

China to focus on agricultural sci-tech innovations in 2023

18 January 2023 | News

CAAS will focus on six fields including seed research and development, arable land conservation, agricultural machinery and equipment, agricultural bio-security and green agriculture.



CAAS will focus on six fields including seed research and development, arable land conservation, agricultural machinery and equipment, agricultural bio-security and green agriculture.

The Chinese Academy of Agricultural Sciences (CAAS) will continue to promote scientific and technological innovation to support the construction of a strong agricultural sector in China, according to Xinhua news agency.

According to the CAAS, innovation efforts in 2023 will focus on six fields. These fields are -- seed research and development, arable land conservation, agricultural machinery and equipment, agricultural bio-security, green agriculture, and rural development.

Wu Kongming, president of the CAAS, highlighted the role of sci-tech innovation in agricultural development at the CAAS 2023 Working Conference.

Wu pointed out that at present, China ranks top in the world in terms of both the number of highly cited papers and the number of invention patent applications in the agricultural field. The contribution rate of agricultural sci-tech progress in China had increased from 54.5 per cent in 2012 to 61.5 per cent in 2021, while the comprehensive mechanisation level of crop cultivation, planting and harvesting, had grown from 57 per cent in 2012 to over 72 per cent in 2021.

"This year, we will accelerate the integration of science and education, science and industry, and enhance our overall ability to support the stable and safe supply of food and important agricultural products, and promote rural revitalisation," Wu said.

He also said that in 2023, the institute will continue to expand international exchanges and cooperation in agricultural science and technology.

CAAS will continue to promote the building of global alliances in agricultural sci-tech innovation. Joint research and technology demonstrations will be carried out in cooperation with neighbouring countries, as well as key countries related to the Belt and Road Initiative, he added.

According to Wu, CAAS signed letters of intent for cooperation with 19 international partners in 2022 -- featuring 121 new international cooperation projects -- 1.5 times the number recorded in 2021. The academy is preparing the construction of a China-Africa agricultural science and technology innovation alliance. The construction of joint laboratories in Kazakhstan, Romania and Uruguay is also progressing smoothly.

During the annual conference, the academy also unveiled ten major agricultural science advances achieved during the past year, including studies in high-yield genes in rice, genetic diversity in potatoes and genetic variation in tomatoes.

One of the major discoveries of Chinese agricultural scientists is a gene in crops which can improve the efficiency of photosynthesis and nitrogen utilisation -- and significantly boost grain yield. Another study by Chinese scientists is the first to reveal the complete process of chitin biosynthesis, providing a new direction for the original innovation of green pesticides.