

# The University–Regional Development Link as a “Third Mission”: The Case of Young Universities in Cameroon

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## **Introduction**

The debate on tertiary education has developed into a highly dynamic discourse in recent years, both in academic circles and in educational policies. The increased significance of a university education in the twenty-first century has led to the development of numerous new concepts for university models and innovative reform ideas. On the one hand, these newly developed concepts are a reflection of inadequate (existing) university systems that no longer appear to meet the demands of their (local) communities; on the other, they represent a response to global developments.

The key determinant for growth in a globalised economy is knowledge that becomes an economic resource. In this context, institutions of higher education currently get an important new social role as the principal generators and distributors of knowledge. They are intended to function as incubators of innovations to drive growth and technological change, not only in national but also in regional and local environments (Goldstein and Renault 2004; Goldstein 2009, Power and Malmberg 2008). This role is based on a new understanding of the inter-relations and interaction between the academic world and business, political and social organisations. As a result, universities are being challenged in new ways at both organisational and institutional level: for example, due to the need to professionalise knowledge management, expand their capacity for

decision-making and action with respect to the government, pinpoint new formal structures and realise new organisational units (Brennan 2008:384). In this debate, a university develops into an 'organisational actor' (Krücken and Maier 2006:241), that is, an organisational unit that sets targets, defines measures and establishes networks, with a view to integrating academic processes into the socio-economic sphere. At the same time, institutions of higher education are also under pressure due to the withdrawal of the state from university funding. Due to these developments, new forms of governance such as academic entrepreneurship or market-oriented universities will be discussed. The question that arises here is to which extent the new requirements correspond to the previous fundamental characteristics of university institutions. In the traditional sense, the principal task of a university is to educate individuals. In addition, university members must reflect the conditions, effects and consequences of academic work and research, and incorporate these into a social context (Lundvall 2006:7). However, the new perspective demands something new, which has an effect on teaching and, consequently, the education of students.

In typical terms, a distinction is made between three models of university system in the twentieth century. All of these models can be found in Africa in various forms. With the Humboldt University Model, the university is viewed primarily as a learning institution (mission: 'teaching') and a location where knowledge is produced (mission: 'research'). Here, the dissemination of knowledge in society is seen to be self-evident. In contrast, the Developmental University Model has emerged in the USA. This model has a more prominent practical focus and is more oriented towards the needs of the (local) community. Here, the university is an autonomous non-profit-organisation that assumes developmental roles (so-called 'third mission') alongside its traditional teaching and research functions (Goldstein 2010). It was only during the course of the twentieth century that the third model – the Entrepreneurial University Model was developed in the USA. Here, the 'third mission' forms one of the key tasks. This university model must generate innovations that are of practical private use during the course of its research and advanced teaching activities, the sale of which becomes an important source of finance for the university's budget.

In order to direct knowledge into society or the economy in a targeted manner and/or absorb knowledge from the national or regional sphere, strategies, particular structures and special organisational units are required. It is only then that knowledge relations are able to give direct economic impulses to the national, regional or local environment, and that finance can be raised through the sale of the results of research activities.

This relatively detailed description of the development of university systems in Europe and the US is intended to highlight that African universities by no means stand alone in what some authors had called a 'dramatic shift in the African higher

education landscape’ in the 1990s (Munene 2009:1). Although Africa is not able to escape from the discourse on tertiary education in industrialised nations and the consequent restructuring processes (Zezeza 2003), specific conditions do apply, such as the extraordinary growth in population and the extreme financial crisis in Africa (Munene 2009). While the Bologna process was developed exclusively for Europe, African governments are currently working to align themselves with Europe by implementing European structures in their respective countries. On the one hand, this development can be attributed to their colonial past and the resultant (and often still existing) dependence relations with the former colonial powers. On the other hand, African universities must compete on the global education market to avoid losing their links with other continents. As a result of inadequate provision of resources to African universities (AAU 2004:9; Amonoo-Neizer 1998:302ff.), certain African states are attempting to implement ‘Western’ models such as the ‘entrepreneurial university’. The idea behind this is to offer solutions that are geared towards the market in order to establish new sources of income for the university.

The universities often lack the framework conditions required to implement new duties and/or new university models (including a market for knowledge-based university solutions). As such, ‘Western’ procedures and their compatibility with other settings must be scrutinised critically (see Charlier and Croché 2009; Khelifaoui 2009). Nevertheless, the development of African universities today depends, more than ever before, on the developments in Europe and the USA. For some time now, the debate on the new role of the university as a catalyst for regional and national developmental processes has even been promoted by certain African governments. Is it possible, on a continent characterised by severe socio-economic and political problems (including under-developed infrastructure, high unemployment and corruption) and catastrophes (Tetzlaff and Jakobeit 2005:58), for a university that has been established following the colonial example to meet the global demands on tertiary learning institutions in the age of the knowledge society? A clear understanding of the exact local and national facts pertaining to a developing country in Africa would appear necessary in this context. One can make legitimate scientific statements on the ‘third mission’ of African universities only after contextualising and proceeding according to an exact and methodical process. In order to reach general conclusions on the contribution of African universities to regional development, a large number of empirical case studies, each being situated in a specific context, are required.

