Chapter 16

The Nonmetropolitan University's Regional Engagement in the African Context: The Case of Cameroon

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Claiming that the university should be responsible for the social and economic development of the region in which it is located is a fairly recent idea. Since the 1960s policy-makers in the Global North saw the location of new universities in remote areas as a means of unlocking potential for higher education and as a powerful regional demand-driven economic stimulus generated by the university. Later, the university came to be considered “a warehouse of precious goods” (van der Wusten, 1998, p. 1), the bearer and developer of various kinds of knowledge that, once having spilled over after its intentional transfer, contributes to regional development. The literature on the university's mode of functioning in this respect is now abundant. The vast bulk of it, however, focuses on the Global North. Very little work on the topic is devoted to Africa.

The past half century has also been one of challenging debate about the role of the university in society and for societal development. Suffice it to recall the dispute about nineteenth-century models such as the European Humboldtian university and the traditional American engaged university (often found at land-grant universities in the United States) as opposed to more contemporary models such as the entrepreneurial (or triple-helix) university (see chapter by Etzkowitz in this volume) and the revived developmental university¹ (Goldstein, 2010; Göransson & Brundenius, 2011). With globalization, this dispute figured prominently throughout the world. A World Bank study (Altbach, Reisberg, & Rumbley, 2009) posited a true “academic revolution” in the societal repositioning of the university. Exceptional pressures on university systems in developing countries in general, especially in Africa,

¹A developmental role had already been assigned to new universities in early postcolonial Africa (see Teferra, 2014, for example). However, they have failed to perform it in the persistent crises since the 1970s.

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came from the shift to the entrepreneurial model in the United States and the launch of the Bologna process² in Europe. According to scholars from Africa (Munene, 2009; Obasi & Olutayo, 2009) and elsewhere (Brock-Utne, 2003; Robertson, 2009; Singh, 2010), Africa has become a battlefield of conflicting notions of the university's responsibilities.

Closely connected to this dispute has been the addition of a third mission, outreach, to complement the two traditional university missions, education and research. The outreach mission positions regional engagement by the university as a management task of the university staff. Knowledge creation, knowledge transfer, and spillovers have become the major challenge for the university's role in society and a core issue in economic geography and regional policy (Goldstein, 2009, 2010; see also chapter by Glückler, Panitz and Wuttke in this volume). A prerequisite for knowledge to spill over from the university to its proximate environment is communication, a complex process shaped by many factors, such as the capabilities of actors, the availability of media, and the opportunities and barriers created by institutional settings (see Meusburger, 2013, 2017). The type of university may also be among the factors determining the kind and degree of knowledge spillovers that may occur as universities evolve according to their disciplinary scope (e.g., full-fledged university, technical university, or applied university), organizer (public or private), size, age, and location (metropolitan, urban, or rural).

In this chapter I argue that regional knowledge spillovers in Africa emerge differently from those on other continents, not least because of dissimilar educational systems and societal contexts conditioned by the burdensome legacies of colonial rule by various European powers (United Kingdom, France, Portugal, Spain).³ African universities are not well researched. Literature that does exist on the subject refers chiefly to the principal "flagship" universities, many of which were created during colonial times or shortly thereafter—such as Cheikh Anta Diop University (Dakar), Makerere (Kampala), University of Ghana (Legon), and the Nigerian universities of Ibadan and Nsukka. This chapter focuses on a rather neglected university type: the young, postcolonial, ordinary public university in a nonmetropolitan context, often meaning small urban centers in rural areas. This type of university is peripheral in terms of its resource endowments and academic

²The Bologna Process is a European initiative, launched in 1999 in Bologna by European ministers of education. It aims at creating a common European space for higher education to foster intra-European mobility of students, teachers, and graduates as a response to changes in the systems of higher education in the United States and Asia. A major element is the introduction of the bachelor-master-doctorate (B-M-D) system across Europe. Harmonization of the European higher education systems is a continuing and sometimes contested process. The Bologna Process became globalized when Australia wished to join in 2001 and the EU Commission's cooperation policies with third countries incorporated it (Charlier & Croché, 2009, Obasi & Olutayo, 2009).

³Although the legacy of colonial rule is indisputable in the broad sense, the debate continues about the degree to which colonial heritage currently matters in higher education. For instance, Nyamnjoh (2012) pointed to "Africa [as a] victim of a resilient colonial and colonizing epistemology" (p. 129), whereas Teferra (2016), taking a more balanced view, has claimed that "contemporary higher education in Africa ... is a new phenomenon" (p. 80).

performance within the university system, its power relationships to the political center, and its region's economic development and absorptive capacities. These conditions constitute a common sociopolitical and regional environment for many young public universities in Africa. It differs from urban agglomerations or metropolises. Hence, the main universities observed in this chapter will be called "nonmetropolitan."⁴

The current state of nescience on the forms and extent of regional engagement by universities in Africa calls for a case study that uncovers regional relationships and communication. For this reason three nonmetropolitan universities in Cameroon were studied at a particular historical moment, the early 2000s, when the Cameroonian government implemented policies conceived to increase the universities' societal responsibility through "professionalization," a French term implying also the commercialization and privatization of higher education. This research has shown that the country's unique history under German, French, and British colonial power still matters in society and politics. For example, a leading staff member of Cameroon's only Anglophone university, Buea, contended that the Anglo-Saxon traditions were being followed as much as possible (Vice Rector for R&D, University of Buea, personal communication, December 12, 2008). Yet the current structure and policies in higher education—blamed for "excessive centralization, authoritarian management style and political control" (Konings, 2009, p. 213)—were largely dominated by a clone of the strict and inflexible French implementation of the Bologna system (Croché & Charlier, 2012; Djouda Feudjio, 2009).

In the following sections I first point out the specifics of the sub-Saharan African context, briefly discuss the methodology generally used in academic research and political debate to analyze regional knowledge spillovers, and ask to what extent it is regarded as inappropriate in this chapter (see chapter by Meusburger in this volume). I then turn to the case of Cameroon and its nonmetropolitan universities. The cardinal assertion is that knowledge spillovers measured by codified means of knowledge communication (e.g., licenses, joint and contract research, or collaborative publications, which are often directed to formal organizations such as companies) essentially provide no framework or vehicle for communicating tacit knowledge to informal societal groups and nonprofit organizations that may be crucial to regional development in rural areas of developing countries. I try to uncover those less visible, even invisible, forms of regional knowledge spillovers by examining three fairly young, small, ill-equipped universities. Particularly in the African context, which is often noted for its weak institutions, heavy financial restrictions, and lack of the kind of university leadership called for by Muriisa

⁴This term is intended to take into account the proximity that a university in a small or medium-sized African town has to its rural neighborhood, the foremost activities of which are agriculture and animal husbandry. Implicitly, these universities are characterized by poor endowment and a focus on undergraduate studies and human sciences. The term is ambiguous, however, because it does not subsume institutions such as technical universities specialized in mining, although they, too, may be located in "rural" areas. I am grateful to Michel Simeu Kamdem for pointing out the difficulties and vagueness of the terminology on types of universities in this context.

(2014), this approach is no assertion that invisible forms of knowledge spillovers sufficiently promote regional development. But given the dearth of codified knowledge that can be commercialized, the analysis can nevertheless reveal the university's unexpected regional engagement with various local stakeholders.

