

Creating an Enabling Research Culture at the Royal University of Bhutan- An Analysis

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Abstract

The Royal University of Bhutan having evolved from a traditional teaching-learning institution is challenged in changing the mind-set and working practices of its academics when it involves research, innovation, and the use of knowledge. This paper looks at the initiatives pursued by the University in contributing to enhanced research culture through desktop research. Evidences indicate that support mechanisms like institutions, policies and guidelines, quality staff development, capacity building initiatives, international relations, and quality curriculum are the driving forces to improve research culture within the University. The University has made a breakthrough in changing the mind-set and working practices of its academics by engaging in research activities in a predominantly undergraduate teaching-learning University. The paper also discusses opportunities and challenges of enhancing research and innovations in the University.

Key Words: *research leadership, research mind-set, research institutions.*

Introduction

The need to conduct research to provide a long-term framework for decisive action to national policies and concerns is well recognized in all development sectors in Bhutan (TEP 2010; HEPD, MoE 2017), including legislative bodies and higher education institutions (RUB 2014). However, there is no central agency to prioritize research needs at the policy level and encourage Bhutanese scholars. In absence of such a nodal agency to coordinate national research priorities, it has become inevitable on the part of sectoral agencies to incorporate strategies to generate knowledge specific to their development mandates and use them in their sectorial plans and programmes.

As a young federated institution and first University in Bhutan, there are challenges in changing the mind-set and working practices of academics in a University set up. The paper looks at some of the enabling environments put in place to assess the state of research at the Royal University of Bhutan (RUB). The paper also sets out prospects of research in higher education and strategies to overcome research challenges faced by the University.

Research Methodology

This paper is based on desktop review and analysis of information collected from the annual reports of the RUB published annually, policy documents on research and innovation of the RUB and governmental agencies, literature review of Bhutanese research status in journals, and several initiatives undertaken by RUB to conduct and promote research and innovation through scholarly events and curriculum design.

The objective of this desktop study is to assess how the existing institutions and policies in place have contributed to enhancing investigative studies by academics and impeding factors, if any, to improve research and innovation in the University.

This paper also discusses opportunities to enhance research engagements within the RUB and its contribution in promoting research in Bhutan through review of statutory University committee meeting minutes and several reports published by the University. The paper also highlights challenges in changing mind-set of researchers both within the academic and public sector organizations.

Results and Discussions

Institutionalization of Research Institutions

In order to provide strategic leadership in setting research policies, priorities, and stimulate a culture of enquiry, curiosity and investigation, a dedicated institution or agency is inexorable. Although the purpose of establishing the RUB in 2003 was to provide tertiary education and conduct research that are of relevance to Bhutan (RUB 2003), no central Department was established until 2005 to focus on research. One proposition of not considering an independent Research Department during the launch of the RUB could be due to historical reasons where all higher education providers were evolved exclusively from teaching experience only, and with very little engagement in systemic studies. In a study of research output of academics at the RUB in 2009, Maxwell & Choeden (2012) corroborates this observation that there is lack of infrastructure to support research in the only University in Bhutan.

Since the University is a collegiate federation of colleges located in different parts of the country, the main challenge is the work responsibilities of the academics in promoting and conducting research at the college level. The need of a dedicated senior academic to provide leadership and management of research was felt necessary in liaising with the central Department so that the University research profile is promoted and supported at the college. This led to the creation of the office of the Dean of Research and Industrial Linkages in each college.

While the intentions were to achieve good outcomes, actual institutionalization through appointment of Dean of Research in the system was possible only around 2010 in all the colleges. Having evolved from a responsibility of only teaching for the past thirty to forty years as a teaching institution, an institutionalization of a central Research Department in 2005 and later the creation of the office of the Dean of Research in each College was a milestone in driving research activities in the University.

Over the years, in order to support research capacity building of the Colleges, several thematic Research Centres (RC) were proposed by several colleges. However, there is no evidence that the initiation of establishing a new RC were influenced by the objectives of Article 2 of the Royal Charter 2003, where one of the objectives of the RUB is to conduct research. Yet in absence of a guideline for establishing a RC, around eight RCs were already established in six colleges before 2014. This could probably be influenced by some academics' initiatives realizing that quality teaching learning cannot take place without engagement in research by both academics and students.