This paper makes a first attempt to analyse knowledge relations in the ‘bilingual’ country of Cameroon, as measured by the number of students at the ‘small’ universities in the major cities of Yaoundé and Douala. Smallness refers here, additionally, to very different dimensions, such as a tremendously low number of professorships at the university, an overwhelming focus on bachelor

or similar undergraduate degrees in teaching, and reduced access to international cooperation in university research.

In 2001, the Cameroonian government claimed that public universities should be more closely linked to regional economic commitments. Although this seems to be a very wide-spread mission of universities all over the world, it hides in particular the intention of the state to increasingly withdraw from university funding due to the country's poor budgetary position. Using the examples of three relatively new universities situated at peripheral locations, this paper will examine the factual and organisational requirements for regional processes of exchanging knowledge, and the extent to which this has contributed to regional development. In analysing the university's contribution to regional development, we have to consider the particular character of the regional (societal) environment of the university, or, to put it in another way, the spatial and historical context. Often, medium-sized towns in peripheral locations have been neglected in social sciences while research on large and fast-growing cities was dominant (see, e.g., Fodouop and Bodpa 2000).

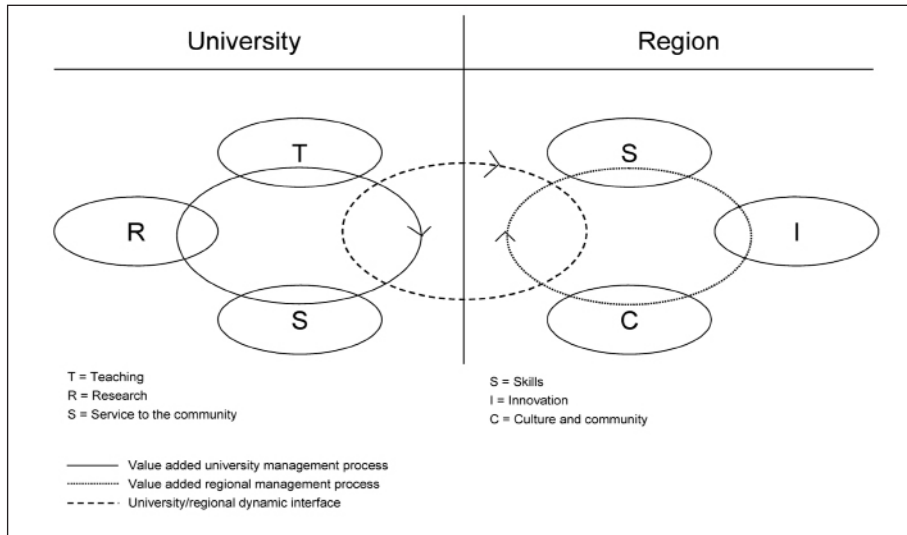
In this paper, we present a summary of the findings of an extended empirical research conducted over three years. The extent to which the concept of the 'third mission' can be, and is currently being, implemented in the context of African communities is discussed in detail by the co-author of this paper in her dissertation on these young universities in Cameroon (Goldstein 2010). Before examining certain empirical findings, the various dimensions of knowledge channels will be considered, based on the current discourse in academic circles. This is followed by details of the manners in which universities establish knowledge relationships with their regional environment. The third section focuses on the case of Cameroon, that is, the three young universities which are situated at peripheral geographical locations outside the country's two main centres (the capital city Yaoundé and the economic centre of Douala) and the relevant framework conditions. The scope of the analysis of selected knowledge channels at these universities will be expanded in the fourth and fifth sections, while the last section will present the key findings and certain recommendations for action.

### **Knowledge Channels as a Prerequisite for Fulfilling the 'Third Mission'**

The systematic development of knowledge channels between the university and its regional environment represents the key determinant to ensure the fulfilment of the 'Third Mission' in many knowledge-based approaches. The design of these channels, however, remains unclear in the literature. According to May and Perry (2006:9), a discrepancy (or 'missing middle') prevails between the opportunities for the university to integrate into the region and the reality of implementing the corresponding regional measures. In order to gain a better understanding of the 'dynamic interface' between the university and region, Chatterton and Goddard

(2000) developed a straightforward heuristic model for the relations between the university and region. This model has been taken as the starting point for this paper (see Figure 7.1).

