

Research Article

The Nexus between Universities and Local Development

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Abstract: This research, adopted interpretive study paradigm, sought to look at how University for Development Studies (UDS) is responding to its local development mandate with a focus on how it is responding to innovation capabilities and human capital development. Notwithstanding the deplorable state of development in Northern part of Ghana, the local development mandate of the university in such a challenging environment has not caught much attention in the education literature. Research findings suggest that whilst UDS has considerably linked its research and teaching roles to the development needs of northern part of Ghana. It has a strong relationship with the human capital development, social and environmental development compared to developing the innovation capabilities. It is recommended that if UDS is seen as a key stakeholder in the development of Northern part of Ghana through its policy mandate, then policymakers need to create a conducive environment and put in place fitting policy support to innovate an effective engagement of UDS with the industrial sector and local enterprises.

Keywords: Ghana, human development, innovation, knowledge, local development, universities

INTRODUCTION

Over the years, academic interest in the nexus between knowledge production institutions within a locality and the local socio-economic development has increased considerably (Gunasekara, 2004; OECD, 2007). Institutions of Higher Learning everywhere are being forced to carefully reassess their role in society and to appraise the links with their various stakeholders and communities (Jongbloed *et al.*, 2008). It is observed that the conventional functions of higher education institutions in the areas of teaching and research are independent of and exogenous to specific social and economic imperatives (Gunasekara, 2005; Chatterton and Goddard, 2000). In this way, universities are being called upon by various local and regional stakeholders and agencies to make a strong contribution to the geographical location in which they are located. For that reason, in addition to the traditional research and teaching, universities are to play a vital role as agents of social, economic and cultural development in their localities (Puukka and Marmolejo, 2008) since it is perceived to be advantageous both to the university as well as to the larger society (Gunasekara, 2004; OECD, 2007).

Realizing the prospective contribution that higher education institutions can and do play in the development of their locality, the Ghana government

established the University for Development Studies with an unambiguous mandate to particularly help forestall and find a panacea to the socio-economic deprivation and environmental problems that have engulfed the people of northern part of Ghana. University for Development Studies was established in May 1992 by the Provisional National Defence Council (PNDC) Law 279. Through the act that established the university, the government charged University to "combine the academic world with that of the community in order to provide a practical interface between the two for the holistic development of northern part of Ghana (Manuh *et al.*, 2007, p. 166). Thus, in addition to its conventional roles of teaching and research, the university was given an additional mandate for the development of its surrounding communities.

The catchment area of the University for Development Studies covers what is usually called Northern part of Ghana-comprising three administrative upper regions-Northern Region, Upper West Region and Upper East Region (Fig. 1). Over the past decades, the three regions in the Northern part of Ghana have been noted to be the poorest, both in relative and absolute terms using various indices of measurement (Asenso-Okyere *et al.*, 1993; Kaburise, 2003; Osei-Assibey, 2014). They are below the national average levels of income and consumption expenditures, poor health and sanitary conditions, weak education and literacy levels

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Fig. 1: Map showing the northern region of Ghana (The study areas: Upper west, upper east, and Northern) Ghana statistical service, 2017

and absence of basic social amenities (Manuh *et al.*, 2007). According to UNDP (United Nations Development Programme), 2007, Ghana Human Development report, Northern Region, Upper West Region and Upper East Region are 'harbor the poorest of the poor' (Harsch, 2008). Thus, at its establishment, the University was seen as a vital stakeholder and instrumental for the development of this less economically developed region. In spite of the state of development in Northern part of Ghana, the anticipation of this university to have a relationship with its surrounding communities as a means to promote socio-economic development in Northern part of Ghana has not attracted the needed attention in education literature. It is for this reason that this study seeks to look at how University for Development Studies with a unique local development mandate in Ghana carried out this daunting task within a highly disadvantaged geographical region. In achieving this goal, the study explores these research questions:

- How is University for Development Studies engaging in building the innovation capabilities in the Northern part of Ghana?
- In what ways is University for Development Studies responding to the development of human capital development needs in the Northern part of Ghana?

