2 and corroborated by the following excerpt of Section 1.9 (Outreach and Cooperation Activities) of the UBSP 2007–2015:

> The linkages usually aim at the exchange of staff and students whilst international organisations usually assist our university with capacity building of staff and with funding for research. There is also increasing collaboration with national institutions and enterprises. Whilst institutions provide support in teaching and research, enterprises, for now, only provide facilities for practical training of students.

Further in line with this situation and especially due to poor salary state of academics, some academics have adopted the tendency to personally source for external funding and grants for the sake of financial benefits that may accrue from diverse external revenue sources. Within this context, as asserted by Verger et al. (2012), GEP participants seize the opportunity to find different reasons to express ownership of education through funding and other support measures. Accordingly, the attitude of academics seeking external funding is encouraging these funders to source for experts from among these academics to do research for them in areas that they (the funders) are most interested in. Following my interaction with Respondent A4 on the issue, he concurred in the following declaration:

> Our major external funders have been IDRC (International Development Research Centre), uh EU. We actually had uh, an EU expert to come and train us on uh the funding system 2020 uh of EU, uh the Horizon 2020, the new system. That was done in December 2013. The representative came to inform researchers of what the EU is making available, and really

> encouraged them to exploit EU funding because as far as Africa, this region, this sub region is concerned, they had quite many things that are key areas of research in Africa, like in health, education, technology, etc. A couple of researchers are really gathering enthusiasm, and because it's making waves.

About the relevance of this externally funded research to the development needs of the country, the same respondent said the following:

> You know he who pays the piper determines the tune. He who pays the drummer will want the drummer to drum in his own way. But, basically, uh to a great extent, it kind of addresses some of our needs especially in, like in FSMS, there was funding for large Scale Land Acquisition in Sub Saharan Africa. It is done by professor....Like the issue of Land Rights and women, he looked at that. It is a very big issue in the North West and South West. He got the funding and actually did real work on the field, sensitisation, and mobilisation, and even was pushing for policy to be changed because he got all stakeholders concerned, and the renewal of the grant has been like twice.

The preceding declarations illustrate that even though the intervention of the Cameroon government in the management of public universities is quite profound, it still cannot entirely determine and sustain its own agenda on the university. Its inability to fund its public universities adequately has a causal relationship with the character of UB and its academics in relation to external funding and research, which incline them towards private and commercially-oriented revenue for their personal aggrandisement. This has been a developing situation dating back to the declarations of presidential decrees of April 1992 and January 1993 that transformed the University Centre of Buea into a full-fledged public university in 1993. Slaughter and Leslie (1997) have identified this market-like attitude of public service academics under the guise of entrepreneurial university practice as academic capitalism. It eventually generates disruptive effects on the management processes and mission objectives of the university, especially when academics choose externally funded research in diverse areas over prioritised domestic research activities towards specific development issues. Consequently, the situation that prevailed at UB is in line with the assumption that international regimes can institute partial international orders and promote endeavours that lead to shared expectations but do not have complete leverage over how actors respond to agreed principles and norms (Krasner, 1982; Hasenclever et al., 2000; Amaral, 2010).

Generally, the above assessment is an indication that the mission and vision of the university (as strongly influenced by government) are strongly hindered by insufficient funding and other capacity issues, including state-imposed management and bureaucratic structures, which are enabled by WB's neoliberal SAPs of public

expenditure reduction in favour of privatisation, deregulation, competition, etc. within a free market concept (WB, 1981; McChesney, 1998; Ross & Gibson, 2006) These have eventually constrained the desires of the public university to effectively liaise with external stakeholders for a more comprehensive entrepreneurial endeavour towards its development agenda. For these reasons, UB's faculties/schools, until now, still experience financial and other capacity issues, albeit with higher tuition fees that they now charge for their professionalised academic programmes. For example, the 2016/2017 intake for COT in accordance with Ministerial Press Release No: 76/00463MINESUP/UB/COT/SG/DAUQ of 03rd October 2016 stood at 180 students against a very limited teaching and infrastructural capacity. The following is the reaction from Respondent R2:

> As I am talking to you, we have only about, only about five permanent staff members in the college and, and so you see that [sic], and we run four options. We are planning to start running the fifth. So we depend fully on part timers.

I note from this assertion that the processes in UB are mainly in agreement with the assumptions of regime and institutional theories that actors and organisations will accept regime norms over their strategic calculations for the simple reason to win good reputation based on their behaviour towards instituted norms (Kersbergen & Verbeek, 2007). This is evident in UB's acceptance of the status quo, irrespective of the challenges accompanying it. Its actions are predicated on the need to gain legitimacy, especially given that it is competing with other public institutions for diminishing public expenditure support. This explains exactly why its possibility to make rational decisions towards becoming a self-initiating, self-regulating and progressive university through diverse forms of engagements with external stakeholders is constrained. Consequently, its faculties, schools and academic departments have, instead, developed a sort of dependency culture on external stakeholders for financial and other forms of support in their endeavour to achieve its economic development goals for Cameroon. Visibly, the situation is exacerbated by the contextual differences in terms of cultures, capacities and the lack of a national transformative mechanisms thereof, and national guiding principles in education policy to mediate the impact of GEP on the receiving governments and institutions (Nagel et al., 2010; Verger et al., 2012; Fulge et al., 2016).

In the midst of the complexities surrounding the transformational process of UB, some academics have also developed the attitude of dedicating more of their time to teaching, especially when not involved in research that guarantees good earnings for them. This is because 'teaching loads are a direct determining factor of salary

bonuses' (Respondent A1). One of the main reasons is that the university is unable to invest much in the recruitment of part-time academics due to financial problems. Consequently, more teaching loads are available to permanent staff, which leaves them with limited time to do research, if at all. In some cases, the workload is even too heavy for permanent academics, to the extent that the management goes out of its way and assigns more than required teaching loads to part-timers (mainly lecturers and assistant lecturers, i.e. doctoral candidates). Hence, there is an increasing tendency towards a teaching culture that is void of the research component required to balance the endeavour, which according to Rubins (2007) is threatening the core traditional academic tenets of teaching, learning and research (the pursuit for knowledge). On this, Respondent M3 provided the following reaction:

> I know that we are supposed to give a lecturer or an assistant lecturer doing his PhD lesser hours to teach, but if you give them lesser hours, then the courses will be left with no one to teach them. So, what do you do in this kind of situation? You have to do something, and so they have to take the work to make sure that the college also runs. And so it also becomes very difficult for them. I passed through such, the same situation.

All these challenges have paralyzed the overall ability of UB to develop an effective entrepreneurial character that would enable it to embrace change and cultivate a distinctively strong identity, which would allow it to cooperate effectively and efficiently with other stakeholders. The challenges have also affected its ability to be innovative in generating more resources to cross-subsidise its activities and be able to meet the economic development expectations of the society. UB has and continues to make efforts in that regard.

Overall, my analysis has determined that even though UB bases its vision on state-defined objectives that are reflected in its academic faculties and departments, it has inadvertently developed itself into an institution that induces its academics to incline more towards personal academic achievements than towards academic activities of general public interest in accordance with the vision of the public university in Cameroon.

Actually, system-wide Law No. 2005/342 of 10th September 2005, including Presidential Decrees No. 2005/383 of 17th October 2005 and Law No. 005 of 16th April 2001 to Guide Higher Education, still determine (technically) the administrative and financial management structures of universities in Cameroon. As already determined, they place universities under full MINESUP control, which means that the government of Cameroon, through its system-wide policies, imposes on its universities the GEP regime and, in turn, the universities accept them over their strategic calculations, especially against their own possible short-term

advantages—all of which is in line with the regime theory (Kersbergen & Verbeek, 2007).

Consequently, the traditional faculties, academic departments and research units of UB are unable to participate effectively in the central management of the affairs of the university as indicated in Figure 3, Section 5.6.1.1. The absence of a true collegial form of governance principle imposes on UB a limitation of the opportunity for its traditional academic units and faculties to transform themselves into progressive entrepreneurial units, capable of inducing change through cooperation with outside stakeholders. These tendencies frustrate every endeavour of UB to be proactive and innovative in its programmes and structures, limiting its ability to engage with other stakeholders for purposes of change and innovation, and preventing it from taking steps towards meeting the development needs of the society.

6 CONCLUSIONS AND IMPLICATIONS

6.1 Purpose, Research Questions and Main Findings of the Study

This research study intended to examine how UB, through its organisational processes, responded to WB's KE and the entrepreneurial university policy objectives aimed towards fulfilling the economic development goals of the country during the 1993–2016 period. In order to achieve this aim, I collected interview data and subsequently analysed them alongside document data and theory literature on KE and entrepreneurial university policies within the frameworks of neoliberal GEPs, and international regime and institutional theories.

In relation to the study objective, I formulated the main research question as follows:

- How did University of Buea (UB) respond to knowledge economy (KE) and entrepreneurial university policy objectives from 1993 to 2016?

By examining the main research question of the study, I was able to develop two separate sub-questions that provided me with better understanding of how to handle the dynamics and complexities involved in assessing and determining the organisational processes of UB in relation to KE and entrepreneurial university policy objectives:

- How did the University of Buea (UB) respond to the knowledge economy (KE) policy objectives of knowledge creation, valorisation and application aimed towards the economic development of Cameroon?
- How did the University of Buea (UB) respond to the entrepreneurial university policy objectives of collegiality, autonomy and educational achievement aimed towards the economic development of Cameroon?

Based on the above research questions and on the chosen methodological approach of the study, I obtained the main findings represented in Table 9. The table illustrates the results of UB's organisational processes in relation to KE and entrepreneurial university policy objectives. To arrive at the results, categories were constructed from collected data in relation to the characteristics of the objectives of these policies and analysed within the frameworks of neoliberal GEP issues, and institutional and

international regime theories. Then, in conjunction with inductive and deductive systematic thematic approaches, I used abductive reasoning to draw my conclusions. The table shows the main and sub research questions, as well as the themes developed from the dataset, and illustrates the analytical dimensions used to arrive at the results. The findings obtained from data analysis in relation to each of the sub research questions are summarised in connection to the main research question, as illustrated.

Table 9. Themes, Analytical Research Dimensions and Results for KE and UB Entrepreneurial University Tendencies

Research Questions	**Theme**	**Analytical Dimension**	**Results**
How did UB respond to KE and entrepreneurial university policy objectives?	Vision (KE and entrepreneurial university) of UB.	In consideration of the conceptual underpinnings of the policy objectives and in relation to institutional and international regime theories (conceptual and theoretical frameworks).	-Influenced by shared international education policy measures. -Highly regulated by system-wide policies (MINESUP) that stifle collegiality, autonomy and educational achievement (knowledge creation, valorisation and application). -MINRESI is in charge of scientific research and innovation. -Inadequate strategic collaboration with other stakeholders. -Priority given to traditional teaching and basic research.

			-Internal contradiction of KE and entrepreneurial university ideals.
	Funding the KE and entrepreneurial public university—UB.	Higher Education Reform measures, 1993–2016, in relation to the conceptual and theoretical framework.	-Reduced and irregular (less than 30% rate of receipt) public expenditure (support) for public universities. -Very limited funding support from external stakeholders. -Very little funding attention on research. -Reduced public investment per student (fell by 37%, 1993–1996).
1. How did UB respond to KE policy objectives of knowledge creation, valorisation and application towards economic development of Cameroon?	KE endeavour: Teaching, research and knowledge dissemination and application, 2000–2016.	Within regime's conceptualisation of knowledge development and creation for the advancement of science and technology, as well as within institutional development of special skills for the valorisation and application of knowledge.	-MINESUP's Division of Planning, Research and Cooperation is a unit for coordinating and monitoring UB research activities, amongst others. -Traditional teaching and research prioritised, with minimal, insufficient and irregular incentives. -No pragmatic endeavours in knowledge-intensive activities (STEM).

