

## LCQ12: Projects receiving the funding support of the Innovation and Technology Fund

Following is a question by the Hon Chung Kwok-pan and a written reply by the Acting Secretary for Innovation and Technology, Dr David Chung, in the Legislative Council today (April 21):

Question:

The Hong Kong Research Institute of Textiles and Apparel announced in December last year that it had launched with a non-profit-making organisation, H&M Foundation, a five-year collaboration plan, which involved a study on superabsorbent polymer, and the relevant testing would be conducted by a garment manufacturer in India. The collaboration plan has received the funding support of the Innovation and Technology Fund (ITF). In this connection, will the Government inform this Council:

- (1) whether it knows the details of the aforesaid study, and the amount of public funding involved;
- (2) whether it has assessed the benefits of the study in terms of promoting the sustainable development of Hong Kong industries (especially the textile and fashion industries);
- (3) whether the Government, when vetting and approving the funding application concerned, required that the testing relating to the study be conducted by local enterprises or enterprises in the Mainland cities of the Guangdong-Hong Kong-Macao Greater Bay Area (Greater Bay Area), so as to promote re-industrialisation in Hong Kong and seize the opportunities brought by the development of the Greater Bay Area; and
- (4) whether it will stipulate that all research and development work for projects receiving the funding support of the ITF must be conducted locally or in the Mainland cities of the Greater Bay Area?

Reply:

President,

The Innovation and Technology Fund (ITF) administered by the Innovation and Technology Commission (ITC) has been financing projects that contribute to the innovation and technology upgrading in the manufacturing industry and the services industry. Currently, there are 17 funding schemes under the ITF, among which the platform projects under the Innovation and Technology Support Programme (ITSP) supports applied research and development (R&D) projects undertaken by the local public research institutes and universities, with a

view to transferring the R&D results to local industries. At least 10 per cent of the total project cost is required to be sponsored by the industry. The intellectual property (IP) rights of the R&D results are owned by the applicants.

In recent years, the Hong Kong Research Institute of Textiles and Apparel (HKRITA) has been actively developing textile recycling and high-performance textile technologies as well as exploring the ways to mitigate the impacts of textile production and apparel manufacturing on the environment. The HKRITA has been conducting platform R&D projects with industry sponsorship in recent years, including research on the ways to recycle textile waste; and in 2018, development of the technologies to turn textile waste into Cellulosic Superabsorbent Polymer (SAP). SAP is an ideal agricultural water retention agent for maintaining a high soil humidity even in arid condition. It has great potential for increasing the yield of natural textile materials, thereby helping promote sustainable development.

The reply to the various parts of the question is as follows:

(1) to (3) The "Development of a Pilot Scale System for the Production of (Fertiliser-containing) Cellulosic SAP" is a platform R&D project. Approved in 2020, the two-year project aims to develop a system for the mass production of SAP. The applicant is the HKRITA. Two local companies and one non-local company provide industry sponsorship, and H&M Foundation, a non-profit making organisation, provides technical advice. The project cost amounts to about \$5.18 million, comprising of about \$4.12 million funding from the ITF and about \$1.06 million from industry sponsorship. The industry sponsorship represents over 20 per cent of the project cost, which is above the required level of 10 per cent. As mentioned above, the IP rights of the technologies developed under this project is vested with the HKRITA.

Majority of the R&D work of the project would be conducted in Hong Kong, mainly in the HKRITA's laboratories in the Hong Kong Science Park. The project also includes a small scale plantation experiment in Hong Kong. While part of the experiment needs to be conducted in south-western India to facilitate the conduct of irrigation experiment in places with relatively extreme climatic conditions (such as arid regions) to grow fine natural textile materials. The experiment concerned was conducted with the assistance of the non-local sponsor at no cost.

The HKRITA will, through licensing of patents, let the Hong Kong industries adopt the new technology. If the relevant material is successfully developed under the project, it could recycle textile products and mitigate the harmful effect of textile waste on the environment, as well as help maintain humidity in the soil and reduce water consumption during irrigation on the other, which will bring positive impact to the sustainable development of the whole textile industry.

In fact, the HKRITA has established strong collaborations with local and Mainland (especially the Greater Bay Area) enterprises. The sponsors and supporting parties of many projects are local or Mainland enterprises.

(4) In general, the majority of R&D work under an approved the ITSP project should be conducted within the territory of Hong Kong. However, given the close ties between Hong Kong and the Mainland, up to 50 per cent of R&D work of projects under the ITF can be conducted (and relevant expenditure incurred) in the Mainland. Where certain R&D tasks need to be conducted outside Hong Kong (other than the Mainland), prior approval from the ITC must be sought.