



Co-funded by the
Erasmus+ Programme
of the European Union



SCREENING REPORT

ENTREPRENEURSHIP, INNOVATION & STUDENTS TALENT DEVELOPMENT

UNIVERSITY OF PERADENIYA, SRI LANKA

Integrating Talent Development into Innovation Ecosystems in Higher Education

586227-EPP-1-2017-1-BG-EPP

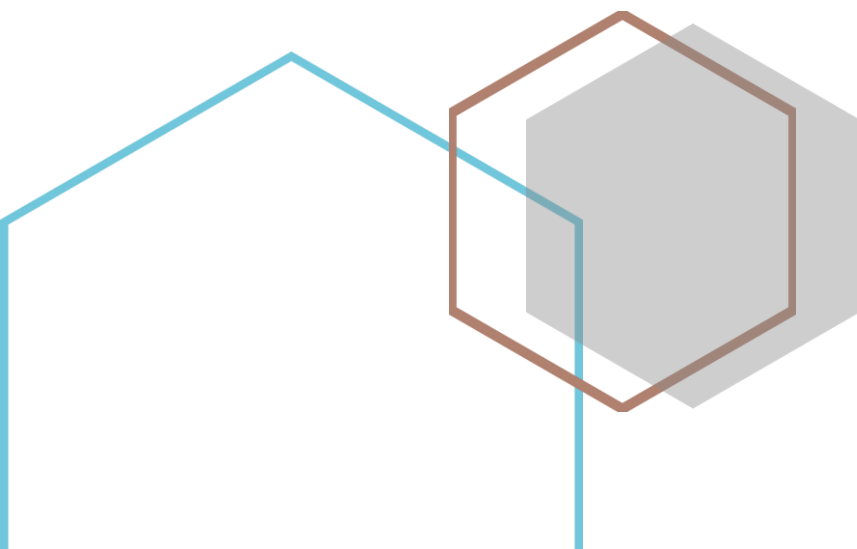


Table of Contents

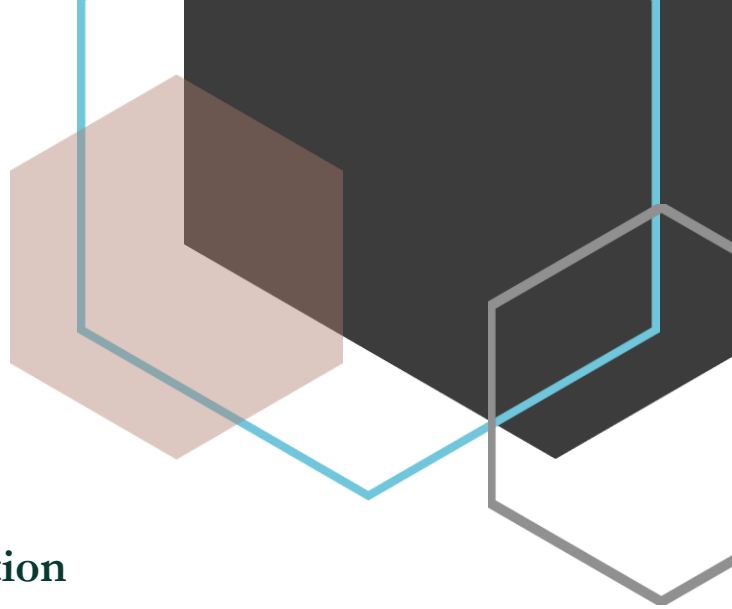
Introduction	2
Profile of the University	4
Capacity to provide and promote entrepreneurship education	10
Innovation capacity and university-business interactions	13
Student talent development policies	19
Conclusions and recommendations	23

The report aims at providing a clear picture of the University's starting conditions and capacities in the areas of graduates' employability, innovation capacity and talent development. The reports points out the strengths and weaknesses of the institution in these fields. It has been developed by external experts, representative of the INNOTAL partners.

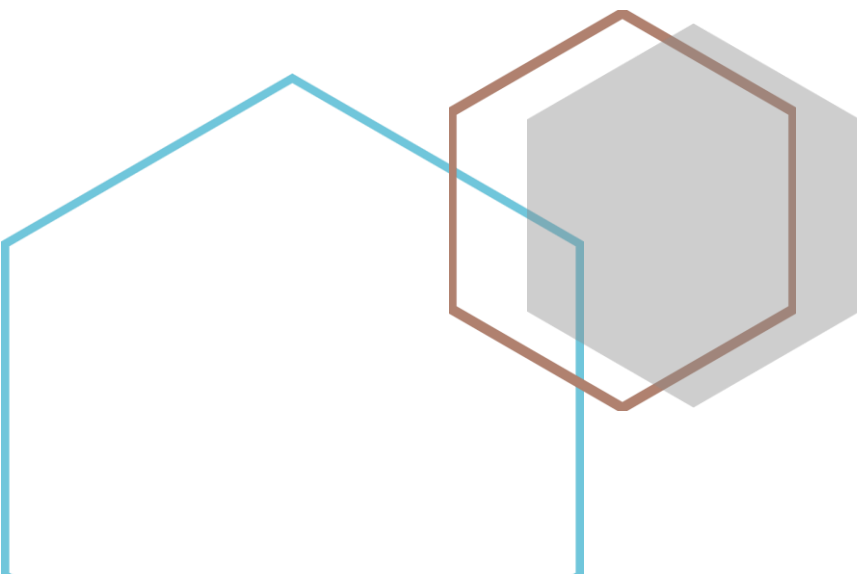
The report can provide insights into the following broad elements of organizational performance of the University:

- organizational motivation, including mission, prevalent culture, incentive structures and support structures
- organizational capacity (structure, physical and financial resources, technology resources, human resources
- leadership, decision-making process, management and inter-organizational linkages);
- c) organizational performance (financial viability, efficiency, effectiveness, relevance)
- external environment (administrative, legal, social, cultural, economic, political, etc.)





Introduction



CONTEXT

The purpose of the screening report is to provide an analytical tool for external assessment and self-assessment of the University of Peradeniya's resources, strategies and performance with regard to graduates' employability promotion, relevance and quality of education, student satisfaction and skills, quality of university-business interactions, and quality of interaction and knowledge exchange between the university and the economy and community.

The screening reports are based on the Scorecard tools developed in the frame of the project, as well as additional data provided by the University of Peradeniya project team. It can be used for regular monitoring, evidence-based decision making and increased accountability to external stakeholders. Since the screening report is based on benchmarking and relies on demonstrated effective practices, it will be useful also to other universities in both Sri Lanka and other Partner Countries.