**Figure 7.1:** Integration Relations Between the University and the Region

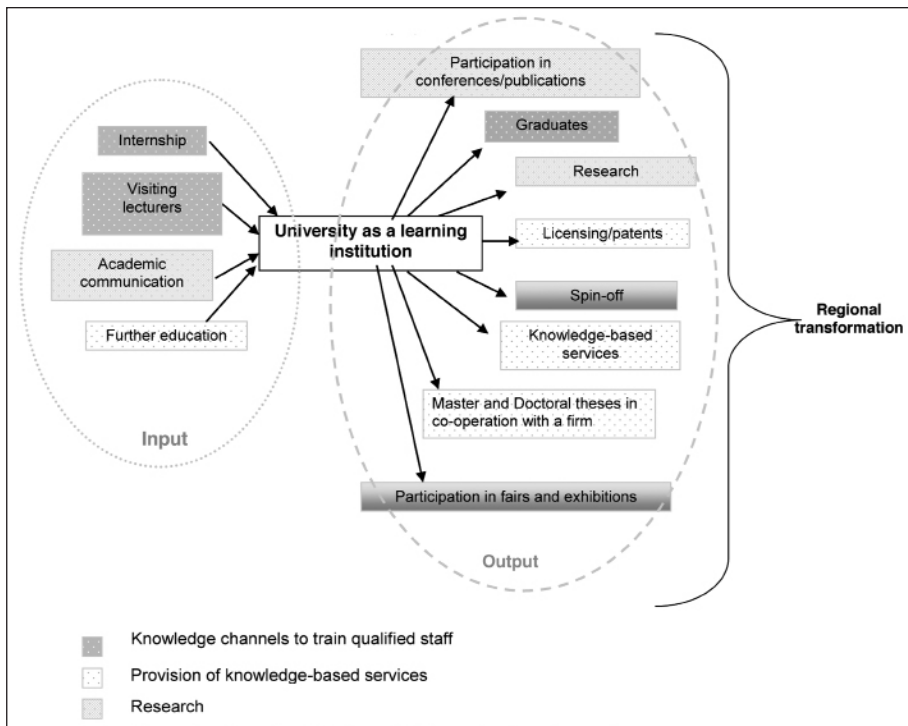


Source: Chatterton & Goddard 2000, p. 482

A university must develop measures (such as amendments to the financing system, staff development, modifications to the communication structures, etc.) in order to be able to tailor its duties – such as research, teaching and service orientation – to the respective regional requirements. This requires an improvement of the internal management process (‘value added university management process’). At the same time, the regional government must create incentives for universities to commit themselves (‘value added regional management process’), including an improvement of companies’ professional qualifications and ability to innovate (Chatterton and Goddard 2000: 482ff). Both management processes are prerequisites for fully functioning interactive knowledge channels between the university and its environment. As such, the university is only able to fulfil its new role if knowledge channels between the university and the regional environment have been established and are being used effectively. The ‘dynamic interface’ between the university and its environment thus renders the introduction of an efficient strategic management necessary. Obviously, this is the only way to eliminate the ‘missing middle’. In the case of Cameroon, the question arises as to whether, in a centralised state organisation currently subject to decentralisation issues, local authorities and/or other groups will develop sufficient power and efforts to create incentives and introduce methods of regional management.

Knowledge can be exchanged and accumulated by means of knowledge channels, in order to expand one's own knowledge base or gain new knowledge. Numerous authors are currently analysing the type of knowledge channels that must be established between the university and the region in order to be able to contribute to development (Goldstein 2009). According to Goldstein and Renault (2004), these include the building of human capital, provision of knowledge-based solutions, research activities and the creation of a collaborative regional environment. Figure 7.2 shows clearly the extent to which the avenues of knowledge relations can differ. The organisational forms of the knowledge channels can also be classified into 'input' and 'output' knowledge flows.

**Figure 7.2:** Classification of Knowledge Channels



*Source:* Goldstein & Renault 2004, p. 735

(Amended according to Fritsch et al. 2007, p. 56ff.; Fritsch & Schwirten 1998, p. 30ff.)

Up until now, studies on knowledge relations have been conducted in particular for highly developed industrialised nations or certain emerging countries. Research into knowledge channels, with focus on geographic-economic factors in Africa, and specifically in francophone (and Lusitanian) African countries), has not yet been conducted. The new model for African universities is presenting

extraordinary challenges for the relatively new and relatively small universities with small budgets in the peripheral regions of Africa, in particular. It can be assumed that the older, flagship universities such as Makerere or Cheikh Anta Diop will have fewer problems complying with the new requirements, as they are well known among government officials and are generally located in a better economic environment, namely Africa's core urban regions.