			-Special research institutes for scientific research and innovation under MINRESI.
2. How did UB respond to entrepreneurial university policy objectives with regard to collegiality, autonomy and educational achievement towards the economic development of Cameroon?	UB entrepreneurial endeavour—Cooperation and collaboration with other universities and stakeholders, including business enterprises, 2000–2016.	In relation to all stakeholder involvement, Clark's (1998) conceptualisation of the expanded developmental periphery of the university and institutional practices: How UB engages with other stakeholders towards attaining enhanced capacities to meet socio-economic expectations and other efficiencies (innovation with massive science and technology transfer activities).	-Available but inappropriate attempts for inclusive development strategies and goals for the society. -Lack of adequate ability and competence to encourage stakeholder involvement and harness their diverse expertise into profitable financial, research and other benefits. -Inadequate strategic alliances with external stakeholders (institutions and organisations home and abroad). -Mainly staff and student exchange cooperation for enhanced capacity building and greater potential for growth in the area of research and development.
	UB entrepreneurial Management endeavour, 2000–2016.	In accordance with the WB's all stakeholders involvement and Clark's (1998) conceptualisation of	-Weak collegial managerial forms. Weak capacity to steer itself. Central administration, faculties and academic departments under full

		the strengthened steering core, stimulated academic heartland and integrated entrepreneurial culture of the university (collegiality).	MINESUP control, especially by 2008. -Extremely personalised forms of leadership appointments by ministerial decisions and presidential decrees. -Bureaucratic tendencies against collegial forms of management approach. -A consequent rift between new managerial values relating to contemporary and changing circumstances with traditional academic ones.
	UB entrepreneurial funding endeavour, 2000–2016.	Within the context of diversified funding-based and institutional response.	-The only steady source of additional income for UB came from compulsory registration fees (by 2007). -Some collaborative grants and funding for research and capacity building. -Externally funded research mainly through personal (researcher) engagements and mostly in funders' own research interest areas.

6.1.1 University of Buea's (UB's) Response to Knowledge Economy (KE) and Entrepreneurial University Policy Objectives

Generally, the results of the study (on KE and entrepreneurial university policy objectives) centre around two main elements: the general vision and the funding capacities of UB towards the economic development of Cameroon. In consideration of the conceptual underpinnings of both policy objectives—and in relation to institutional and international regimes theories—I conclude that KE and entrepreneurial university policy visions of UB were greatly influenced by the shared international education policy experience rather than based on specific country circumstances. This is basically because the acceptance and institutional pursuit of some of these GEP objectives are contingent on certain conditions—such as the US $50 million SAP programme loan of the WB in 1989 whose major demands, amongst others, included a finance law on public investment programmes—for Cameroon to reorient its education sector policies, especially towards the primary education level, in order to improve human resources development as an economic development measure for the country.

Aiming to maintain pace with KE objectives, the Cameroon government maintained strict measures in pursuit of system-wide HE policies, which determined the institutional management systems of its public universities. Consequently, it maintained the education and management processes of UB under strict MINESUP control, a phenomenon that made it significantly difficult for the university to achieve specific goals through diverse institutional endeavours. For example, in connection with specific characteristics of KE and entrepreneurial university objectives, UB was unable to achieve effective collegiality, autonomy, knowledge creation capacity, valorisation and application aimed towards meeting societal needs and aspirations. This is partly because MINESUP attributed, in particular, the responsibility over scientific research and innovation to MINRESI. This situation disrupted UB's public expenditure funding benefits directed towards research, thus limited its educational achievement capability and reduced its possibility to engage in strategic collaboration with other stakeholders because it then concentrated its efforts on traditional teaching and basic research due to lack of enough funding.

Conventionally, funding is a fundamental tool in KE and entrepreneurial university policy processes aimed towards meeting societal needs and aspirations. With respect to the KE, it is vital in the act of research—the production of knowledge as well as its valorisation and application towards economic development. It is equally important in the entrepreneurial process of the university, especially as

a tool for setting up the basic capacities that are needed to spur progress at the university. For example, success of a university's autonomy status, collegial forms of management and educational achievement depends on basic human and infrastructural capacities, which must be flexible enough to allow it to adopt policies and adapt to changing circumstances. Without required funding for building and enhancing such basic capacities, autonomy, collegiality and educational achievement are not sustainably possible for a progressive university.

I discovered that with the 1993 HE reform measures in Cameroon, public expenditure support for UB declined, incluing with a receipt rate of less than 30%. In addition, public investment per student also declined. Between 1993 and 1996, for instance, it fell by 37%. This caused UB to devote very little attention to research. Eventually, these dynamics reduced the possibility for UB to acquire the necessary capacities, both human and infrastructural, which would enable its flexibility and progress. Consequently, the university developed an inability to become adequately enterprising and an incapability to induce change from within those of its academic units that could attract private sector collaborations and partnerships with a potential to be profitable.

6.1.2 University of Buea's (UB's) Response to Knowledge Economy (KE) Policy Objectives

The study results indicate that UB did not quite succeed in achieving its KE objectives aimed towards knowledge production, valorisation, dissemination and application, which are the leading factors for economic efficiency, competitiveness, profitability or effectiveness (Jessop, 2017). This means that it registered very limited success in the area of knowledge creation and development for the advancement of science and technology and for institutional development of special skills for the purpose of valorising and applying knowledge in societal activities that intend to address particular needs, demands and aspirations. By implication, it partly failed in its attempt to influence the production of goods and services that are based on knowledge-intensive activities meant to accelerate the pace of technological and scientific advancement as well as equally rapid obsolescence (Powell & Snellman, 2004).

In fact, between 1993 and 2016, UB was unable to achieve far-reaching development in its teaching and research endeavours. Partly because of insufficient funding, it prioritised traditional teaching methodologies and basic research

activities, accompanied with minimal, insufficient and irregular incentives. In addition to funding challenges, state imposed governance structure made it difficult for UB to collaborate effectively with private sector stakeholders, which would have enabled it to associate teaching and research with concrete societal realities. This means that UB lacked the ability to enhance the applicability of its study programmes or to translate their outcomes into marketable goods and services. Consequently, by the year 2000, the university achieved very little in terms of its teaching quality and general educational output even though teaching and research were fundamental in its mission objectives. It also failed to meet international standards, especially with regards to teaching conditions, curriculum development and pedagogical equipment by 2016.

With respect to knowledge creation and development (research activities) in relation to KE objectives, UB did not achieve much either. Besides insufficient funding issues, advancement in technological and scientific research did not actually constitute a crucial part of its economic development role. While Decree No. 92/074 of 13th April 1992 charged MINRESI with ensuring there was a strong focus on scientific research and innovation in order to scale up its impact in the context of WB's KE policy objectives, MINESUP was charged with sustaining the traditional HE mission, which included the promotion and dissemination of basic/pure/fundamental research (enhancement of knowledge and understanding of theories and phenomena) through public universities. This explains why, by 2007, UB had not elaborated any systematic approach that defined system-wide policy guidelines for science, technology and innovative research. However, although it elaborated its desires for knowledge production, dissemination and application for purposes of economic development in its 2007–2015 strategic plan document, UB fell short of actually implementing pragmatic measures with regards to knowledge-intensive STEM activities.

The scientific and innovative research capacity problem at UB was exacerbated by the lack of adequate infrastructure, basic labs and other requirements necessary for boosting productive research activities. Unsuspectingly, MINESUP did not pay attention to this. It mostly encouraged internal collaboration among university staff members, enhancement of traditional teaching and basic research capacities of junior staff members and their general welfare. For these purposes, it instituted a series of special allowances and grants that were, unfortunately, not sustainable. The absence of basic research facilities was also reflected in the delay of the creation of (and, in some cases, the nonexistence of) regulatory research committees or boards. For example, the IRB (for monitoring policies on ethical research conduct) and the CAI

(for monitoring policy on academic misconduct) were absent in 2009—16 years after the creation of UB. It was also difficult to maintain institutional peer-reviewed journals due to an insufficient number of researchers and research support staff, including the critical mass needed for timely and credible peer-review responsibilities. Consequently, by 2013, the university owned no academic journal. It suspended their operations because it lacked the resources to hire and retain the services of qualified academics who would ensure the sustainability of research activities across the board.

In its endeavour to develop special skills and competencies that would strengthen its competitive advantage and position in the global marketplace, UB created new applied science academic programmes. In September 2010, for instance, the state approved and supervised the creation of the Faculty of Engineering and Technology at UB. The action expanded the structure of UB's academic programmes to include professional programmes that have, over time, graduated qualified professionals with applicable skills needed for different economic sectors. In particular, new academic programmes in the health sciences and education disciplines enabled the training and production of a workforce with skills in both applied sciences and traditional disciplines from the year 2000 onwards. Similarly, COT, created in 2010, graduated students with special skills and competencies in the context of qualified human resources with the ability to spur economic competition. The Faculties of Veterinary Medicine and Agriculture, Engineering and Technology also trained and graduated some enterprising students who can engage in entrepreneurial activities and offer practical skills in agriculture, information technology and engineering sectors.

Unfortunately, the management structure at the university has greatly limited its engagement with the private sector. This has constrained the university's ability to establish aggressive KE tendencies for its academic units. Consequently, UB could not use its key strengths and assets proactively to develop effective partnerships with private sector stakeholders for required innovative capabilities. In some cases, the situation created a wide gap between the contents of academic programmes and skills acquired by students and the economic realities in society. This included issues on the usefulness of acquired skills in relation to the adaptability, creativity, flexibility and innovative capacity of graduates, which are key to sustained economic development and improvement in human well-being (Ozga & Jones, 2006; WB, 2011).

Additionally, there were no proper mechanisms in place to facilitate the dissemination of research findings and to eventually enable their effective application

in the general public domain. The DRP—whose responsibilities include the dissemination of research results—had capacity issues. In addition to being heavily understaffed and without active measures to enhance staff capacity for effective and efficient services, UB also cared more about the effectiveness and efficiency of the actions of the Division of Planning, Research and Cooperation (a MINESUP unit) than its own institutional research activities. This suggests that UB yielded to system-wide pressures and adopted new structures and practices just to gain organisational homogeneity for state recognition over rational decision-making processes needed for its own economic development goals (DiMaggio & Powell, 1983; Zucker, 1987; Verbeek, 2007; Janićijević, 2015). The situation also conforms with the assertion that the KE policy is just an imaginary economic and social concept meant to guide structural reform and strategic HE reorientation and research to the emergence of an already endorsed (though uncertain) procedure towards it (Jessop, 2017).

6.1.3 University of Buea's Response to Entrepreneurial University Policy Objectives

The study results suggest that, from 1993 to 2016, UB was not a progressive and dynamic university, characterised by tendencies of collegiality, autonomy and educational achievement. Its institutional processes were highly influenced by system-wide HE policies, which put in place a governance structure that submerged its central administration, faculties and academic departments under full MINESUP control. For instance, in order to establish a good reputation with the WB regime, MINESUP indirectly determined and orientated the organisational structure and activities of UB, especially through a statutory instrument—in other words, through a government executive order without due consideration to equitable government's strategic calculations over UB's management structure. On the other hand, driven by its institutional character to gain legitimacy and trust of the government, UB simply adopted new structures and practices as directed by MINESUP. This constrained its desire to become a self-initiating, self-steering, self-regulating and self-reliant university by nature; thus, a conflict of interest situation arose between UB and the government (MINESUP), especially on issues relating to STEM aimed towards projecting UB's developmental trajectories. Consequently, the management structure of UB (Figure 4), at face value, merely created a semblance of interconnectedness in power relations in order to depict a sense of collegiality among the central administrative groups, academic faculties and departments.

