# Seminar on Management of Animal Husbandry for Developing Countries

| Name                                    | Seminar on Management of Animal Husbandry for Developing Countries  |   |                           |         |  |
|---|---|---|---------------------------|---------|--|
| Organizer                               | Agricultural University of Hebei  |   |                           |         |  |
| Time                                    | 2023-06-14 to 2023-06-27  |   | Language for Learning     | English |  |
| Invited<br>Countries                    | Developing Countries  |   | Number of<br>Participants | 25      |  |
| Objectives of<br>the Training<br>Course | Through the implementation of the training program, the trainees will achieve the following learning goals: 1. Fully understand the development status of modern animal husbandry in China and the world; 2. Master the animal nutrition requirements and ration processing technology; 3. Master the techniques of animal breeding and reproducing; 4. Master the management of livestock and poultry breeding technology; 5.Master animal husbandry environmental control technology; 6 Initially master the theory of pasture management; 7. At the end of the course, trainees will be able to make suggestions on the development of relevant fields for their mother country. |   |                           |         |  |
| Requirements for the Participants       | Professional<br>Background  | Field or major: Animal husbandryOccupation: Breeding technicians, teachers and management personnelLevel, education or other qualifications: Senior school and aboveRelevant Work experience: At least 2 years                |                           |         |  |
|   | Age   | Under legal retirement age  |                           |         |  |
|   | Health  | In good health and capable of attending online courses as scheduled   |                           |         |  |
|   | Language  | Capable of listening, speaking, reading and writing in English during the training  |                           |         |  |
|   | others  | Participants should prepare necessary equipment, devices and software for online courses. The organizer will provide guidance and technical assistance via video link regarding how to register and use the online platforms. |                           |         |  |
| Seminar<br>Content                      | Main training courses and contents in brief     (1) Overview of current china     The trainees will know and feel the Chinese culture. Through introducing and sharing China's general situation, development status, concepts, initiatives and knowledges, the course can help trainees gain more value recognition and development consensus. It also   |   |                           |         |  |

may offer China's experience to the development of human community and contribute a share to friend network foundation for the great rejuvenation of Chinese nation

# (2) Development history and current situation of world livestock husbandry

The course focuses on the analysis and description of the history and current situation of livestock husbandry development in different countries as well as the main varieties of livestock and poultry, breeding quantity, livestock product output and the management level of livestock husbandry enterprises in various countries. Through analysis and comparison, the course carries out discussions on the characteristics of development livestock husbandry in different regions of the world. By combining the local climate, feed raw material supply, consumption characteristics, national culture and customs, the course tries to explore the future development direction, strategies and methods of livestock husbandry in different regions.

### (3) Overview of Hebei and China in livestock husbandry development

The course mainly introduces the history and current situation of China's livestock husbandry development, the main livestock and poultry varieties, breeding quantity, livestock product output and the management level of livestock husbandry enterprises. By analyzing the current situation and future trend of animal husbandry in Hebei Province, the course can help trainees understand the characteristics and future development direction of China's livestock husbandry development as well as have an overall understanding of the current situation of China's livestock husbandry production, the animal products composition, the livestock farms management, and the composition and consumption characteristics of livestock products.

## (4) Animal nutrition requirements and feed processing

The course mainly introduces the nutritional requirements and test methods of different livestock and poultry varieties, different physiological stages and different production purposes as well as the nutritional function, digestion and metabolism process of different nutrients in livestock bodies. It shows the nutritional characteristics, processing and treatment methods of different feed materials; explains the design principles, main methods and steps of feed formula, and the characteristics and processing process of different livestock formula feeds. The principles and methods of feed factory operation and management is also introduced in this course.

## (5) Animal breeding and reproductive practice

The course introduces the distribution, physiological characteristics and production performance of major livestock and poultry varieties in China and abroad. The conventional methods and molecular biological techniques of livestock and poultry conservation and breeding is also described. Course also explains the reproductive methods and research progress of livestock and poultry, especially the technical operation procedures of estrus synchronization, superovulation, vitro fertilization, sex control technology, embryo transfer and so on.

# (6) Sheep feed management technologies and practices

This course introduces the characteristics, distribution and production performance of

major goat and sheep varieties in China and the world, the physiological development characteristics and feeding management technology of sheep at different physiological stages, management methods and processes of large-scale sheep farms, processing and quality identification methods of wool and mutton. Through theoretical teaching, case study, practical operation, discussion and other methods. The course tries to enhance trainees' practical ability and helps them understand the operation and management of large-scale sheep farms in a systematic manner.

# (7) Cattle management technologies and practices

This course introduces the characteristics, distribution and production performance of major beef cattle and dairy cow varieties in China and other countries, the physiological development characteristics and feeding management technology of beef cattle and dairy cow at different physiological stages, the management methods and processes of large-scale cattle farms, and the milk/beef processing technology. Through theoretical teaching, case study, practical operation, discussion and other methods, the course tries to enhance trainees' practical ability and help them understand the operation and management of large-scale beef cattle and dairy farms in a systematic manner.

## (8) Rabbit management technologies and practices

This course introduces the characteristics, distribution and production performance of major rabbit in China and the world and introduces the physiological development characteristics and feeding management technology of rabbit at different physiological stages, the management methods and processes of large-scale rabbit farms, and the rabbit processing technology. Through theoretical teaching, case study, practical operation, discussion and other methods, the course tries to enhance trainees' practical ability and help them understand the operation and management of large-scale rabbit farms in a systematic manner.

