LCQ4: Promoting development of innovation and technology

Following is a question by Dr the Hon Lo Wai-kwok and a reply by the Secretary for Innovation and Technology, Mr Alfred Sit, in the Legislative Council today (June 17):

Question:

The Government has over the years been promoting the collaboration among the government, industry, academic and research sectors, and has established the Innovation and Technology Fund (ITF) to finance projects that contribute to the innovation and technology upgrading in the manufacturing and services industries. On the other hand, the Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area (Outline Development Plan) promulgated by the Central People's Government in February last year outlines the vision of developing an international innovation and technology hub. On promoting the development of innovation and technology, will the Government inform this Council:

(1) as there have been comments that the various funding schemes under ITF lack overall efficacy due to the absence of collaboration, whether the Government will consolidate the various funding schemes as well as formulate a set of unified and specific targets and performance indicators, with a view to enhancing the efficacy of ITF; if so, of the details; if not, the reasons for that;

(2) whether it has formulated any overall planning to enhance the collaboration among universities, research institutions (including Hong Kong Cyberport Management Company Limited, Hong Kong Science and Technology Parks Corporation and Hong Kong Applied Science and Technology Research Institute Company Limited) and the industries, with a view to dovetailing the targets set out in the Outline Development Plan, such as enhancing the in-depth integration of industries, academia and research and promoting the commercial application of technological achievements; if so, of the details; if not, the reasons for that; and

(3) given that Hong Kong has during the past six months been relentlessly affected by the Sino-US trade conflicts, social incidents and the coronavirus disease 2019, resulting in the research and development activities of tertiary institutions, production of the manufacturing industry, and even the businesses of related industries (such as testing and certification) having been dealt a heavy blow, whether the Government has assessed the impacts of the aforesaid situation on the collaboration among the government, industry, academic and research sectors, and rolled out corresponding measures; if so, of the details; if not, the reasons for that?

Reply:

President,

Development of innovation and technology (I&T) requires the collaboration among the Government, industry, academia and research institutes to create synergy. The current-term Government has been pushing I&T development along eight major areas, which include increasing resources for research and development (R&D), pooling together technology talent and providing technological research infrastructure, etc., with a view to facilitating co-operation among the Government, industry, academia and research institutes.

My reply to the three parts of Hon Lo's question is as follows:

(1) Currently, there are 16 funding schemes under the Innovation and Technology Fund (ITF), each having its own objectives which include supporting R&D, facilitating technology adoption, nurturing I&T talents, supporting technology start-ups and promoting I&T culture. Each of the funding schemes has its specific target group(s) and modus operandi, and the ways and criteria to evaluate their effectiveness differ.

Take the Innovation and Technology Support Programme (ITSP) as an example. Organisations being funded are required to submit reports to the Innovation and Technology Commission (ITC) two years after project completion to report in detail the intellectual property rights generated from the project, whether the project has been successfully commercialised, commercialisation incomes received, the number of jobs created, etc. As regards the Technology Voucher Programme which encourages enterprises to adopt technology solutions, applicants are required to report six months after project completion on whether it has improved the productivity or helped in upgrading or transformation of the enterprises.

However, it is rather difficult to quantitatively measure the effectiveness of some funding schemes. For instance, the General Support Programme supports non-R&D projects that help upgrade local industries and promote an I&T culture in Hong Kong, such as conferences, exhibitions, etc. As the cultivation of an I&T culture is a long-term and continuous endeavour, it may not be suitable to assess the effectiveness of the programme by quantitative evaluation.

To further support and bring convenience to the industry, from time to time we review and consolidate different schemes when appropriate. For example, the ITC consolidated the former University-Industry Collaboration Programme and the collaborative stream of the ITSP in January last year to launch the more flexible Partnership Research Programme, which supports collaborative research projects jointly conducted by local universities and public research institutes with private companies. Moreover, from July this year, we will merge the Researcher Programme and the Postdoctoral Hub to provide more flexibility for enterprises in engaging researchers.

