Sabaragamuwa University realizes the goals of 21st Century transferring Research Knowledge to Industry

# **Transformation Process**





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# By Prof. Indunil Dayaratne

In the modern world Universities have a greater role to bring the reality to the concept of knowledge economy in the 21st century in creating wealth for the nation. Having realised its role as a socially responsible establishment, the University Business Linkage Cell (UBLC), Sabaragamuwa University of Sri Lanka achieved another milestone with its success effort in exposing the university inventions to the external business stakeholders. In the path of UBLC's continuous advancement as the linking partner of inventors of the University with the industry, it signed its second licensing agreement on April 27, 2021with Cap Organic Pvt. The company is an emerging entrepreneurial firm that engages in the business of sustainable 'end to end' value proposition for the development and production of Agri-based organic products.

The University granted an exclusive license to CAP Organic in the territory of Sri Lanka for a period of 10 years to manufacture and sell the product in Sri Lanka and the rights will be extended by the University to other international markets after reviewing the international business models of the company. The newly licensed invention was the Soursop Based Medicated Wine Series with Anti-Diabetic qualities. This novel research idea was conceived by Natural Product Chemistry and Food Science Research team of the Faculty of Applied Sciences, Sabaragamuwa University of Sri Lanka.

The team has developed a series of soursop based herbal wines with potential antidiabetic, anticancer and antioxidant activities and it is hoped that the products will win the international market to gain a competitive edge. This is a 100% natural herbal combination in which the

hypoglycemic effect, and efficacy levels of the products were confirmed by in vitro assays. The product is currently being subjected to in vivo assays, thus providing scientific validation to the indicated health claims, and the safety of the product consequently, going in-line with the global regulatory framework.

Now it is noticeable that the Sabaragamuwa University is expanding its mission beyond the traditional teaching role to transferring the research knowledge to the industries for the development of the economy.

Vice-Chancellor-Sabaragamuwa University of Sri Lanka, Members of the Cap Organic Pvt. Ltd, Members of the research team, Members of the University Business Linkage Cell.

## Role of UBLC in Knowledge Transfer Process

The University Business Linkage Cell of Sabaragamuwa University of Sri Lanka was established with reference to the University Grants Commission Circular No.10/2016 issued in May, 2018. The main role of this initiation is to establish a formal mechanism to transform the innovative ideas of the University community in to an intellectual property and then, convert the IP assets to commercially viable products in the marketplace. As illustrated in the above figure, the technology transfer process of the UBLC goes through a very complicated and rigorous process. This process is very common to any Academic Institution which engages in research, innovation and commercialisation activities. Under this framework the knowledge transfer process from the Universities to industry starts with the notification of the innovative ideas to the UBLC by the researchers of the university. In the next step the UBLC assesses the innovation for protecting it as an intellectual property (IP) and decides which form of IP protection is most appropriate for the invention, along with the business model of the licensing partner. The UBLC first assesses whether the invention is patentable, if the assessment process satisfies that the idea is novel, nonobvious and commercially viable, moves forward to next step to apply for the IP (patent) protection. IP protection is essentially needed before moving on to the marketing plan as it goes to the public disclosure in the effort of the commercialization.

The best business model for the universities with the IP generated from the Universities is the licensing of the IP whether IP protected or not to the industry partner as the Universities are not supposed to manufacture products within the premises but, quality graduates. After the negotiation of the licensing terms with the industry partner the technology/knowledge is transferred to the industry partner to start the commercial operation.

It is evident that more often the Sabaragamuwa University of Sri Lanka is delivering its national responsibility by transferring its intellectual knowledge to create wealth for the nation. With the conducive policy initiatives of the UGC for the development of research and innovation culture within universities, it is visibly seen both academics and students eager for inventing new products which retain high commercial value.

With greater commitment from the research team and co-ordinated effort of the UBLC the Sabaragamuwa University of Sri Lanka could transfer its second IP asset which carries enormous health benefits and herbal properties.

#### **Market Potentials**

The University is very optimistic that this Wine variety will attract both local and international markets. It is intended to further extend the license to international territories as required by the CAP Organic (Pvt) limited. The value of this Sri Lankan herbal drink will be brought to the attention of consumers from overseas countries very soon. Furthermore, it is certain that there is a huge demand for soursop products in the international market and we Sri Lankans are not yet able to meet that demand".

The Company has also connected with the Ministry of Agriculture to provide free advice to soursop growers and to purchase their own harvest at a higher price. The management of the CAPOrganic revealed that as many young people as possible should join hands with the cultivation of soursop and conquer the international market.

# **Benefits to the University Community**

The financial returns generated from the licensing of IP of the Universities go back to the inventors and they can divert these resources to further enhance the research and development activities within the University. The Sabaragamuwa University of Sri Lanka has an IP policy which demarcates the distribution of revenues generated from knowledge transfer among contributors in fair manner. With a view to further encouraging the researchers, the University has allocated 80% of revenues to the contributors of the invention. With these policy initiatives, now it is very apparently seen an enhanced research and innovation culture within the University. Most importantly, students are encouraged to undertake collaborative research with the industry and these research links will pave the way for the students to get more internship placements in the partnering firms. Also, through these links, new technology comes to the University with cross licensing agreements, in the occasions where the university transfers the technology to continue further research in the industry premises. With this new technology the University can further expand the research boundaries to the emerging technological areas in the practical world.

### **Benefits to the Industry Partner**

The golden rule of knowledge transfer and university-industry collaboration is delivering winwin outcome for both parties. The Universities are having pool of human capital with Ph.Ddegrees and other expert research experience in the related subject and disciplines. The industry can shorten their R & D process and focus on other development actives as the University looks after the technological side of the invention. The industry partner is only left with the task of modifying the inventions to bring it to an attractive product for the customers.

As the technologies transferred by the Universities are generally IP- protected, the licensee can exclude the new entrants to the market with the exclusive rights of the license. Even the licensee can enjoy a premium price in the marketplace for the IP protected product. The University gets the burden of the IP maintenance by paying annual renewal fees and other IP related legal matters such as IP infringement cases against the licensed technology or product. The product

catches more reputation in the marketplace with the piece of information that product is coming out of the University R&D process.

These partnerships further cement the University-industry collaboration and fill a long-waited vacuum in Sri Lanka. Hence, it is bright light at the end of the dark tunnel for the University set up in Sri Lanka.