Seminar on Agricultural Biotechnology Application for Developing Countries

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<tr><td>Full Name</td><td colspan="3">Seminar on Agricultural Biotechnology Application for Developing Countries</td></tr>
<tr><td>Organizer</td><td colspan="3">National Agricultural Technology Extension and Service Centre</td></tr>
<tr><td>Holding Time</td><td>November 7th to December 6th, 2022</td><td>Language</td><td>English</td></tr>
<tr><td>Invited country</td><td>Developing countries</td><td>Number of Participants</td><td>25</td></tr>
<tr><td>Target</td><td colspan="3">1. To understand the current situation and trend of agricultural biotechnology industry in China and other countries, including the development trend of related bio-technology; 2. To understand Chinese practices and experiences in promoting the development of biotechnology industry. 3. To understand China's relevant management policies on biotechnology, especially on genetically modified crops, and state support measures for farmers to adopt good crops and livestock and poultry varieties; 4. Be able to put forward suggestions and preliminary plans for the development of domestic biotechnology industry according to the contents learned.</td></tr>
<tr><td rowspan="5">Requirements of Participation</td><td>Academic Background</td><td colspan="2">- Field or major: Personnel involving in agriculture from government service，extension agencies, university and college，research institute，enterprises in Developing countries
- Position: Government and private departments</td></tr>
<tr><td>Age</td><td colspan="2">No older than statutory retirement age of recipient country</td></tr>
<tr><td>Physical Health</td><td colspan="2">Be able to attend online training courses on time.</td></tr>
<tr><td>Language Ability</td><td colspan="2">Capable of listening, speaking, reading and writing in English</td></tr>
<tr><td>Others</td><td colspan="2">Use ZOOM platform to keep up with the project schedule.</td></tr>
<tr><td>Training Contents</td><td colspan="3">1. Introduction of main seminar contents
（1） Overview of China: introducing China's geography, politics, economy and culture, help foreign participants to learn about China's basic knowledge, and introduce the background for the next training.
（2） Overview of China's Agriculture: As a large agricultural country, this course introduces China's "three rural" issues and China's agricultural development issues.
（3） China's experience in fighting COVID-19 and maintaining the growth of agricultural production: introducing the measures and effects taken by China during the period of COVID-19 and the experience of the Chinese government in maintaining the growth of agricultural production during the period of covid-19.
（4） China's Agricultural Technology Extension System: it mainly introduces the general situation and development experience of China's agriculture, as well as the composition, working mechanism, working experience and Enlightenment.
（5） Promotion of China's Agricultural Mechanization Technology: introducing the development of China's agricultural machinery industry and its application in agriculture, with emphasis on China's experience and achievements in developing agricultural</td></tr>
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	mechanization. （6） South-South cooperation between China and developing countries: This course focuses on the process, experience and achievements of international cooperation in agricultural technology promotion between China and developing countries, as well as suggestions on international cooperation in agricultural technology promotion with developing countries. （7） Agricultural standardization system: Introducing the role and function of standardization in agricultural development, as well as development experience and practices. （8） China's land system and farmers' Cooperative Organization: introducing that the land system is the foundation of agricultural development, and introduce the basic management system and land system of China's rural areas. （9） Vegetable planting in China: This course focuses on the historical process, experience and achievements of China's development in vegetable planting and facility agriculture, as well as suggestions on cooperation with developing countries in vegetable planting and facility agriculture. （10） China's grain production: This course focuses on the historical process, experience and achievements of China's development in grain production, as well as suggestions on cooperation with developing countries in grain production. （11） Application of microbial technology in agriculture: This course focuses on the historical process, experience and achievements of the development of microbial technology in agriculture in China, as well as suggestions on cooperation