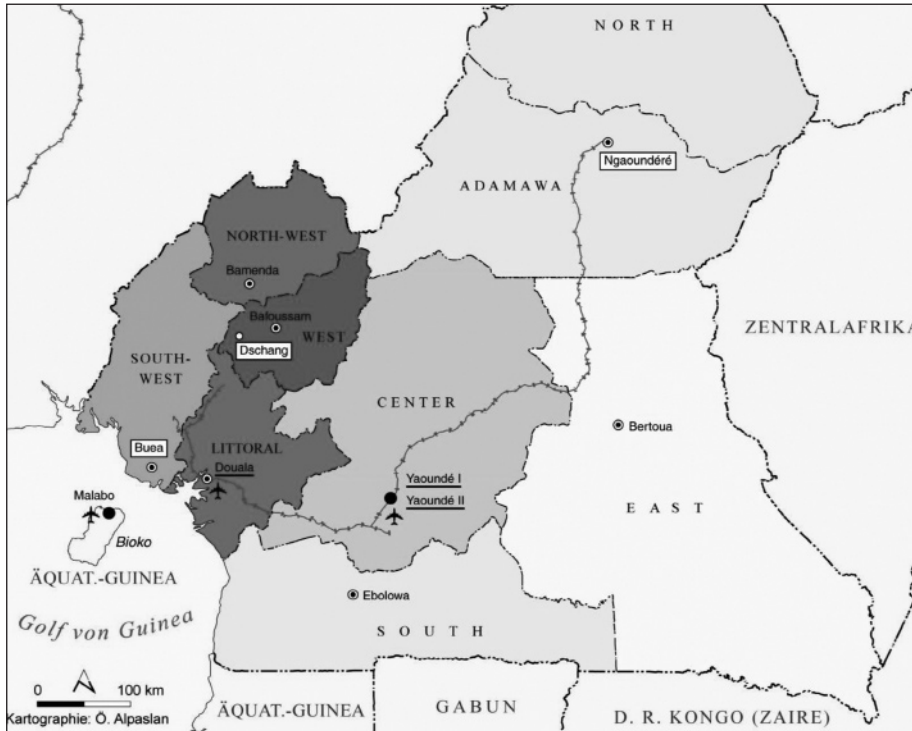
Certain empirical findings from a joint research project are presented below. This research was conducted between 2006 and 2009 in conjunction with professors and PhD students at three Cameroonian universities<sup>1</sup>. There is no 'one definitive' African university. It is possible that examples are described in this paper that detail the extreme difficulties faced by the smaller, weaker universities in the African context. In this respect, however, Cameroon represents an interesting research perspective as the country not only has a university that follows the anglophone model (Buea) but also universities that follow the francophone model (all remaining universities). The universities that were examined thus come from both models. To our knowledge, we will first present the findings for sub-Saharan (francophone) Africa concerning the ways in which the 'small' and relatively new universities establish knowledge-oriented relations with their regional environment. In contrast to other studies conducted previously that primarily treated the university as a 'black box', this paper will also take account of organisational structures within the universities.

### **Changes in the Higher Education System of Cameroon and the Young Universities**

The development of the Cameroonian university system has been fully discussed by various scholars (see, for example, Njeuma 1999). Nevertheless, we will provide a brief history here. In 1993, substantial changes were introduced to Cameroon's university system. Additional universities were founded that year to accommodate the increased growth in student numbers at what was until then the country's only university, Yaoundé. Alongside the already established university in Yaoundé ('la mère', which became Yaoundé 1), Yaoundé 2 university was founded in the capital, specialising in law and economics. The highly specialised university centres, founded in 1977 and belonging to the 'parent' university of Yaoundé, in the medium-sized provincial cities of Buea (Advanced School of Translators and Interpreters), Dschang (Agricultural Sciences) and Ngaoundéré (Food Science and Food Technology), as well as the University Centre in the largest city of Cameroon, Douala (Business Studies and the training of technical education teachers), were all upgraded to full university status. In so doing, Cameroon's first anglophone university (Buea) was established in the English-speaking South-West province. While the universities of Ngaoundéré and Douala were declared to be purely francophone universities, the University of Dschang in the francophone

West province, adjacent to the anglophone provinces, was given the unofficial status of a bilingual university (English/French). In contrast to the universities in Douala and Yaoundé which are located in Cameroon's principal metropolitan areas, the universities in Buea, Dschang and Ngaoundéré are situated at peripheral sites (see Figure 7.3). This paper will focus on the latter group of universities.

**Figure 7.3:** Young Universities in Cameroon



*Cartography:* Ö. Alpaslan 2008

Ever since their founding, these universities have been fighting against major difficulties, in addition to the internal and external challenges posed by the country itself (including corruption, a vast increase in training and competition from private universities). A former colony of Germany, Cameroon was controlled to a large extent by France and to a lesser extent by Great Britain until the country's independence in 1960. The country is therefore officially classified as bilingual, although the anglophone areas represent roughly only 20 per cent of the population. The bilingualism that resulted from the country's colonial past tends nowadays to lead to a divided society, and the divisions are profound and devastating. This is reflected in the communication behaviour of academics which reproduces the language communities that were founded during the colonial period. Thus, international communication between academics still remains



restricted to the francophone world (in the cases of Dschang and Ngaoundéré) and the anglophone world (the case of Buea), respectively (Schamp and Zajontz 2008). To this day, Cameroon remains split into two language areas, which has serious consequences for the tertiary education system. The founding of an anglophone university in Buea was originally intended to help reduce the potential for conflict with the English-speaking population, who were at a disadvantage linguistically. A further aim was to open up the proximity between two academic language communities. Research conducted into this issue has however revealed that this has tended to lead to a fragmentation of the two academic cultures (Schamp and Zajontz 2008).

As a result of a rapid increase in student numbers, together with a restricted budget and the low number of qualified lecturers,<sup>2</sup> the young universities have, to date, been unable to meet the requirements for an adequate university education. The unrestricted access to the public universities and low student fees are currently resulting in a steady increase in the number of students enrolled in both the universities in the metropolitan areas and the universities at peripheral sites. Despite the fact that the universities have made efforts to continually encourage continued education among their own staff since their founding, the number of professors at the three universities has remained rather low. The effect of this can be seen in the low number of advanced study programmes. In the past, the universities in Buea, Dschang and Ngaoundéré predominantly offered a university education up to Bachelors level, which can be attributed in particular to the Cameroonian government's failure to fill professorial vacancies at the young universities. Until recently, students were able to continue their studies to Masters level only at the University of Yaoundé or abroad.