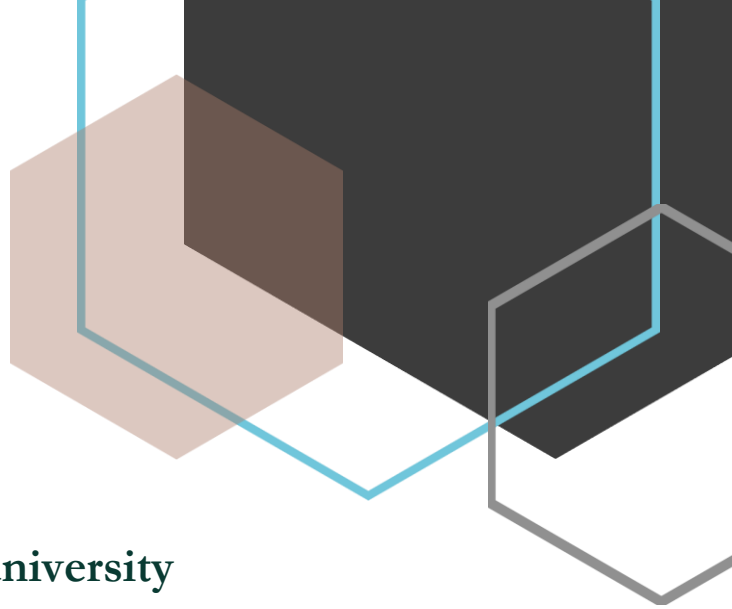
SCOPE

This Report is produced in the frame of the project's first stage, which is focused on preparatory research and understanding the context in which further capacity building activities shall take place. The purpose is to provide an external assessment of:

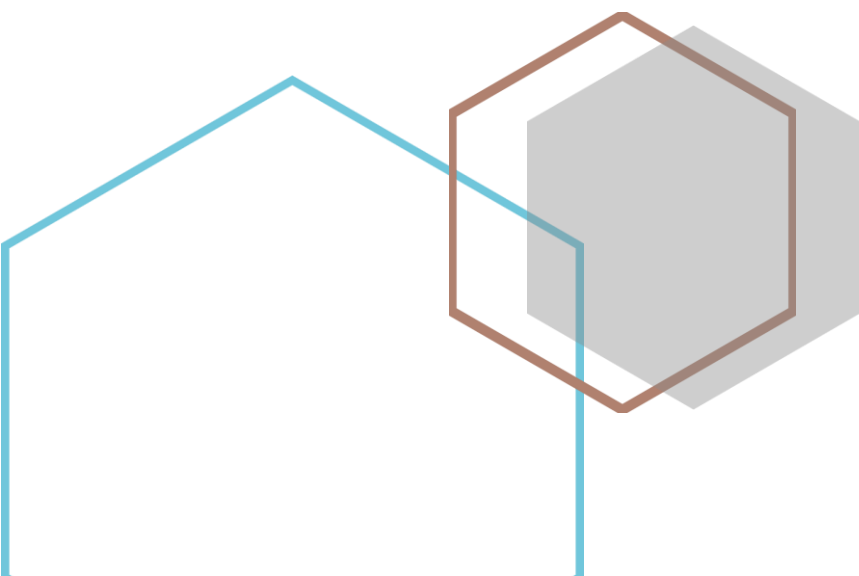
- University capacity to provide entrepreneurship education across various disciplines
- University capacity for innovation
- University capacity for promoting graduates' employability and developing students' talent

The reports aims to provide a clear picture of the University's starting conditions and capacities related to graduates' employability, innovation and talent development. The report has been developed on the basis of the scorecards developed in the frame of the INNOTAL project.





Profile of the university



ESTABLISHMENT

The University of Peradeniya is the heir to a sixty-year-old University tradition which commenced with the inception of the University of Ceylon, the first higher education institution in Sri Lanka, established in Colombo in 1942. It moved to the banks of Mahaweli River in 1952. University of Ceylon's history of evolution as the oldest and the largest University in the country passes through the following stages:

- 1942 to 1952 - University of Ceylon
- 1952 to 1972 - University of Ceylon Peradeniya
- 1972 to 1978 - Peradeniya Campus, University of Sri Lanka
- Since 1978 - University of Peradeniya

The University is located in Peradeniya in the Central Province, approximately 6 km from the City of Kandy, the historic Capital of the last independent Kingdom, and 110 km from Colombo, the capital of Sri Lanka, from where it can be reached within two to three hours by road or railway. The University covers around 700 hectares of land. The developed area, covering approximately 130 hectares, is occupied by buildings of the Faculties, Halls of Residence, staff bungalows, etc.

At its inception in 1942, the University of Ceylon was an institution of very modest proportions, consisting of four faculties, namely Arts, Oriental Studies, Science and Medicine. In 1942, there were only 904 students and 55 staff members in the 4 Faculties, which consisted of 41 academic departments: 15 Professors, 20 Lecturers, 8 Assistant Lecturers and 12 others.

During the 1942-51 period, the university experienced a phase of impressive growth in many respects. In 1950, the Faculty of Engineering was established. In 1952, the staff and the students of the Faculties of Arts and Oriental Studies, together with the Library and the University Administration, were transferred to Peradeniya. An important development in 1954 was the transfer of the Department of Dental Surgery to Peradeniya. The second Faculty of Science was created in 1961. The first stage of the second Medical School commenced in 1961. After many delays, the Faculty of Engineering was transferred to Peradeniya in 1964.

The inauguration of the second Faculty of Arts in Colombo during 1963 represented a development in the reverse direction in respect of the transfer to Peradeniya. In 1967, in response to the increasing demand for higher education, those parts of the University of Ceylon still functioning in Colombo were amalgamated into a separate university under the title "University of Ceylon - Colombo". Thus the University of Ceylon was divided into two universities and the University of Ceylon- Peradeniya became a separate entity.

Under the Universities Act No. 16, 1978, the university regained its independence and some academic departments that were lost at the beginning of the same decade were re-established. Since then, it has shown steady development and if looking for growing further. The separation of the Dental and Veterinary Schools from the Medical Faculty and the birth of a new Faculty during this time period increased the number of Faculties at Peradeniya to eight. Together with these and the re-establishment of the



MISSION AND
VALUES

Department of Law at the Faculty of Arts in August in 2009, the University of Peradeniya can be considered the most comprehensive University in Sri Lanka today.

* This section is based on official University statements, as per the University's Strategic Plan 2012-2015

(http://www.pdn.ac.lk/uop/about/document/Strategic_plan.pdf)

Vision

The vision of the University is to “be a centre of excellence in higher education with national, regional and global standing”

Mission

“University of Peradeniya strives to offer globally recognized knowledge and education to knowledge seekers at undergraduate, postgraduate and non-graduate levels and deliver education, training and research programs by conducting professional and curriculum-based teaching and learning and conduct high quality research for national, regional and global needs whilst maintaining highest levels of efficiency, effectiveness, integrity and transparency in contributing to the development of a knowledge-based society.”

Values

The University subscribes to the following values:

- Highest standard of teaching, learning and research
- Academic freedom
- Integrity and transparency in all functions
- Respect for cultural diversity

Goals

The goals of the University include:

- Delivering quality and relevant study programs
- Developing resources to enhance the quality of research
- Ensuring administrative and financial efficiency
- Providing opportunities for a wider range of educational programs to contribute to the development of a knowledge-based society
 - Organizational structure

The University of Peradeniya operates under the provisions of the Universities Act No. 16 of 1978 and the Universities (Amendment) Act No. 7 of 1985. Since it is a state university, undergraduate study is free of charge. Therefore, the University depends on the government for much of its annual budget, which is based on a grant provided by the University Grants Commission (UGC). Due to this, its administration is heavily influenced by the UGC. The administration is based on the model of the former University of Ceylon, consisting of a dual structure of bodies: The Council (formally known as the University Court) which is the governing body, and the Academic Senate



(academic affairs).

