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TYSP Showcases Solutions for World Agricultural Development

By ZHONG Jianli & LI Linxu

As young scientists are the hope for future sci-tech innovation, it is vital to promote exchanges between the youth in this sci-tech community. To this end, the 2022 Talented Young Scientist Program (TYSP) Seminar on Agriculture held on July 27 provided an effective platform for mutual learning between Chinese and foreign agricultural experts.

The Ministry of Science and Technology (MOST) of China has always attached great importance to international exchanges among young scientists. With its focus on young sci-tech workers from foreign countries, TYSP has become one of the most popular exchange mechanisms, with a large number of participating countries that involve a wide range of expertise, said Xu Jie, deputy director-general of Department of International Cooperation of MOST, speaking at the seminar.

Exchanges in the agriculture sector are particularly active under the TYSP framework.

"Through the program, young agricultural scientists and research institutions from various countries have vigorously cooperated with their Chinese counterparts in academic exchanges, resource sharing, as well as the building and improvement of cooperation platforms and models," said Gao Xiang, director-general of China Science and Technology Exchange Center (CSTEC).

In fact, international cooperation in agricultural science and technology serves as an effective means for humankind to address common challenges, such as food security, biosecurity, climate change and green development, according to Mei Xurong, vice president of the Chinese Academy of Agricultural Sciences



Beijing Venue of the 2022 TYSP Seminar on Agriculture. (PHOTO: CSTEC)

ences (CAAS).

During the seminar, TYSP participants from different countries were positive about the role of the program in deepening pragmatic sci-tech cooperation, promoting exchanges of technology and knowledge in agriculture, and providing brighter career prospects.

"The program showcased a wide variety of case study examples to illustrate the key points in developing the fields of agriculture, health, physics, eco-environment and equipment manufacturing, the challenges involved and how they were dealt with," said Shereen Kamal Assem, vice president of Agricultural Research Center in Egypt, adding that young Egyptian scientists became more identifying and scaling up innovative solutions to their research area.

Hidayat Ullah is one of the benefi-

ciaries of TYSP. As a visiting scholar at CAAS, he was involved in a number of sci-tech projects and published nine SCI papers. Now, he is an associate professor in the University of Swabi and still active in promoting Sino-Pakistan agricultural sci-tech cooperation.

Meanwhile Ruidar Ali Shan, director of the Office of Research Innovation and Commercialization at University of Swabi in Pakistan, believes TYSP is a wonderful initiative which gives young researchers and scientists the opportunity to further strengthen their skills, capacity, and collaboration with renowned teams and scientists during their stay in China.

As the vice-rector of University of Agronomic Sciences and Veterinary Medicine of Bucharest in Romania, Dr. Florin Stanica highlighted that TYSP

opened a new chapter for international sci-tech and people-to-people exchanges under the Belt and Road Initiative.

Apart from academic exchanges, TYSP created a direct channel for young scientists from around the world to understand and experience Chinese culture.

In sharing her program experience, Dr. Khin Nyein Chan, deputy director of the Department of Biotechnology of Ministry of Science and Technology of Myanmar, said not only the technical knowledge and lab experience were important, but also the chance to learn about Chinese culture made her stay in China more interesting.

Santiago Suarez, from Argentina's Universidad Nacional De La Plata, said he loved the multicultural environment in the Beijing research lab, and also confessed he is a big fan of Chinese food.

Influence of Talented Young Scientist Program Increasing

By LI Linxu & ZHONG Jianli

It is said that friendship between countries lies in amity between their peoples, and amity between peoples lies in heart-to-heart communication.

This sentiment was on display at the 2022 TYSP's seminar, which focused on people-to-people exchanges in the field of agriculture.

Currently, China has established sci-tech cooperation relationships with more than 160 countries and regions.

Over the years, especially since the

launch of the Belt and Road sci-tech people-to-people exchanges, a series of programs have been initiated by China to enhance young scientist exchanges and cooperation, including TYSP.

About 260 people participated in the seminar, including representatives from foreign sci-tech authorities, foreign TYSP partner institutions, and outstanding international young scientists. The online livestreaming of the event attracted some 1,100 views from various countries.