The African Context

The African university faces a sociopolitical environment much different than that in other parts of the developing world. That fact codetermines the university's limited abilities to engage in regional development. The roots of these constraints stem largely from weak African economic development in the 1980s and 1990s—the “lost decades”—during which most countries on the continent, still dependent on their natural resources, descended into crisis (Lawrence, 2010). State budgets shrank, and governments were unable to close the sizable gap between the levels of education in Africa and those on other continents (see Sawyerr, 2004, for a masterly summary of the long-term development and crises of the university across many African countries).

A host of problems have contributed to this malaise. Demographic growth on the continent has remained the highest globally. A persistently high rate of illiteracy has coincided with an explosion in the young population seeking improved education in Africa. The share of the Africans who have graduated from an institution of higher education—less than 1% of the population older than 15 years (Teal, 2011)—is the lowest in the world. Yet the young generation's quickly rising willingness to study, combined with a population explosion, has caused the “massification” of higher education everywhere.⁵ Despite the economic crisis affecting many African countries, they have had to scale up tertiary education in response to the young generation's unrest. This decision conflicts with the World Bank's recommendations in favor of primary and secondary education—which, paradoxically, has fueled the demand for higher education. Unsurprisingly, most authors stress the overall weakness of the African university (Ajakaiye & Kimenyi, 2011; Munene, 2009; World Bank, 2009) and the science taught there (UNESCO Science Report, 2010). The shortcomings mirror those of the state, whose governance of the educational system ranges from aspired state centrism in a neopatrimonial political system (as is prevalent in Francophone Africa) to neoliberalism imposed by international organizations such as the World Bank and UNESCO (see Robertson, 2009; St. George, 2006).

Another macroeconomic explanation of weaknesses in the system of higher education in Africa calls into question the political strategies pursued by African

⁵Massification is the term usually used in the pertinent literature. Cloete, Maassen, & Bailey (2015) argued that university systems in Africa are not “massified” but are “overcrowded elite systems” (p. 5), for most of the young generation still has little or no access to higher education. This assessment is confirmed by Sawyerr (2004), who actually sees “novel forms of social exclusion” (p. 22) in student enrollment.

governments. African governments in the 1980s and 1990s were not able to codevelop primary, secondary, and tertiary education. They did not see investment in higher education and industrialization as a parallel process, whereas policies on higher education and industrialization went hand in hand in successful Asian economies (Cloete, Bailey, Pillay, Bunting, & Maassen, 2011, p. 3; St. George, 2006). According to the World Bank (2009), spending on higher education per capita of enrolled students slid from U.S. \$6,800 in 1980 to an average of U.S. \$981 some 30 years later in 33 low-income countries of sub-Saharan Africa. Many African policy-makers, however, have meanwhile come to see the university as many academics do: as an engine that drives development. This new perspective has raised a continuing controversy between the advocates of applied research and those of basic research and between supporters of a service orientation as part of the entrepreneurial model and those who endorse "engagement" as part of the developmental model of the university (Cloete, Maassen, & Bailey, 2015).

In summary, the African university's weakness has extended to all fields of education and research for a number of reasons. Equipment and infrastructure have been scarce, especially with regard to libraries and Internet access (Willinsky, Jonas, Shafack, & Wirsy, 2005). Hygienic facilities (toilets) and classrooms are in short supply as well (Djouda Feudjio, 2009). Economic crises have triggered a massive brain drain of university staff to wealthier countries in the Global North and partly within Africa (at first to Nigeria, then to South Africa after the fall of the apartheid state). The use of colonial languages (English and French), too, has accelerated the brain drain inasmuch as it was seen to be a "grave problem at the university" because students have trouble mastering the foreign languages (Brock-Utne, 2003, p. 44). Time and again, curricula have been assessed as inadequate for the private sector. In addition, leading figures at the university prefer kinship relationships when it comes to the appointment of doctoral students and assistant lecturers. In short, "tribalism"⁶ has figured as a ubiquitous mechanism of social relationships in the recruitment of new staff, a fact certainly not limited to Cameroon (Affa'a & Des Lierres, 2002; Kemayou, 2012).⁷ The university's local public infrastructure—transport, the power supply, and student housing—is deficient as well. A complementary problem is the academic weakness of young and nonmetropolitan universities, which used to focus on undergraduate studies only. At many universities growth in the humanities, arts, and social sciences,

⁶In traditional anthropology the term *tribe* refers to an ethnic group that adheres to its traditional rules and identities. Tribalism has been common in Cameroonian politics as a form of behavior that favors reciprocal relations with people from the same place of origin. It is a specific form of clientelistic relationship embedded in ethnic politics in Cameroon (see Bayart, 1979; Ngeve & Orock, 2012; Nyamnjoh, 1999). In the academic world, it denotes behavior expressing antimodernism as opposed to basic meritocratic principles in modern academia and society at large.

⁷A sociopolitical system that is explicitly manifested in a nation's institutional settings is indisputably a powerful determinant of the quality of a university and its effectiveness as a leader of development. Researchers in political science and political economics have repeatedly pointed to this link. I am sympathetic to the approach by Acemoglu and Robinson (2012), who see the necessity of inclusive institutions and recognize that extractive political institutions inhibit a nation's long-term development.

which are less capital intensive than the technical and natural sciences, far outpaced that in the latter two fields.

African universities are thus among the world's weakest in terms of performance, much as Ajayi, Goma, and Johnson (1996, p. 229) concluded in the 1990s: The African university is marginalized "from the intellectual and informational mainstreams that shape development possibilities in the rest of the world" (p. 229). Aside from the considerable number of "transnational partnerships" arranged through Africa's development cooperation with the Global North and with emerging Asian economies (Koehn & Obamba, 2014; Schamp & Schmid, 2008; Teferra, 2014), that statement still applies. It is also substantiated by Jöns and Hoyler's (2013) evaluation of world university rankings. Writing on Uganda, Muriisa (2014) highlighted what he saw as an even worse situation. Of course, there used to be exceptions (e.g., Makerere University and Ibadan University), and some South African universities do stand out. But aside from South Africa, no sub-Saharan African university, flagship universities included, has ranked among the world's top 1,000 as of 2008 (Charlier & Croché, 2009; Jöns & Hoyler, 2013).⁸ The number of research publications from universities in that part of the continent is extremely low, only about 27,000 papers annually from more than 30 nations (including the two regional "giants," Nigeria and Kenya). The total scarcely exceeds that of The Netherlands, a small country of the Global North (Adams, King, & Hook, 2010; Mugabushaka, 2008). The share of students going abroad is larger in sub-Saharan Africa than anywhere else on the globe (5.6% of worldwide student mobility in 2005; Charlier & Croché, 2009). Massive emigration of sub-Saharan academics to OECD countries persists. Predictably, these enfeebled universities have been unable to cope with new government policies promoting the commodification and commercialization of teaching and research since the early 2000s.

Lastly, the socioeconomic environment in sub-Saharan Africa is far less favorable to regional knowledge spillovers than is generally assumed in the literature on the Global North's university-industry linkages, an issue that is more closely examined in the following section. There are few efforts to pursue innovation policies, as indicated by a dearth of patent registrations, the weak innovation capacities of state enterprises and the private sector, and the fact that multinationals tap into innovation from their home country rather than from Africa. A paucity of organizational structures for improved communication between academia and the business world exacerbates the situation. The share of manufacturing remains negligible and has even declined in some parts of Africa. Small local industries, sometimes clustered at certain locations, appear to be less keen on gaining access to knowledge from universities than their counterparts from the Global North are (Zeng, 2008). Moreover, most of the sub-Saharan African population still lives in the urban informal sector and in the rural noncommercial economy. What kind of knowledge spillovers for what kind of regional development can one expect under these conditions?