- Degree of autonomy (decisions concerning academic affairs and financial issues, e.g. student fees, non-public funding, management of real estate)

The University has full autonomy when deciding on the curricula, but final approval is sought from the UGC. Financially, it is entirely supported by the Government; however, some minor decisions like payment for hired staff could be made at the Management Boards. The Vice-Chancellor, who is the principal academic and administrative officer of the University, is also its legal representative. The selection of the Vice-Chancellor is initially done by the University Council which proposes three candidates, but the President of the country has the choice to select one of them to appoint for the post. The Vice-Chancellor is tasked with delivering the mission and aims of the University in alignment with the national policies of the country.

Academic matters are mainly administered by the University, but approvals for new degrees and curriculum again need to be obtained from the UGC. Other than that, academic matters are decided by the Faculty Boards and approved by the University Senate. The Council, which is the supreme management body of the University, makes decisions on administrative matters and approves academic decisions of the Senate.

Selection of all academic staff (including hired staff), recruitment and removal powers are with the University Council. Staff salaries are decided periodically by the Government in compliance with UGC requirements. Thus, the University is not autonomous in deciding staff salaries except in the payment for hired staff on hourly basis or on assignment basis (through contract for a defined job).

Since the University is influenced by the UGC, it has no role in determining the number of students. The University can only decide on minimum number of students per degree, and the number of students for open and distance learning for a degree programme is limited to twice the number of students in full-time programmes. Undergraduate education is for free, as per the National Policy of free education in Sri Lanka, and student fees are relevant only to postgraduate students. It is the University itself that decides on these fees. The students receive scholarships from the Government via the UGC on the basis of merit or needs of students.

When the need to set up new establishments (Faculties, Departments, Research Centers and Units) or real estate issues arise, these are channelled through the University Council with the recommendation and approval of the UGC. The research priorities of the university address issues relevant to the country's economy and society, and are determined through a collaborative effort of academics and grant-making bodies.

The university has its autonomy in formulating research policies (topics, priorities, research funding strategies, etc.). In this area, the Senate makes decisions and the Council approves them. In deciding on real estate issues, the Council has the sole authority but land cannot be sold as it is public property. Further, in deciding on siting and location, too, the University Council has the



SIZE OF THE UNIVERSITY

sole authority.

University of Peradeniya, in total, enrolls annually over 12,000 students at its nine Faculties, and employs over 1,000 academic staff members. There are close to 2,000 administrative staff members.

	Numbers of Students and Staff (between 2007-2016)									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Under-graduates	8469	8917	9605	10251	10710	9985	9621	12869	12815	12603
Masters Students	474	342	452	433	566	742	754	668	705	713
PhD Students	11	15	11	16	12	23	16	23	17	31
Academic Staff*	1074	1125	1114	1187	1105	965	1215	1154	1236	1337
Non-academic Staff**	1866	1896	1835	1899	1832	1835	2063	1966	2048	2010

Budget

The University of Peradeniya operates under the financial allocation by the UGC through treasury funds. In addition to the UGC's annual allocation for research, the University receives research grants mainly via Government agencies such as the National Research Council (NRC), the National Science Foundation (NSF), the Council for Agricultural Research Policy (CARP). The University further builds up partnerships with foreign institutions (i.e. the Bill and Melinda foundation, IDRC, JICA, KOICA, etc.) to attract research grants to expand its research capacity.

Research Budget for the University of Peradeniya (Internal and External) in 2017

Grant / Fund	Fund Source	Receipts for the year 2017 Rs. Mn
NSF	National Science Foundation	36.7
CARP	CARP	8.3
IAEA Research	IAEA	5.5
Erasmus Mundus Project	Georg-August University-Gottingen	0.5
NORHED Project	NORAD	3.2
WASO ASIA Project	NORAD	7.8



ROLE OF THE UNIVERSITY IN ITS REGION

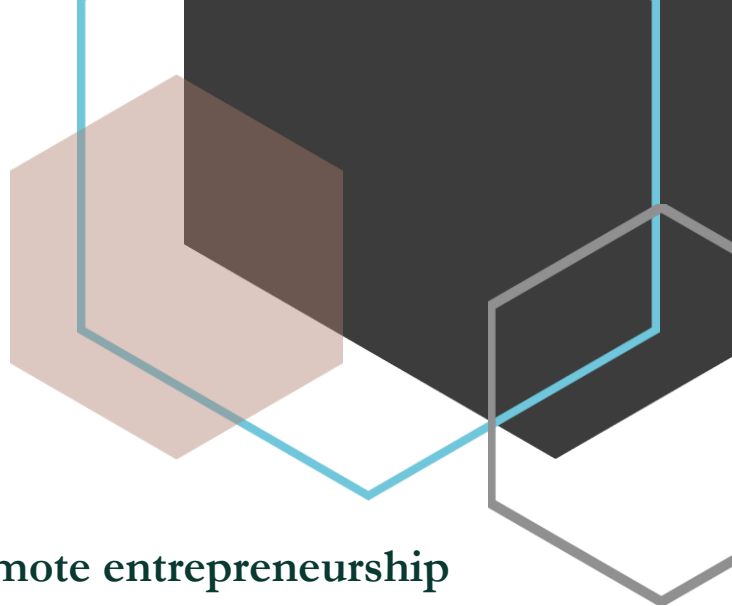
The connection of the University with the region (authorities, general public) is characterized by a very close and continuous relationship. The university is invited to give expert contributions in the search for solutions for most of the regional and national-level issues in social, economic and technological areas. The University experts play a major role in national or regional-level policy development as well. The University of Peradeniya takes part in decision making regarding the region. The University Vice-Chancellor, the CEO, is considered as a prestigious and very important personality in the region and in the country as a whole. The university has some connections with local, national and regional enterprises and entrepreneurs, but due to the location, it faces limitations in this respect. Therefore, further expansion of such linkages is under way through the industrial units of faculties and the recently established University Business Linkage (UBL) unit.

The University of Peradeniya at present produces professionals in diverse areas via its nine faculties. The employability of graduates in Faculties of Medicine, Engineering and Dental Science exceeds 96%, as they are still directly absorbed into government jobs. This impact is not limited to the region, as there are national recruitment drives. At the same time, however, a significant amount of graduates in Physics, Chemistry, Agriculture, etc. go abroad for higher studies, as there is a great demand for such professionals there.