(2) The development of an international I&T hub is a work focus of the

Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area. Hong Kong has strong R&D capabilities and advantages as an international and market-oriented economy, while other cities in the Greater Bay Area can provide a sizeable market as well as capabilities in commercialising R&D results and advanced manufacturing. Hong Kong can achieve synergistic development with other cities in the Greater Bay Area with regard to their comparative strengths and build up a comprehensive industry chain, ranging from R&D, commercialisation of R&D results to production, logistics and marketing. In this regard, the Government will continue to strengthen the I&T ecosystem in Hong Kong and actively participate in the work of developing the Greater Bay Area into an international I&T hub.

We are pressing ahead with the establishment of the two InnoHK research clusters in the Hong Kong Science Park. The first batch of R&D laboratories is expected to be set up progressively this year. To further promote global R&D collaboration in Hong Kong, we are also actively exploring the establishment of a third InnoHK research cluster.

In terms of facilitating the flow of key elements of scientific research, the Central Government announced in May 2018 that universities and research institutes in Hong Kong could gradually bid for funding to undertake central fiscal science and technology projects on the basis of merit and competition, and the approved project funding can be remitted across the boarder for use in Hong Kong. Over the past two years, the Ministry of Science and Technology and some provinces and cities in the Mainland have approved over RMB 250 million for local universities and research institutes to conduct R&D projects or establish laboratory.

We are also developing the Hong Kong-Shenzhen Innovation and Technology Park (the Park) in the Lok Ma Chau Loop as a key base for co-operation in scientific research. Various planning and infrastructural works have commenced progressively. We expect the development of the Park will complement with the industries that Shenzhen possesses an edge, and further promote the commercialisation of R&D results.

On the other hand, the Hong Kong Science and Technology Parks Corporation and Cyberport have launched corresponding measures and schemes to facilitate the expansion of business of local entreprises in the Greater Bay Area market. The Hong Kong Applied Science and Technology Research Institute will also continue to collaborate with enterprises operating business in both Hong Kong and the Greater Bay Area, and assist the industry in applying technology and exploring business opportunities.

(3) The social events happened in the past half year or so, as well as the epidemic and the conflicts between China and the United States, did to a certain extent impact on the development of I&T in Hong Kong in the short run. Amongst which, social events and the uncertainty brought by external economic and trade environment have made some of the companies, especially small and medium enterprises or start-ups which have less capital, to put on hold their business expansion. The epidemic has also affected the outbound exchanges of the academia and technology companies. However, the current

epidemic has also created some opportunities for the I&T sector, such as the software and hardware required for distance business and e-learning. The Government, industry, academia and research institutes are all determined to turn the crises into opportunities and respond to changes proactively and flexibly.

To support the industry, the Government has set aside \$380 million under the Anti-epidemic Fund to provide a full, six-month rental waiver for tenants and start-ups in the Hong Kong Science Park, Industrial Estates and Cyberport. It is estimated that about 1 800 enterprises will be benefitted.

We have also launched the Distance Business Programme to provide funding support to enterprises to adopt information technology (IT) solutions for developing distance business. The Programme Secretariat has received a total of 3 834 applications to enroll on the IT Service Providers Reference List, as well as over 13 000 funding applications from enterprises so far.

At the same time, the Government has been proactively adopting local R&D outcomes to help combat the epidemic. The ITC launched a special call for projects under the Public Sector Trial Scheme of the ITF to support product development and application of technologies for the prevention and control of the epidemic, as well as to foster the commercialisation of relevant R&D results. So far, 25 applications have been approved under the special call, involving a funding amount of about \$42.8 million for trials in over 40 public sector organisations. The Government will also collaborate with the Hong Kong Trade Development Council to share with overseas markets Hong Kong's experience in applying technology to combat the epidemic, and explore more business opportunities for Hong Kong's I&T industry.

In fact, Hong Kong enjoys tremendous strength in scientific research, the advantage as an international and market-oriented economy. It is believed that with the collaborative efforts across all sectors, the local I&T industry will continue to prosper in the long run.