In fact, the state's involvement in the management processes at UB is characterised by bureaucratic tendencies with extremely personalised forms of leadership that were enabled by appointments through presidential decrees and ministerial decisions. The system-wide imposed governance structure (Figure 3), at the Council level, ironically portrays an endeavour to promote the participation of all stakeholders in education policy formulation and implementation through the use of diverse ideas and practices. However, with the exception of four government-appointed private sector representatives on the UB Council, the rest were appointed state officials that represented different state ministries, including the offices of the prime minister and president of the country. This kind of politically motivated system encouraged strong traditional managerial and academic values with top-down decision-making approaches over expected new ones, which are strongly related to contemporary universities and their changing surrounding circumstances. This phenomenon, backed by state subventions to public universities, is partly responsible for why UB was not ambitious, focused and flexible enough to adapt quickly to its expanding and changing surrounding circumstances within the period 1993-2016. Its academic heartland (academic departments and their subunits) remained inferior in the management chain and had less participatory responsibility in decision-making processes. Overall, academics and management did not share a common sense of responsibility for the choices made towards the achievement of the university's development goals.

In terms of collaboration and educational achievement, the study determined that UB lacked adequate capacities and competences to effectively collaborate and develop strategic alliances with other stakeholders. In accordance with MINESUP, the university placed emphasis on internal collaboration among university academics, their general welfare and the enhancement of research and teaching capacity of academics without a terminal degree. Its collaboration with other institutions and organisations was primarily within the same framework, including student-exchange programmes, their practical training (internships) as well as staff training on pedagogy and curriculum development. Principally, the university missed the possibility to enable the harnessing of diverse stakeholders' expertise into profitable financial, research and other benefits for inclusive and appropriate development strategies and goals as well as for the development and transfer of useful knowledge into social and economic practice.

In the wake of the collaborative endeavour with other stakeholders and in line with the assertion of the international regime theory that regimes do not have a strictly formal control system that is able to guide and enforce the rules under which

all the participants are to act (Amaral, 2010), some academics sought collaboration as a means through which they could commercialise their intellectual capacities within the framework of intellectual property rights. This included research activities for the sake of personal financial gains and for political power in the academia, which could be obtained through appointments into higher professional and administrative positions. Most research collaborations between individual academics and other stakeholders were determined by sponsors and occurred primarily within their research preference areas. This phenomenon raises the question of the contextual relevance of most knowledge produced under such circumstances for the socio-economic development of the society's aspiration. Nevertheless, this capitalistic tendency resulted from the lack of enough public expenditure on public universities, which did not even allow for a better salary situation to be arranged for academics, the majority of whom are civil servants. Such happenings are in line with both institutional and international regime theories, which point out that organisations and actors tend to develop processes or respect regime norms based on pressures rather than on rational decision-making processes or their own strategic calculations (Janićijević, 2015; Kersbergen & Verbeek, 2007).

Nonetheless, some academics have shown a resilience, developing a high commitment towards their disciplines and, hence, valuing knowledge creation and development as integral parts of their professional career and for economic development (R5, Section 5.5.2.2 and R7, Section 5.5.1.2). As a result, some collaboration and partnership engagements have yielded commendable results. Collaborating with external stakeholders, the biotechnology laboratory conducted research on new tools for the control of prevalent tropical diseases in the community, as well as in diagnostic and consultancy services, in accordance with the research mandate of the university. A perfect example is the research conducted on the genetic basis of non-communicable diseases, such as hypertension and diabetes, in Cameroon (R4, Section 5.6.1.4). It included the training of students at the graduate and postgraduate levels and has yielded encouraging results on diabetes and hypertension from their theses—despite the fact that the project was beset with challenges resulting from the lack of adequate means for effective dissemination and application of study results in the public space.

Generally, UB lacked the necessary basic infrastructural, financial, research and other capacities that would enable it to stimulate its engagements with other stakeholders in ways that would allow it to become progressive in nature. Largely, inadequate operational funding was determined to be the main cause of the challenges faced by the university. Other than state subventions, the only steady

sources of additional income for UB were compulsory registration fees (by 2007) and tuition fees for professional degree programmes (by 2016). Therefore, most of its partnership and collaborative engagements were informed more by the idea of grants and other forms of support from its partners. Thus, in addition to entertaining a political dependency relationship with the government in view of recognition and subventions, UB was dependent on external stakeholders for a wide range of support schemes. For example, it depended on external stakeholders for grants, academic capacity building, research funding assistance and practical training of its students through internships, etc. (A1, Sections 5.5.2.3 and 5.6.1.4). Corroborating this finding is UB's strategic plan document for 2016, which declares that its collaborative research activities with other stakeholders for its development role mainly depended on stakeholder apathy. These reasons, among others, account for why the university was unable to gain autonomy, reasonable success in educational achievement and the ability to adapt on its own terms to the changing circumstances of its environment.

6.2 Relationship with Previous Research

In general, this study illustrated that, despite being conceived within the framework of shared international education policy ideas, GEP can be a source of diversion and confusion in the national education systems of receiving countries. This is evident in the shift caused by KE and entrepreneurial university policy objectives in the relationship between the government and its public university (UB) with unintended consequences. With respect to Cameroon, at least, both policy objectives do not quite match/consider the prevailing socio-economic and political education situation in the country. Consequently, this study especially affirms that the production, valorisation and application of knowledge as the leading factor of economic efficiency, competitiveness, profitability or effectiveness must not be achieved, basically, through neoliberal-capitalist GEP processes without due consideration of the context-specific—country circumstances. Nonetheless, some of the findings are broadly in line with some aspects of previous studies about the role of HE in the socio-economic development of Africa and Cameroon by Cloete, Bailey, et al. (2011), Cloete, Fehnel, et al. (2006), Doh (2012) and Bilola (2015).

The conclusion that UB is yet to gain the capacity to effectively achieve its economic development role is consistent with Doh's (2012) finding that, in the poverty reduction endeavour aiming towards an emergent industrialised economy by

2035, Cameroon's universities (as of 2012) did not have a research status and were therefore yet to gain the recognition required to enable their integration into national research, innovation and production systems. Doh (2012) attributes this finding to the lack of macro-support linkages and the absence of a national strategic plan as well as a central funding system for university research. While my finding confirms his assertion, it emphasises the notion that the inability of UB to effectively fulfil its economic development role is partly due to reduced and irregular public expenditure for the university, which is further exacerbated by a less than 30% rate of its receipt for public universities. This has generally affected the rate of public investment per student as exemplified in the period between 1993 and 1996 when investment rate per student declined by 37%, coupled with very little public investment attention on research.

With particular reference to Doh's (2012) assertion regarding the refusal to integrate universities into Cameroon's national research, innovation and production systems, my study found that the 1993 split of the Ministry of Higher Education and Scientific Research into MINRESI and MINESUP was primarily responsible for the subsequent neglect of scientific research at public universities. However, the main reason for the split was to ensure a strong focus on scientific research and innovation under a unique authority in order to scale up its impact within the KE policy conception framework. This explains why MINRESI has eight research institutes under its authority, including the responsibility for drafting, implementing and assessing government policy regarding scientific research and innovation. Since 2005, MINRESI has also been charged with valorising, vulgarising and exploiting research results in permanent liaison with all sectors of the national economy, ministerial departments and other concerned institutes/organisations. On the other hand, MINESUP is responsible for universities and their traditional missions, including the promotion and dissemination of scientific research (Section 5.3). Hence, my study suggests that government's KE and entrepreneurial university actions in relation to its public university are ambiguous, as are its public expenditure decisions.

My assertion about the overriding role of system-wide policies over institutional policies is in alignment with Bilola's (2015) conclusion that the state is the most influential of all stakeholders in the strategic objectives of HE in Cameroon. She reached this conclusion using primary data that suggested that most HE personnel, both at MINESUP and at public universities, defined the importance of university stakeholder based on financial contribution, age, status (mainly political) and direct involvement in university matters as determined by state regulatory instruments such

as laws and decrees. Consequently, since the Cameroon government is the principal guarantor of basic funding for public universities, it has maintained a firm grip over the governance and management structure of these universities. Accordingly, my study has proven that system-wide governance policies have seemingly persuaded UB, an elite institution with guaranteed privileges, to remain dependent on government's political influence in return for public expenditure. This phenomenon has ultimately deprived UB of collegial-style management and weakened its ambition towards a progressive nature of its activities as well as its capacity to engage with other stakeholders in order to fulfil its development role (M2, Section 5.3 and A2, Section 5.5.2.2). This is in line with the submission of Cloete, Bailey, et al. (2011) about the absence of a coordinated effort between some African governments, external stakeholders and their universities for enhancing the latter's economic development role.

The conclusion of Cloete, Bailey, et al. (2011) regarding the lack of clarity and agreement between African governments and their universities about a development model and the latter's role in development is corroborated by my finding that KE and entrepreneurial university policy objectives are largely perceived (in Cameroon) within the framework of shared international education policy constructions without due consideration of country-specific circumstances. Also, like Cloete, Bailey, et al. (2011), my study observed increasing awareness of the Cameroon government regarding the importance of universities in the KE drive. However, I equally found that system-wide policies have continued to constrain UB to primarily operate within the government's rationalised framework. This points to a contradiction between the government's acknowledgement of the role of the university in economic development and the misconception of KE and entrepreneurial policy agendas for its universities. It also illustrates the kind of influence that internationally conceived education policies can have on the development of specific African countries. For example, as in the case of UB, Cloete, Bailey, et al. (2011) also note that inadequate public funding is the reason why, at some African universities, research production is not strong enough to allow them to make sustainable and comprehensive contributions to development through knowledge production.

6.3 Limitations of the Study

This study was primarily concerned with UB processes in relation to KE and entrepreneurial university policy objectives aimed towards fulfilling UB's role in the

economic development of Cameroon. I mainly addressed issues regarding the actions of UB in connection to KE and entrepreneurial university policy objectives for the economic development of Cameroon. Consequently, I took into consideration the influence/intervention of the government on/in the activities of UB through its system-wide policies for universities in the country, which is a determining factor for the outcome of management processes at the university. In many ways, primarily in relation to Cameroon's system-wide policies for its public universities, the conclusion could be drawn that the results of this case study could equally pass for other public universities in the country. This is based on the assumption that system-wide HE policies are generally designed in consideration of both national and GEP objectives like the ones examined in this study, which are applicable to all public universities within the national territory.

Consequently, the interference of system-wide policies in institutional processes is considered to be a measure for supporting and enhancing these processes, guiding them towards the most deserving outcomes of education policy objectives. However, this does not necessarily mean that the interference of system-wide policies will affect different institutional processes in the same way or induce the same policy outcomes. This is because, although homogenous in their character, there are possibilities of structural heterogeneity that may cause them to react differently to system-wide policies, especially based on how they perceive and exercise their autonomy rights with respect to the visions of the different academic units that constitute the overall essence (vision-academic heartland) of the university. In this case, the results of my case study may not be perfectly transferable to other cases in the country.

Additionally, given the scope of my study, the only HE stakeholders that took part in the interview process were UB personnel—i.e. academics, top management and administrative staff members of the university. I did not include students, personnel from other public universities, external stakeholders and personnel of the HE ministry in the interview process. Even though I engaged document data and presidential decrees in relation to HE laws, including the activities of MINESUP that make up system-wide HE policies, I still assume that the participation of their personnel would have generated a more diverse dataset in relation to the processes of UB regarding KE and entrepreneurial university policy objectives of the university. In particular, I assume that I would have been able to collect a more interactive dataset from them regarding the types of management approaches at UB. This would have included, for example, raw data on the practical influence of MINESUP over the management structure of UB that would most likely have

impacted the results of the current study. In addition, other stakeholders (internal and external-private sector participants) would have provided raw data about the influence that system-wide regulations exert on their involvement in the management processes at UB, including the kind of interests they have with respect to their involvement and expectations thereof. Nevertheless, my failure to consider a more diverse respondent base suggests a direction for further research.