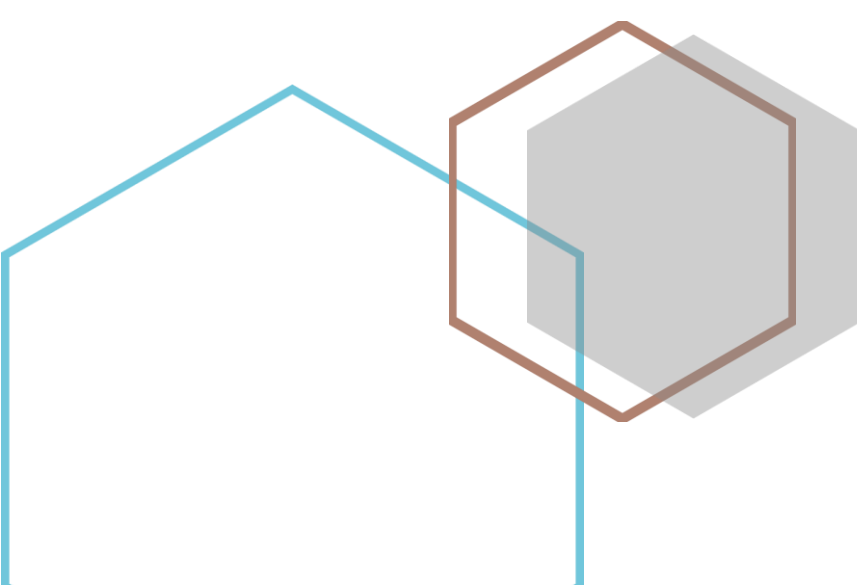
The regional job market is very small as the University is not located into a commercial area. Most of the jobs in technical fields are limited to the Capital and one province as that is the commercial hub. The main regional job market is the government sector but it is very small at present. The jobs available in the few industrial zones are not matching with the graduates that the University produces, as these zones need factory workers.

The triple bottom line approach is the recent mandate of all public universities and that is reflected in the university vision and mission. The University of Peradeniya is moving towards a green campus. The theme of the University since the time of establishment is “more open than usual” and the concept of the University of Peradeniya is the University Village/Town – a university integrated with society. With respect to the economic pillar, the University is a non-profit organization, hence a social enterprise and non-profit oriented by regulations. However, the postgraduate institutes and centres are making some profit and are trying to become more self-sufficient, as the government is supporting such changes.





Capacity to provide and promote entrepreneurship education



PERFORMANCE IN THE AREA OF ENTREPRENEURSHIP EDUCATION

The percentage of bachelor/master/post-graduate programs offering entrepreneurship courses/training is just 1.4.

The number of students in bachelor/master/post-graduate entrepreneurship programs amounts to 1.7% of the total number of students. The share of staff teaching entrepreneurship courses is just 0.8% of the total number of staff. The share of entrepreneurship-related research projects in the total number of research projects is just 2%.

The percentage of bachelor/master/post-graduate entrepreneurship courses in which case studies or study visits are used to enhance learning reaches 100%, as case studies and/or study visits are used in all entrepreneurship courses.

ENTREPRENEURSHIP -SUPPORTING POLICIES AND CULTURE

The general mission and strategy of the University includes support for entrepreneurship and entrepreneurship education. However, there is no clearly formulated and articulated institutional strategy on entrepreneurship education. The University involves (officially or unofficially) employers or labour market institutions in:

- curriculum development
- teaching
- participation in decision-making or consultative bodies at institutional level

SUPPORT STRUCTURES AND LINKAGES FACILITATING ENTREPRENEURSHIP EDUCATION

The University of Peradeniya has entrepreneurship centres supporting university-business relations and entrepreneurship in general and, also, provides support to bachelor/master/post-graduate students to access internship and/or placement schemes.

ADAPTATION OF TEACHING METHODS TO FACILITATE ENTREPRENEURSHIP EDUCATION

Real case studies provided by business/enterprises are included in entrepreneurship teaching and a competence-based approach is used to assess the results and impact of studies. The University does not monitor the development of students' soft skills (leadership, teamwork, communication, etc.).

ADDITIONAL INFORMATION

Out of nine faculties, the Faculties of Management and Agriculture teach entrepreneurship for Master's and Bachelors' students. There is a standard course content addressing real-world challenges with the contribution of experienced and young entrepreneurs during the orientation programme. The programs include a combination of seminars, courses, and mentorship to assist in advancing student ideas through a stage-gated business plan competition. Mini business projects are launched by the agriculture students and practically they run a business for one semester. The university is planning to establish a Business Incubation Unit under the UBL unit. The Postgraduate Institute of Agriculture also teaches Entrepreneurship for its



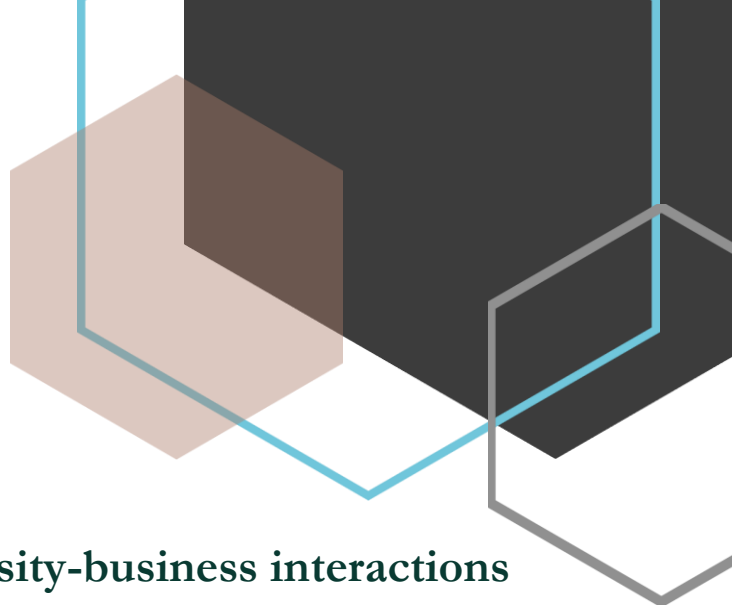
MBA students. In addition, the Career Guidance Unit (CGU) conducts annual training programmes on Entrepreneurship for the students of all faculties. The CGU provides this training in collaboration with the National Enterprise Development Authority (NEDA) and they deliver trainings on mini business projects as well. This training is open for any interested undergraduate student or a student who graduated within the past five years. About 40 graduates' businesses have been initiated during the last three years. A tracer study on those start-ups is under way.

At present, seed funding for the above entrepreneurship project is provided by the NEDA and technical support is provided by the University. In some instances, students are sent to participate in UNDP/World Bank sponsored programmes on young social entrepreneurship development that offer free participation of student start-ups in business incubators. The Faculty of Management in the future plans to introduce internship programs in start-up projects, technology transfer offices, venture capital firms, and industry.