Since their founding, Cameroon's young universities have considered themselves to be teaching institutions in the first instance, whose mission is to enable students acquire education to the Bachelors level only and, simultaneously, to impart knowledge about work in the academic sphere. The performance of research activities is given an equal weighting in the mission statements of these universities although this mission was heavily neglected in the initial years of their existence. It is only in recent years that the government has required not only the young universities but also all state tertiary institutions to focus more intensely on research activities. The intention is to transfer the new knowledge that is gained from this research into the region to benefit the region's population and business and provide an impulse for regional development.

The debate on the new role of the university raises questions against the background discussed above. Is the construct of the 'third mission' even valid in the context of African communities? Are the young universities in Cameroon, which offer predominantly basic education, are relatively new and have until now, tended to view research as a low priority area,<sup>3</sup> also able to fulfil the 'third mission'? as it

is claimed that young universities are less prompt, compared to the metropolitan universities in Cameroon.

In order to answer this question, two potential areas of knowledge distribution in the regional community will be analysed in more detail below: first, an area from the first mission of the university – teaching – and subsequently an area from the second mission – research. The analysis will be carried out based on complex quantitative and qualitative primary surveys at these universities (Zajontz 2010). Alongside many other ways in which knowledge can be transferred from the university into the regional community, the practical aspect of teaching (which can be clearly seen in the requirement that students participate in internships) as well as the relevance and distribution of the results of research activities, constitute some of the most important communication paths for the transfer of knowledge between the university and its (local) environment.

### **Internships: The Gateway Between Theory and Practice for Students**

Participation in internships in private and public institutions during the course of students' schooling allows them to translate academic (theoretical) knowledge into practical knowledge through mentoring processes. At the same time, internships act as a form of professional orientation that allows the students to gain impressions, knowledge and experience in fields in which they might wish to work in the future, thereby allowing them to discover fields of interest and study early on. During the course of the internship, however, the lecturers as well as the students become familiar with economic and social issues and questions. An intern can also introduce the private or public institutions to new theoretical perspectives, thus allowing them to benefit from the problem-solving capabilities of the university. The number of completed internships and the implementation of a professional internship management system give an indication of the extent to which the university is able to fulfil its role in supporting development.

Universities make the distinction between voluntary internship and one which is integrated into the curriculum. At the *grandes écoles*<sup>4</sup> of the young universities (i.e. University of Dschang (FASA), University of Ngaoundéré (ENSAI), University of Buea (ASTI)), the Faculty of Health Science of the University of Buea and at faculties offering a practice-oriented DESS (similar to a professional Masters degree) qualification (e.g. Professional Master in Human Rights, International Criminal Law and Humanitarian Law), the student must complete a mandatory internship in accordance with the respective study guidelines. These mandatory internships are organised at faculty level at the Institut universitaire de Technologie (IUT)<sup>5</sup>, of the Universities of Dschang and Ngaoundéré, and in the ENSAI (University of Ngaoundéré) by the Division for Internships, Lifelong Learning and Business Relations. However, this department only organises the mandatory internships for students in its own faculty. While the Faculté d'agronomie et des sciences

agricole (FASA, University of Dschang), which also requires students to complete a mandatory internship, does not (yet) have an efficient internship management system, the Faculty of Health Science (University of Buea) has concluded nine formal internship co-operation agreements with hospitals. In contrast to the francophone universities where indications of internship management systems can only be detected for the study programmes with restricted access, the first (decentralised) solutions for an internship management system can be seen at the anglophone University of Buea, including for study programmes with unrestricted access.

The students themselves are responsible for searching for internship positions in business or public institutions, and this may not be completed within the framework of the study guidelines. The studies have shown that only a very small number of students participate in voluntary internship. Lack of interest by the students may be one reason for this. Further potential causes could be lack of awareness of the benefits provided by voluntary internships and the low absorption capacity of the region for interns. The few businesses in the regions around the universities are only able to grant places to a small number of students. The option of completing an internship in another city that offers more scope for internships is often characterised by increased costs (temporary relocation, transportation, etc.) which many students cannot afford to pay as a result of their financial situation.

