



Lofty goal set for R&D spending

Country climbs four places in innovation index

SUCHIT LEESA-NGUANSUK

The government aims to accelerate the country's R&D spending to 2.2% of GDP in seven years to improve economic development and reduce social disparity in the face of future uncertainty.

"We are on a roadmap to become an innovation country as we are scaling up efforts to improve competitiveness in science and technology," said Anek Laothamatas, the higher education, science, research and innovation minister, at the opening ceremony of the Innovation Thailand Forum 2021 yesterday.

Thailand's economy ranks 20th out of 200 countries globally in terms of GDP. Mr Anek said R&D expenses in Thailand are expected to reach 2.2% of GDP in seven years from an estimated 1.23% in 2021, or 196 billion baht.

He said Thailand's science and technology sector is seeing advancement. For example, the country is able to make a small satellite.

"Within four years, we will make a 150-kilogramme class satellite before stepping up to produce a 300kg satellite," said Mr Anek.

A xenon gas-powered spaceship can be built and sent to the moon, he said.

This spaceship can be piloted by robots or artificial intelligence, controlled from a ground station 300,000km away, said Mr Anek.



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ANEK LAOTHAMATAS
HIGHER EDUCATION, SCIENCE,
RESEARCH AND INNOVATION
MINISTER

The minister said the Office of Atoms for Peace is developing its own nuclear reactor, using 50% domestic technology.

Thailand hopes to build a tokamak fusion reactor for clean energy within 20 years.

According to him, the country is also researching Covid-19 vaccines in seven projects. Two of them — messenger ribonucleic acid (mRNA) and tobacco vaccines — have passed animal testing stages.

"We expect to use the vaccines in humans in the second half of 2021," said Mr Anek.

"Thailand has talent innovators and scientists, but we need to improve our system to speed up innovation."

Pokrath Hansasuta, head of the virology division in the Department of Microbiology under Chulalongkorn University's Faculty of Medicine, said his university is spending 300 million baht to develop mRNA Covid-19 vaccines.

A small group of people will undergo a clinical test with this vaccine by April and tens of thousands are expected to be tested by the end of this year, he said.

"With the ability to develop our Covid-19 vaccines, this could effectively help control the pandemic as we no longer have to wait on quotas from other countries," said Mr Pokrath.

Thailand has climbed four positions to 36th out of 60 countries in Bloomberg's Innovation Index 2021.

Pun-Arj Chairatana, executive director of the National Innovation Agency (NIA), said the country needs more science, technology, engineering and mathematics students, as well as patents, startups and innovation-driven businesses to climb the table.

NIA aims to see 100 deep-tech startups within three years, mainly focused on health tech and high-precision engineering, he said.