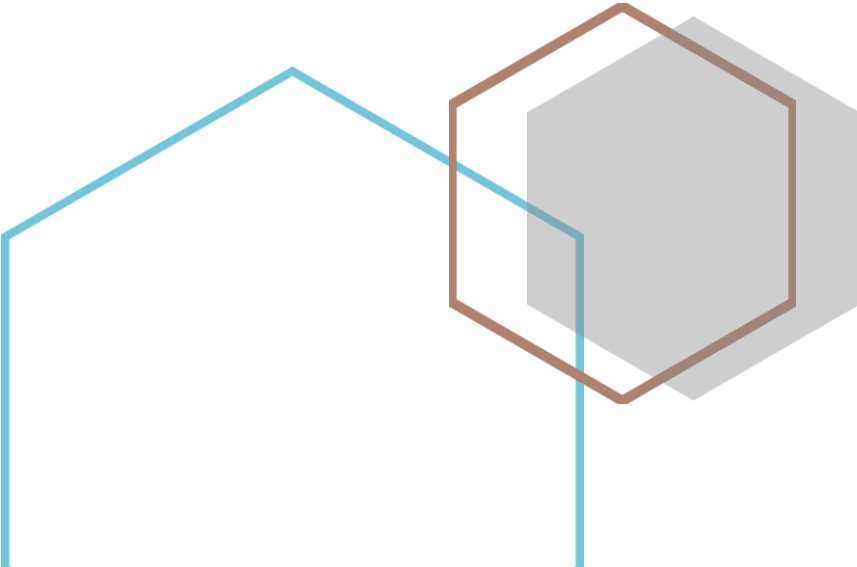
Real world challenges are normally addressed in teaching as the university allows the inclusion of independent learning in the curricula. In addition, most of the specializing students conduct applied research during their final year to address real-world issues.

There is an increasing trend of student patents at present. The university has recently approved a procedure for patent applications but it is yet to be implemented. Voluntary lawyers from among the academic staff are supporting the application process. Draft applications are freely available for students from their faculty members through an informal procedure. Innovation competitions are held by the Faculty of Agriculture and selection and rewarding is done by the National Inventors' Commission (NIC). There are regional and national competitions by the NIC and individual students apply for those. The university does not coordinate such activities very well. The Faculty of Engineering encourages their students to participate in innovation competitions at national and international level. Under its talent development activities, the Career Guidance Unit also facilitates students who wish to participate in national and international competitions. However, student participation needs to be further promoted as the status **at** present is not satisfactory.





Innovation capacity and university-business interactions



PERFORMANCE IN
THE AREA OF
INNOVATION AND
UNIVERSITY-
BUSINESS
INTERACTIONS

INNOVATION-
SUPPORTING
POLICIES AND
CULTURE

The R&D expenditures as a share of the total university budget are estimated at a low 0.76%, while the ratio of total grant funding and funding from external sources to full-time employed academic staff comes up to 38.13%. No spin-off firms have emerged from the University of Peradeniya.

The proportion of academic staff holding international and national research grants is 14.04% of total staff. At the same time, the proportion of academic staff holding industry research grants reaches 5% of the total staff.

The University of Peradeniya depends on public funds from the government treasury. The faculty members can make special requests to the faculties and get additional funding for special work. However, the funding the University receives as competitive research grants is very limited and not sufficient for meeting individual researchers' needs. Therefore, individuals need to get external funding through research and development grants. In general, the government pays to academics a monthly allowance called 'research allowance' to assist their research activities. The University research grant is available annually. For example, in 2017, limited funds were allocated, with the maximum limit set at Rs 500,000 per person. Even though these are competitive grants, academics that have received them are not receiving special rewards or recognition at the university.

The number of weighted publications per full-time employed academic staff (Average number of publications of full-time employed academic staff at the university over the last 3 calendar years / total number of full-time employed academic staff) is 70.8%. The number of citations in Scopus and Google Scholar database per full-time employed academic staff cannot be determined or estimated.

The relative number of intangibles in the form of patents, licenses, copyrights, trademarks, policy recommendations, etc. per full-time employed academic staff is very low, standing at 0.2%

Support for innovation and regional development is included in the mission and core strategy of the University and there is an institutional strategy on innovation, innovation support and knowledge transfer to the external environment, although it is not clearly defined.

There is no research and research training planning and policy at the University.

The University does not provide any financial resources in the form of seed funding.

No clear IPR policy is yet followed by the university in its relations with economic agents, although such a policy is in the process of development. The university has a Legal Unit and the unit is responsible for all legal matters. The unit produces and updates IPR policy and acts on any issues related to IPR. However, the IPR policy has been established very recently and the University does not have proper guidelines developed to protect IPR so far. The University has a central Research Committee and faculty research committees. They conduct seminars on this issue to improve awareness



among researchers. Communication on these matters is important, especially for new recruits.

Until early 2018, patent applications were made by individual staff members but the rights remained at the university. Now, with the IPR policy emerging, a clear guidance and mechanisms/instructions are being compiled by the University. Up to the year 2018, licensing and royalties were decided by the University Council for individual cases based on governing regulations and the procedures were not systematic and uniform. However, the new IPR policy has defined the rules and the process more clearly and in such a way that individuals will be motivated to commercialize. However, it is still too early to comment on the implementation.

The faculty attestation rules do not envisage rewarding of applied research for industry/local development. However, there are rules in place about modernization of curricula according to new challenges, national priorities and business needs.

Universities recruit academics on probation terms for three years. The academics' work is evaluated by the respective Head of the Department and the Dean, and a decision is made on whether to keep the academic as a faculty member. Junior staff is given 8 years to complete graduate studies (Research degree) to become a senior academic (Lecturer). If one fails to earn the required qualification, they lose the job. Those who acquire the postgraduate qualification are placed in senior academic posts. At public universities this is the common rule of hiring. With respect to sabbatical leave, all senior academic staff members are illegible for sabbatical leave for every 7-year service period. It is not a must to take it. Some staff members get it while others are not getting sabbatical leave. Sabbatical leave regulations are updated by the UGC (which governs all the universities) in consultation with universities.

The university has a limited fund for research and mainly depends on external research grants won by individual or groups of researchers. Although the University can hire skilled staff/people, such people cannot be attracted easily to the University positions due to poor remuneration. However, this is happening informally as many researchers have their own linkages and networks. External experts are invited to the university to provide assistance i.e. as honorary visiting fellows, and there is a trend to invite more skilled staff under this category. The postgraduate institutes of the University recruit many external skilled staff (mainly national but sometimes international) on contract basis as they offer fee bearing courses

There is the legal possibility for researchers to become engaged in research supported by industry.

In terms of university structures, facilitating links with industry and local community, or structures in which the university is collaborating with external economic actors or the local community, the University of Peradeniya:

- does not have any research laboratories (owned or shared with other entities)

This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

- does not have or participate in any technological parks
- does not have a technology transfer office operating on its premises
- has an incubator / incubator services, but no accelerator
- has applied research centres
- has research and development units

These Centres include: Agricultural Biotechnology Center, Agribusiness Centre, Centre for Distance and Continuing Education, Center for Environmental Studies, Health Emergency and Disaster Management Training Centre and Centre for Education, Engineering Design Center, Industrial Service Unit of the Faculty of Science, Research and Training on Kidney Diseases. The University Business Linkage unit (UBL, with an Incubation Cell attached to it) and MuNIC (Multidisciplinary National Innovation Centre) are also recently established and due to initiate such activities.

Since the University of Peradeniya has 9 faculties, research priorities are in a broad spectrum. However, depending on the demand, the major areas are: Environmental engineering & conservation, causes and control of chronic kidney disease of unknown aetiology (CKDu), cancer research, geological survey for minerals, antivenom production, robotics and control systems, food technology, biotechnology, climate change, sustainable development, environmental issues, social violence, poverty and social empowerment, child psychology, agricultural modernization, loss of biodiversity, and research related to gender and community.