From another perspective, most of my interview questions dealt with aspects of research, funding and academic activities of the university. This was so because KE and entrepreneurial university policy objectives primarily concern the production, valorisation, dissemination and application of knowledge as well as the interactive, progressive and adaptive nature of the university to its environment. Hence, my interview questions were designed against the backdrop of this knowledge base, which is primarily concerned with the characteristics of policy objectives in order to draw more effective practical meaning from the experiences of respondents. Still, the thought remains that I could have done more in terms of exhausting the scope of my investigation. There are certainly other subject areas relating to the study that I did not think of initially, especially given that both policy objectives are intricately linked to WB's idea that all stakeholders should be involved in the economic development process. This actually suggests that a comprehensive data collection method for this study would have included topical issues from other sectors of society in order to enable us to make more effective meaning from the data for more accurate answers to the phenomena under study. Failure in this respect might have resulted in some weaknesses in my analyses. Notwithstanding, it opens up an opportunity for further research on same policy objectives.

I also acknowledge the possibility that other trust issues exist in the analytic generalisation of my findings to other public universities in Cameroon. This is primarily because only UB was used as a case study to determine how Cameroon's public universities function with regard to KE and entrepreneurial university policy objectives. Although I analysed the study data in relation to institutional and international regime theories, there is nevertheless the possibility that the extent of generalisability would have been different if the results were based on multiple sets of experiments that replicated the same phenomena at different public universities (contexts and settings). This means that—although all public universities operate under the auspices of the government's regulatory mechanism that exercises a great degree of influence over them—the contextual and circumstantial variables that may be peculiar to other cases need to be considered in accordance with the poststructuralist philosophical viewpoint. Such differences have the capacity to

generate different response mechanisms to the same phenomena in different settings. Thus, despite using interviews and document data sources (triangulation) that clearly defined and stated the philosophical assumptions and research contexts that underpin the study, equally providing enough contextual knowledge about the case study, it is plausible to contend that at least four out of the eight public universities in Cameroon should have been considered for the study in order to ensure more validity for the generalisability of its results. This would probably have provided a more reasonable depth to the transferability of the empirical insights of the study.

Considering that the study is also solidly linked to global politics on education policy issues, I acknowledge the likelihood of some conceptual, theoretical and analytic immaturity from an inexperienced career researcher. For example, I recognise that both neoliberal and GEP contexts may not have been adequately considered in the analysis. An in-depth exploration of both concepts in line with the functional objectives of UB, for example, would have provided greater insights into the political and economic perceptions of different stakeholders about system-wide and institutional policies in relation to KE and entrepreneurial university policy objectives. In other words, a more detailed and integrated perspective of the neoliberal perception of KE and entrepreneurial university policy objectives would have provided greater analytical depth on the interference of the government and the role of other stakeholders in the activities of UB for the economic development of Cameroon. Additionally, such a perspective has the capacity to broaden the scope of the study by determining the role of system-wide policies in the activities of public universities with an entrepreneurial outlook. However, I emphasise that the essential purpose of the conceptual illustration of these constructs was primarily to create an awareness of the socio-economic and political background of the study.

6.4 Implications for Policy

UB processes (in the context of a public university) in relation to KE and entrepreneurial university policy objectives were central in this study. The study results have implications for current theoretical understanding of GEP for the economic development of some developing countries. The study provides evidence that GEP could be a source of diversion and confusion in the national education systems of recipient countries. In my case, the study results indicate that KE policy objectives of the WB, as well as entrepreneurial university policy objectives, have

introduced a complex type of relationship between the national education governance system of Cameroon and at least one of its public universities, UB. In this case, the interference of system-wide policies in UB's management processes, with regard to the phenomena under study, undermined its operations and mission objectives within the framework of its own management structure aimed towards achieving its vision. For example, due to system-wide intervention, the DRP is unable to play its role in relation to managing research data and other resources, research output and the exploitation of research findings for the purposes of external reporting and internal research management (RPMG 2007–2012). Consequently, the acceptance of GEP for the economic development of Cameroon imposed a shift in the relationship between system-wide and institutional policies with unintended consequences. This phenomenon highlights the gap between GEP, related institutional processes and results.

In the same vein, the pursuit of university entrepreneurialism and KE policy objectives is seemingly giving rise to new and unexpected dimensions in the character of the public university in Cameroon. Compared to most Western universities, which are developing self-initiating, self-steering, self-regulating and self-reliant capacities through the pursuit of these policy objectives in order to enable them to adapt on their own terms to changing environmental circumstances (Clark, 2001), Cameroon's public universities are developing more dependent survival traits instead, based on the apathy of external stakeholders. For example, results of KE and entrepreneurial university processes at UB indicate the need for greater public expenditure on public universities in Cameroon—otherwise, they will remain ineffective and inefficient in their development role.

Accordingly, UB has not been able to effectively engage other stakeholders and make progress in the context of the advancement of science and technology and in the development of special skills and competences in human resources. In essence, both KE policy objectives of the WB and global education entrepreneurial university policy objectives have neither enhanced the self-reliant and self-initiating character of UB nor its capacity to be flexible, progressive and adaptive enough in its environment so as to be able to raise funds through science, technology and innovative activities. This finding triggers a new thought in the theoretical understanding of the GEP objectives of the entrepreneurial university conception for some developing countries. Consequently, it questions WB's proposition of public expenditure reduction for HE in favour of universal primary education for an optimal economic development output, on the basis that both social and economic returns of the latter (private or public) were higher (Obamba, 2013). Additionally, it

suggests that KE and entrepreneurial university policy objectives are not necessarily universal solutions to the financial problems and economic development goals of public universities.

Apparently, the KE and university entrepreneurialism have been promoted as a solution that would allow universities to escape the constraints of rigidified practices (especially funding constraints) and the homogenising effects of state planning, particularly in the developing world, allowing them to catch up with the global trend characterised by increasing importance of higher knowledge as a driver of growth and by the information and communication revolution (WB, 2002; Clark, 2001). Both policy objectives claim that the essential idea is for universities to develop greater capacities to steer themselves and engage more appropriately with external stakeholders in order to form strategic alliances that would drive economic development and to obtain non-state funding in order to cross-subsidise and incentivise further independent academic activities (Clark, 2001; Shattock, 2009; WB, 2000, p. 5). Clark (2001) also determines that best practices for this goal include university collegiality, autonomy and academic achievement.

However, as evidenced in my study, state involvement is inevitable in the entrepreneurial context of UB's evolutionary processes, which remain characterised by bureaucratic tendencies with extremely personalised forms of leadership, especially through presidential decrees. This greatly accounts for UB's inability to steer itself and become self-reliant, self-initiating, self-steering, self-regulating and progressive in nature. Consequently, its central administration is unable to effectively design its management structure to accommodate the interests of its different academic units and develop effective partnerships with external stakeholders for profitable financial, research and other benefits. Hence, UB's involvement with other stakeholders is one of dependence on financial and other forms of support based on the apathy of the former towards its own activities. This suggests that in the African HE system, KE and entrepreneurial university policy objectives do not quite take into consideration the prevailing socio-economic and political education situation of the majority of the African continent.

Generally, the results of this study create the opportunity for both the university and the Cameroon HE system to re-examine the nature of their relationship regarding policy choices, especially in relation to institutional processes aimed towards fulfilling the country's economic development agenda. This is connected with the argument that both policy ideas are largely conceived within the framework of shared international education policy practices which were tested and proven right mainly in Western industrialised economies. Therefore, the view that knowledge

development should constitute the basis for development goals and strategies and that cooperation and collaboration between different institutions and stakeholders should be the basis for inclusive and appropriate development goals and strategies of the society, remains problematic for most African countries. I attribute this to the 1981 neoliberal idea of the WB, which constrained public support for HE in Africa through the affirmative action of the SAP and increased deregulation and privatisation of social services, including the corporatisation of universities (Heidhues & Obare, 2011; Bockman, 2013). Given the circumstances that are peculiar to Cameroon to date, its public universities are seemingly unable to build strong capacities for knowledge development due to reduced and irregular public expenditure—a situation that complicates their engagement with external stakeholders. Consequently, large public investments in education and research can enhance the knowledge capacity of public universities and thus enable a constructive reaction to KE and entrepreneurial university policy objectives for economic development through shared values and cultures.

Furthermore, my study results indicate a situation of internal contradictions in the application of both KE and entrepreneurial university policy objectives. This is still connected with the notion that KE and entrepreneurial university policy objectives are conceived within the framework of shared international education policy objectives without due consideration to the prevailing socio-economic and political circumstances of Africa and its HE systems. Evidently, my study found clear indications of inconsistencies and contradictions in the processes of system-wide and institutional policies for the economic development of Cameroon. For example, while propagating implementation of Article 2 under General Provisions of Law No. 005 of 16th April 2001, the professionalisation of HE programmes, both the government and UB did not take pre-emptive measures for the challenges of finance, human and material resources, growing disparity in teacher to student rations, inadequate infrastructural development, overcrowded classrooms, etc. This means that education policy actions would not achieve desired goals if they are not backed by required and sustainable variables. However, this sheds some light on the effectiveness of good governance and its importance.

Consequently, this study suggests that there is a need for UB to develop the desire to achieve internal organisational efficiency by taking into consideration both its internal and external circumstances with respect to its specific vision and goals. This measure would enable it to gain the needed capacity to enhance the participation of the academic heartland (basic academic units) in its central steering groups in order to widen the possibility of success in relation to its KE and entrepreneurial policy

objective processes. Similarly, it should be in the interest of the government to engage significant public expenditure on knowledge production activities of public universities. However, this must be backed by well-articulated and coordinated measures to ensure accountability towards the achievement of the country's development goals. Most particularly, it should be done with the participation and utmost recognition of the autonomy prerogatives and interests of these universities, especially in relation to the needs and aspirations of their different academic units, given that they constitute the heartland of the university. System-wide policies should also prioritise the development of capacities, especially infrastructural, and special skills because they are key drivers for Cameroon's economic development goals, but this should be done through effective partnership with non-state actors.

6.5 Reference to Further Research

This study has provided insights into the dynamics of research, teaching and outreach activities of UB. More specifically, it has given us an idea about the funding, research, management and collaborative endeavours and challenges of the university in fulfilling its knowledge production and economic development roles. This means that a number of other studies can follow up on the results obtained regarding UB processes related to KE and entrepreneurial university policy objectives. For example, there is the possibility to further explore the research and outreach activities of UB that aim for the economic development of the society. Given the government's interference in the research activities of public universities in Cameroon through MINESUP and its research activities through MINRESI, there is also a possibility to explore the relationship between these institutions and public universities in Cameroon. It would particularly be interesting to conduct a comparative study between the research and outreach activities of MINRESI and public universities in Cameroon. The aim could be to determine the importance/effect of public expenditure on scientific and technical research in MINRESI as opposed to public universities in the country.

Given the limitations of my study, as highlighted in Section 6.3, a more comprehensive study involving an in-depth methodological approach is needed to examine how the processes or activities of public universities could profoundly be captured in relation to KE and entrepreneurial university policy objectives in Cameroon. This could involve at least four of the eight public universities in the country, thus constituting a more diverse data collection method, including a diverse

and bigger sample size of participants from MINESUP, concerned universities and the private sector (other stakeholders). Such a study dimension would definitely affect the scope of the discussions, analyses and, perhaps, research outcomes, especially given the contextual differences of the universities chosen for consideration in such research. Although this would constitute a long-term and methodologically challenging study, the results would surely be more comprehensive in nature and adequately implicating to policy.