A detailed analysis shows that none of the universities has a well-organised, 'centralised' internship management system. None of the young universities has an internship office at university or faculty level to support and advise students when planning an internship related to their field of study. Only the Division des stages of the Universities of Dschang and Ngaoundéré have a database with businesses that may be able to offer a position to interns. At the north Cameroonian University of Ngaoundéré, this department contacts around 300 to 400 companies, using this database in writing each year to enquire whether the companies would be able to accept interns. However, these companies are not situated in the region, but rather are located in the major cities of Douala/Edéa, Yaoundé and Bafoussam. While it had even been possible in the past to conclude long-term agreements that guarantee (paid) internships with five companies, it was not possible to establish any regional focus in the contacts to these companies, simply due to the fact that only around 5 per cent of all companies are located in the north of Cameroon. On average, around 40 per cent of companies respond to the survey conducted by the IUT at the University of Ngaoundéré and offer internships, while the remaining 60 per cent must be contacted again. On the one hand, the low response rate may be attributed to the short lifespan of privately funded SMEs (usually less than 5 years in Africa) and the companies' lack of time. On the other hand, many companies are not prepared to accept interns or

do not see any benefit or added value for the company in taking on an intern. As a result, as far as internships are concerned, the relations on the university input side in the knowledge flow model (see Figure 2) between the universities and the region prove to be weak, despite the fact that universities have the potential to create new knowledge in their roles as centres for learning and creativity.

### **Research: An Ideal Way for Implementing the Third Mission?**

However, could research at the output side of the knowledge model act as the ideal solution for generating a regional impact? In the models of the developmental and entrepreneurial universities, the creation of new knowledge has enabled innovative products, methods and services that can be transferred to benefit the population and businesses in the region to be developed, thus providing an impulse for regional development. While Ela (2001) states that development occurs through scientific research (*le développement passe par la recherche scientifique*), he also specifies certain requirements as regards the type of research. According to some of his conclusions, certain preconditions must be established to enable the newly created knowledge to have an effect on the region. The subject of the research must correspond to the needs of the regional community and economy. It should be noted at this point that research is not considered to be one of the principal duties of lecturers at the reviewed universities, except research to support their own academic career (e.g. in dissertations). Research into topics, such as new methods of cultivation in the agriculture industry, the development of pesticides to combat native insects or the development of medication from medicinal plants to fight against malaria, can trigger positive impulses for growth in the region if the findings can be directly utilised by the population. Organisational forms shaping knowledge channels must be established for this in order to exchange the knowledge relevant to the region with the community in an appropriate manner. In order to guarantee that knowledge is transferred to the region in a research-focused manner, a structured research organisation must be present within the university, to receive and send trans-regional flows of knowledge (such as from foreign universities or research institutes) through established networks.

An initial analysis of research projects at the universities shows that the number of research projects said to be currently in progress is surprisingly high, despite the fact that research does not form part of a lecturer's principal activities (see Table 7.1).

**Table 7.1:** Number of Research Projects

Faculties	University of Buea	University of Dschang	University of Ngaoundéré
FSJP	-----	3	-----
FSEG	-----	5	4
FALSH	-----	9	8
FS	6	11	19
IUT	-----	2	4
ASTI	2	-----	-----
FASA	1	10	-----
ENSAI	-----	-----	10
FE	3	-----	-----
FSMS	5	-----	-----
FA	4	-----	-----
FHS	4	-----	-----
Total	25	40	45

Source: Own Survey

At the francophone universities, research projects are allocated in a hierarchical manner. On the one hand are the so-called *laboratoires* – research units that can be found not only in the sciences and engineering fields but also in the social sciences and economics. Despite their affiliation to specific faculties, these research units may be organised in an interdisciplinary manner. However, a distinction must be made between these units and the so-called practical teaching laboratories, in which lectures are held and tests performed as part of the course. On the other hand, each lecturer is able to carry out his own independent research. Three types of research projects could be classified:

1. Contract research with businesses or public institutions (only rarely the case);
2. Third-party research projects that are funded by international research organisations or NGOs. Only a small number of co-operative research projects with other universities could be identified (often the case);
3. Individual research that is generally conducted without financial support (usually the case); (see Table 7.2).

Twenty-eight per cent of the research projects currently in progress have no source of finance. The funding situation of the research laboratories that do not correspond to the Anglo-Saxon tradition and can thus only be found in the francophone universities in Cameroon is far worse. Forty-one per cent of the research laboratories do not have a dedicated research budget, as they are not

officially recognised. The university assigns a research budget each year only to research laboratories that are recognised by Cameroon's Ministry of Higher Education. According to statements made by heads of laboratories that were interviewed, the facilities and infrastructure, expertise of the staff (the founder must have attained the level of an Associate Professor) and focus of the research determine whether or not approval for a laboratory is granted in the first instance (at university level). Definitive approval from the Cameroon Minister for Higher Education is mandatory for a laboratory to be opened.

The size of the research budget depends on the year of founding and the reputation of the research laboratory. Many heads of laboratories use their own funds to finance their research activities. A path-dependent development in the financing could also be determined within the three universities for the allocation of resources to the research laboratories. Despite the fact that the faculty focusing on agricultural sciences (FASA) constitutes one of the smallest faculties within the University of Dschang, the three research laboratories attached to the faculty still receive the largest allocation of resources from the annual university research finances. There is no pure financing of laboratories using third-party funds. It is suspected that heads of laboratories apply for third-party projects which, once approved, are carried out outside the laboratories.