Later with continued advocacy for the need of a dedicated RC to promote research and with set guidelines put in place to establish new RCs in 2014 (RUB 2014), seven additional RCs were established across all colleges. The establishment of the Institute of Gross National Happiness Studies (iGNHaS) in 2013 at the Department of Research and External Relations (DRER) was instrumental in facilitating, reviewing, and initiating new RCs with financial support from the iGNHaS. From late 2017 to early 2018, all RCs were reviewed by a joint team of staff from the college and DRER, and recommended for continued operation of the RCs to enhance the research reputation of the University and its academics (22nd and 23rd RIC Minutes). As of August 2018, the University has 15 RCs operational across the colleges with dedicated Research Centre Coordinators (DRER 2018).

The Research and Innovation Committee (RIC) of the RUB is another statutory institution responsible to promote research and innovation within the University and is coordinated and operated by meeting four times a year. At the college level, the College Research Committee (CRC) is responsible to promote a strong and vibrant research culture. Further, the Research Degree Committee has also enhanced research activities by enrolling students for research degrees. However, the number of research degree programmes and research degree students are limited to one programme only within the University during the time of writing this paper.

Creating an Enabling Research Environment in the University

The Royal Charter of the Royal University of Bhutan mandates research as one of the dual objectives of the University as:

To promote and conduct research, to contribute to the creation of knowledge in an international context and to promote the transfer of knowledge of relevance to Bhutan (Article 2, 2.2 of The Royal Charter, p.3)

In the endeavour to promote a research inspired University, the primary responsibility of the Research Department is to frame several guidelines and policies to facilitate conduct of research by academics. Among several working documents developed to accelerate scholarly activities, the *ZHIB'TSHOL RUB Research Policies 2014* was put in place after series of consultations, thus assuring the conduct of quality research under the University with detailed protocols and processes outlined. This was a significant milestone in building standard research capacity of academics within RUB, although many academics have still to put in practice their learning. Schofield (2016) too reported that since secular higher education in Bhutan is new, many academics of RUB needed training to engage in high-quality research indicating that existing RUB academics were least involved in research besides routine class room teaching. The RUB Research Policies itself needs review and fine tuning to enable academics to pick up investigative studies.

The Department of Research and External Relations (DRER) developed several working templates and general guidelines to facilitate application for University-wide sponsored annual university research grants (AURG) since 2010. In 2016, all these policy guidelines, reporting templates, and application forms were reviewed, improved, and institutionalized as an AURG guideline and endorsed by the university in the 36th Academic Board Meeting. The AURG guideline 2016 is now increasingly referred to and implemented for the college sponsored annual research grant by the colleges. Later from mid-2017, the Human Resource Rules and Regulations 2017 (RUBHRRR 2017) has also recognized to account the performance of academics in scholarly activities for their career progression. All these policies in place have enabled the academics to partake in research activities.

Quality Human Resources

Documentary evidence indicate that the first PhD degree received by a Bhutanese was in 1990 (Penjore 2016), from India. When RUB was established in 2003, there was only one academic with PhD degree. Ten years later in 2013, RUB had 18 academics with PhD degrees (RUB 2013). RUB now has more than 70 percent teaching staff with postgraduate degrees, among which 59 have PhD degrees and

367 have a Master's degree (Annual Report 2017). Coupled with a minimum of five years to average of 10 years teaching experience, higher university qualification and job experience of academics have contributed to enhanced research culture in the colleges. In 2018, more than a thousand attended 97 scholarly events organized by the colleges and the University, giving positive indications of quality human capital in initiating research events.

External institutions like civil service and legislative bodies have also been the driving force to accelerate a culture of inquiry and investigative studies in Bhutan. For instance, a seasoned educationist and public servant with more than four decades of service in various organizations in Bhutan, including as the Speaker of the National Assembly of Bhutan commented that even the Parliamentarians of today need research skills to ensure discussions in the august house is based on evidence and analysis, and not on reactionary note (Palden 2018). Recognition of such research skills from the legislative body is a source of inspiration to the higher education providers in exploring professional development services to enhance research skills of Parliamentarians. In fact, the University in collaboration with UNICEF has been involved in building research capacity of both the Houses of Parliamentarians and the Senior Planning Officers of the Government Ministries and several senior Executives of the Civil Service Organizations since January 2016 for three consecutive batches. The presence of the minimum University degree holder to the highest degree of a PhD holder by Bhutanese Parliamentarian is also a testimony of educated Parliament in Bhutan.