There is an equal possibility to perform a reassessment of the neoliberal and GEP constructs that constitute a portion of the conceptual framework that informed my study. These constructs could be used as the main theoretical framework on which to premise the analysis of data for the exact same study. This is based on the consideration that, since the 1970s, neoliberalism has remained discursive and has shaped diverse policies at international, national and local levels—including in the corporatisation of universities and entrepreneurship—with different measures generating different impacts and economic development outcomes for different countries (Griffin, 2007; Bockman, 2013; Mijs et al., 2016; Fine & Saad-Filho, 2017). Both constructions could equally be used as a theoretical framework to address the specific results of my study, especially in relation to the outcome of the collaborative endeavour between the public university and external stakeholders (the industry). This would be in light of their influence on the outcome of the economic development role of Cameroon's public universities. Furthermore, it would mean developing different approaches for evaluating the relationship between public universities and corporate businesses in order to determine the benefits of their collaboration in the economic development agenda of the country.

One of the most prominent issues that features in the results of my study is that of inadequate public funding of UB and, consequently, of its research activities. Apparently, the situation is worsening UB's ability to become a progressive organisation that can combine the old socialist democratic order and the new neoliberal order into a revised form of education policy that would work towards the enhanced economic development of Cameroon. This necessitates further research to investigate the funding mechanisms of public universities, especially with respect to research and in accordance with Law No. 005 of 16th April 2001, Ministerial Circular No. 03/0001/MINESUP/CAB of January 8, 2003 (which emphasises that government's public expenditure for public universities only prioritises teaching and research), Law No. 2005/342 of 10th September 2005 and Presidential Decree No.2005/383 of 17th October 2005 on finance and other regulations applicable to public universities. These laws make up some key regulatory

principles that are meant to reiterate certain issues and reorient public universities towards an enhanced economic development agenda of the state within the neoliberal economic system. Hence, research on the funding of public universities in Cameroon would determine the relationship between funding and education policy outcomes and, most importantly, shed light on the impact that public expenditure support can have on the development and character of scientific research within the GEP and neoliberal contexts of the WB.

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APPENDIX A

The Deputy Vice Chancellor
In Charge of Research and Cooperation
University of Buea

Dear Sir,

An Application for Authorisation to Carry Out Some Research Activity at Your University

I am a doctoral researcher from the Higher Education Group (HEG) at the School of Management at the University of Tampere. HEG focuses on research and teaching in the higher education sphere. More specifically, HEG research concentrates on topics within higher education management and finance.

As a doctoral researcher, my interest lies in the area of higher education management with particular attention on the Sub-Saharan Region of Africa. I am investigating neoliberalism and global education policy (GEP) pressures on universities in Africa. Of particular importance is how these policy options impact the contribution of public universities to the economic transformation of African societies.

In line with the above, I am interested at examining the ways in which research is managed at some public universities in Africa, in general, as well as the University of Buea, in particular—as this is the case study institution for my current project. In order to accomplish the objectives of the project, I plead for your assistance in the following ways:

1. That you provide me with necessary materials (published/documented materials and texts) on research management at the university.
2. That I be granted the opportunity to interview members of top management as well as academics and administrative staff.

It is my fervent wish that this application be given due consideration because I am counting on your kind cooperation.

With sincere regards,

Terence Yuh Yong

(Doctoral Candidate)

CC: Professor Seppo Holtta
(Supervisor)

APPENDIX B

UNIVERSITY OF BUEA

P.O. Box 63
Buea, CAMEROON
Tel: (237) 233 32 21 34/233 32 26 90/23332 27 06
Fax: (237) 2332 22 72

PRO-CHANCELLOR: **Professor Maurice Tchuente**
VICE-CHANCELLOR: **Nalova Lyonga , PhD**
DVC/Teaching, Professionalisation and Development of Information and Communication Technologies: **Dr. Blaise Mukoko**
DVC/Research, Cooperation and Relations with the Business World: **Professor Epah Fonkeng George**
DVC/Internal Control and Evaluation: **Dr. Lucy Mande Ayamba epse Ndip**
REGISTRAR: **Professor Roland Ndip Ndip**

REPUBLIC OF CAMEROON
PEACE – WORK – FATHERLAND

Your Ref: _____

Our Ref: 2016/ 075 /UB/DVC/RCB/RPD/AA/RPD Date: 17 FEB 2016

Terence Yuh Yong
PhD Student, University of Tampere
Mobile: 680670289

Authorisation to Conduct Research at the University of Buea

We write to acknowledge receipt of your application for authorisation to conduct research in the University of Buea on the study "The impacts of university research management on the social and economic transformation of societies in the Sub Region of Central Africa".

In view of the relevance of the research topic, we are pleased to inform you that your request has been granted. This authorisation is issued subject to the following conditions:

- That you undertake to address all ethical considerations at every stage of the study from the survey to the dissemination of results. You shall, in particular, ensure that the principles of confidentiality and respect of subjects are scrupulously respected;
- That data collected shall be utilised strictly for the purpose of your research;
- Your acceptance to adhere strictly to the Research Policy and Management Guidelines of the University of Buea.

You can present this authorisation to all the offices deemed necessary to provide you with relevant data for the study.

We wish you good luck throughout the entire study.

Professor Epah Fonkeng George
Deputy Vice-Chancellor/RCB

cc:
- VC - D/AcA
- DVCs - REG.
- D/FHS - Archives

APPENDIX C

Request for Interview

Dear Madam/Sir,

I thank you for making yourself available for this interview. I am Terence Yuh Yong, a doctoral student at the Higher Education Group (HEG), School of Management, Tampere University, Finland. As a doctoral researcher, my area of interest is higher education management. I am investigating neoliberal practices and global education policy (GEP) influences on universities in Africa. My aim is to examine how these affect universities and the impacts that they have on economic growth and development in the Sub-Saharan Region of Africa. I have chosen the University of Buea (UB), in Cameroon, as a pilot university at which to study the way in which research is organised and managed in this region.

I would like to talk to you about your experiences as a stakeholder at this university (UB). Your responses will help me perform an assessment of policy implementation in order to capture the lessons that can be learned and applied in consideration of future education policy adoption or GEP design. Importantly, this also provides an opportunity for the UB to assess its own research and cooperation objectives, which were planned for the 2008–2015 period. The interview will not last longer than one hour, maximum. In order not to miss any of your comments, I also ask you to allow me to record our interview even though I will also be taking notes as we speak. Your responses will be transcribed, analysed, kept confidential and used anonymously for research purposes only. You may choose to respond in any university stakeholder category—as a researcher/academic, an administrator or management personnel.

- I would also appreciate receiving any published materials and documents that contain detailed information and highlights about some answers that you may be unable to provide during the course of the interview.

- You may also choose to write down your responses for the sake of clarity and consistency if you think there is more that you can add to this interview topic.

Sincerely,

Terence Yuh Yong Interviewee Date:

Background of Interviewee

Strictly anonymous and for researcher's use only

Please provide information about the following:

1. Gender
   ……
   ……
2. Academic qualification
   ……
   ……
3. Profession
   ……
   ……
4. Current position and other positions held at the university
   ……
   …….....
5. Others (if any)
   ……
   ……

1. Interview Guide

Research in today's world is considered to be fundamental for the socio-political and economic development of most nation states and their societies within the knowledge economy (KE) perception. However, some scholars argue that 20th century neoliberal tendencies and global education policies have made it difficult for most African countries to achieve these developments within the present dispensation (market-oriented world order). In these circumstances, the development of African public universities seems to have remained essentially reactive rather than proactive. The social dimension of higher education is gradually

shifting from its perception as a public good with public responsibility to a tradable commodity under the General Agreement on Trade in Services (GATS) of the World Trade Organization (WTO) (Obasi & Olutayo, 2009). This situation has, in turn, transformed the organisation and management of higher education in the area of funding and general support. University entrepreneurialism and academic capitalism are recent concepts affecting the way research is funded and managed at some universities, especially in the West. This involves autonomy in the handling and management of research and teaching at the university with the intention of raising more funds and garnering support for most of its other activities from funding sources other than from the government. The way research is organised and managed will definitely determine the level of socio-political and economic development of nation states and their societies.

In general terms, the interview seeks perspectives regarding the dynamics involved in the organisation and management of research at the University of Buea, including the types of research and their relevance to society. This aim is fulfilled through three themes under the following categories:

1. Mission, purpose and vision of the University of Buea
2. The priority areas of research at the university
3. Roles of the department in charge of research and cooperation
4. Funding sources
5. Criteria for funding research activities
6. Cooperation with non-government sources
7. Publication and dissemination of research results: research transfer mechanisms
8. Desirability of research results: how relevant/helpful research has been to the society

---

2. Interview Questions for Academic, Administrative and Management Staff at UB

A. University mission and research priority area(s):

1. What are the functions (mission and purpose) of the University of Buea?
2. What are the priority areas of research adopted by the university?
   a) Natural Sciences
   b) Social Sciences
   c) Humanistic Sciences

d) Other, please state
e) Please state the disciplinary areas involved

3. What type of research is the university most involved in?
   a) Basic research
   b) Applied research
   c) Experimental research
   d) Please state the disciplinary areas involved
4. Does the university have research laboratories/facilities or special research units?
   a) If yes, please name them.
5. How many PhD programmes does the university offer and in which disciplines?
6. How many PhD graduates are there each year, on average?

B. Funding sources—Research, collaboration and funding criteria:

1. Who sponsors research at the university?
2. What are the criteria for funding research at the university?
3. How much of the budget is allocated for research at the university?
4. How much research has been sponsored by the private sector and industry?
5. What percentage of private sector funding has accounted for the research and/or university budget?
   a) What are the monetary figures?
6. How has the university benefitted from these sponsorships?
7. How is research and teaching handled by academic staff?
   a) In what ways do you think research activities affect teaching?
   b) What are the measures in place to mitigate or arrest the negative effects on teaching?
8. How much independent research has been produced at the university over the past seven years?
   a) In what disciplinary areas has this research been done?
9. How much collaborative research has been produced over the same period?
   a) In what disciplinary areas has this research been done?
10. Does the university have special guidelines for conducting independent and collaborative research?
    a) If yes, what are they?

11. How about an office in charge of procedures for good conduct of research?
    a) If yes, what are its responsibilities?

C. Knowledge management and transfer:

1. Does the university own knowledge transfer offices?
    a) If yes, how do they function?
2. How does the university disseminate/make public its research results?
3. Does the university coordinate knowledge transfer activities in partnerships?
    a) If yes, how is this coordination done?
    b) Who finances it?
4. How do you understand knowledge transfer partnerships and networking? What do they involve and what are the benefits?
5. Can you identify any research of the university with results that have been particularly important to the economic progress of the society (enhanced well-being of citizens)?
    a) If yes, please state which research.
6. Does the university own any patents?
    a) If yes, please state them.
    b) If no, what do you think accounts for this?
7. How about royalties?
    a) If yes, please state them.
8. What achievements would you attribute to the Research Policy and Management Guide of 2007–2012?
    a) What lessons have been learnt and what is the way forward?
9. Any plans for another Research Policy and Management Guide?
    a) If yes, what is the vision of the next guide?

---

3. Closing Key Components

- Is there anything else you may wish to add?
- Thank you for your time.