Depending on the national/global issues, timely research with selected network partners is emphasized, e.g. antivenom for endemic snakes, CKDu research center, urban waste management research, research on paddy parboiling effluent management, mitigation of harvesting & postharvest issues due to climate change influences, adaptation of climate changes. There is no proper guidance, but individuals do engage in innovation activities on the basis of their self-interest. There is also no systematic support system.

Technology development and commercialization at the University have been poor over the years and many researchers have limited their research to publications. There are some isolated successful cases at faculty level, but they are not prominent and the University has a long way to go in this area. One major reason is that the sales volumes of some innovations are not sufficient to commercialize at local level. Poor economic policies and taxation policies have bared the local production and industry.

Partnerships are available for research and consultancy, but commercializing activities are still limited at the University of Peradeniya. Very recently, in 2018, the University has established a separate cell as a national centre “Multidisciplinary National Innovation Centre (MuNIC)” with the intention of promoting this area. But the unit is still at the establishment stage and has not started functioning properly.

Social entrepreneurship promotion is not in a very mature phase, although some initiatives are taken in this respect. The University has engaged in such



activities in the past, but in many cases by providing consultancy services through other organizations, such as NGOs/INGOs. Reflecting the changing global trends, the university has just started one such project but activities have not yet commenced.

According to the legal provisions in the Universities Act, the University works with other external parties by establishing Memoranda of Understanding or Agreements for a defined task for a specified time period. Sri Lanka Universities do not have fixed affiliations but they are working under national agreements for scholarships and funding, etc. Individual lecturers are not allowed to set up their own foundations or NGOs while working at the University.

There are Industrial Linkage Cells established at faculty level (Science, Engineering, Agriculture, Dental Sciences) and they work independently. This area of work is progressing, but currently only a few such cells have long-term collaborations.

Under the applicable regulations, publicly funded Universities cannot register industries and partnerships are also not possible at the moment. Faculties independently initiate industry collaborations from time to time and there are a few such partnerships established by the Faculties of Science, Engineering, Agriculture, Dental Sciences, etc. Industries are not accommodated at the campus and this is mainly due to the legal barriers imposed for the public university system. However, in the future, there are proposals to provide space and facilities for start-ups and establish University Business Linkages as a separate division.

Interdisciplinary projects are common at present and the university has good capacity for such projects as the nine faculties are operating in one location. Most of the modern projects are multidisciplinary in nature and concern many areas such as Agriculture, Medicine, Engineering, Science, Social Sciences. Some of the non-medical faculties provide internships to their students. Students who study toward a 4-year degree in Engineering, Science, Agriculture, Management, and some departments at the Faculty of Arts (ex. Economics, Social Sciences) place their students for internships. Students studying toward degrees of three-year duration are not provided internships during their studies. However, limited internship positions for graduates of three-year duration programs are provided by the Career Guidance Unit, based on demand from the industries. Such opportunities benefit less than 5% of the students.

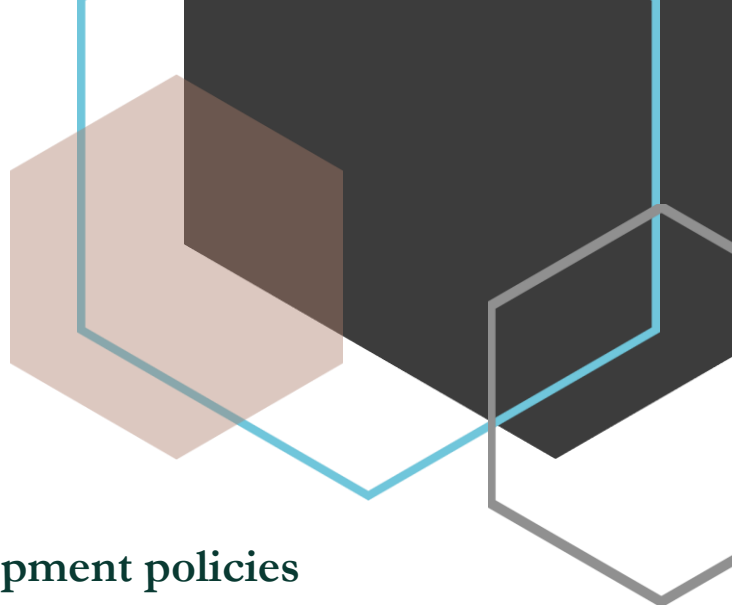
The proportion of students in bachelor's/master's/post-graduate programs involved in research projects (averaged over the last 3 academic years) is quite high, reaching 80% of total students. Such projects include mainly student short-term research during the final year of study, Masters-level mini projects and a small proportion of professionally funded long-term research. The long-term professional research option is limited only to research degrees.

There are no university-wide research-promotion events but some faculties, such as the Faculties of Engineering, Science and Agriculture, have initiated

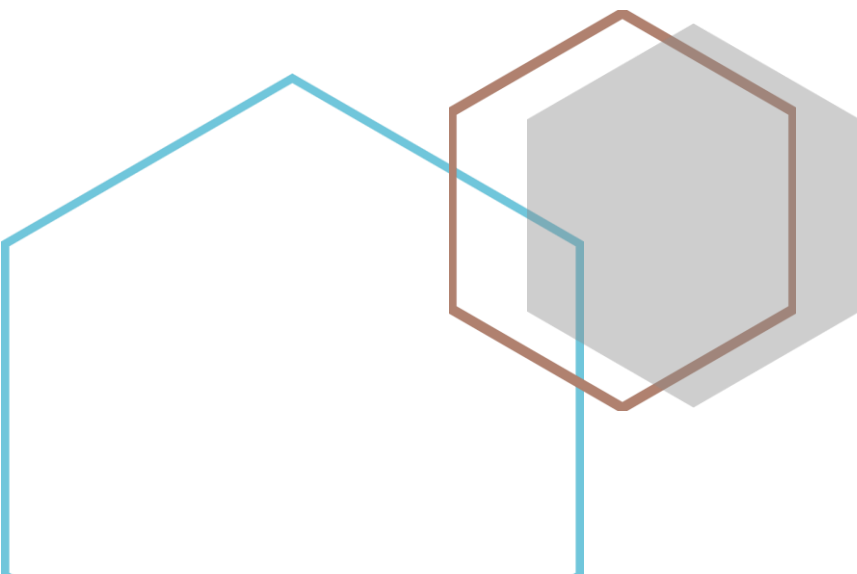
limited activities like annual student research exhibitions, rewards by external parties, participation in national food technology events, etc. These activities are currently run independently at faculty level but not at the university level.

PhD degree completions per full-time employed academic staff are calculated at 0.3 %, while the proportion of PhD completions within planned schedule (averaged over the last 3 academic years) sums up at a high 78%. Only academic staff with a PhD and a good research background is allowed to supervise a PhD thesis of a postgraduate student.





Student talent development policies



**CAPACITY TO
ATTRACT AND RETAIN
TALENT**

There is a marketing strategy for attracting talented students at the University of Peradeniya. It prioritizes events such as Faculty Open Days, exhibitions, paper ads, etc. The share of foreign students in the total number of enrolled students is a rather low 0.6%. These students come from Asian (e.g. Japan, China, Pakistan, India, Nepal, Maldives), European (e.g. Netherlands, Greece, Czech Republic, Romania, etc.) and African (Nigeria, Ghana) countries.