LITERATURE REVIEW

University engagement literature suggests that universities adjust their core functions of research and teaching as well as community service to find solutions to actual local problems (Chatterton and Goddard, 2000; OECD, 2007). In this way, the local universities is conceptualized into three facets namely knowledge creation in the locality through research and its exploitation via technology transfer; knowledge transfer

and human capital formation; and community and cultural development, contributing to the vicinity social cohesion and sustainable development (Jongbloed *et al.*, 2008; OECD, 2007).

Many research findings have shown that through its teaching function, universities can play a unique role in developing the skill needs of locality within which they are established. Thus, the knowledge that is passed on to graduates and subsequently applied in the local economy is one of the best means of knowledge transfer and has the potential of changing local economy (OECD, 2007). The education literature postulates that universities can respond to the development of the human capital in the area in which they are located in diverse ways (Charles, 2003; Gunasekara, 2004; OECD, 2007). Universities can broaden the scope of access to university, particularly those coming from remote communities; promote the balance between the labor market and supply through creating labor market intelligence. Aside these, universities can help develop the skill base of their locality by mapping out well-thought-out strategies to enhance graduate employability and retention. This could be achieved by focusing courses which can help the retention of graduates in these localities (Chatterton and Goddard, 2000; Gunasekara, 2004). They can localize the learning process by drawing upon the unique features of a locality to assist learning and teaching (OECD, 2007).

Universities further adapt their traditional research function in building the innovation capabilities of the area they are established. According to Chatterton and Goddard (2000), research within higher education institutions, particularly the university, has conventionally focused on the production of knowledge for the academic community and has neglected the application of established knowledge for the local community. However, there are a number of developments that are invigorating universities for commercializing their research activities and tie their research and expertise more closely to their local environment. According to Lester (2005), the university's role in innovation processes partly depends on what kind of industrial breakthrough occurring in the local economy. In view of this, the "one-size-fits-all" approach to local sustainable economic development pursued by so many academic institutions with the focus on licensing and patenting should be replaced.

Moreover, studies advocates for a broader local development concept including community development, cultural vitality, social inclusion and cohesion, sustainability and welfare hence understanding that social, cultural and environmental developments have comprehensible economic and intrinsic benefit (Mora *et al.*, 2006; OECD, 2007). These highlights and stabilize economic growth and bring to light benefits in terms of community health and welfare, community life, social cohesion and sustainable development. Chatterton and Goddard (2000) opine that

a number of trends are converging that are increasing the service function of universities. Amongst these is the increasing awareness of the global nature of numerous problems such as poverty, environmental degradation and economic development which has created interconnected local responses and that universities are well positioned to construe these global issues on a local scale and to play a most important role in the social and environmental development of the locality.

DATA COLLECTION METHOD

This research employed an interpretive and qualitative study paradigm. According to Denzin and Lincoln (2011), qualitative research involves naturalistic and interpretive approaches to the world. The interpretive paradigm was deemed vital for this study as it sought to look at the viewpoint of participants on the kind of initiatives they have brought to bear at the institutional level to promote local development in the Ghanaian context. The researcher employed semi-structured interviews to collect the required data from respondents. This was complemented by a thorough review of some selected literature including annual reports on research activities, university reports on outreach programmes.

The researcher also adopted purposive sampling technique in selecting the respondents during the data collection process. According to Bryman (2008), the goal of purposive sampling is to sample cases in a strategic way so that those sampled are relevant to the research questions that are being posted. In this respect, the investigator needed to select respondents tactically from different units within the university that will provide relevant information on how the institution is responding to the prescribed mandates such as the development of the skill needs of northern part of Ghana, regional innovation and the contribution to social and environmental development. Acknowledging this, the pollster drew participants from the University's central administration, Heads of Departments, Deans of selected Faculties, Centre for Continuing Education, the unit in-charge of the University's Outreach programme, Interdisciplinary Research (CCEIR), some senior academics and the Alumni office. In all 30 participants were selected for the study. English was used to conduct the interviews with all participants and were all audio-recorded after seeking their consent. Interviews were conducted in the offices of the participants and each session lasted approximately 1 h.

Data assembled were analyzed manually. The pollster after the data collection transcribed all the audio-recorded interviews in the word for word. This helped the researcher to capture the views narrated by participants in their own words. The transcribed data and the documents gathered were subject to thorough reading with close attention being given to emerging themes in the data.