APPENDIX D

Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Researcher as a Multicultural Subject	**Theoretical Paradigms and Perspectives**	**Research Strategies Design**	**Methods of Collection and Analysis**	**Art, Practice and Politics of Interpretation and Evaluation**
History and research tradition **Conceptions of self and the other** **The ethics and politics of research**	Positivism Post-positivism Interpretivist, constructivism, hermeneutics Feminism(s) Racialised discourses Critical theory and Marxist models Cultural studies models	Case study Ethnography, participant observation, performance ethnography Phenomenology, ethnomethodology Grounded theory Life history, testimonio Historical method Action and applied research	Interviewing Observing Artefacts, documents, and records Visual methods Auto-ethnography Data management methods	Criteria for judging adequacy Practices and politics of interpretation Writing as interpretation Policy analysis Evaluation traditions Applied research

	Queer theory Post-colonialism	Clinical research	Computer-assisted analysis Textual analysis Focus groups Applied ethnography	

Source: Creswell (2012, pp. 2, 3).

APPENDIX E

Set of more Document Sources Utilised as Data

Publication Date		Document Type
04.1992		Decree N° 92/074 of 13th April 1992 to transform the Buea and Ngoundere centres into universities.
01.1993		Decree No. 93/026 of 19th January 1993 creating state universities in Cameroon.
01.1993		Decree No. 93/027 of 19th January 1993 providing common guidelines on the operations of the state universities in Cameroon.
01.1993		Decree No. 93/034 of 19th January 1993 organizing the University of Buea.
06.2000		Circular N° 00/0005/MINESUP/CAB of June 30, 2000
04.2001		Law No. 005 of 16th April 2001 on the orientation of higher education. Available online at: http://www.minesup.gov.cm/ipescam/en/textes/1_LOI_N%C2%B0_005_du_16_avril_2001.pdf
09.2005		Law No. 2005/342 of 10th September 2005 to modify and complete certain dispositions of Decree No. 93/027 of 19th January1993 to define common conditions for the operation of universities in Cameroon.
10.2005		Decree No.2005/383 of 17th October 2005 to lay down financial regulations applicable to universities in Cameroon.

2007		*The University of Buea research policy and management guide (UBRPMG) 2007–2012*. University of Buea.
2007		*University of Buea annual report 2006/2007*. University of Buea.
09.2007		Buea University Newsletter (BUN). *Embracing the new university governance*.
2008		*University of Buea annual report 2007/2008*. University of Buea.
2008		*The University of Buea strategic plan 2007–2015*. University of Buea.
08.2008		Decree No. 2008/280 of 9th August 2008 creating the University of Maroua.
12.2008		Buea University Newsletter (BUN). *BMP at the University of Buea: One year later*.
2009		MINESUP. *Operational strategy of the new university governance policy, a new vision for the Cameroonian university—2020 horizon*.
2009		*University of Buea annual report 2008/2009*. University of Buea.
12.2009		Buea University Newsletter (BUN). *In recognition of the University of Buea as a partner in the Global Emerging Infections Surveillance and Response System Network: A Division of the US Armed Forces Health Surveillance Centre*.
2010		*University of Buea annual report 2009/2010*. University of Buea.
12.2010		Decree No. 2010/372 of 14th December 2010 creating the University of Bamenda.
12.2010		MINESUP. (2010, December 20). *Partnership charter between university and the industry*.

10.2012		Decree No. 2012/433 of 1st October 2012 to organize the Ministry of Higher Education in Cameroon.
2014		*University of Buea research at a glance 2013/2014*. University of Buea.
2014		Faculty of Social and Management Sciences (FSMS). *Research report 2014*.University of Buea.
2014		*Annuaire statistique 2014* [Annual Statistics]. Ministere de l'Enseignement superieur [Higher education ministry].
2015		*University of Buea research at a glance 2014/2015*. University of Buea.
2016		*University of Buea revised strategic plan 2016*. University of Buea.

APPENDIX F

List of Departments and Programmes at UB During the 2006/2007 Academic Year

FACULTY	DEPARTMENTS	PROGRAMMES	LEVEL
Advanced School of Translation and Interpretation	Division I	Translation	MA
	Division II	Interpretation	MA
Faculty of Arts	English	English	BA, MA, PhD
	French	English and French, French	BA, MA
	History	History	BA, MA, PhD
	Linguistics	Linguistics	
Faculty of Education	Curriculum Studies	Curriculum Studies	B.Ed, PGD, M.Ed, PhD
	Educational Foundation and Administration	Educational Administration	B.Ed, M.Ed

	Educational Psychology	Educational Psychology	B.Ed, M.Ed, PhD
	NB: B.Ed. Educational Psychology, B.Ed. Special Education		
Faculty of Health Sciences	Medicine	Medicine	
	Medical Laboratory Science	Medical Laboratory Science	BMLS, MSc
	Nursing	Nursing	BNS
Faculty of Science	Biochemistry and Microbiology	Biochemistry, Microbiology	BSc, MSc, PhD
	Chemistry	Chemistry	BSc, MSc, PhD
	Computer Science	Minor in Computer Science	BSc, MSc, PhD
	Geology and Environmental Science	Environmental Science, Geology	BSc, MSc, PhD
	Mathematics	Mathematics	BSc, MSc, PhD
	Physics	Physics	BSc, MSc, PhD
	Plant and Animal Sciences	Botany, Zoology	BSc, MSc, PhD
Faculty of Social and	Economics and Management	Accountancy, Banking and Finance,	BSc, MSc

Management Sciences		Economics, Management	
	Geography	Geography	BSc, MSc, PhD
	Journalism and Mass Communication	Journalism and Mass Communication	BSc
	Law	Law	LLB
	Political Science and Administration	Political Science	BSc
	Sociology and Anthropology	Sociology and Anthropology	BSc
	Women and Gender Studies	Women and Gender Studies	BSc, PGD, MSc

APPENDIX G

UB Collaboration with Other Stakeholders

No	Linkage / Collaboration	Area (Project) of Collaboration	Year of Collaboration	Status / Observations
i) Capacity Building: Teaching Improvement-Pedagogy and Curriculum Development				
Faculty of Health Sciences (FHS)				
1.	World Health Organization West African Office (Ouagadougou)	Curriculum development of MSc and PhD in nursing.	2011–date	Active
2.	University of East Anglia UK, Norwich England	Curriculum follow-up and teaching by distance.	2008–date	Master's in Nursing Education
3.	Faculty of Education, University of Buea	Collaboration in nursing education performance.	2008–Date	Active
4.	Prof Leonna Uys, University of Kwazulu-	Curriculum development and associated guides.	2009–Date	Active

No	Linkage / Collaboration	Area (Project) of Collaboration	Year of Collaboration	Status / Observations
	Natal, South Africa			
5.	Case Western University, USA	Student-to-student (peer) teaching in clinical nursing.	2010–Date	Active
6.	Golfarb School of Nursing, Ohio, USA	Peer teaching in HIV/AIDS.	2010–2011	Ended
7.	ICITD, Southern University Baton Rouge, Louisiana, USA	Assorted: ICT, teaching, CSC, based on MOU, conferences.	2008	Ongoing
Faculty of Social and Management Sciences (FSMS)				
8.	African Economic Research Consortiums (AERC)	Support for postgraduate training in economics.	2010	Ongoing
ii) Capacity Building: Training/Improvement in Skills Collaboration (FHS).				
9.	Cameroon Baptist Convention (CBC) –	Collaborating in seminars in HIV/AIDS	2007–date	Active every July

No	Linkage / Collaboration	Area (Project) of Collaboration	Year of Collaboration	Status / Observations
	Mutengene Head Office	counselling at level 500 nursing.		
10.	ADEPT: Adaptation of a depression treatment for HIV patients in Cameroon	Diagnosis and management of depression in HIV in Cameroon.	2009–2012	Ongoing
11.	Linfield College of Nursing, USA	HIV/AIDS among ANC women.	2011–2012	Ongoing
12.	Golfarb School of Nursing	HIV/AIDS stigma among youth.	2009–date	Ongoing with three publications
13.	Collaboration with the European and Developing Countries Clinical Trials Partnership (EDCTP)	Capacity building of the Faculty of Science Institutional Review Board (IRB).	2013/2014	Active
14.	Collaboration agreement with the University	To foster training in reproductive health, beginning with the introduction of a	2013/2014	Active

No	Linkage / Collaboration	Area (Project) of Collaboration	Year of Collaboration	Status / Observations
	of Arizona, USA	postgraduate programme in obstetrics and gynaecology.		
Faculty of Science (FS)				
15.	World Intellectual Property Organization (WIPO), Geneva, Switzerland	Sharing innovation in the fight against neglected tropical diseases.	26 June 2012	
16.	Centre for Tropical Forest Science – Forest Global Observatory (CTFS Forest GEO), USA, in collaboration with the Department of Botany and Plant Physiology (BPP), UB.	Centre for Tropical Forest Science – Forest Global Observatory (CTFS Forest GEO), USA	2013/2014	Ongoing
17.	Group Decolvanaere Logging	Ecology, plant systematic	2013/2014	Ongoing

No	Linkage / Collaboration	Area (Project) of Collaboration	Year of Collaboration	Status / Observations
	Company – Douala, in collaboration with BPP, UB.			
18.	Institute of Plant Science, University of Bern, Switzerland in collaboration with BPP, UB	Ecology, plant and systematic plant biotechnology.	2013/2014	Ongoing
19.	ANAFOR Yaoundé, Cameroon	Forestry conservation.	2013/2014	Ongoing
20.	CDC, Bota – Limbe, Cameroon	Ecology and plant biotechnology.	2013	Ongoing
21.	SOWEDA – Buea, Cameroon	Ecology, plant and systematic plant biotechnology.	2013	
22.	Howard University GEAR UP programme in partnership with the University of Buea	Undergraduate research exchange mobility of students from both universities.	From 2013 to 2017	Active

No	Linkage / Collaboration	Area (Project) of Collaboration	Year of Collaboration	Status / Observations
Faculty of Education (FEd)				
23.	Antioch University, Yellow Springs, Ohio, USA	– Develop mutually beneficial academic programmes; – Exchange of students and staff for teaching and research purposes; – Reciprocal assistance for students and staff; – Joint research and seminars in short and long programmes;	July 2010	Ongoing, Vice Chancellor's Office

No	Linkage / Collaboration	Area (Project) of Collaboration	Year of Collaboration	Status / Observations
		– Exchange of documentation and research materials of mutual interest.		
24.	Association for Educational Assessment in Africa (AEAA) – Cameroon, Kenya, Nigeria and Uganda	Management, improvement and mutual cooperation between examination bodies in Africa.		Faculty of Education

- Centre de Recherche sur les Filarioses et Autres Maladies Tropicales (CRFiLMT), headed by Dr Joseph Kamgno, University of Yaounde I;

- ANDI Centre of Excellence for Onhocercal Drug discovery, Biotechnology Unit, headed by Dr Fidelis Cho-Ngwa, UB;

- Research Foundation for Tropical Disease and the Environment (REFOTDE), headed by Dr Samuel Wanji, UB;

- Prof. Vincent P. K. Titanji, Vice Chancellor of Cameroon Christian University, CCU, Bali. Former Vice Chancellor of UB, Founder of the Biotechnology Unit and PRD Project Advisor.

- Laboratory of Biotechnology and Embryology (IBMM), headed by Prof. Jacob Souopgui, Universite Libre de Bruxelles;

- Laboratory of Molecular Parasitology, with Prof. Luc VanHAMME, Universite Libre de Bruxelles;

- Ecole de Santé Publique, Centre de Recherche CRISS – Approches sociale de la santé, with Prof. Claire Perrine Humblet, Universite Libre de Bruxelles;

- Secteur des Sciences de la santé – Faculté de santé publique (FSP) et Institut de recherche expérimentale et clinique (IREC), with Prof Annie R ROBERT, Université catholique de Louvain.

Source: Division of Research and Publication (2015).
Last update: 2015.