⁸This indicator of the performance of universities is currently in wide use but may be seriously criticized for its onesidedness. As Jöns and Hoyler (2013) put it, "world university rankings represent best those investment-intensive areas of the technosciences that facilitated American hegemony in the second half of the 20th century and that China is now trying to emulate" (p. 55).

Stylized Facts about the University—Regional Development Nexus

Over the last few decades, mounting attention to innovation as a basis for economic prosperity in times of global competition has led to concepts of national and regional innovation systems that emphasize the links between the university as a knowledge creator and companies as codevelopers and users of innovation (Mowery & Sampat, 2005; Reddy, 2011). Issues such as the entrepreneurial behavior of universities in regional engagement and university-industry relationships have prevailed (Perkman et al., 2013; Rothaermel, Agung, & Jiang, 2007). They emerged partly when the intellectual property rights to knowledge that is generated at universities were shifted from the state to the researchers and university administration⁹ and when the demand for codifying such knowledge in commodifiable patents and licenses intensified. Knowledge commodification and commercialization, the turn from public to private knowledge production at universities, and other forms of an increasing “academic capitalism” have spread around the world since then (Slaughter & Rhoades, 2004). Formal mechanisms of knowledge spillovers specific to the technology transferred became critically important (e.g., licensing of patented research findings; contract research in cooperation with industry; and university spin-offs or company start-ups by university teachers and/or researchers). Much of the knowledge transferred is codified by those means. They develop between formal organizations—between the university and a specific company, private research lab, or public organization, for example. From this innovation-oriented perspective, research-intensive universities perform well if they have well-developed channels and institutions facilitating communication with private companies and if there are private companies interested in and capable of innovation because they face strong competition. However, this view of innovation is narrow, for patents, licensing, copublications, and spin-offs refer chiefly to technologies originating in the natural sciences, engineering, and life sciences (Benneworth & Jongbloed, 2010). These fields tend to be commercialized to companies, a decidedly stimulating prospect for policy-makers in both the Global North and Africa, not least because these mechanisms can be quantified.

These facts are obviously stylized and may hold for the highly industrialized countries of the Global North and for large emerging economies such as Brazil, India, China, and South Africa. Even in those societies, such mechanisms seldom appear in the humanities, arts, and social sciences, where consultancy, transfer-based research, information services, training, qualification, further-education services, and network-forming services are more common mechanisms of knowledge spillovers (Froese et al., 2014). The burgeoning literature on university engagement in regional development refers principally to codified knowledge outputs that can be commercialized by codified spillover mechanisms, be they copublications by, or contracts between, university staff and nonuniversity actors. These mechanisms may occasionally come into play at some nonmetropolitan universities in Africa as well, but in my

⁹The U.S.'s Bayh–Dole Act (1980) is generally regarded as the starting point of a neoliberal turn in university strategies.

estimation tacit knowledge spillovers and informal mechanisms are more important in engagement with other social partners, such as peasants, nomads, nonprofit organizations, and local communities.¹⁰ It follows that most of the current approaches to studying the linkages between the university and economic development hardly apply to the African context, especially to rural Africa, except for some agricultural research and related extension activities. Hence, neither the concept of regional “engagement” and its addressees nor the methodology for surveying and analyzing such engagement really seem appropriate.

The concept of stakeholders as opposed to a “shareholder” view on university–industry relationships has therefore arisen (Benneworth & Jongbloed, 2010; OECD, 1999). For the purposes of this chapter, I do not take into account the university’s internal stakeholders, such as students, teachers, and other members of the institution. Instead, the focus is on external stakeholders—companies, authorities, social groups, nonprofit organizations, even individuals in the regions concerned. Knowledge spillovers to these stakeholders are often not formalized, not codified, and, hence, not easily discerned. Furthermore, codified knowledge from published research findings is scarce to come by. The strength and weakness of the university’s engagement is thus less visible than it is with codified knowledge and may even be invisible, so revealing regional engagement requires a different methodology. Evidence will be based less on quantitative data than on anecdotes and interpretations.

Similarly, certain notions of the capacity of the regional society and its stakeholders to “absorb” knowledge from the university are common in economics and economic geography, but they do not strictly apply. Casper (2013) called attention to the “pulling” power of regional industries for promoting spillovers from the university. However, the concept clearly focuses on companies, in line with the Penrosian theory of the resource-based firm (Lane, Koka, & Pathak, 2006). According to Nooteboom (2000), the concept of absorptive capacity keys on the cognitive distance between sender and receiver organizations in knowledge spillover and is thus basically a relational concept. Scholars have frequently pointed out the weakness of links between the predominating, small-scale companies and the university in Africa and to difficulties of establishing those links (Benneh, Awumbila, & Effah, 2004; Oyelaran-Oyeyinka, 2006; Zeng, 2008). It seems overtly clear that the cognitive distance between, say, an illiterate peasant and a university teacher would be even greater and that only enormous effort would bridge it for regional development.

¹⁰ Analyzing the transfer of knowledge from the academic world to industry in Mozambique, Zavale and Macamo (2016) supported this view when they ascertained that informal exchange of “embodied” (not codified) knowledge dominated. Notably, some literature on the Global North, too, calls for broadening the view on the university’s regional engagement and for applying an analytical methodology different from mere commercialization (Breznitz & Feldman, 2012; Perkman et al., 2013).

The Hardships of Regional Engagement at Nonmetropolitan Universities in Cameroon

The nonmetropolitan university's regional engagement is seldom an issue in the Global North and, to the best of my knowledge, it is even more rarely so in Africa. The following sections present an exploratory inquiry into the links between three rather young universities and regional stakeholders in the institutional setting of Cameroon.¹¹ The gathering of data from the universities' staff was designed to gain insight into their visible and invisible interactions with local stakeholders external to the universities in terms of their three missions: teaching, research, and outreach. Because these universities concentrated on teaching and because qualified graduates were regarded as the university's most important contribution to regional development, a team of Cameroonian doctoral students conducted tracer studies on the whereabouts of the graduates. Tracer studies, too, are urgently needed in Africa. The nonmetropolitan universities researched in Cameroon were the University of Buea in the Anglophone part of the country; the University of Dschang in a border region between the Anglophone and the larger Francophone part of Cameroon; and the University of Ngaoundéré, which serves the sizable Francophone part of Cameroon's north and two neighboring countries: Chad and the Central African Republic.

The Cameroonian Socioeconomic Context of Higher Education

Cameroon's universities are a result of the country's unique colonial history, which began with German colonial power, followed by division under French and British colonial power after World War I and a partial reunification in independence after 1964. Literature brims with studies on conflictual issues in Cameroon, such as the

¹¹The following section draws widely on a research project on Cameroonian universities in 2006 to 2010 (DFG Scha 237/14-1/-2), which I had supervised. Through collaboration with Cameroonian professors Alexander Asong, Martin Kuete, Michel Simeu Kamdem, and Michel Tchotsoua, it brought together a team of doctoral students consisting of one German and several Cameroonians. On the German side the study encompassed a quantitative survey on current research projects at the universities, which was combined with qualitative information from 70 in-depth interviews with research-project leaders, university officers, and officials from the Ministry of Higher Education and the Ministry of Research and Innovation. The Cameroonian members of the research team then complemented this input with tracer studies conducted at each of the three universities in order to gather information on how and where their graduates find a job. For detailed results see Mediebou and Tchotsoua (2012), Schamp and Zajontz (2010), Simeu Kamdem and Schamp (2014), and, in particular, the doctoral dissertation by Zajontz (2010). Mediebou (2011) and Gondié (2014) from the University of Ngaoundéré and Tchomga (2016) from the University of Dschang have meanwhile successfully defended their doctoral dissertations.