**Table 7.2:** Number of Research Projects Outside a Research Laboratory and Research Laboratories by Finance Method

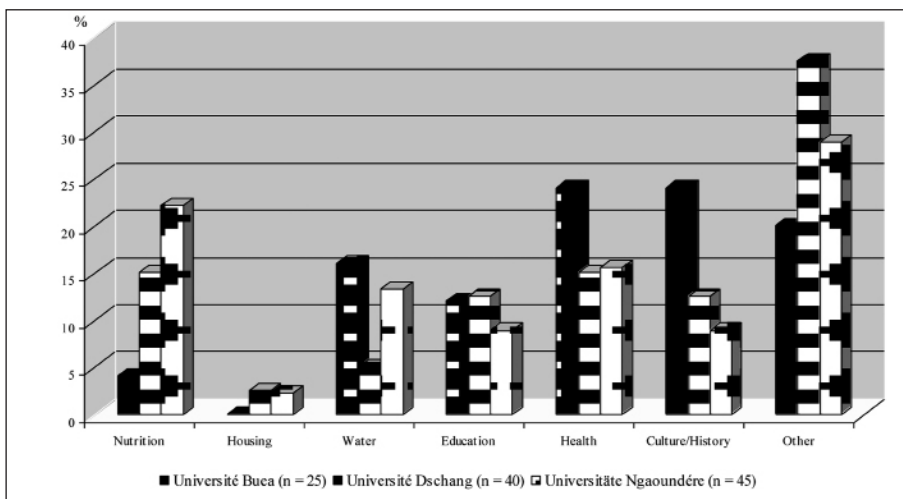
	University of Buea	University of Dschang research projects	University of Dschang laboratory	University of Ngaoundéré research projects	University of Ngaoundéré laboratory	Total
	(n = 25)	(n = 16)	(n = 13)	(n = 17)	(n = 16)	
No financing	6	3	4	5	8	26
100% financed by own university	8	3	6	3	6	26
100% financed by third-party funds <sup>6</sup>	8	9	0	6	0	23
Mixed financing <sup>7</sup>	2	1	3	2	1	9
No information	1	0	0	1	1	3

Source: Own Survey

Fourteen research projects and 12 laboratories are financed entirely by the university's research funds. While the recognised research laboratories receive an annual budget from the university, applications must be made for supporting funds for research projects conducted outside the laboratories. In terms of the applications for and distribution of funds for research projects outside laboratories, a major difference can be noted between the two francophone universities and the only anglophone university. The francophone universities do not have any regulated mechanisms for applying for research funds, and a transparent, fair distribution of research funds is not guaranteed. Here, any university researcher is able to apply to the office of the Deputy Vice-Chancellor in charge of Research, Cooperation and Relations with the Business World. Applications are not subject to any standardised regulations with regard to the form and deadline for submission. This method of applying for research funds does not guarantee any transparency as to why an application may be granted or rejected. At the anglophone University of Buea, funds have been distributed in an open manner according to service-based criteria, since 2007. All scientists have the opportunity to apply for internal research funds at the same time each year. The university specifies the exact form and content of the research applications in a small handbook published to assist in this regard.

The allocation of the identified research projects by subject area indicates a strong orientation to practical issues that arise in areas relevant to the current needs of the population (see Figure 4). As such, one of Ela's (2001) fundamental requirements – that knowledge be used as a means to combat poverty – appears to be fulfilled.

**Figure 7.4:** Research Project Clusters at the Three Universities that were Analysed (in %)



Source: Own Survey

Sixty-two of the 110 research projects focus on what could be designated as 'safeguarding basic needs'. This includes projects investigating basic needs in terms of food (e.g. the nutritional values of plants, research into yams, honey production, agricultural production, the production of yoghurt and the shelf life of foodstuffs), water supply and sewage disposal (including damage to the environment, water quality, designation of protected areas), living situations (such as building materials and fixtures), health (including medicinal plants, malaria) and education (e.g. language, professional training). In addition to the research clusters on basic needs, a further research cluster focusing on cultural and historical issues was also identified (15 research projects). These projects predominantly tackle contemporary issues, such as conflict resolution and strengthening (local and regional) self-perception and identity. Thirty-three research projects (around 30 per cent) could not be allocated to one particular subject area – for example, research projects into social rules, such as corruption, or into modern technologies, including renewable energy sources or telecommunication.

It can be seen from the allocation of the research clusters pertaining to the fulfilment of basic needs that hardly any of these projects relate to basic research. Some African authors have lamented the decline in basic research conducted at African universities (Chachage 2006; Mavongou 2008; Nyang 2005; Sawyerr 2004). However, the question should be raised as to whether basic research should be more established at the metropolitan universities (like in Yaoundé and Douala), and whether the young universities (like the universities in Dschang, Buea and Ngaoundéré) should better comply with the requirements set by Jean-Marc Ela. Although numerous research projects in the specified subject areas that are conducted at the investigated universities do not directly contribute to alleviating problems found in everyday life, they do raise scientific issues that are closely linked to day-to-day situations in the African society.