During the seminar, the partici-

pants shared their insights and views on TYSP, and offered their suggestions for further enhancing TYSP's role in sci-tech exchanges particularly among young scientists, expanding the fields of cooperation and exchanges, and regularly collecting feedback from participating individuals and institutions.

In the Q&A session, the young scientists freely expressed their views and asked questions of interest to them. They also had an in-depth discussion on the implementation and operation of

TYSP in the post-pandemic period, which shows their recognition and high hopes for TYSP.

The seminar was hosted by China Science and Technology Exchange Center under the supervision of the Department of International Cooperation of MOST, organized by the Department of International Cooperation of the Chinese Academy of Agricultural Sciences, and co-organized by the Yunnan Academy of Agricultural Sciences and the Chinese Academy of Tropical Agricultural Sciences.

Case Study

Global Experts Help Build Hub for Opening up in Northern China

By WANG Haiquan & LI Xiao

In recent years, Heilongjiang province has consistently strengthened international collaboration with other countries. To meet the needs of its industrial development, the province has actively conducted cooperative research and technological breakthroughs with international leading teams, delivering rewarding achievements.

This year, Heilongjiang has implemented a more open talent-related policy. Foreign experts from more than 90 countries are granted work permits to date. More and more foreign talents have settled in Heilongjiang and contributed to local development.

First-class innovation platform

Professor Nikolay Mukhurov, who comes from Belarus, has carried out joint research with the team of Harbin Institute of Technology and Harbin Engineering University for more than 10 years.

"The academic atmosphere here is very good, and the research conditions and research capacity are also world-

class. There is no language barrier in communication, and our cooperative research is very fruitful," said Mukhurov.

Drawing on his experience, Chinese researchers solved the bottlenecks in the control of mass manufacturing of ceramic carrier microstructure, and improved the performance of domestic high-end high-temperature sensors and gas sensors. The two sides have achieved fruitful results in writing papers, publishing works, applying for invention patents and jointly training talented individuals.

At present, Heilongjiang has built 779 various types of science and technology innovation bases and platforms, and 79 national innovation platforms. Many foreign experts have praised the speed of improvement of Heilongjiang's sci-tech innovation capacity.

"Norman Bethune" in Daqing

Popova Liliya, an 82-year-old Kazakh, is the chief eye specialist of Daqing Ophthalmology Hospital. She is widely known as "Norman Bethune" in Daqing by local people. She has been liv-

ing in China for 24 years, and regards China as her second home.

"It is true that I am getting older, but I will continue to work as long as I can see, my heart still beats, and patients like to see me," said Liliya. In 2005, she was awarded the Chinese Government Friendship Award.

When talking about why she chose to settle in China, Liliya always answers with a smile. "The past 20 years I've spent in China are the most important and meaningful time in my life. I can use my clinical knowledge to cure people and spread my experience. Also, my days with kind, friendly, diligent and wise Chinese people allow me to have a more profound understanding of the beauty of life," she said.

Opportunity for innovation and entrepreneurship

As an old industrial base in northeast China, Heilongjiang has a very good foundation for international science and technology cooperation, and rich demonstration scenarios for technology application in traditional advantageous

fields such as energy, new materials, modern agriculture and biomedicine.

Fadeev Andrey, aged 34, is an expert in the field of metal materials from the Russian Academy of Sciences. He has worked at Heilongjiang Academy of Sciences for a period of time almost every year since 2016.

"It is amazing to come to study and practice here. My knowledge can be fully applied, while the results of our joint research will be very helpful for my future research projects," said Andrey. Under the efforts of the joint innovation team, the first DC thermal plasma spheroidization powder-preparing equipment has been put into operation.

Inclusiveness, shared benefits and win-win outcomes are what Heilongjiang has been pursuing. It will accelerate the launch of new platforms for open collaboration, enhance the levels of international cooperation, and intensify its efforts to construct a cooperation hub of global significance in the north.