To improve reliability, data triangulation was adopted as the interviews were complemented with formal documentary data. Moreover, respondents were selected from different departments of the university so that expressions on the similar issues could be easily verified so as to improve the precision and trustworthiness of findings. To end with, the pollster acted in accordance with moral issues by initiation the data collection process only after an authorization had been sought and granted by the university administration while the consent of all participants was sought.

STUDY FINDINGS

Building the innovative capabilities in the northern part of Ghana? This segment of the study sought to explore how research activities of UDS are linked to building the innovation capabilities in the Northern part of Ghana. Two main subjects concerning how UDS is introducing innovative practices into agriculture and the mechanisms employed to circulate its research findings to local farmers in the northern part of Ghana emerged from the study.

Pioneering innovative practices in Agriculture in the Northern part of Ghana: Participants from the Department of Agriculture and Animal Science reported that the academics at the department have an alliance with the Savannah Agriculture Research Institute and they engage in research concerning to food and fiber crop farming for the purpose of introducing advanced technologies to improve agricultural yield. It came out that they have programmes for the main crops cultivated in the northern part of Ghana including millet; maize, groundnut, sorghum and cowpeas and that they have supplied farmers with varieties of improved seeds. In addition, through the auspices of the German Agency for Technical Co-operation (GIZ) they are introducing farmers into dry season farming and beekeeping production. It emerged that since the northern part of Ghana has a long period of drought, they realized that farmers mostly become unemployed during dry season periods. Thus, to forestall this undesirable situation, they are researching into different crops that can endure a long period of droughts so that local farmers can grow during the dry season. In the meantime, they have organized farmer groups and educating them on how to do dry season farming so that during the dry seasons they will still remain employed.

Respondents from the Department of Animal Science asserted that they have partnered the Veterinary Department of the University of Glasgow with the aim of improving the nutritional quality of animal feeds for local farmers. Farmer groups have been formed to be educated on how to improve the nutrient level of their feeds.

Knowledge transfer to local communities: Another subject that came out was institutional mechanisms through which research Products University are disseminated to local communities. According to the respondents, the department of agriculture extension liaises with other departments and they meet farmers from time to time to exhibit knowledge and technologies to the local communities. They added that hitherto they used to have some radio programmes through which they publicize their research findings and also offer free advice on some modern practices of farming but that could not continue due to inadequate funding. Respondents grouped the research works of the university into commissioned, where the project is initiated and supported by some international agencies and non-commissioned research, their own individual research activities. It appeared that besides commissioned research or internationally supported projects; the dissemination of research findings directly to local community members has not been efficient. A participant at the University's Outreach programme, Interdisciplinary Research opined that:

"For internationally supported research, they would organize validation workshop, where they go back to the communities and meet stakeholders and opinion leaders to discuss the outcome of the research. The implications of the findings are brought to the limelight. In the case of our non-commissioned research, securing funding to do the research in itself is problematic.

Clearly, this indicates that through the creation of the extension department was to enhance the diffusion of scientific knowledge and research products from the university to the local communities, it appears financial and logistical constraints are impeding progress in this regard.

Responding to human capital development needs of Northern Ghana: The research sought to investigate the strategies and programmes by the university to develop human capital needs of northern part of Ghana.

Recruitment of students from Northern Ghana: The study findings indicated that University for Development Studies has initiated a policy that aims to promote the recruitment of students from northern part of Ghana. It came out that whilst applicants to the university come from far and near of Ghana, the university general policy is that the first thirty-five percent of the students' places are recruited on merit and such applicants could come from any part of the country. The next thirty-five percent is reserved for the catchment area comprising Upper West Region, Upper East Region, Northern Region and the Brong Ahafo Region while the last thirty percent is allocated to municipal-sponsored students. However, the interviews

revealed that though this is the general institution-wide policy, it is more followed in some departments than others.

In addition, the study found out that UDS is creating opportunities for more females from the northern part of Ghana to be enrolled through their affirmation action admission process. Respondents asserted that the university recognizing the wide gap in educational attainment between males and females in the northern part of Ghana is making earnest attempt to promote the admission of more females, particularly in the health and physical sciences. This was confirmed by the one policy paper reviewed as it states in the Vice Chancellor Report, 2003, p. 5:

"The University is dedicated to solving the issues of gender equity and mainstreaming, particularly in connection with empowerment and poverty reduction. In the Northern part of Ghana, gender and poverty are inextricably linked. Our policy regarding admission in respect of gender is informed by findings supported by research. We are encouraging female gender enrolment through an admission policy that allows more merit applicants to gain admission into our scholarly programmes". (Kaburise, 2003)

Thus, while University for Development Studies has the policy to promote the recruitment of students from northern part of Ghana, it has taken a step further to encourage the recruitment of females.