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political order, official language policies, and “culture,” which are further aggravated by two decades of severe economic crisis. These matters still affect the university staff’s self-understanding, the organization of relationships with local stakeholders, and the behavior of local authorities.

For example, Cameroon is officially a bilingual country with French and English as languages in the formal sector because of its colonial past and the absence of a common vernacular “local” language. Of the 279 living indigenous languages, a few serve as a *lingua franca* in daily life in particular regions. Language thus becomes a substantial problem at the university. University teachers have been obliged to move between the minor Anglophone and major Francophone part of the country in the government’s pursuit of an official language policy favoring French. However, many young students do not sufficiently master both official languages (as noted for African universities in general, Brock-Utne, 2003). This inability holds especially true for English in the Francophone part of the country. As an English teacher at Ngaoundéré university wrote in an article about the “hostile environment” for English: “The over-dominance of [the] mother tongue is such that even French[,] which is presumably the medium of instruction in our university[,] is rarely spoken outside the classrooms” (Zogang, 2007, p. 158). But English is also a foreign language for students in the Anglophone part of the country, who use Pidgin English in daily life. Ironically, globalization has triggered a current rush for school teaching in English in urban milieus of southern Cameroon (Fonyuy, 2010), working in favor of Buea as an educational hub. A further consequence of incomplete bilingualism is that university staff sometimes cannot communicate in the language of local stakeholders.

The colonial legacy is still manifest in the prevailing university models, the visions that university staff members have for the university’s societal role and their global communication. Schamp and Zajontz (2008) had documented such path dependence in the still dominant patterns of international academic communication. Academics from the Anglophone University of Buea had a relatively global pattern—with the United States as a main travel destination—whereas academics from the predominantly Francophone University of Dschang preferred communication with France and French-speaking West Africa.¹²

Favoritism of ethnic groups is another burden in the current political system of Cameroon (Ngeve & Orock, 2012). The Cameroonian political system has been widely characterized as neopatrimonial, with the head of state presiding over an extended patronage system and playing the ethnicity card (e.g., Bayart, 1979; Nyamnjoh, 1999; Orock & Mbuagbo, 2012). Some regulations facilitate neopatrimonialism. For example, the head of state appoints university rectors or

¹²This pattern of communication is arguably due to a kind of institutional “fix” stemming from the place where teachers had earned a doctorate and where transnational partnerships have been created. However, the burgeoning literature on policies and instruments of research collaboration between universities of the Global North and South predominantly focuses on the U.S.- and U.K.-Africa nexus, essentially neglecting the France-Africa nexus (Koehn & Obamba, 2014; Teferra, 2014). For the Germany-Africa nexus see Schamp and Schmid (2008).

vice chancellors (the heads of the universities in the Anglophone part of Cameroon), and the Secretary of Higher Education appoints the deans and directors of institutes. This arrangement has two inimical effects on university life: corruption and tribalism. Indeed, Cameroon has been repeatedly accused of being “the most corrupt country in the world” (Nyamnjoh, 1999; Orock & Mbuagbo, 2012), with the vice pervading academia as well. Tribalism that shows little regard for merit has been attested several times and causes a *misère intellectuelle* at universities (Nyamnjoh, 1999, p. 107; see also Affa’a & Des Lierres, 2002; Kemayou, 2012).

The system of higher education in Cameroon also suffered from persistent economic crisis in the 1980s and 1990s (Ombga, 2011). A 50% devaluation of the currency in 1994 induced deep cuts in the state budget, the closure of many state enterprises, subsequent lay-offs of company and government employees, a 60% decline in public-sector salaries (at universities, too), additional reduction of purchasing power, and escalating political unrest. Teachers continued to escape by going abroad or looking to earn money in other ways (e.g., various forms of corruption) to support their families (Gaillard & Khelfaoui, 2000; Orock & Mbuagbo, 2012). The economic situation improved when the Cameroonian government achieved a partial debt write-off through the Heavily Indebted Poor Countries (HIPC) Initiative launched by the International Monetary Fund and the World Bank. The government used the arrangement to set up a permanent fund for higher education in 2009. Salaries of university staff rose swiftly, sometimes threefold, from a very low level. Hundreds of lecturers and researchers were hired. The government also invested in new university buildings and new public universities. New departments, faculties, and schools specialized in technological disciplines such as veterinary medicine, pharmaceuticals, geology, and fishery were opened (“Cameroon puts,” 2010; Minesup, 2014; UNESCO, 2010, p. 302). Establishment of a new satellite link rapidly improved access to the Internet in many towns (Willinsky et al., 2005, p. 13). Nevertheless, these decades of economic crisis have remained powerful memories among academics.

Pressures from a relentless rise in unemployment among university graduates prompted several governmental initiatives fostering professionalization of higher education to enhance employability or, because of weak growth in Cameroon’s formal private sector, to spur the entrepreneurship of graduates and strengthen the commitment of the universities to regional development (for details see Zajontz, 2010, pp. 166–170; critically also Chatue, 2016). Since a government decree of December 2007, for example, universities have been “called upon to tailor the competences which they deliver to the students to fit with what enterprises, cooperations, and companies need” (Vice Rector for R&D, University of Buea, personal communication, December 5, 2008). As contradictory as it may sound, a new point

of departure seems to be emerging in Cameroon for the university's engagement in development at large, regional development included.¹³

Young Nonmetropolitan Universities in a Young University System

The country's first university, today called the "mother university," was founded in the capital Yaoundé with the backing of France and UNESCO (Ajayi et al., 1996, p. 134) shortly before Cameroon's independence in 1962 and is modeled on the Humboldtian university. It is divided into faculties to which entrance is unrestricted and into schools having entrance examinations. In 1977 the government responded to the soaring demand for higher education in applied sciences by establishing schools in provincial centers as branches of the mother university. These new institutions were located in Buea, the Anglophone part of Cameroon, for language and interpreting; in Douala, the country's leading economic center, for business studies and teacher training in technologies; in Dschang, the densely populated agrarian region of West Cameroon, for agriculture; and in Ngaoundéré, the sparsely populated mid-Cameroonian region, for food science and food technology. Ever greater demand for higher education, combined with periodic student unrest, led to a university reform in the midst of economic crisis in the early 1990s. In addition to laying the ground for the privatization of higher education (an issue that did not become relevant until the 2000s), the public university reform of 1993 transformed these provincial schools into full-fledged universities with soaring numbers of students (Ngwe & Pokam, 2016; Njeuma, 2003; Zajontz, 2010). Student unrest fueled by unsatisfactory work and living conditions and political pressures continued, however (for Buea see Fokwang, 2009, and Konings, 2009; for Ngaoundéré see Woudamike, 2008). Private universities have emerged rapidly since 2004, especially in two urban agglomerations, Yaoundé and Douala (Tsafack Nanfosso, 2006). Two other public universities have opened in remote provinces, Maroua in the Franco-phone Extreme North Province (2010), and Bamenda in the Anglophone North-West Province (2011) (see Fig. 16.1).