The share of students that started work in their field of study within 6 months after graduation/or board exam exceeds 50% of total students (54%). The student-to-teaching-staff ratio is 16:1. The University operates a Students' Enrolment and Services Office and has a quality management system for academic excellence in place (University Quality Assurance cell and faculty QA cells). There is also an option for part-time/distance /flexible learning at the university.

**STUDENT WELFARE
SUPPORT**

University of Peradeniya has developed a strategy for residential environment improvement, including student accommodation, and maintains an active Student Welfare Office, sport facilities and health services at the university premises.

The share of approved applications for university accommodation or providing support for finding living premises compared to total submitted applications is 70%. Support services are provided for reducing the debt load of students. A tuition exemption for those with the highest GPA is available at postgraduate level. However, this exemption is applicable to paid postgraduate courses only (since other courses are free).

The percentage of students who receive financial support reaches 52.6% of the enrolled students. There are options available for students to receive legal advice as well.

In addition, postal services, banks, mini-supermarket, laundry service, saloon and recreation facilities, gymnasium, swimming pool, playgrounds, hiking tracks etc. are available for the University students. The University also provides free transport facilities for students to attend outdoor training.

In alignment with the free education policy of Sri Lanka, all Bachelor's degrees are awarded for free at all state universities, including at the University of Peradeniya. Fees vary between 150,000 and 400,000 LKR for Master's Degrees depending on the programme. Most of the PhDs are funded through grants, and only registration fees are charged by the University. A limited number of scholarships is also available at the postgraduate institutes and the University. At present, postgraduates are not provided in-campus accommodation due to the limited availability of accommodation spaces.



CAPACITY TO ATTRACT AND RETAIN STUDENT TALENT FROM DISADVANTAGED GROUPS AND THE GROUP OF NON-TRADITIONAL LEARNERS

GDP PER CAPITA IN SRI LANKA (2006-2018)



The share of students with disabilities in the total number of enrolled students is very low (0.1%) but there is specialized support for disadvantaged groups of students (students with disabilities, mature students, minority groups, etc.). Provisions are there for mature students but they are limited to two Faculties out of 9.

The share of mature students in the total number of enrolled students is also very low (1% of total). No built environment with universal design for students with disabilities is available, but an adapted teaching process and an adapted assessments and examination process for disadvantaged students is available and used at the University of Peradeniya.

PERFORMANCE IN DEVELOPING STUDENT TALENT

The share of students engaged in practicing entrepreneurship skills (e.g. teamwork, leadership, project management, business plan development and competitions, idea competitions for solving community and social issues, elevator pitch contests, public speaking, network creation) in the total number of students comes up to 6.9%.

The percentage of students who have participated in internships in professional settings is 36%, while the percentage of students included in coaching/mentoring programmes is calculated at 59.7%. The percentage of students who participated in study tours (domestic and/or international) is estimated to be approximately 50%.

POLICIES/STRUCTURES FOR DEVELOPING STUDENT TALENT

Public financial support is provided to (partially) cover the costs of practical training. There is no policy or structure at the University intended to support student talent development. Also, there is currently no dedicated space to showcase and collect innovative ideas from students, staff, faculty, or community members.



EMPOWERING STUDENTS AS STAKEHOLDERS IN UNIVERSITY GOVERNANCE

Students participate in official decision-making bodies at the University (e.g. Academic Council, Department Council, Students Council, etc.). More specifically, they participate in the Faculty Boards – statutory decision-making bodies for management of the Faculties. Two students elected by the faculty Student Union participate in each Faculty Board.

There are clear and transparent procedures for student involvement in decision-making bodies at the University, but the students do not participate in quality assurance bodies as expert members.

Students are asked to provide information (e.g. through surveys) on core aspects of student experience and on additional aspects of student experience:

- design of the curriculum
- quality of teaching
- student learning
- student support resources
- student support services (only at postgraduate level)

Information about quality assurance (procedures, schedules, results) is published and available to students. There is some motivation for students to get involvement with quality assurance as they are allowed to select the Dean's list and financial support/scholarships. Training and support materials about quality assurance are not provided to students and there are no events organised to inform them on quality assurance matters.

SUPPORTING STUDENTS' CAREERS

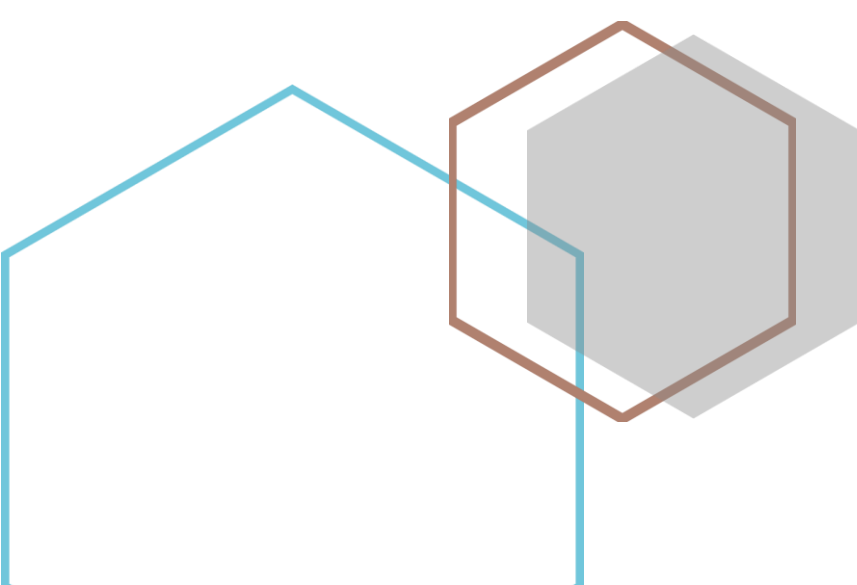
University of Peradeniya does not monitor the career paths of former students and it does not carry out or use student and graduate surveys, where students and/or graduates could provide details on their transition to the labour market. However, career guidance is available throughout the whole student lifecycle.

Career guidance is available to all students, although no career guidance specifically targeted at disadvantaged students is available. Career guidance services are not extended to graduates and alumni.





Conclusions and recommendations



CONCLUSIONS

The University of Peradeniya is a well-known University, with a history of over 60 years. It offers a variety of degrees in different disciplines. It offers a limited number of entrepreneurship education options, as can be seen from the very small percentage of bachelor/master/post-graduate programs offering entrepreneurship courses or entrepreneurship training, namely 1.4% of the total number of bachelor/master/post-graduate programs. As expected, the number of students in bachelor/master/post-graduate entrepreneurship programs corresponds to an equally low percentage. For the teaching staff, the relative number of staff teaching entrepreneurship courses is even lower and the relative number of entrepreneurship-related research projects to the total number of research projects is 2%, again a very low percentage.

The mission and strategy of the University mention support for entrepreneurship and entrepreneurship education, but there is no clearly formulated and articulated institutional strategy on the matter.