Localizing the learning process: Participants stipulated the localization of the curricula of University for Development Studies which aims to integrate students into their neighboring settlements. From the central administration, a respondent commented that:

"The curricula of the various schools and departments emphasize dialogue at the community level, community entry, extension and practical tools of inquiry. Participatory appraisal and participatory technology development methods are an intrinsic part of the various curricula to ensure that students come to grips with that the poor needs, to be partners in attempts to reduce poverty".

Moreover, through the Third Trimester Field Practical Programme (TTFPP), students are integrated into local communities in a northern part of Ghana to deepen their understanding of the peculiar features of northern Ghana. Aside from the service role of the trimester programme, it helps students to bridge the lacuna between theory and practice. In the first year of the programme, students write community profile comprising the physical resource base, socio-political organization, demographic characteristics, agricultural and natural resources, science, technology and industries and social services of the communities in which they are

located. It was found out that once they write their report, academics draw upon these in their teaching and learning.

Response to local labor market needs: The study findings showed that the university is modifying the existing programmes and instituting new academic programmes in response to local labor market needs. One of the cases mentioned during the study is the establishment of the Faculty of Education in 2008, which was established in response to a pressing local labor market need. The respondents from the central administration opined that the two universities in Ghana that offer courses in education and hence the training of teachers are all located in the southern part. This has resulted in inadequate teachers in the northern part of Ghana. The university realizing this, created a faculty of education to assist in producing teachers for the education sector in the northern part of Ghana.

From the Faculty of Agriculture, a respondent made mention of the establishment of Department of Agribusiness. They recognize that farmers in the area are mostly into peasant farming. The faculty feels that agriculture needs to be done in commercial form and this call for the training of agricultural experts who will help farmers in this direction. Nevertheless, the interview with respondents pinpointed that university has not established courses in response to the needs of specific local businesses and industries in the area.

Promoting lifelong learning: The study finding indicates that the university has instituted lifelong programmes that take care of non-traditional students. Through the establishment of Centre for Continuing Education and Interdisciplinary Research (CCEIR), the university organizes professional programmes for non-traditional students. The mission of the unit is as follows:

"The Centre for Continuing Education and interdisciplinary Research exists to support research and teaching for socio-economic development in Northern part of Ghana. It organizes professional training at the postgraduate level and short courses for capacity building programmes/courses for grass-roots development".

Graduate retention and employability: In relation to employability and retention of graduates, respondents the study indicate that the University has created two units, the Alumni Office and the guidance and counseling unit. They reported that the guidance and counseling unit organizes career and guidance seminars for final year students whilst the Alumni office keeps a record of graduates and monitor their employees. Nonetheless, when the researcher sought to discover from the Alumni office if there was a complete documentation on the employability of graduates in the

northern part of Ghana, the search revealed that there was no data to that effect.

DISCUSSION

The overall goal of this research was to examine how UDS is participating in local development with key attention on how it is engaging in local innovation and human capital development. Findings showed that University has undertaken a number of interventions to improve the skill needs of northern Ghana. Previous research findings in Ghana indicated that students from Northern Region, Upper East Region and Upper West Region of Ghana are less advantage being admitted to universities in Ghana (Manuh *et al.*, 2007). According to Manuh *et al.* (2007), the most important factor determining access to universities in Ghana was the region of residence and that nearly 70% of the students of the seven public universities in Ghana resided in only three regions in the south namely: Ashanti, Greater Accra and Eastern Regions. This means that students from Northern Ghana are underrepresented in public universities of Ghanaian. Thus, if UDS is creating the new avenue for more students to be recruited from northern Ghana, then it is in the right direction since it has the potential of reducing the level of poverty in northern Ghana (Blondäl *et al.*, 2002; OECD, 2007). This initiative is consistent with the effort of several other universities highlighted in the literature as they are making an effort to recruit students from their located regions (Gunasekara, 2004).