Source: Heilongjiang Provincial Department of Science and Technology

Column

Revitalizing Heilongjiang via Innovation-Driven Approach

By SHI Zhaohui

Located in northeast China, Heilongjiang province boasts a vast stretch of fertile land and rich natural resources.

Since the 18th National Congress of the Communist Party of China, President Xi Jinping has always cared about the development of Heilongjiang. He has visited the province twice and issued important instructions on the revitalization and development of the province and northeast China at large.

Keeping in mind those instructions, the province has adhered to the innovation-driven development strategy, by employing its advantage of rich sci-tech resources to enhance the innovation capacity and realize the comprehensive revitalization goal.

During the 13th Five-Year Plan period, the province won 64 national science and technology awards, among which Academician Liu Yongtan of Harbin Institute of Technology won the 2018 State Preeminent Science and Technology Award, China's highest scientific award.

Sci-tech achievements of the province have supported the country's major projects, such as the manned spaceflight, Chang'e lunar probe, Mars exploration, and the deep-sea submersible "Fendouzhe."

Through speeding up the establishment of major sci-tech innovation platforms, such as national sci-tech facilities and national high-level laboratories, Heilongjiang continues to reinforce its innovation capability.

As pointed out by President Xi, talent is the key to revitalizing northeast China. Not long ago, the province rolled out a series of policy measures to strengthen and improve talent-related work for the new era. With a global vision and open attitude, it endeavors to build world-class platforms to gather excellent professionals from home and



Harbin New District is the 16th national new district approved by the State Council. It plays an important role in promoting economic development of Heilongjiang province and the industrial revitalization of northeast China. (Photo by Zhang Jianxun)

People at the Heart of New Urbanization Plan

By LI Linxu

China is on fast track to raise the number of permanent urban residents to 65 percent of the total population by 2025.

By the end of 2021, the figure had already reached 64.7 percent, only a step from the goal.

Currently, there are more than 900 million people living in China's cities and towns. The number will continue to rise in the future.

China's top priority is its people while embarking on a new urbanization path, according to an implementation plan recently released by the National Development and Reform Commission (NDRC).

Focusing on the 14th Five-Year Plan, it laid out detailed goals, tasks and measures to advance the new urbanization

abroad and let them fully display their talent.

At present, by virtue of the new round of technological revolution and industrial transformation, Heilongjiang is making great efforts to develop four new engines of economic development, namely, digital economy, biological economy, ice and snow economy, and creative design. It has formulated and implemented relevant industrial development plans and supporting policies, in order to achieve rapid development in frontier sci-tech areas and industries through innovative way of thinking.

Regional innovation areas are built with high standards, including the Harbin, Daqing, Qiqihar National Independent Innovation Demonstration Zones, Harbin National New-Generation AI Innovation and Development Pilot Zone, and Jiamusi National Agricultural Hi-Tech Industry Demonstration Zone. The development path, which begins from strong sci-tech capacity to strong enterprises, industries, and economy, is taking shape.

The commercialization of sci-tech achievements in universities, research institutes and key enterprises has been implemented, while efforts are also being made to strengthen the effective connection of innovation chains with industrial, service and capital chains. This is so as to realize high-level, efficient creation and transformation of sci-tech achievements, thus making sci-tech innovation the major contributor to revitalization and development of the province.

"Enchanting snow and ice scenery of northern China is only found in Heilongjiang." Heilongjiang has extended an open invitation to people from around the world to consider the province as a land of opportunity.

The author is deputy director of Heilongjiang Provincial Department of Science and Technology and director of the Provincial Administration of Foreign Experts Affairs.

strategy.

China's urbanization is still in the phase of fast development during 2021-2025, said an official from NDRC, adding that there are enormous opportunities.

Urban public services will be accessible to all permanent residents.

The policy concerning foreign experts' stay and residence in China will also be improved, as per the plan.

Meanwhile, coordinated development between cities and counties is also highlighted in the plan, calling for establishing networked urban clusters with multi-centers, multi-levels, and multi nodes.

Cities are built for the people, said NDRC, emphasizing that the development of cities should keep up with people's ever-growing needs for a better life.