The three universities examined in this chapter focused principally on undergraduate studies in faculties, not schools, and labored under the disadvantages of student massification, a deficient university system, inadequate urban infrastructure, and young, rather inexperienced university teachers intent mostly on advancing their academic careers (for details see Schamp & Zajontz, 2010; Zajontz, 2010). The universities were located in somewhat small urban centers, with Buea having about

¹³There have been several initiatives, notably at universities in Cameroon's large urban centers. The faculty of arts in Yaoundé I, for instance, introduced new curricula on hotel management and tourism, and the Universities of Buea and Douala organized stakeholder meetings to establish partnerships with companies. However, our data was collected between 2006 and 2008, just as reorientation of the universities started, so they do not capture recent developments.

Fig. 16.1 The growth of the public university system in Cameroon, 1962–2012.
Sources: Njeuma (2003), Minesup (2014).

90,000 inhabitants; Dschang, 64,000; and Ngaoundéré, 152,000 (population figures of 2005 as reported by BUCREP, 2010). These settlements represent different rural environments—the plantation economy of South West Cameroon (Buea); the mountainous, small-scale commercial agriculture of the Ouest province (Dschang); and the cattle-raising plateaus of Adamaoua, the northern plains of cash crops (cotton

and rice), and subsistence agriculture (Ngaoundéré). As dissimilar as these locations are, they have in common the low demand for university graduates and research in the agricultural and mineral sectors, the burden of widespread adult illiteracy, violence between population groups, violence from neighboring countries (Nigeria, Chad, and the Central African Republic), and violence from authorities. This entire socioeconomic world bears little resemblance to Yaoundé and Douala—although Kemayou (2012) noted the ambivalence of the relationships between the university and urban society in those two cities as well.

Curricula in most disciplines did not take the particular local environment into account. Only very recently has a new state policy on higher education put emphasis on differentiating the universities by specialization. Officials at the University of Dschang are reconsidering its original specialization in agriculture and rural societal development, and decision-makers at the University of Ngaoundéré are strengthening its capacities in scientific and technological disciplines, returning to an old idea of a “technical university” (see Table 16.1). Both institutions, however, still have a long way to go before they achieve their new objectives.

Table 16.1 Basic facts about three universities in Cameroon

Structure	Buea	Dschang	Ngaoundéré
Faculties ^a	Arts Science Social Science and Management Health Sciences (1997–1998) Education (1998–1999)	Arts Economics Legal and Political Sciences Sciences	Arts Legal and Political Sciences Economics Sciences
Schools ^b	Language and Translation	Applied Technology (IUT) ^c “Faculty” of Agriculture	Food Technology (ENSAI) Applied Technology (IUT) ^c Veterinary Medicine (2007) (ESMV) Geology and Mineral Exploitation (2011) Chemical Engineering (2014)
Students			
2006–2007	10,300	11,600	11,900
2012	16,500	25,500	15,300
Professorships			
2006–2007	13	14	7
2012	13	11	13
Teachers			
2006	242	329	183
2012	308	379	264
Student-teacher ratio			
2006–2007	43	35	65
2012	54	67	58

Note. Minesup (2007, 2013, 2014).

^aUnlimited enrollment, except at the University of Buea. ^bLimited enrollment. ^cUndergraduate studies.

Patterns of Interactions with Local Stakeholders

It is evident from the previous section that these young, small, remote universities were usually incapable of contributing to regional development in the visible ways that are commonly assumed to have a major impact on development. Their dominant mix of nontechnological disciplines and the focus on undergraduates left them with few patents and few opportunities to become seedbeds for university spin-offs. There were almost no copublications by academics and authors from the private industrial sector. Neither collaborative research with industry nor researcher mobility from the university to industry or vice versa was widely practiced. Some minor consultancy relationships were oriented to the political and economic centers, as in the field of accounting. Moreover, the strong hold that the neopatrimonial central state had on staff management¹⁴ lessened the likelihood that day-to-day activities would bring the university and leading regional administrators to network with the few “formal” organizations that exist.

Consequently, the university–regional development nexus seemed all but nonexistent, at least quantitatively invisible. Yet it seemed nearly inevitable that university staff would come into contact with regional stakeholders in the course of teaching and research, if not by contributing to the third mission, outreach, as marginal as it may be. All these interactions may be more adapted, but less apparent, to the local rural societies than quantitatively visible ones are. To discern the kind and scale of regional engagement by the three universities, we members of the research team surveyed each of them for its external ego relationships according to the missions of the university. This work rested on the assumption that regional spillovers occur when both personal and organizational social networks emerge between a university and the region in which it is located.

First Mission: Teaching

Depending on the level and quality of teaching at a university, the teaching mission offered several occasions to establish contact with regional stakeholders and to facilitate intentional or unintentional spillovers of knowledge. The overriding purpose of these three universities was to teach undergraduates, who in 2007 accounted for 95% of the student body at Buea, 87% at Dschang, and 91% at Ngaoundéré. The overwhelming majority of the students were enrolled in faculties (e.g., 93% at the University of Ngaoundéré). Schools, with their entrance examinations and limited enrollment, had comparatively few students. At Ngaoundéré, for instance, the school of food technology accounted for only 3% of the student body; the school of applied technology, for 4% (Zajontz, 2010, pp. 149, 151). Human resources in teaching were weak, as indicated by a high student-to-teacher ratio and a low rate of professorships (Table 16.1). Some graduate courses have been established since the early 2000s, a

¹⁴By contrast, local elites in the Cameroonian provinces had long lobbied for a public university to be founded there as a sign of their political power (Sikombe, 2016, p. 151).

process interfering with the introduction of the bachelor-master system (Bologna) in Cameroon. The universities awarded their first doctorates in 2001 (Buea), 2004 (Ngaoundéré), and 2005 (Dschang).

Contact and cross-fertilization in knowledge may occur, first, through teaching, chiefly by means of teacher exchange and student internships. Teacher exchange had occasionally been reported only within the public sector because of a regulation that university teachers attached to the Ministry of Education in Yaoundé had to teach part-time. Internships were obligatory in some disciplines, primarily in technical fields where bachelor and master theses, too, were written in liaison with companies. This requirement applies to most universities in the world. However, these contacts were poorly managed at the three universities covered in this chapter, so partners in the regional private sector were rarely found. Internships came about principally in the two distant metropolises and essentially depended on the willingness and motivation of the students and university teachers involved. The university administrators undertook only a few initiatives, such as pursuing formal cooperation agreements between the faculty of health at Buea and regional hospitals and, at the school of food technology at Ngaoundéré, administering a regular data bank on organizations that offer internships.

Supplying the region with a qualified labor force was a fundamental target of the university's teaching mission. Aside from the low absorptive capacity of the regions in question, the universities generally had no basic knowledge about the whereabouts of their graduates. Placement of graduates was fairly rare and was based on the personal relationships of certain teachers only. Tracer studies of university graduates were as few in Cameroon (Fohopa, Garro, & Mortelette, 2006) as elsewhere in sub-Saharan Africa (Mugabushaka, Schomburg, & Teichler, 2007), a paucity even more conspicuous at the regional level. Detailed tracer surveys at the three universities plausibly revealed that academic labor markets were nonregional, fragmented, and difficult to access and that the supply of "human capital" from the universities was therefore fairly marginal (Mediebou & Tchotsoua, 2012; Simeu Kamdem & Schamp, 2014). This statement applied especially to disciplines such as the humanities, whose ministry-approved curricula seemed inappropriate ("traditional" or "unfeasible," according to several interviewees), at least for the private sector. Those fields of study may be more in tune with the few available public-sector jobs for which most graduates still strive (education, administration). In fact, unemployment of university graduates was high, yet graduates showed little aspiration for self-employment or entrepreneurship. Graduates seeking employment preferred to migrate to Yaoundé and Douala, and it seemed that only the less successful graduates tended to return to their home region to eke out a living (Tchomga, 2016).

