

Three Pillars of Research Landscape of KDU

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1. INTRODUCTION

Since independence, the state university system of Sri Lanka has not taken any dynamic or systematic approach to strengthen the national landscape of research and developments, and mainly as a result of this, even the best university in Sri Lanka has not been able to secure a position within the top thousand universities in the world university ranking. However, many universities in the Asian region now have reached greater heights in the map of World University ranking and contributed to gain an exponential growth in their national economies through research and developments. Undisputedly, standards of most of such Asian countries had been much lower than that of Sri Lanka at the time of independence. Therefore, it is high time for Sri Lankan state university system to investigate into why and how Sri Lankan economy and the tertiary education system can be uplifted by research and developments. This article presents the recent contribution of KDU to strengthen the national landscape of research leading to social and economic development of the country. The article highlights the philosophy behind research and developments at KDU and the three pillars on which KDU research stand.

2. PHILOSOPHY OF RESEARCH AT KDU

The crust of the philosophy of research at KDU recognizes the power of research for national development and the need for devising mechanisms to systematically strengthen the research culture in the state university system in particular and in the country at large. In line with this philosophy, in 2013, KDU established the position of Dean of Research and Development first time in Sri Lanka to promote institutional research in a systematic manner. Multifaceted initiatives for Research and Developments at KDU stand on three pillars, namely, staff development through research, local and foreign research collaborations, and commercialization of research.

3. THREE PILLARS OF RESEARCH

The first pillar of KDU research envisages that research and development at KDU should energize the career progression of staff members. In order to encourage the own staff in research and development, KDU has introduced numerous reward schemes including grants, awards, patents, and commercialization of research. KDU offers financial rewards for the staff members who secure publications in reputed indexed journals and present papers at high-end specialized international conferences leading to distinct publications. Staff members are also offered with opportunities of hiring research assistants leading to gaining MPhil/PhD qualifications. KDU has also introduced the first ever comprehensive PG Diploma in Research Methods and Allied Aspects in Sri Lanka to produce staff members with versatile skills in research. This programme targets not only KDU staff but also any persons interested in gaining skills for conduct of research and acquiring knowledge of peripheral aspects of research. Young Researchers Forum and Biweekly Research Evenings are some other initiatives by KDU to strengthen the research capacity of KDU staff.

The second pillar of KDU research is the provision of encouragement for collaborative research with external institutions and individuals with distinguished track record in research and development. In this sense, KDU invites high profile researchers/institutions to join with KDU for collaborative research. KDU offers a wide spectrum of open access resources including, a wind tunnel, 24x7 research laboratory, robotics laboratory, and CISCO laboratory for collaborative research. Among other concerns, KDU is very particular in promoting Computer Modeling and Simulation (*in-silico*) in all areas of research to enable cost effective and hazard free experimental environments before embarking on real world experiments (*wet-lab*). Eminent researchers from major Sri Lankan universities including Universities of Moratuwa, Colombo, Sri Jayewardenepura, and Ruhuna have constant research collaborations with KDU. In addition, KDU has already established some research collaborations with eminent researchers from various countries including USA, UK, Australia and Canada.

The third pillar of KDU research can be highlighted as its emphasis on commercialization of research outputs so that research leads to strengthen the economy of the country. More than half a century, this matter has gone unnoticed in the state universities in Sri Lanka. With a view to energizing research and development leading to commercialization of the output, KDU has established its research arm, Institute for Combinatorial Advanced Research and Education (KDU-CARE). This unique initiative has already commenced a wide spectrum of research including analytical chemistry, proteomics & genomics, natural products, drug discovery and clinical trials. KDU-CARE has already established several research partnerships with various industries. More interestingly, KDU-CARE also offers opportunities for undergraduate students to involve in research projects thereby inculcating research skills in students in their early days of tertiary education. Further, KDU IP policy provides financial assistance to its researchers for securing local and international patents for their research outputs.

4. SUMMARY

This article highlights the issue of inadequate attention given by the state university system of Sri Lanka to exploit the power of research and development for national development. The article presents how KDU responds to this national issue by elaborating the philosophy behind recent research and developments at KDU, and the three pillars on which it's multifaceted research initiative stand with staff development, research collaborations and commercialization of research at the core of all research at KDU. It is heartening to note that this model has taken roots at KDU and related projects are progressing very fast.