with developing countries in the application of microbial technology in agriculture. （12） Promotion of agricultural green plant protection technology: This course focuses on the historical process, experience and achievements of China's development in the promotion of agricultural green prevention and control technology, as well as suggestions on cooperation with developing countries in the promotion of agricultural green prevention and control technology. （13） Cotton planting and integrated pest control technology: introducing the main cotton planting technology and related main pest control technology. （14） Locust monitoring and early warning and migration route monitoring: introducing the monitoring and early warning work on desert locust disasters in China and the monitoring research and work progress on the migration route of desert locusts. （15） Locust Research and locust type change mechanism in China: introducing the history and experience of locust disaster prevention and control in China and the progress of relevant scientific research, locust type change mechanism research and its application in production practice. （16） Monitoring and control of Fall Army worm: introducing the research achievements and application in production practice of China in the prevention and control of Fall Army worm (Spodoptera meadow)Prof.. （17） China's plant quarantine system: introducing the composition, main functions, relevant technical research progress, and relevant projects carried out at home and abroad of China's plant inspection and quarantine system. （18） Investigation and prevention and control suggestions of Chinese experts on locust

	disasters in developing countries: experts who visited locust disasters in developing countries gave lectures on the occurrence law, progress, prevention and control suggestions and relevant research results of desert locust disasters in recent years. （19） Research progress of locust pheromone: pheromone is an important means of transmitting information. This lecture focuses on the research progress of locust and other insects pheromone, the formation of products and the use of pheromone to control pests and diseases. （20） Wheat planting and pest control technology: wheat is the second largest crop in China. Planting technology and pest control technology in wheat production play an important role in yield formation. This lecture will focus on wheat planting and pest control technology. （21） Sugarcane planting and pest control technology: Sugarcane plays an important role in sugar production. Planting technology and pest control technology in sugarcane production play an important role in yield formation. This lecture will focus on sugarcane planting and pest control technology. （22） Corn planting technology: corn is a major grain crop in China. The planting technology and pest control technology in corn production play an important role in the formation of yield. This lecture will focus on corn planting and pest control technology. （23） Rice planting and pest control technology: rice is the main grain in China. The planting technology and pest control technology in rice production play an important role in the formation of yield. This lecture will focus on rice planting and pest control technology. （24） Practical pest control technology for Tropical Crops: mango is an important tropical fruit. As a tropical fruit tree, its pests and diseases have an important impact on the formation of yield. This lecture will focus on Mango planting and pest control technology. （25） Application and evaluation of pesticides: this lecture will focus on the technology, research progress and application in production of the effect evaluation of pesticides after application. （26） Research and application of predatory mites: this lecture will focus on the research and cultivation technology of predatory mites in the control of natural enemies, as well as their application in grain and fruit and vegetable planting. （27） Main testing technologies for testing plant varieties: introducing the application, experience and development direction of gene testing technology for testing plant varieties in agriculture. （28） New plant variety protection system at home and abroad: introducing the history and current situation, main system composition and effect, experience gained and development direction of new plant variety protection system in China and major countries. （29） China's seed processing machinery and equipment: introducing the development achievements, main equipment types and industrial development direction of China's seed processing machinery and equipment. （30） Overview of biological breeding related technologies: introducing the process and relevant experience of biotechnology, especially breeding technology and its application in China's agriculture.