#### □9□Poultry management

This course introduces the characteristics, distribution and production performance of main broiler and layer breeds in China and the world, the physiological development characteristics and feeding management technology of broiler and layer at different physiological stages. It also shows management methods and processes of large-scale chicken farms, processing methods and quality identification of meat and egg. Through theoretical teaching, case study, practical operation, discussion and other methods, the course tries to enhance the trainees' practical ability and help them understand the operation and management of large-scale chicken farms in a systematic manner.

#### (10) House construction and environmental control of livestock

The course introduces the farm site selection, livestock and poultry house design, water and electricity supply, lighting, heat preservation, ventilation and manure disposal treatment schemes of different livestock and poultry houses as well as emissions characteristics, concentration and harm degree to animals' health of the main pollutants in the environment, including feces and urine, harmful gases, harmful bacteria and other harmful bacteria. The course also includes the control scheme and the manure harmless

disposals to enable the trainees systematically master the construction planning of livestock and poultry houses as well as the processes and methods to control harmful pollutants. (11) Prevention and control of major diseases in livestock and poultry The course introduces the types, characteristics and harm degree of main livestock/poultry diseases at different physiological stages and under different environmental conditions, the epidemic characteristics, incidence rules, infection routes and harm degree to livestock/poultry major infectious diseases. It shows the diagnosis process, medication principle and plan of antibiotic treatment for livestock/poultry diseases as well as important disease prevention and control programs or measures to enable students to systematically master the diagnosis and treatment process of livestock/poultry diseases, and set the prevention and treatment plan of important infectious diseases. (12) Farm Management The course introduces the operation and management objectives, principles and contents of different livestock/poultry breeds and breeding scales, shows the principles and methods of personnel and job setting in large-scale breeding farm as well as farm personnel and livestock/poultry management process. The methods for benefits accounting of livestock/poultry farms are also included. Through studying, trainees can truly manage large-scale ranches independently and gain good benefits. 2.Online visit Online visit DBN Group, Huayu Group, JUNLEBAO Group, ZHIHAO Animal Husbandry Company and Sun Rabbit Group to learn about the development of animal husbandry in China. 3. Materials to be prepared by the trainees In order to facilitate exchanges with Chinese experts, please prepare materials related to the subject of the training about your mother country, such as: □Introduction of your profession and your working places; 

Current status and existing problems of animal husbandry in your country; 

The cooperation between your country and other countries or international organizations in FMD prevention and control; 

The agricultural cooperation between China and your country, etc. **Host City** Baoding, Hebei, China Cities to visit Hebei Province, Beijing City Notes This is online training, using ZOOM platform. Hebei Agricultural University (HEBAU) is a key backbone university in Hebei Province jointly established by the People's Government of Hebei Province, the Ministry of Education, the Ministry of Agriculture&Rural Affairs and the State Forestry&Grassland About the Administration. It is the national demonstration base of mass entrepreneurship and Organizer innovation, boasting entrepreneurial and innovative college at national level. It is also the national demonstration university of educational reform in entrepreneurship and innovation, the university implemeting Ministry of Education's "Excellent Engineer

Education and Training Program" and "Excellent Agriculture and Forestry Talent Education and Training Program" as well as one of the "First-rate Universities and Disciplines" construction universities in Hebei Province.

Composed of 31 colleges/departments, including College of Animal Science and Technology, HEBAU has 3171 in-service teaching staff, of which 2031 are full-time teachers including 459 professors and corresponding titles, 1006 associate professors and corresponding titles, 248 doctoral supervisors and 995 master supervisors. Among them, there are more than 200 person-times of experts with the titles of national "Ten Thousand Talents Project" or "Ten Thousand Talents Plan" or with special government subsidies of the State Council or under provincial management, 2 academicians of the International Eurasian Academy of Sciences, 1 foreign academician of the Russian Academy of Natural Sciences, 1 distinguished professor of the Yangtze River Scholars Award Program, 9 excellent teachers at national level, and 44 excellent teachers at provincial level. The university has 8 post-doctoral mobile stations, 11 first-class discipline doctoral programs and 1 doctoral degree authorization category; 24 first-class discipline master programs, 12 master's degree authorization categories. Four disciplines of HEBAU including Agricultural Science, Plant & Animal Science, Chemistry, Environment and Ecology have entered the top 1% of ESI's global rankings. Therefore, HEBAU has developed a professional system with the integration and coordination of disciplines including " Agronomy, Engineering, Management, Science, Economics, Literature, Law and Art". Boasting "State Key Laboratory of North China Crop Improvement and Regulation" and "National Agricultural Engineering Technology Research Center in Northern Mountainous Areas", the university has established 69 national, provincial and ministerial key laboratories (Engineering Center, Base, Test Station and Collaborative Innovation Center), 405 "Teaching, Scientific Research and Production Integration" bases in six ecological types of areas in Hebei Province, 125 agricultural innovation bases in Hebei Province and 9 regional comprehensive test stations. Besides, HEBAU has undertaken 29 Foreign-Aid Programs of Ministry of Commerce and trained 715 participants from 75 developing countries in Africa, Asia, South America, Eastern Europe and Oceania.

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