Second Mission: Research

Although the research mission of universities is usually the source of a key argument for their engagement in regional development, there are several reasons why it is unlikely to be so at the three universities in the study presented in this chapter. Research is less a mission for them than it is elsewhere, and it may be less

technological, given the dominance of their faculties.¹⁵ Can comparatively few research projects become an important font of knowledge spillovers to regional stakeholders? Can those projects become that wellspring if they are at least of “applied” character and if they focus on local empirical evidence? In this section I tackle these questions in a search for less visible and sometimes less purposive interactions with local stakeholders.

The limited knowledge that university administrators have about current research, particularly when projects are self-funded by academic staff, is not the only obstacle in this quest. It is also difficult to formulate a clear definition of “research” and “project.” Self-funded projects can stretch over a long unspecified period, and projects include different activities such as writing a book, establishing a data bank, consulting, supplying services to laboratories, drawing on disciplinary knowledge about different local environments (applied research), and conducting basic research. In the Francophone universities research is partly self-organized and partly organized in what are called research laboratories (with physical equipment only in the sciences and technical sciences), which must be approved officially by the university. These research labs are sometimes umbrella organizations that perform no work. To shed light on the local reach of the research mission, Zajontz (2010) surveyed 104 research projects that came to attention at the three universities. She found that they encompassed a striking diversity of disciplines and topics (Table 16.2).¹⁶

The preconditions of research at these three institutions of higher education are even worse than those discussed generally for African universities (Sawyer, 2004). Basic infrastructures are insufficient (library, Internet access, laboratories), and funding is marginal. The low number of professorships leads most of the teachers to pursue research in order to advance their own academic careers. Questioned about the sources of funding, 30% of the 87 researchers who responded in the 2006–2008 survey had no funds (Zajontz, 2010). When funded by their own university (another 30%), most researchers at the universities of Buea, Dschang, and Ngaoundéré had only one thousand to three thousand Euros per research project at their disposal. Allocation of university funds was regarded as nontransparent at Francophone universities, where more transparent regulation was said to exist at the Anglophone university. Another 38% of the projects were partly or totally funded externally, often by international funding organizations, partly by governments (development aid), partly by foundations and research councils (Table 16.3). For this 38% of the projects, support averaging several tens of thousands of Euros was available to the project leaders (Zajontz, 2010, p. 217). Whereas these sources of funding were sometimes seen critically as a sign of postcolonial dependence (and of academic

¹⁵A report on research policy in Cameroon (Gaillard, van Lill, Nyasse, & Wakata, 2014) stated that academic research still suffers from “a lack of organisation and management, scattered topics and multiplication of microresearch groups unable to reach the critical mass for productive research, and lack of financial resources” in general (pp. 9–10).

¹⁶The response rates were 35% for project leaders and 80% for leaders of laboratories. The survey was supplemented by 21 in-depth interviews with research and laboratory leaders. We are not able to present all the research efforts that took place at each university at a given time, though.

Table 16.2 Pattern of research projects at Cameroonian universities surveyed between 2000 and 2008, by discipline and type of university structure

Structure	Buea	Dschang	Ngaoundéré	Total
Faculties				
Humanities	13	13	15	41
Science	10	20	14	44
Schools	2	2	15	19
Total	25	35	44	104

Note. Zajontz (2010); E. W. Schamp's own calculation reconsidering raw data of Dschang and Ngaoundéré and, hence, slightly differing from Zajontz (2010), Schamp and Zajontz (2010), and Simeu Kamdem and Schamp (2014).

Table 16.3 Surveyed research projects at three Cameroonian universities, by geographical and thematic scope

Type of project	Buea	Dschang	Ngaoundéré	Total
Academic projects on local issues	11	6	15	32
Academic projects on nonlocal issues	14	23	27	64
Local services by research	...	6	2	8
Total	25	35	44	104
Projects funded or cofunded externally ^a	6	15	17 ^b	38

Note. Author's own calculation.

^aThe projects addressed local and nonlocal issues, were generally in sciences and technology, and were funded by international organizations and foundations. ^bTwo projects were cofunded by a Swiss pharmaceutical company and one by a Cameroonian firm.

services migrating abroad), they may, conversely, also indicate a capacity of researchers to approach international donors for project funding.

Broadly speaking, cultural differences pose a further barrier to researchers' interaction with local stakeholders. Many African regions are highly diversified in their societal statuses, number of ethnicities, local languages, and ways of life (e.g., urban, rural commercial, rural subsistence, agrarian, and nomadic). In Cameroon most of the university teachers are not natives of the region. (There are fewer out-of-region teachers at the universities of Buea and Dschang than at Ngaoundéré.) How can and do they communicate with regional rural societies involved in their research projects. What do teachers do to disseminate their results to local stakeholders? In some social science research projects a practical solution to this problem was to have local students participate as translators and interpreters.

To assess a project's possible relatedness to the local environment, we also distinguish between the research's geographical scope (location of university) and type (academic research or research services). Regional knowledge spillovers from research may take different forms, such as an outcome of academic research proper or a service that uses the university's technical equipment or provides consulting for public authorities and the private sector. Research may be defined as "local" if it addresses local stakeholders such as peasants, local administrators, or local health-care service providers. It is "nonlocal" if it grapples with national issues or issues of

basic research. Individually and university-funded research was viewed as “local” when the topics had to do with the domestic natural and social environment, and it sometimes treated questions of applied research. Service projects relating to public authorities were found mainly in the agricultural sciences (Dschang) and geomatics (Ngaoundéré, Dschang).¹⁷ Many more nonlocal research projects than local ones have been totally or collaboratively funded externally—generally by international research organizations, public donor organizations for the Francophone world, and international foundations. In some of these cases, it was not clear whether the researchers were able to apply for funding or whether they acted as local service providers to international research programs. In exceptional instances researchers found support from foreign companies. We therefore found little evidence of patents that had emerged from academic research (three or four projects only), and foreign firms seemed to be the patent holders in those cases. Apparently, most of the acquired new knowledge was unpatentable because of the research disciplines involved, unsatisfactory national patent legislation, or lack of assistance from university and government in the patenting process.¹⁸

There is, however, much overlap between and ambiguity in the categories of Table 16.3. In terms of local development, the table therefore serves only as an initial approach to a typology of research. The research team was unable to make a quantitative assessment of the impact that the research projects had on local development. Only the number and kind of projects were evaluated, and the method of data collection did not enable us to gauge the data's representativeness and reliability.