APPENDIX H

S/N	Name of Research Laboratory	Coordinator(s)	Host Establishment/ Faculty/ School	Mission/ Objective	Core competences
	Language Laboratory	Director/ ASTI	ASTI	/	Translation and interpretation service.
	Centre for African Languages and Cultures (CALAC)	Dr Pius Akumbu	Arts	To encourage, promote and conduct interdisciplinary research on African languages and cultures.	Research and teaching on Africa specialised in the acquisition and dissemination of information about languages, literatures and cultures through the publication of books and articles and organisation of guest lectures, seminars, workshops and conferences.
	Faculty of Agriculture Experimental Farm	Dr Pierre Sakwe	FAVM	/	Four hectares of farmland and equipment for mechanised farming, including: – two tractors

					– a plough – a disc-harrow – a water pump
	College of Technology Laboratory	Dr Nde Ntomambang Ningo (Director / COT)	COT	/	/
	UNESCO Chair on Special Education Needs	Prof Therese Mungah Shalo Tchombe	FED	To provide training in special needs education.	General teaching laboratory in special education and assistive technology in impairment.
	Clinical Diagnostic Laboratory	Prof Theresa Akuo-Akenji	Science	To provide reliable and cost effective routine and referral clinical laboratory services to our community while promoting and fostering development	Clinical chemistry tests, haematological tests, parasitological tests and bacteriological tests.

APPENDIX I

No	Project title	Host Institution	Principal Investigator	Funding Source	Budget Coordinator	Observation/ Status
1.	Application of Molecular Biology Techniques to Tropical Diseases	University of Buea	Prof Vincent P. K. Titanji	ISP/ IPRCS	PI & Grant Management Office	
2.	Mt Cameroon Volcano Monitoring Project	University of Buea	Dr Samuel Ayounghe		PI & Grant Management Office	
3.	Relationship Between In Utero Exposure to Malaria Antigens Immune Responses of the Newborn and Disease Susceptibilit	University of Buea	Dr Eric Achidi	MIM/ TDR /Grant for Malaria Research	PI & Grant Management Office	

	y During the First Years of Life					
4.	UNICEF/ UNDP/ WB	University of Buea	Dr Eric Achidi	UNICEF/ UNDP/ WB	PI & Grant Management Office	
5.	European Union VARBO Project	University of Buea	Dr Samuel Wanji	European Union	PI & Grant Management Office	
6.	Evaluation of the Management of Waste Generated During Palm Oil Production and Utilisation of Composted Empty Fruit Bunches in the Cameroon Development Corporation	University of Buea	Dr Yinda Godwin Sendze	CDC	PI & Grant Management Office	

7.	Medicine for Malaria Venture	University of Buea	Professor Simon Efange	WHO	PI & Grant Management Office	
8.	Biotechnology Project	University of Buea				
9.	IFS Project (*Résistance des agents d'infection urogénitales aux antibiotiques: recherché de solutions dans quelques espèces des plantes médicinales du Cameroun*)	University of Buea	Dr Assob Nguedia Jules Clement	International Foundation for Science (IFS)	PI & Grant Management Office	
10.	Grand Challenges in Global Health Initiatives – Malaria GEN Project	University of Buea	Dr Eric Achidi	Welcome Trust– Oxford University	PI & Grant Management Office	

11.	Peaceful Application of Nuclear Techniques (influence of seasonal changes in hydrology on nutrient-cycling in West African tropical mangroves)	University of Buea	Dr Tening Aaron	IAEA	PI & Grant Management Office	
12.	To establish a drug discovery centre at UB; Project titled: Screening for Macrofilaricidal Drugs in Onchocerciasis	University of Buea	Dr Fidelis Cho Ngwa & Prof Vincent P. K. Titanji	CELGENE Corporation USA	PI & Grant Management Office	Training grant
13.	T-cell Responses to Variant Surface Antigens of Plasmodiu	University of Buea	Prof Vincent P. K. Titanji	Microsoft Corporation	PI & Grant Management Office	

	m Falciparum					
14.	Influenza Surveillance in Cameroon	University of Buea	Dr Lucy Ndip	Henry Jackson Foundation (HJF), USA	PI & Grant Management Office	
15.	Characterisation of *Erhlichia Spp* Infecting Cattle in Cameroon	University of Buea	Dr Lucy Ndip	TWAS (Academy of Sciences for the Developing World)	PI & Grant Management Office	
16.	Malaria Pilot Community Research Project	University of Buea	Prof Theresa Akenji	WHO	PI & Grant Management Office	
17.	Global Forum for Health Research	University of Buea	Dr Ndeh Peter	WHO	PI & Grant Management Office	
18.	Gender, Globalisation and Land Tenure: The Chad-Cameroon Pipe	University of Buea	Prof Joyce Endeley, Prof Fondo Sikod	IDRC Canada	PI & Grant Management Office	Completed

19.	Climate Variability and Climate Change in Northern Cameroon	University of Buea	Dr Ernest Molua	IDRC-UNITAR	PI & Grant Management Office	
20.	Application of Genomic and Proteomic Approaches in the Characterisation of Human and Bovine *Tubercle Bacilli* and Implications for Disease Control	University of Buea	Prof Vincent P. K. Titanji	BecANet	PI & Grant Management Office	
21.	The Impact of Land Tenure Practices on Women's Right to Land in Anglophone Cameroon and Implications on	University of Buea	Prof Lotsmart Fonjong, Dr Lawrence Fombe, Dr Irene Sama-lang	IDRC	PI & Grant Management Office	

	Sustainable Development					
22.	Correlation of Bark Phytochemicals from *Annickia Chlorantha* with Physiological and Environmental Variables Across a Forested African Landscape	University of Buea	Prof Simon Efange	Smithsonian Institute, Washington	PI & Grant Management Office	
23.	The Influence of Seasonal Changes in Hydrology	University of Buea	Dr Tening Aaron	IAEA	PI & Grant Management Office	
24.	Climate Friendly Waste Management	University of Buea	Dr Josepha Foba	Common-wealth and foreign office, UK (Admin. by British High Commission)	PI & Grant Management Office	

25.	Mechanisms of Erythrocytic Infection and Anaemia in Malaria	University of Buea	Prof Vincent P. K. Titanji	University of Notre Dame, USA	PI & Grant Management Office	
26.	Women's Movements and the Struggle for Socio-Political Space in the Grasslands of Cameroon: A Study of Anlu, Kelu, Tekembeng and Fuembuem	University of Buea	Dr Roselyn M. Jua, Walters Nkwi and Henry Kah	CODESRIA NWG Research Grant	PI & Grant Management Office	
27.	Gene-Environment Studies in Podoconiosis	University of Buea	Dr Wanji	Welcome Trust Limited	PI & Grant Management Office	Grant to University of Sussex with UB as subcontractor
28.	Documenting the Royal Honorific Language of	University of Buea	Dr Ayu'nwi Ngwabe Neba	HRELP Project, London	PI & Grant Managem	New

	Bafut, a Grass Fields Bantu Language of North West Cameroon				ent Office	
29.	Poverty Eradication and Grassroot Empowerment through Sustainable Integrated Agriculture Development: Fish Cum Rice and Pig Production *Lead University: Njala University, Sierra Leone*	University of Buea	Dr Pius Mbu Oben (Cameroon National Coordinator: CORAF – WECARD)	WB Project: West and Central African Council for Agricultural Research and Development (CORAF / WECARD) Competitive Grant and Commissioned Research Schemes	PI & Grant Management Office	
30.	Sustainable Integrated Pond Based Aquaculture with Rice	University of Buea	Dr Pius Mbu Oben	WB Project: West and Central	PI & Grant Management Office	

	and Poultry Production: Economic, Social and Environmental Assessment *Lead University: University of Ibadan, Nigeria*		(Cameroon National Coordinator: CORAF – WECARD)	African Council for Agricultural Research and Development (CORAF / WECARD) Competitive Grant and Commissioned Research Schemes		
31.	Developing a Macrofilaricidal Drug for Onchocerciasis Using Anacor's Novel Oxaborole Technology	University of Buea	Dr Fidelis Cho-Ngwa & Prof Vincent P. K. Titanji	New York Blood Center	PI & Grant Management Office	Research project
32.	To Establish a Drug Discovery Centre at the	University of Buea	Dr Fidelis Cho-Ngwa	WHO / TDR	PI & Grant Management Office	

	University of Buea					
33.	Studies on Developing Surveillance / Monitoring and Integrated Management Systems for the Oil Palm Leaf Miner Beetle (*Coelaemenodera Minuta Uhmann*) in the Cameroon Development Corporation	University of Buea	Dr Ntonnifor Nelson		PI & Grant Management Office	
34.	IPICS: Biotech Project	University of Buea	Prof Vincent P. K. Titanji	IPICS	PI & Grant Management Office	
35.	Benedict College	University of Buea	Prof Leke Tambo		PI & Grant Management Office	

36.	IFS Grant	University of Buea	Dr Ndip Roland	IFS Grant	PI & Grant Management Office	
37.	Order, Disorder and Chaos in Biophysical Systems: Unveiling the Complex Dynamics of the Neuronal System	University of Buea	Dr Dikande Alain Moise	TWAS	PI & Grant Management Office	In progress
38.	UB AERC Project	University of Buea	Dr Sama Molem	AERC Project	PI & Grant Management Office	
39.	Development and Sustainable Breeding of Local Chicken for Improved Productivity Under Local	University of Buea	Mr Christian Keambou T.	International Initiative Africa-Brazil Agricultural Innovation Marketplace	PI & Grant Management Office	New Research and development

	Alternative Feed Management System and Health Control					
40.	Development of a Research Strategic and Operational Plan and Guidelines for Accreditation and Evaluation of Research Units at the University of Buea	University of Buea	Division of Research and Publications (Coordinator: Dr Foba Tendo)	AAU Seed Grant Project	PI & Grant Management Office	Ongoing
41.	UB-ULB Project on Strengthening the Onchocerciasis Programme in Cameroon	University of Buea	Dr Stephen Mbigha Ghogomu	Universite Libre de Bruxelles	PI & Grant Management Office	
42.	Effects of Extracts of *Aguaria*	University of Buea	Dr Fotio Lambou	International Foundatio	PI & Grant Managem	New

	Salicifolia on Liver diseases, In Vitro and In Vivo		epse Tonfack	n for Science (IFS)	ent Office	
43.	Documentation and Description of Zerenkel, an Afro-Asiatic Language of Chad Belonging to East Chadic Language Family	University of Buea	Ramat Sakine (PhD Student at UB, from Chad)	ELDP, SOAS - UK	PI & Grant Management Office	Ongoing
44.	Morphological and Molecular Identification of Fresh Water Prawn of Genus *Macrobrachium* in South Region of Cameroon	University of Buea	Ms Judith G. Makombu	International Foundation for Science (IFS)	PI & Grant Management Office	New
45.	The Youths in Africa's Labour Market:	University of Buea	Dr Tabi Atemnkeng Johannes	Africa Economic Research	PI & Grant Managem	New

	Quality of Employment, Unemployment and Under-employment			Consortium (AERC)	ent Office	
46.	Programme of Implementation Research to Inform the Effective and Sustainable Scaling-Up of Integrated Neglected Tropical Disease (NTD) Control Initiatives	University of Buea	Dr Samuel Wanji	Liverpool School of Tropical Medicine (LSTM)	PI & Grant Management Office	New

APPENDIX J

Current Research Themes and Major Research Findings (1998–2007)

Research Themes	**Major Research Findings**
Tropical and Transmissible Disease	-Immunodiagnostic test development. -Promising drug leads for adult worms (onchocerciasis) and malaria. -Highly promising vaccine candidates for malaria vaccines (UB05).
Geo Hazards	-Pattern of volcanic eruption for Mt Cameroon. -Mapped high risk zones with respect to eruption. -Identification of landslide-prone areas in S.W. Cameroon.
Phyto/Medicinal-Chemistry	-Identification of local food spices as a source of anti-malaria drugs.
Gender Research	-Impact of globalising projects such as the Chad-Cameroon Oil Pipeline project on gender relations, land tenure systems and livelihoods. -Feminist analysis of socio-cultural, political and economic issues in Cameroon.