According to the Civil Service Statistics 2017 of the Royal Civil Service Commission, there are 37 PhD degree holders in the civil service, although 57 percent of the professionals are from the natural resources sector. The trend for PhD degree quests by civil servants has exponentially increased in recent years with additional 61 civil servants already enrolled in PhD programmes in different countries (Australia-39; Thailand-8; India-2; Japan-2; United State-2; UK-1; Netherland-1; Austria-1; France-1, Germany-1; Italy-1; Canada-1; and Denmark-1). That excludes several individuals who secured scholarships to pursue PhD privately. Although civil servants constitute not more than 4% of the Bhutanese population, an increased quality of civil servants with around 47 percent University degree holders (RCSC 2017) is a driving force in improving the culture of inquiry and innovation in human resource management.

There are also evidences from the Judiciary, Government owned corporations, Private sectors, Civil Society Organizations, and individual Consultancy firms who have staff with PhD degrees. While in general, all PhD candidates specializes in their specific area of study, there is one common attribute to all PhD

degree holders. This common trait is the generic skills of analytical, methodological, logical and communicative skills, which can be applied across professions and disciplines. The challenge in a small society like Bhutan is also learning to appreciate the PhD degree holders by those in the bureaucracy that have not travelled the PhD journey.

However, with increased work force in all development sectors in Bhutan, and also comparatively with young and dynamic population, this quality workforce is indirectly a source of inspiration to conduct and promote research for quality service and policy formulation with documentary evidences.

Research Capacity Development Initiatives

Socio-economic development plan in Bhutan was initiated from 1961, but not many Bhutanese scholars were engaged productively in writing our own development plans until the 5th Five-Year Plan, where some Bhutanese educated overseas joined and were instrumental in advising the government on real Bhutanese perspective. When the RUB was established in 2003, it already had some institutions that were thirty to forty years old. However, the focus of those tertiary education providers was either to offer skills-based training or higher learning with minimal attention to conduct research. The paradigm shift in including research activities besides teaching required both capacity building and creating an enabling research environment in the University.

Among several initiatives of creating an enabling research environment, the University encourages all researchers to seek research sponsors at three levels, namely, the University-wide research funding, College research funds, and Research funded by external sources. However, all researchers are implicitly required to follow the University financial rules and regulations since all researchers are affiliated with the University (RUB 2014).

The potential to improve research activities in Bhutan is currently constrained by lack of dedicated research fund (DRER 2016). While some agencies in the Government systems have improved both in terms of quality and quantity of researchers, many agencies still do not consider or appreciate contribution of research outputs to policy formulations. On the other hand, evidences from international practices already indicate that countries in the East Asia and the Pacific invest almost 1.5 percent of GDP in R&D (UIS 2018) yielding fast results both in social and economic fronts. Therefore, it also appears that there is an urgency to institute a nodal agency like a National Research Fund in Bhutan to support research matters and generate new knowledge that is relevant to Bhutan (DRER 2016).

At the University, the Department of Research and External Relations (DRER) has been successful to garner external sources of funds to build research capacity of academics. Some of the notable achievements were scholarships from Australian Government for building PhD degree supervision skills (Annual Report 2013), institutional research capacity building project from Global Development Network (Annual Report 2014), PhD degree enrollment and research project from Danish Government (Annual Report 2014), PhD scholarship from Thailand International Cooperation Agency, Government of Thailand for PhD degree (Annual Report 2015), and Norwegian Government research project on study of women's participation in leadership in Bhutan (Annual Report 2013).

In line with the National Research Fund in Bhutan, the Department of Research has also initiated and mobilized central research endowment fund from the government, although investment plans are not yet implemented.

Likewise, in order to build up the research capacity, all colleges dedicate a minimum of one percent operational budget annually to research activities. The University-wide research fund has also increased substantially from one million in year 2010 to two and half million in 2018. The number of AURG applications has also increased exponentially from 16 applications in 2010 year to over 50 in 2018. However, there are around 38 research grants from the external sources received from both within and outside the country where academic faculty collaborate with international Universities in 2018. Such external research grants were very few and rare before 2010.

Forum for Conferences and Seminars

RUB has worked tirelessly to build the research capacity of RUB faculty members by sponsoring conferences, modestly funding research projects at constituent colleges, and obtaining research grants. All these activities were feasible within the framework of developed and approved guidelines.