Nonetheless, 32% of the academic research and service projects included in our case study had a local character. Moreover, 61% of the projects that were categorized as treatment of a nonlocal topic had a local dimension as well. For example, medicinal plants were seen as an important focus of university research in Cameroon (Gaillard & Khelfaoui, 2000), and research on local medicinal plants was conducted at each university, though in different disciplines and with different approaches. The researcher may cooperate with international organizations and companies abroad and be in contact with local traditional doctors (*tradipraticiens*), either to gather information on plant choice or to provide information on properties of plants in order to improve treatment. Of the 15 “local” projects at Ngaoundéré, five were oriented to farmers (pest control, nutrition from different plants, beekeeping); another five, to traditional doctors (analysis of medicinal plants); and an additional two, to small agroindustries (photovoltaic energy supply, establishment of a food-value chain). In Buea, local topics encompassed a wide range of social problems in semiurban and rural settings (e.g., the identity crisis of migrant workers, the education of girls in a nomadic society, local languages, political autonomy, health, and environmental

¹⁷Projects concerned soil and water pollution tests, for instance, or the use of geographical information systems for the improvement of power supply configurations that have emerged historically in a chaotic way.

¹⁸Cameroon is faulted for its weak legislation and institutions governing intellectual property rights, as exemplified by the implementation of an access and benefit-sharing policy on biodiversity (Rosendal, 2010).

management). At the University of Dschang, we could not sufficiently discriminate between local research and services, especially with projects in the faculty of agriculture, where, according to information from the university, researchers working on integrated agriculture seemed to be collaborating with farmers and agricultural services in the region.

Hence, certain topics existed across these universities, with each institution addressing them according to its particular capabilities. Common research subjects in science and agriculture were medicinal plants, food and food storage, and water and waste management. In the social sciences (including arts, economics, management, sociology, and education), local projects helped to document cultural artifacts (local heritage), to study local crises (identity of labor migrants, the coffee economy, environmental damages), and to cope in general with manifold societal crises at the local and regional level.

These findings appear to show that university research can have an important meaning in local development. Indeed, many researchers claimed to be conducting applied research and wished to contribute to regional development. Their viewpoint was consistent with that reported by Kruss, Visser, Aphane, and Haupt (2012), who found a great deal of commitment and responsiveness to social development among teachers and researchers at a South African rural university. Table 16.4, though, reveals that communication and cooperation with local stakeholders is the exception rather than the rule at the nonmetropolitan Cameroonian universities studied in this chapter.

Obviously, research projects rarely provide for knowledge dissemination to local stakeholders, except public authorities. Although research leaders casually expressed their wish to communicate to local stakeholders, they were unable to conceptualize communication channels, let alone use them. Because there were few, if any, project structures and real initiatives therein, possible knowledge spillovers were not discernable. We members of the research team nevertheless uncovered outstanding examples of less visible communication from projects conducted in cooperation with traditional doctors, peasants, nomads, nurses in rural areas, and

Table 16.4 Number, kind, and percentage of partnerships in “local” Cameroonian research projects

Partnerships	University		
	Buea	Dschang	Ngaoundéré
Local academic projects	11	6	15
Total of cooperative partnerships ^a	74	21	37
Percentage of			
academic partnerships ^b	58	57	65
partnerships with local administration	19	14	13.5
partnership with groups from the informal sector and peasantry	5	...	8
other partnerships ^c	18	29	13.5

Note. Authors’ own calculation.

^aPartnerships in the survey were ranked from 1 (*very important*) to 5 (*unimportant*). The total number of cooperative partnerships is the sum of the rankings 1 through 3. ^bWith other disciplines at the same university (majority), at other universities in Cameroon (primarily the “mother university,” Yaoundé I), and at universities abroad. ^cMostly foreign organizations.

other stakeholders (for details on the University of Ngaoundéré, see Schamp & Zajontz, 2010). In-depth interviews revealed interesting ways in which academic, often nontechnical research had of communicating with and having impacts on the local society. In one project local social science students had established communication with rural communities by serving as translators. In another project researchers were working on medicinal plants and communicating with professional groups (traditional doctors). A third case was a university-initiated project on geographical information systems (GIS) that had become a municipal service and consultancy. In yet another instance networking effects had emerged in a project on nomads and had forged links between nomadic society and development-aid NGOs. A fifth project had resulted in regional further education. Other outstanding examples were Ngaoundéré projects on analysis of the enabling environment and on the introduction of beekeeping where awareness, interest, initiative, and ideas generated over the radio, creation of a beekeeper's association, and training of beekeepers had contributed to the spread of beekeeping as an additional source of income for subsistence farmers. There were thus many different anecdotal examples of communication between university research and local civil society. Cultural and ideological barriers to communication exist, too, as demonstrated by policy-makers and health-care officials who, sticking to Western medicine, refused to test and accept knowledge from research on medicinal plants—a stance quite the opposite of that in Asia (project leader Ngaoundéré, personal communication, February 2, 2008).

Many research projects from faculties such as the arts, economics, and legal and political sciences tackled current problems of cultural and economic life in Cameroon. But whether local or not, their local reach was limited for want of communication channels. The projects tended to generate “background publications” that are available to policy-makers and administrators only. It seems plain that many of the projects in the sciences and technical sciences (e.g., engineering and agriculture) helped improve technical knowledge—but principally in the major urban centers, not the rural areas.

Summing up, there is sufficient anecdotal evidence that academic researchers are willing to deal with problems of the local society and that interactions with local stakeholders in rural areas are sometimes unexpected and overwhelming. These interactions remain largely invisible, however, and become apparent only through in-depth interviews. Further socioanthropological analysis is required for full assessment of their impact on the development of local societies.

Third Mission: Outreach—Building Local Intermediaries of Knowledge Spillovers

Teaching and research per se do not make the university available for engagement in regional development. Both missions brought about rather disordered, invisible, and ineffective forms of engagement. This assessment also holds for what can be seen as the high road of university engagement in regional development, namely, the creation of research-based firms (university spin-offs) by university staff and graduates. However, another consequence of the focus on undergraduate-level teaching

and of the weak research landscapes at the three universities singled out in this chapter is that spin-offs as defined in the literature are relatively unlikely. A detailed search for enterprises created by graduates of the University of Ngaoundéré between 1993 and 2006 identified 17 small firms, mostly in the School of Food Technology and the School of Applied Technology. Nine of these persons were available for an interview. The others had disappeared because the firms had either closed or relocated. None of the firms was related to any research project but drew on standard knowledge from the relevant disciplines (food technology, computer sciences, maintenance). Needing urban clientele, firms in food-processing, beverage production, and maintenance services have all been created in Yaoundé and Douala, far from the small town of Ngaoundéré and its rural neighborhood. Unsurprisingly, the graduate entrepreneurs have kept little contact with their alma mater.

Unlike teachers and graduates of engineering, those of science and the humanities in general were able to create their own private enterprises at the two other university locations, Dschang and especially Buea. University staff from the social sciences and humanities founded a range of private educational institutions—a secondary, a polytechnical, and an evening school—and have meanwhile hired several graduates of those universities as teachers. Staff from the faculty of science and health at Buea established a private high school for vocational training, mainly in health care, and a private hospital, whose trained nurses then created drug shops in residential areas. On one hand, these activities respond to an increasing inability of the public education system to keep pace with the rising demand at all levels of education and with the privatization policies introduced into the educational system in the early 2000s. A challenging entanglement of public-private linkages in the education system has emerged because these private schools must be officially sanctioned by the Ministry of Education and supervised by the public university—requirements that often result in the hiring of part-time teachers from the nearby public university. Several shortages were thereby addressed at the same time: those in the provision of public services such as health care and education; in the labor market for graduates; and, occasionally in personal income at the university. On the other hand, Buea and, to a more limited extent, Dschang offer advantages deriving from an environment that is more commercialized and closer to urban centers than Ngaoundéré. Buea in particular, an Anglophone setting, has become an educational hub for ordinary and advanced education in West Cameroon, for the city benefits from both its proximity to Douala's Francophone metropolitan area and that society's rising demand for English as a medium of instruction in the educational system (Fonyuy, 2010).