	-Critique of selected development policies, projects and initiatives from a gender perspective.
Natural Resource Research and Pollution Control	-Identification of gold, nickel and cobalt occurrences and characterisation. -Identification of limestone and cobalt occurrences, characterisation and acid drainage.
Education Development	-Teacher behaviour as a factor in quality of education.
Fisheries	-The culture of aquarium fish species. -Ciguatoxins detections in some carnivorous Cameroonian marine fish species. -Culture of some freshwater fish species and their hybrids—for example, *Clarias gariepinus* (yinda).
Biodiversity	-Checklist of plants in S.W. Cameroon and the drier forest of the eastern province.
Medical and Environmental Microbiology	-Characterisation of yeast strains for production of wine from local fruits. -Development of a consortium of microorganisms for bioremediation.
Soil Genesis and Lava Flow: Impact on Soil Fertility (Mt Cameroon)	

Crop Protection and Plant Ecology	-Patterns of host-pathogen interactions for okra and palms.
Evaluation and Law Reform	-Critique of the settlement process under the CIMA code. -Evaluation of the effectiveness of OHADA: Cameroon experience.
Translation and Interpretation	-Effective methodology for teaching African languages alongside official languages. -African linguistics as a tool for the development of African communities. -Strategies for the translation of African drama. -Pedagogy of interpretation. -Strategies for rescuing endangered African languages. -Developed appropriate seed production and agronomic techniques for popular vegetables.
Applicable Mathematics	-Models of the dynamics and transmission of indirectly transmitted diseases.
Renewable Energy	-Optimum design parameters for hydro and wind turbines for rural electrification.

Source: University of Buea Strategic Plan for 2007–2015.

APPENDIX K

REPUBLIQUE DU CAMEROUN
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SECRETARIAT GENERAL
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DEPARTMENT OF UNIVERSITY ACCREDITATIONS AND QUALITY
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ORDER N° 17/00329/MINESUP/SG/DAUQ/SDEAC/SE of 24 MAI 2017

To launch the Competitive Entrance Examination into the first year of the College of Technology (COT) of the University of Buea and fixing the number of places offered for the 2017/2018 academic year.

THE MINISTER OF HIGHER EDUCATION,

Mindful of the constitution;
Mindful of law n° 2001/005 of 16th April 2001 on the orientation of Higher Education;
Mindful of Decree n° 2011/408 of 09th December 2011 to organize the government;
Mindful of Decree n° 2011/410 of 09th December 2011 to appoint members of Government;
Mindful of Decree n° 2015/434 of 02nd October 2015 to re-shuffle the Government;
Mindful of Decree n° 2012/433 of 01st April 2012 to organize the Ministry of Higher Education;
Mindful of Decree n° 2005/342 of 10th September 2005to modify and complete certain dispositions of decree n° 93/027 of 19th January 1993 to define common dispositions applicable to Universities
Mindful of Decree n° 92/074 of 13th April 1992 to transform the Buea and Ngaoundere University Centres into Universities;
Mindful of Decree n° 93/034 of 19th January 1993 to organize the University of Buea;
Mindful of Decree n° 2012/333 of 29th June 2012 appointing a Vice-Chancellor and Rectors in some State Universities;
Mindful of Decree n° 2012/333 of 29 June 2012 appointing persons in State Universities;
Mindful of Decree n° 2012/366 of 06th August 2012 appointing persons in State Universities;
Mindful of Decree n° 2013/0891/PM of 12th March 2013 appointing persons in the Ministry of Higher Education;
Mindful of Decree n° 2014/545 of 10th December 2014 to appoint the Director of the College of Technology;
Mindful of Arrête n° 17/00056/MINESUP/SG/DAUQ/SDEAC/SE of 25th January 2017 fixing the calendar of the competitive examinations into the Cameroon State Universities, for the 2017/2018 academic year;

On the proposal of the Vice-Chancellor of the University of Buea

HEREBY ORDERS AS FOLLOWS:

Article 1: A Competitive Entrance Examination for the selection of **one hundred and eighty (180)** students for admission into the first year of the Bachelor of Technology degree programme of the College of Technology (COT) of the University of Buea for the 2017/2018 academic year is hereby launched to admit students in the Departments of Computer Engineering, Electrical and Electronic Engineering and Mechanical Engineering on **Wednesday, 15th September 2016.**

Article 2: The Competitive Entrance Examination cited in article 1 shall be open to male and female Cameroonians and to foreign candidates resident in Cameroon within the limits of available places.

Article 3: Applicants for the competitive entrance examination must be holders of one of the following qualifications:

- General Certificate of Education Ordinary Level in at least five subjects including English Language, Mathematics, and Physics and excluding Religious Knowledge; and General Certificate of Education Advanced Level in at least two subjects which must include Mathematics and Physics;
- Baccalaureat C, D, E, F1, F2, F3 or BT (MSIE, MAV, MEM);
- General Certificate of Education Technical Ordinary and Advanced Levels in relevant subjects;
- Any other certificates recognized as equivalent by the Ministry of Higher Education;

Article 4: The complete application file must include the following documents:

1) An application form to be completed by the applicant;
2) Certified true copy of the candidate's birth certificate not less than three (3) months old;
3) Four (4) recent passport-size photographs (4cm x 4cm);
4) Photocopies of the relevant academic certificates indicated in Article 3 above;
5) Receipt of payment of CFAF 20,000 (twenty thousand francs) for the examination, payable to the following account at **Banque Atlantique Cameroon**:
   Account No: 10034-00040-94063570003-92
   Account Name: COLLEGE OF TECHNOLOGY, UNIVERSITY OF BUEA

Article 5: Application forms and supporting documents shall be available at the Universities of Buea, Maroua, and Ngaoundere, also at regional delegations of Secondary Education and at branches of Presbook in Bamenda, Douala, Limbe and Yaounde.

Article 6: Complete application files shall be submitted at the locations in Article 5 not later than **Wednesday, 6th September 2017**. Late or incomplete application files shall be rejected.

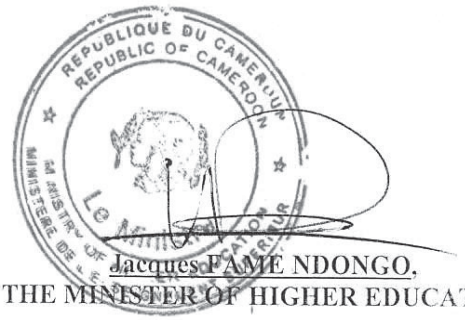
Article 7: The examination centres are Buea, Bamenda and Yaounde. A press release published by the Vice-Chancellor of the University of Buea shall ultimately indicate the modalities of the organization of the written examination.

Article 8: Candidates are requested to come to the examination centres at least 30 minutes before the start of each examination paper. They must come along with their National Identity card.

Article 9: The written papers below will account for 60% and study of files 40%. The written examination is based on the High school syllabus and will comprise:

- Mathematics paper (3 hours, coefficient 4);
- Physics paper (3 hours, coefficient 4);
- Language paper (1 hour, coefficient 1)

Article 10 – The Vice-Chancellor of the University of Buea, the Director of University Accreditation and Quality and the Director of the College of Technology of the University of Buea shall be responsible, each in his/her own sphere, for the implementation of this order, which shall be registered and published wherever need be.



Jacques FAME NDONGO,
THE MINISTER OF HIGHER EDUCATION

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ORDER N° 17/00324 **/MINESUP/SG/DAUQ/SDEAC/SE of** 24 MAI 2017

To launch the Competitive Entrance Examination into the third year of the College of Technology (COT) of the University of Buea and fixing the number of places offered for the 2017/2018 academic year.

THE MINISTER OF HIGHER EDUCATION,

Mindful of the constitution;
Mindful of law n° 2001/005 of 16th April 2001 on the orientation of Higher Education;
Mindful of Decree n° 2011/408 of 09th December 2011 to organize the government;
Mindful of Decree n° 2011/410 of 09th December 2011 to appoint members of Government;
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Mindful of Decree n° 2012/333 of 29 June 2012 appointing persons in State Universities;
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Mindful of Decree n° 2013/0891/PM of 12th March 2013 appointing persons in the Ministry of Higher Education;
Mindful of Decree n° 2014/545 of 10th December 2014 to appoint the Director of the College of Technology;
Mindful of Arrête n° 17/00056/MINESUP/SG/DAUQ/SDEAC/SE of 25th January 2017 fixing the calendar of the competitive examinations into the Cameroon State Universities, for the 2017/2018 academic year;

On the proposal of the Vice-Chancellor of the University of Buea

HEREBY ORDERS AS FOLLOWS:

Article 1: A Competitive Entrance Examination for the selection of **twenty (20)** students for admission into the third year of the Bachelor of Technology degree programme of the College of Technology (COT) of the University of Buea for the 2017/2018 academic year is hereby launched to admit students in the Departments of Computer Engineering and Electrical and Electronic Engineering on **Wednesday, 15th September 2016.**

Article 2: The Competitive Entrance Examination cited in article 1 shall be open to male and female Cameroonians and to foreign candidates resident in Cameroon within the limits of available places.

Article 3: Applicants for the competitive entrance examination must be holders of one of the following qualifications:

- Higher National Diploma (HND) in the Engineering fields cited in Article 1;
- Brevet de Technicien Supérieure (BTS) in the Engineering fields cited in Article 1;
- Any other certificates recognized as equivalent by the Ministry of Higher Education;

Article 4: The complete application file must include the following documents:

1) An application form to be completed by the applicant;
2) Certified true copy of the candidate's birth certificate not less than three (3) months old;
3) Four (4) recent passport-size photographs (4cm x 4cm);
4) Photocopies of the relevant academic certificates indicated in Article 3 above;
5) Receipt of payment of CFAF 20,000 (twenty thousand francs) for the examination, payable to the following account at **Banque Atlantique Cameroon**:
   Account No: 10034-00040-94063570003-92
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Article 5: Application forms and supporting documents shall be available at the Universities of Buea, Maroua, and Ngaoundere, also at regional delegations of Secondary Education and at branches of Presbook in Bamenda, Douala, Limbe and Yaounde.

Article 6: Complete application files shall be submitted at the locations in Article 5 not later than **Wednesday, 6th September 2017**. Late or incomplete application files shall be rejected.

Article 7: The examination centres are Buea, Bamenda and Yaounde. A press release published by the Vice-Chancellor of the University of Buea shall ultimately indicate the modalities of the organization of the written examination.

Article 8: Candidates are requested to come to the examination centres at least 30 minutes before the start of each examination paper. They must come along with their National Identity card.

Article 9: The written papers below will account for 60% and study of files 40%. The written examination is based on the HND and BTS syllabuses and will comprise:

- Speciality paper (4 hours, coefficient 4);
- Language paper (1 hour, coefficient 1)

Article 10 – The Vice-Chancellor of the University of Buea, the Director of University Accreditation and Quality and the Director of the College of Technology of the University of Buea shall be responsible, each in his/her own sphere, for the implementation of this order which shall be registered and published wherever need be.

Jacques FAME NDONGO,
THE MINISTER OF HIGHER EDUCATION

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ORDER N° 17/00324 **/MINESUP/SG/DAUQ/SDEAC/SE of** 24 MAI 2017

To launch the Competitive Entrance Examination into the third year of the College of Technology (COT) of the University of Buea and fixing the number of places offered for the 2017/2018 academic year.

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