The R&D expenditures as a share of total university's budget are estimated at a low 0.76%, while the ratio of total grant funding and funding from external sources to full-time employed academic staff comes up to 38.13%.

No spin-off firms have emerged from the University of Peradeniya so far. The relative number of intangibles in the form of patents, licenses, copyrights, trademarks, policy recommendations, etc. per full-time employed academic staff is also very low, estimated at 0.2%. It appears that there are regulatory and institutional barriers in these areas.

The University reports that an incentive structure for faculty and researchers to engage with external entities for research and innovation is essentially lacking.

Regarding publications and citations, the numbers pick up, with the average number of publications of full-time employed academic staff over the last 3 calendar years / total number of full-time employed academic staff reaching 70.8%.

Support for innovation and regional development is included in the mission of the university and there is some form of institutional strategy on innovation, although it is not sufficiently clearly defined. In the same context, there is no implementation of research planning and policy and the University does not provide any financial resources in the form of seed funding. No clear IPR policy is followed, which is consistent with the lack of spin-offs in the University, as well as the low number of intangibles (patents, licences etc.). It appears, however, that steps are being taken to rectify this.

University structures facilitating links with industry and local community at the University of Peradeniya include an incubator, applied research centres and research & development units. On the negative side, there are yet no research units or laboratories shared with external stakeholders, no ownership or participation in a technological park, no technology transfer office and no accelerators. This situation leaves a lot to be desired, as the wider perspective of academic entrepreneurship



beyond a narrow focus of commercializing a product includes collaborating with industry through joint research projects and contributing to the formation of university incubators and/or science and technology parks. (R. L. Perera, B. Igel, 2016).

There is a marketing strategy for attracting talented students at the University of Peradeniya but it appears that it focuses on events and paper ads rather than long-term engagement with secondary education. The share of foreign students is rather low, at 0.6%. There is limited effort to attract foreign students, but this is expected to change in the next years, as in 2014 the government announced plans to “...open up its higher education system to private overseas investors” as part of an effort to “attract 50,000 international students and 10 foreign university campuses by 2020.” Sri Lanka’s Ministry of Higher Education hopes to transform the country into the “most cost-effective and quality higher education hub in Asia”, and has substantially increased the number of student seats and scholarship opportunities for incoming international students since 2011 (Justine D’Souza, Credential Analyst, WES, and Thomas D. Moore, Credential Examiner, WES, 2017).

The student to teaching staff ratio is 16:1, which is a very decent rate. There are basic prerequisites for student retention. The University operates a Student Enrolment and Services office and has a quality management system for academic excellence in place. It has developed a strategy for residential environment improvement, including dormitories for students, active student welfare office, sport facilities and on-campus health services. In terms of access to higher education for diverse groups, support services are provided for reducing debt load of students and the percentage of students who receive financial support are a bit over half the enrolled students. It should be noted that all undergraduate students study for free, which by itself already guarantees very high accessibility of higher education, making financial support less important anyway. The share of students with disabilities in the total number of students enrolled is very low (0.1%) and there is specialized support for disadvantaged groups of students. Unfortunately, students with disabilities are not well catered to, as there is no built environment that would make their stay on campus easier.

The students participate in official decision-making bodies at the university. They also participate in the Faculty Boards that manage the Faculties. There are clear and transparent procedures for student involvement in decision-making bodies in the university in effect, but the students do not participate in quality assurance bodies.

The share of students engaged in practicing entrepreneurship comes up to 6.9%, which is relatively low, while the percentage of students who participated in internships in professional settings is 36% and the percentage of students included in coaching/mentoring programmes is calculated at 59.7% of total students. The percentage of students who participated in study tours (domestic and/or international) is estimated to be approximately 50% of all students. The percentage of students who have participated in internships is definitely low and the University would benefit from improvements in this area.



RECOMMENDATIONS

The University of Peradeniya does not monitor the career paths of former students and it does not carry out or use student and graduate surveys to assess graduates' success in transition to the labour market. However, career guidance is available to all students. Unfortunately, disadvantaged students are not provided tailor made career advice.

Based on the above conclusions a number of recommendations can be made:

- Formulation of a clear and comprehensive strategy on entrepreneurship and entrepreneurship education and its incorporation on the University's overall development strategy and future mid- and long-term plans
- Development of a better strategy for supporting innovation and regional development. Along with the entrepreneurship education strategy, it would help provide guidance, support and incentives for all relevant activities of the University. It would also help in providing a basis for strengthening staff commitment and effective resource allocation as well as keeping in line with the most recent national policies. Such a strategy is recommended to clearly address the issue of lacking incentives for researchers and faculty to engage with external stakeholders and to get involved in knowledge transfer and exchange.
- While courses in entrepreneurship are still few and the number of students taking entrepreneurship courses is correspondingly low, the fact that entrepreneurship courses are already offered by most departments (sometimes in some extracurricular form), at both undergraduate and postgraduate level, is very promising. It is even more promising that the introduction of more entrepreneurship courses is being planned. On the one hand, the particular needs for each department should be carefully considered, but on the other hand an interdisciplinary approach should also be considered and balanced against departmental needs
- Research funding is low in general, and, specifically, research funding from external sources is low. At the same time, no spin offs, licences or patents exist at University of Peradeniya, which can be – in part – explained – by the lack of IPR and spin-off policies. Development of a clear and modern strategy for IPR and commercialising research results in general, as well a set of guidelines, could go a long way into remedying this situation
- At the same time University of Peradeniya has a good academic record (in terms of publications and citations) which provides for an opportunity to attract industry interest
- While some University structures facilitating links with industry and the local community do exist, other structures such as shared research units and laboratories or a technology transfer office could prove very valuable in strengthening university–



industry relationships, especially if they are developed in line with an overall strategy on entrepreneurship, innovation and research commercialisation

- The University is already implementing a marketing strategy aimed at attracting talented students, but this strategy could be extended to focus not just on promotion but also on long-term engagement with secondary education institutions. The University could also benefit from attracting more foreign students and improving the possibilities for the international mobility of students
- Talent development will greatly benefit from a more focused approach to facilitating the retention and talent development of students with disabilities and disadvantaged students. Some elements of such an approach already exist (adapted teaching and examination processes). However, there is more to be desired, especially in terms of built environment for students with disabilities and career guidance for disadvantaged students
- The University may need to invest more time and efforts in activating its involvement with alumni as alumni are invaluable sources for mentoring, internships, guidance and exchange activities. Engaging with alumni will also make it possible to monitor students' career paths

References

D'Souza J and Moore T.D (2017), *Sri Lanka's pioneering entrepreneurial university churning out 'confident' entrepreneurs*, The Sunday Times (<http://www.sundaytimes.lk/130728/business-times/sri-lankas-pioneering-entrepreneurial-university-churning-out-confident-entrepreneurs-54054.html>)

Perera R. L., & Igel B. (2016), "Identifying the key motives of academic entrepreneurs in Sri Lanka", 2016 IEEE International Conference on Management of Innovation and Technology (ICMIT), Bangkok, Thailand

University of Peradeniya website: <https://www.pdn.ac.lk/>