	（31） Promotion technology of seed vigor: introducing the promotion technology and its application in production of improving crop seed vigor by using various methods. （32） Application of organic fertilizer and straw ripening agent: introducing the production technology of organic fertilizer and the development and application of straw ripening agent and other related technologies. （33） Scientific fertilization and technology promotion of science and technology academy: introducing China's fertilizer management system and relevant policies, experience and development direction. （34） Soil and fertilizer testing methods and applications: introducing the history and current situation, main items and effects, experience and development direction of soil and fertilizer testing methods and applications in China. （35） Fertilization technology for Tropical Crops: introducing the achievements, experiences and development directions of major fertilizer enterprises in China in carrying out scientific fertilization in Southeast Asian countries. （36） China's soil improvement technology: introducing China's technology and experience in medium and low yield field improvement, agricultural soil improvement and soil productivity improvement. （37） Water saving agricultural technology: introducing the lack of water resources in China's agricultural development, and the development and experience of water saving agricultural technology in China. （38） Slow and controlled release fertilizer technology: introducing the development and application technology of slow and controlled release fertilizer industry and technology in China in the process of scientific fertilization. (it will take 28 days, two lectures per day except the weekend, 40 lectures in total) **2. Overall introduction of the speakers** (1)Prof. Peng Bowen: associate researcher of the foreign economic cooperation center of the Ministry of agriculture and rural affairs, engaged in agricultural foreign cooperation research. (2)Prof. Wang yingkuan: researcher of the planning and Design Institute of the Ministry of agriculture and rural affairs. His research direction is agricultural mechanization. (3)Prof. Wei Liang: Deputy Director of the international exchange center of the Ministry of agriculture and rural affairs, long engaged in agricultural international cooperation research. (4)Prof. Ma Chao: Beijing Agricultural Technology Extension Station, long engaged in grass-roots agricultural technology extension. (5)Prof. Chen Baodong: researcher of the ecological center of the Chinese Academy of Sciences, has been engaged in the research of microbial agricultural application for a long time. (6)Prof. Cheng Yingguo: National Agricultural Technology Extension Service Center, chief expert, long engaged in grain crop technology extension (7)Prof. Sun Zhao: National Agricultural Technology Extension Service Center, senior agronomist, research direction is agricultural international cooperation. (8)Prof. Zhang long: Professor of China Agricultural University. He has been engaged in locust control research for a long time. In early 2020, he went to Pakistan as a Chinese expert to investigate the occurrence of locust disasters. (9)Prof. Zhang Zehua: researcher of the Institute of plant protection, Chinese Academy of Agricultural Sciences. His research direction is the prediction and forecast of desert locust

	disasters. (10)Prof. Tu Xiongbing: associate researcher of Institute of plant protection, Chinese Academy of Agricultural Sciences, research direction: prediction of migration route of desert locust disaster. (11)Prof. Wang Su: researcher of Plant Protection Institute of Beijing Academy of agricultural and Forestry Sciences, long engaged in research on green plant protection technology. (12)Prof. Li Zhihong: Professor and doctoral supervisor of China Agricultural University. Engaged in the research and application of plant pest quarantine technology for a long time (13)Prof. Fan Shuli: researcher, Cotton Research Institute, Chinese Academy of Agricultural Sciences, long engaged in cotton breeding and planting technology research (14)Prof. Dong Fengshou: researcher of Institute of plant protection, Chinese Academy of Agricultural Sciences. His research direction is pesticide application post-evaluation. (15)Prof. LV Jiale: associate researcher of Plant Protection Research Institute of Chinese Academy of Agricultural Sciences, with research direction of biological control technology. (16)Prof. He Yan: Professor, national corn Improvement Center, China Agricultural University, research direction: corn breeding and planting technology. (17)Prof. LV Zhongxian: researcher, Plant Protection Institute, Zhejiang Academy of Agricultural Sciences, research direction: rice disease and pest control. (18)Prof. Wang Zhenying: researcher, Institute of plant protection, Chinese Academy of Agricultural Sciences. His research direction is the prevention and control of Spodoptera. (19)Prof. Huang Chenghua: researcher of Guangxi Academy of Agricultural Sciences, research direction: sugarcane disease and pest control. (20)Prof. Ban Liping: Professor, China Agricultural University. Her research interests are locust pheromone research. (21)Prof. Wang Guangjun: associate researcher, Institute of plant protection, Chinese Academy of Agricultural Sciences, research direction: agricultural microbial biotechnology. (22)Prof. Zhang Yunhui: researcher of Institute of plant protection, Chinese Academy of Agricultural Sciences, research direction: wheat disease and pest control. (23)Prof. Xia wenshen: chief expert of the National