

Driving economic growth through innovation



Newcastle Disease Vaccine (NDV) is one of UPM's highest grossing commercialised innovation.

The university was bestowed the best organisation for management of intellectual property award at the Anugerah Harta Intelek Negara 2014 (National Intellectual Property Award 2014) for the third time since 2008. In the 2013 Malaysian Research Assessment, UPM also came out on top for commercialisation.

In nurturing potential innovations, the university also provides small amounts of funding of not more than RM500,000 for technology upscaling. Known as Initiative 7, it is specially designed for pre-commercialisation research and

prototype development at all stages from post-discovery to pre-commercialisation.

By establishing InnoHub, an incubation programme meant to increase the chances of successful commercialisation of innovations, the university encourages researchers to venture into commercialising their own innovations. Innohub focuses on taking these innovations through the valley-of-death phase where most technologies fail to enter the market.

As the country's one and only institution of higher learning dedicated to agriculture, the university has successfully

commercialised many agriculture-based innovation technologies that have significantly impacted the socio-economic growth of the country.

For instance, the Newcastle Disease Vaccine was invented to fight a virus that attacks the digestive, nervous and respiratory systems of poultry. It contributed to the creation of the first vaccine-producing company in Malaysia.

Another product produced by the researchers at the university's is Bacto 10, which is a liquid biofertiliser with non-pathogenic micro-organisms that have been removed from oil palm and herbal roots. Bacto 10 is capable of increasing the growth of plants in an environmentally friendly manner. It also maintains a viable shelf life of more than 15 months in bottles.

The Ministry of Agriculture awarded UPM and Diversatech, a manufacturer and wholesaler of fertilisers, a three-year US\$2.5mil (RM8.7mil) contract. Diversatech is required to supply a subsidised paddy seed treatment, known as Zappa, to farmers to increase their farm yield.

To date, Zappa and Vita-Grow - a foliar fertiliser by Diversatech - have generated more than

RM26.3mil in gross sales.

Recently, the Robo-rest System, a system that is capable of increasing the production capacity of palm oil during oil processing, was commercialised to an international partner, Dolphin Engineering. The system is the result of a successful research conducted by UPM researchers. The collaboration between UPM and international companies such as Dolphin Engineering has assisted UPM in achieving its vision to become a university of international repute.

These are just some of the many examples of products that researchers at UPM have produced. These innovations will help establish the university's position as one of the leading intuitions of higher learning with prolific commercialisation ventures.

To market its innovations, the university holds regular Innovation Open Days where major players from various industries are invited to view the multitude of IPs available. During these events, prospective investors and businesses have the opportunity to have a one-to-one engagement with researchers and their products.

THE nation is focusing on capitalising innovation as a prime driver of economic growth and Universiti Putra Malaysia (UPM) plays a significant role in this. The university is driven by policies and agenda with the goal to transform the research and ideas of its researchers into viable commercial ventures.

Propelled by an ecosystem that is strategically placed by the university, the number of commercialised technologies has grown significantly. From the nine technologies that were licensed to industries in 2005, 78 have been licensed this year with a total gross sale of RM39.5mil.

Turning innovative ideas into successful commercial ventures is a challenging process that requires a team approach by inventors, universities, investors and business partners.

UPM approaches innovation development and commercialisation in unique and innovative ways by creating an ecosystem where commercialisation collaboration is guided by a focus on research, development, commercialisation and entrepreneurship.

The university provides a number of services for researchers to protect their innovation discoveries, including patenting and promotion services. These are carried out to increase the market value of the technologies and the quality and quantity of innovations entering the market.

To date, UPM has filed more than 1,600 intellectual property (IP) protections and files more than 100 IP protections every year.