The Department of Research encourages all University-wide research applications to present their project proposals at the Faculty Research Meet where the proponents receive professional feedback to improve their research grant. At the College level, a series of scheduled seminars and conferences have picked up giving space to academics to showcase their study findings.

Many researchers have also chosen to present at the regional and international conferences and seminars. This has enhanced the visibility of the University and led to several networking and collaborative project developments. It

is only encouraging that trends in research engagements are increasing and would continue to increase.

Space for Scholarly Publications

In 2012, the RUB published the *Bhutan Journal of Research and Development*. In 2013, it set up the Institute for Gross National Happiness Studies (iGNHaS) to foster GNH-related research within the country. The following year, a lengthy document was developed detailing RUB's Research Policies (RUB, 2014). Research Centres have also been operationalized at all the constituent colleges, although most such Centres are still in a very formative stage.

Publication of papers in journals, journal publications, book publications, and technical report publications have also picked up within the University. The growth of journals in the colleges has given space to the academics to publish their papers. Many of the journals have journal policies, although the degree of peer reviewing may vary. The important issue for the young University at the moment is to encourage writing and publication considering the importance of quality of papers and journals.

During recent years, a few authentic research-based book publications by the University include – i) *Improving women's participation in local governance: an exploratory study of women's leadership journeys in eight districts of Bhutan* (Thinley et al. 2014), and ii) *An introduction to the Biodiversity of Bhutan in the context of climate change and economic development* (Gurung and Katel 2017).

Enhanced External Linkages

From a modest international linkage with few Institutions and universities in the region, RUB has now established academic relations with several universities in Asia, Europe, North America and Australasia over the recent years. For instance, in one financial year from 2016-2017, as many as 59 projects were implemented by the University colleges from 30 countries. This has resulted in the movement of around 175 international guests to the University to implement joint projects secured between partners (DRER 2018).

The University has also attracted international students since January 2015 under different modalities such as semester abroad, short-term study, and full-time enrollment to the University undergraduate and postgraduate programmes. The international students visiting the RUB are mainly from North America, Europe, and Australia, with a significant proportion also from Asia.

Participation to Consultancy Services

Unlike in the past, many industries within Bhutan and also outside the country have approached our academics to conduct consultancies in giving trainings, pre-feasibility studies, review of policies, use of services, and many more. This has led to capacity building of many academics engaged in such scholarly activities. Many of the study report submitted to the industries have led to policy formulations of their sectoral plans and policies. The visibility and credibility of services have also contributed to participation in various Boards and Committees beyond the University. All these professional services are healthy trends in the growth of the University.

Incorporation of Research Subject Content into Curriculum

As stated earlier, the University has evolved from a teaching-learning tertiary education focused on subject content to enhanced research culture of academics and University students. With quality assurance put in place to initiate new programmes, and with review of existing programmes; visible impacts are seen in undergraduate curriculum with incorporation of subject matter like research and statistics modules in many award bearing programmes and also a significant component where students have to undertake undergraduate projects. The presence of student project in the curriculum itself poses challenge to academics in supervising skills while the students of the University improve their analytical and written communication skills.

The University has also launched postgraduate programmes through research in Natural Resource Management. Several undergraduate students have also opted to pursue honours degree which has significantly contributed to enhanced research skills of academics and students. There are as many as six Master's degree programmes including some taught through research. A significant component of Master's degree dissertation has also challenged academics to engage in research.

Conclusion

Situational analysis of the performance of research and development at the Royal University of Bhutan reveal several initiatives undertaken during the past one and half decade in enhancing the culture of inquiry, curiosity and learning. This has been instrumental in infusing the importance of research and innovation in the higher education. While structures and mechanisms to support research are put in place within the University, participation of academics in grant writing and collaborative projects still needs improvement.

The visibility of the University within and outside Bhutan has improved exponentially in recent years and trends indicate increasing opportunities to establish formal and informal academic exchanges and joint research projects with established

institutions and universities. Yet, enhancement of research activities, both in terms of quality and quantity, still needs an enabling environment in a traditional teaching-learning set up. Given the quality of academics with highest university degree, and with adequate teaching experience in a higher education system, the required research requirements of academics, and with an enabling driving force created for systemic investigations, and with required support from home and outside the university in Bhutan; the RUB is confident to conclude that research culture in the University is improving and assisting policy formulations with evidence based systematic studies.

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