These private initiatives have emerged in a spontaneous and disordered way, as did the occasional university services for public and private organizations. This pattern characterized the previously mentioned teaching in GIS at the University of Ngaoundéré, which evolved into diverse services provided to local authorities and the Cameroonian utilities company and which led to the establishment of a local commercial training unit. It typified services that the faculty of agriculture at Dschang extended to large plantations held by major companies. It also occurred with workshops that the department of journalism in Buea offered to professional journalists. These services go hand in hand with policies on the professionalization of higher education, which were relaunched in the mid-2000s when the

Cameroonian government obliged universities to expand the university's budgetary "autonomy." Nonmetropolitan universities were less able to follow metropolitan universities in commercializing master's degree courses at fees up to 15 times higher than the similar public ones. However, they did attempt to strengthen their outreach, or "third mission." Based on visible communication, formal network-building, and formal contracts between the university and external stakeholders, outreach has become the cornerstone of the entrepreneurial and developmental university models.

Accomplishing the third mission as discussed in the Global North means creating new intermediary institutions that connect university functions to stakeholders' needs systematically. The University of Dschang established the *Groupe ment d'intérêt économique* in 2006 as Cameroon's first university center for knowledge transfer, forming a coalition consisting of the university, the Friends of the University's Personnel, the University Teacher Association, and a local bank (Zajontz, 2010, pp. 252–253). In 2007 the University of Buea launched a series of conferences with key external stakeholders, even companies from nearby Douala, to improve contacts, establish "partnerships," and formalize procedures for internships. Additional initiatives may have followed, but it seems far too early to expect visible results, especially because they remain embedded in a neopatrimonial system.

Obviously, the nonmetropolitan universities still have little capacity for organizing the outreach function. Linkages and knowledge spillovers are usually undocumented and nontransparent, and university administrators are generally uninformed about them. However, most of the linkages seem to be nonlocal and oriented to the metropolises, as exemplified by the university's staff consultancy in disciplines such as accountancy, business studies, and legal sciences.

Conclusions

As noted at the beginning of this chapter, the university's regional engagement in Africa differs from that on other continents because of Africa's particular historical, societal, economic, and political context. I have sought to confirm this observation with a case study on three nonmetropolitan universities in Cameroon. It appears that the empirical analysis of these African examples yields few visible testimonials on regional engagement as usually studied in the literature in the Global North and in Asia's emerging economies. Such publications focus on private companies, which hardly exist in these African cases.

This statement needs qualification, though. First, interpretation of the results can differ depending on what the term *engagement* is taken to mean. Usually, the university's engagement is seen "as knowledge-related collaboration by academic researchers with non-academic organisations" (Perkman et al. 2013, p. 424), including profit-oriented companies and nonprofit-oriented societal groups and individuals. This understanding is generally based on direct, purposive communication between university staff and nonuniversity stakeholders. If communication is formalized, it becomes visible and measurable for empirical analysis. Because of numerous shortcomings—such as weak management capacities of the universities

and overall weakness of the institutional context—the Universities of Buea, Dschang, and Nougoundéré had not yet seriously developed either strategies or organizational structures for regional engagement. There was no feasible intermediary for communication between the university and regional stakeholders. It would be misleading, however, to conclude that these universities were not engaged in their region at all and that personal communication between university staff and the region did not exist. If the term *engagement* is used broadly to mean any outcome of knowledge that reaches local societies—whether planned or unplanned, direct or indirect, and hence “tacit” and undocumented, “invisible”—then the university is indeed “engaged” in regional processes.

Given the universities’ orientation to the mission of teaching undergraduates and given the scarcity of resources for research, some results nevertheless seem surprising. Regional engagement came about less through teaching (e.g., organizing internships and providing graduates) than through research. University staff members widely believed they should pursue “applied research” that responds to the needs of the region’s “ordinary people”—a link long said to be “really missing” in Africa (Brock-Utne, 2003, p. 46). Unfortunately, neither personal strategies nor the universities’ organizational framework has provided the means of communication necessary to achieve this goal. The university’s “service” role has been criticized for preventing innovation-oriented basic research at universities and even for restricting academic freedom and identity (Chachage, 2006; Niang, 2005). This discomfort may characterize research-led universities, the flagships (Cloete et al., 2015), more than nonmetropolitan universities, a crucial distinction in my argumentation. Scholars have occasionally faulted Africa’s university systems for their lack of diversification (Brundenius, Lundvall, & Sutz, 2009), a view that basically holds also for the current literature on the African university. The tension between the service orientation and research orientation of universities, between the supply of higher education in general and the demand for special technological disciplines (such as veterinary medicine, biogenetics, and geology) certainly calls for increased diversification of the African university system.

Second, the likelihood that visible forms of regional engagement by the university can be unraveled also depends on the region’s endowments and societal structures. The manufacturing sector is negligible in the university regions considered in this chapter, urban services are underdeveloped in the rather small towns where nonmetropolitan universities are located, and neither public administrators nor the few major agricultural companies that exist are interested enough in communicating with the university to engage in regional development.

In brief, regional capacity to absorb knowledge spillovers is slight. Kruss et al. (2012), whose South African case study traced collaboration with partners other than firms, emphasized the strong regional commitment that a rural university’s staff showed to community and welfare organizations, government, and civic society in general. Such variety and availability of social partners may not yet exist in Cameroon, for that country’s civil society still suffers from many weaknesses (Nkwi, 2006). Nevertheless, Kruss et al.’s findings support my call for an analysis of less visible, “soft” mechanisms of regional engagement on behalf of noncommercial stakeholders. Anecdotal evidence of such mechanisms surfaced at each of the three universities examined in this chapter.

The insight that the African context is peculiar for university engagement in regional development is not new. It has been stressed repeatedly in comparisons between African and Asian models of educational systems and development (Lawrence, 2010, p. 27; St. George, 2006). Catchwords for the Asian model are a high literacy rate, rapid expansion of public investment in education, simultaneous development of education and industry, the common Confucian heritage with its high priority on meritocratic principles, and interventions by a strong developmental state (St. George, 2006). None of these characteristics applies to Africa, where the literacy rate is low, the state weak, state budgets are restricted, and growth (if any exists) is based on raw materials. Last but not least, the World Bank has long recommended that higher education in Africa be neglected in favor of primary education.

Worse still, African universities, notably those in Cameroon, have been subject to government initiatives that obviously transform the university's underlying developmental model into an entrepreneurial one. This change may respond to many pressures from globalization in higher education. However, the relevant policies are fragmented and contradictory and ultimately favor commercialization of university output and privatization of higher education in large urban areas. The nonmetropolitan universities analyzed in this chapter are ill equipped to respond as developmental universities in practice, but they have not really been able to become entrepreneurial in their region either, partly because of their region's character. They have been unable to foster engagement by networking, communicating with local stakeholders and by providing relevant institutions for local knowledge spillovers. Hence, they have been unable to turn the invisible forms of engagement into visible ones and to improve the ways they function. Unfortunately, our findings may stand for hundreds of nonmetropolitan universities that have been established in Africa. To put it more generally, the developmental university model described by Göransson and Brundenius (2011) seems more a dream than reality.

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