However, a mere recruitment of students from a region is not enough to stimulate regional development. It partly depends on the retention of students and their employability in the region after completion which is also influenced by how well the university aligns its academic programmes to the needs of the regional economy and how strong the regional economy is to absorb the graduates. According to the OECD (2007), the knowledge that is transmitted to students and is subsequently absorbed into the regional economy is one of the most effective means of knowledge transfer and has a greater potential of transforming regional economies. Thus, UDS has adopted a curricular that integrates students into local communities for eight weeks in each academic year with the hope that they will gain favorable attitudes which will facilitate their retention in these communities. However, what is not clear is whether these students have corresponding industrial and business opportunities in these communities and whether their respective programmes are linked to these industrial or business pathways in the communities.

It appears from the study that there is a lack of systematic assessment of the labor market needs of the region by the university, lack of specific programmes responding to specific regional industrial needs and a minimal co-operation between UDS and regional

employers. This existing weaker link between UDS and the labor market in northern Ghana could lead to migratory pull of graduates into other regions upon completion. Again, while UDS has created a specific unit to promote lifelong, learning in northern Ghana, an assessment of the existing programmes show the limited target to local industrial workers and other Small and Medium Enterprises. Thus, UDS needs to orient academic programmes to the industrial activities and other local businesses in their surrounding communities to stimulate the retention of graduates into northern Ghana upon completion.

With regards to building the innovation capabilities in northern Ghana, findings from the study suggest that while UDS has introduced some innovative practices into agriculture in northern Ghana, little effort is done to liaise with other industrial activities in the region. This supports the view that university's role in regional innovation processes depends on the kind of industrial transformation that is occurring in the local economy (Lester, 2005). Over 70% of the population in northern Ghana engages in Agriculture and thus it is not surprising that UDS has aligned most of its research activities to agricultural related activities in Northern Ghana. Again, while research highlights a number of channels or mechanisms through which research output is transferred from higher education institutions to the industrial sector and the wider community including regional development offices, research centres, spin-off companies, incubator units, advice and training services, sciences parks and mechanisms to exploit intellectual property rights (Chatterton and Goddard, 2000), our empirical data show little evidence of the above mechanisms and infrastructures in the case of UDS and northern Ghana as a whole. Rather, the study results showed that UDS disseminates knowledge and technology through one to one consultations with local farmers and meeting farmers directly from time to time in the communities to demonstrate new technologies. Thus, it appears the industrial transformation occurring in the regional economy shapes the manner through which knowledge is likely to be transferred.

CONCLUSION

In general, this study has shown that UDS has linked its teaching and research functions to the local needs of northern part of Ghana. Nevertheless, it appears that UDS engaged activities to the human capital development needs than the innovation capabilities. UDS has not made positive headway in linking its research activities to local industrial activities. This contrasts how the local role of universities is undertaken in the buoyant or developed economies as the literature suggest a strong relationship of research activities to the innovation capabilities of the local industries (Gunasekara, 2005; Lester, 2005; OECD, 2007). The situation in the case of UDS could be explained by the

university's dominance in the social sciences. Thus, if UDS is seen as a key stakeholder in local development through its policy mandate, then, policymakers need to create the necessary ambiance to stimulate its local engagement activities. This requires active cooperation between UDS, local and national policymakers in northern Ghana.

LIMITATIONS OF THE STUDY AND FUTURE RESEARCH

Notwithstanding the fact that this study has elaborated on a number of ways that UDS has responded to its policy mandate, it suffers from some limitations. First of all, the selection of respondents largely from the University can be regarded as a limitation. If the views of local farmers, community leaders and Education Ministry were also sought, it would have deeply validated the findings of the study. Again, UDS has four campuses located in different geographical areas of northern Ghana and as such the researcher could not visit all Faculties. Eliciting responses from participants of all the four campuses would have added more meaning to the study. A future study could investigate the impact of the engagement activities of UDS on the community members in Northern Ghana. Since the students play important role in the engagement programmes in UDS, future research could explore student experiences in community engagement programmes. Finally, further research could explore the factors that inhibit the local role of UDS in the northern part of Ghana.

CONFLICT OF INTEREST

No potential conflict of interest was reported by the authors.

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