Current and planned pedagogical initiatives for enhancing university-industry interactions and fostering entrepreneurial skills: a case study from Sabaragamuwa University of Sri Lanka

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The B.Sc. degree programme in Food Science and Technology at the Sabargamuwa University of Sri Lanka has been in existence since 1996. As the pioneering B.Sc. degree programme in that discipline in Sri Lanka, the curriculum integrates core aspects of food science and technology with a special focus on bridging the gap between industry and academia. The programme has so far produced about 260 graduates with 82% of them securing an employment opportunity within six months after graduation. A key contributor to the high level of employability is the final year research project in which undergraduates are required to carry out an independent research to solve an industrial problem related to food technology and food processing during a period of 15 weeks. Field excursions to industrial establishments also enable the undergraduates to familiarize with the industrial perspective of their academic knowledge.

A comprehensive curriculum revision is planned for a five year cycle. The current cycle was initiated in the year 2013. The initial phase was completed by gathering feedback from all stakeholders, i.e. academic staff, undergraduates, graduates, industry professionals, external resource persons and academics from other Sri Lankan universities. A SWOT analysis was performed to evaluate the existing curriculum followed by a gap analysis to identify the required knowledge, skills and attitudes profile of the graduates to comply with stakeholder requirements. The results from the analysis were used for the development of the current graduate profile. The contents of all existing courses were revised reflecting the current and emerging developments and trends in the field and stakeholder feedback.

New courses titled 'Entrepreneurship in Food Technology' and 'Technology and Innovation Management' were introduced to the proposed new curriculum. An existing course has been revised with the title 'Integrated Project in Food Science and Technology' incorporating concepts of new food product development where students are required to produce a product prototype followed by a feasibility study on the commercialization potential in which learning about industry liaison is expected.

In order to coordinate and streamline university-industry interactions, a faculty level initiative called Industry-Institution Interaction Cell (I³C) has been taken. It is expected to sign MoUs with identified industries to enhance the quality of industrial placements for research projects.

For the undergraduates to become familiarized with different industrial contexts, an initiative called Tech Talk has been taken where a talk is delivered by an alumnus from food industry.

One of the planned activities for promoting the university-industry interaction and fostering entrepreneurial skills is the establishment of a Student Business Incubator where undergraduates with innovative food product-based business ideas will be connected with prospective venture capitalists, business angels and mentors from food industry to transform their idea to a concrete business venture.

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