Agricultural Technology Extension Service Center, who has been engaged in the promotion of grain crop technology for a long time. (24)Prof. Ma Xin: Beijing Agricultural Technology Extension Station, senior agronomist, long engaged in grass-roots agricultural technology extension. (25)Prof. Xu Jin: senior agronomist in Beijing Agricultural Technology Extension Station, long engaged in grass-roots agricultural technology extension. (26)Prof. Cui Yehan: researcher of the science and technology development center of the Ministry of agriculture and rural affairs. He has been engaged in the research and management of the protection system of new plant varieties at home and abroad for a long time. (27)Prof. Deng Chao: researcher of the science and technology development center of the Ministry of agriculture and rural affairs. He has long been engaged in the application of genetic testing technology to test plant varieties in agriculture. (28)Prof. Li Yonglei: senior agronomist of the planning, design and Research Institute of the Ministry of agriculture, long engaged in the research and application of seed processing machinery and equipment. (29)Prof. Zhu Zhiqiang: Director of the general manager's office of Dabei agricultural

	biotechnology company, responsible for breeding research and application carried out by the experimental base of Dabei agricultural biotechnology company. (30)Prof. Tian Weihong: China seed group, long engaged in research on seed trade. (31)Prof. Song meizhen: Cotton Research Institute of Chinese Academy of Agricultural Sciences, long engaged in cotton breeding research. (32)Prof. Bai Zhen: Institute of ecology, Chinese Academy of Sciences, long engaged in microbial research. (33)Prof. Gu riliang: Professor of China Agricultural University, who has been engaged in research on seed vigor improvement technology for a long time. (34)Prof. Wang Hong: researcher of the Chinese Academy of Agricultural Sciences. His research interests are fertilizer management and related testing technology. (35)Prof. Jiang Rongfeng: Professor of China Agricultural University, with research interests in soil and fertilizer testing methods and applications. (36)Prof. Cai Shijun: manager of Yuntianhua crop nutrition college. His research direction is the promotion of scientific fertilization technology on tropical crops. **3. Materials to be prepared by the participants** In order to facilitate the exchange with Chinese experts, please prepare materials related to the research topics, such as: ① introduction of your specialty and department; ② main problems encountered by your country in agricultural development; ③ basic information of cooperation with China, etc. **4. Completion test / assessment** A paper or thesis and the attendance rate will be used to evaluate the performance of the participants.		
Host City	Beijing	Cities to Visit	——
Notes	1. Responsibilities and obligations: The trainees as representatives of the government and people of their country, should be responsible for their actions and performance, abide by Chinese laws and relevant regulations of the seminar and perform corresponding obligations. 2. Disciplinary requirements: During the implementation of the project, please strictly abide by the project schedule, do not arrange activities unrelated to the seminar without authorization, please do not withdraw from the seminar without reasons and attending the seminar on time.		
About the Organizer	National Agricultural Technology Extension and Service Centre (NATESC) is a governmental organization affiliated to the Ministry of Agriculture. It is composed of 22 divisions with more than 120 staffs. The major responsibilities of NATESC are: to introduce, field-test, demonstrate and extend the important technologies (such as crop cultivation, soil improvement, scientific fertilization, water-saving agriculture, pest management and safe-use of pesticides) and improved varieties nationwide; to be responsible for plant quarantine management, registration testing and approval of crop varieties, seed market supervision; to organize monitoring and prediction of crop pest occurrence dynamic and farmland soil moisture content; to carry out quality supervision and testing of seeds, soil and fertilizers nationwide; to guide establishment of national crop extension system and vocational skill certification; to implement extension programs,; to organize international exchanges and cooperation programs for crop production; and to guide operation of the affiliated associations. NATESC is very experienced in implementing China-aid training programs. From 2002 to 2021, NATESC has successfully completed more than 70 seminars and training courses. Totally		

	1700 participants who came from over 70 countries in Asia, Africa, Europe and Latin America attended the programs. Training subjects included agricultural technology extension system management, seed production and management, balanced fertilization, pest control, water-saving planting, crop cultivation technology, hybrid rice technology, tropical crop, agricultural biotechnology application etc. NATESC has successfully organized and accomplished all the China-aid international training projects, and won appreciation from participants and related units thanks to the excellent cooperation and full dedication of numerous outstanding experts from NATESC and other agencies.
Contact of the Organizer	Contact Person(s): ZHAO SUN, MIN GUO Telephone: 0086-10-59194538, 0086-10-59194514 Cell: 0086-13681158475, 0086-13241179966 Fax: 0086-10-59194538, 0086-10-59194538 E-mail: 652120409@qq.com, guomin@agri.gov.cn