However, Ela (2001) sets another requirement for development-oriented research: to move from research 'for the people' to research 'with the people', that is, participatory research. The search for regional partnerships for the research projects at the three universities was largely unsuccessful due to the low development in the (local) economies of the regions around the universities. The universities have only weak mechanisms for exchanging knowledge with the region. If research collaborations exist, the contacts were predominantly made as a result of personal networking. As is the custom in the academic sphere, the aim of most of the projects is to have the research findings published in academic papers. Many researchers plan the presentation of the findings in workshops or at specialist conferences. While further training measures are often envisaged, the funds and routes for this to be implemented are often lacking. Support by the university management would be meaningful here, which could include a variety of measures ranging from a *guide pédagogique* (Ela 2001) to organisational measures and financial incentives.



### **Cameroonian Universities and their Mission: A Conclusion**

Whereas the classic primary duty of an African university was to train students and junior researchers while the secondary duty was to carry out research and promote exchange of knowledge, the changed significance of knowledge as a resource and the corresponding new development trends in the university sphere have meant that universities now also have to take on the previously neglected function of supporting development (i.e. a developmental university), in order to be able to meet the current demands set by policies and the African societies. Using the case studies of three universities in Cameroon located outside the country's main metropolitan areas, an investigation was carried out to determine the extent to which these tertiary learning institutions were able to fulfil the 'third mission' within their two key university missions of 'teaching' and 'research'. Given that one of the aims of the government when founding the universities was to establish a stronger link between the universities and regional economy, one would expect to find a measurable regional impact with the relatively new universities in peripheral areas, in particular. Seventeen years after the founding of these universities, our analysis into university research and the organisation of internships has shown that the local universities have been only scarcely integrated as knowledge generators into the regional development. The lack of practical orientation – due to a lack of course-related internships and the associated low integration into the business community – prevents these universities from having an impact on their respective regions. Although (applied) research into practical issues for the region is conducted, the research findings are not consequently transferred to the region. It should be noted here that the absorptive capacities of the regional economies in Cameroon are very restricted. Other factors include additional restrictions, a university model that has been established following the colonial example and that has a strong focus on a general education, the linguistic divide in the country, the government's preference for clientelistic trading and a poorly developed industrial sector.

As explained at the beginning of this paper, the fact that the new concept of the 'entrepreneurial university' has come from the anglophone sphere would suggest that anglophone universities in Africa would be better prepared for it, rather than the previously followed 'developmental university' model or the (francophone) 'general education' model. A brief comparison of the knowledge channels 'internships' and 'research' between the francophone universities in Dschang and Ngaoundéré, and the anglophone university in Buea shows that Buea is better positioned when it comes to both channels. Buea has already made the first attempts at establishing an internship management system and shown the first signs of a structured distribution of research funds. Some authors have called for the francophone universities to follow the anglophone example.

Seen in this light, the young universities at peripheral locations are a weak actor for regional development. Under these circumstances, it is difficult to fulfil the 'third mission'. One fundamental weakness can be found in the organisation of research and student internships. Lack of management of central tasks makes it impossible to fulfil the new role, especially with unfavourable social conditions. It could be claimed that African universities can benefit from the discussions being held in the Western industrialised nations on the fulfilment of the new role – particularly if one considers the continuous reduction in university budgets and steady increase in student numbers. However, before any long-term, costly and 'Europe-centred' goals such as the creation of technology transfer sites, employment of university managers or a stronger, more stringent implementation of measures to professionalise the fulfilment of the 'third mission' are contemplated, small, incremental steps should first be taken in Cameroon to improve university management. The establishment and monitoring of specific rules and regulations could be such first steps to support development and a functioning knowledge community. This could include an internship database or regular monitoring and management of internships. One further recommendation is the consistent distribution of university research funds according to selected criteria. The criteria could, for instance, be oriented to meaningfully planned contributions towards organising the transfer of knowledge into the community. The establishment of advisory committees for research and internships, with members from the region, could also contribute to improved university management.

Despite the measures mentioned above, it is certain that the possibilities for these universities to have an impact on their respective regions can only partly be brought about by the universities themselves. Comprehensive fulfilment of the 'third mission' requires a complete restructuring of the socio-political system. As such, only measures at a governmental or ministerial level to support the 'third mission' as well as the implementation of new governance structures will create the leeway required for action to be taken at the university level.

## Notes

1. We would like to thank the professors and academics at the University of Dschang, University of Buea and University of Ngaoundéré for their assistance with our research.
2. The authorisation and nomination of professorial candidates just as the distribution of professorial staff at the six universities depend on the Cameroonian Ministry of Higher Education (MINESUP). The Universities of Yaoundé 1 and 2 benefit from the staff of their former 'mother' university. This advantage is being eroded by the time retirements step in.
3. The empirical findings show that the academic staff spends less time for (basic and applied) research (18.7%) compared with other activities like teaching (38.6%), administrative and academic affairs (21%), according to the annual work-load distribution.

4. Access to a study programme at one of the *Grande école* institutions is regulated by a strict selection procedure (*sélection du concours*), whereas access to the other faculties is unrestricted.
5. Access to a study programme at the “IUT” is regulated by a strict selection procedure.
6. Third-party financing may consist of finance sources from several third-party donor institutions.
7. Part-financing by the university and third-party donor.

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