

Training Course on Fish Seed Production and Feed Development for Developing Countries

Project Description

Full Name	Training Course on Fish Seed Production and Feed Development for Developing Countries		
Organizer	Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences		
Holding Time	September 2-September 22, 2021	Language	English
Invited Countries	Developing Countries	Planned Number of Participants	25 in total
Objectives	To enable participants to understand the theories, practical techniques, practical cases, and applied research of China's fish seed production and feed development technology; the participants can apply the relevant technology to the production of fish seed in their country according to the content they have learned, and be able to put forward relevant suggestions that will help fishery development and cooperation based on the country's actual situation.		
About the Participants	Background	——Field or major: fishery, aquaculture or any related with biology —— Position : fishery-related government officials, university teachers, scientific research personnel, grassroots technical personnel, extension officials, business personnel and farmers, etc. ——Level, academic degree or other relevant qualification requirements: none	
	Age	Not higher than the statutory retirement age	
	Physical Health	Ability to attend online training courses on time	
	Language	Capable of listening, speaking, reading and writing in English	
	Others	Able to use the ZOOM platform and participate in the project schedule throughout the process	
Course Content	<p>1. Main content introduction</p> <p>(1) Overview of China's national status: mainly introducing the development status of China's politics, economy, society, culture, etc. and achievements in the past 70 years since the founding of PRC and 40 years since reform and opening up;</p> <p>(2) Knowledge and experience sharing of corona virus prevention and control: mainly introducing China's prevention and control measures against the epidemic and the current situation, and sharing anti-epidemic experience;</p> <p>(3) Module 1—Fish seed production: —— The development of fine seed industry, mainly introduces the development history and successful case analysis of China's fine seed industry, relevant government policy support and system construction experience. —— Seed production technology, mainly introduces the artificial breeding technology of fish, the hatching technology of fish seed, the breeding technology of fine seed, the cultivation technology of fry and the cultivation of the commercial-sized seed, etc. ——Seed production knowledge and application, mainly introduces the storage and transportation of fish seedlings, seed stocking and seed quality management that should be paid attention to in the production process, the collection, identification and cultivation of natural food organisms, and the process of cultivating them into commercial-sized seedlings, etc. .</p> <p>(4)Module 2—Fish feed development: —— The development of feed development industry, mainly introduces the development status, main achievements and relevant case analysis of feed development technology in China. —— The feed development technology, mainly introduces the source and identification of feed ingredients, the principle of feed formula, the feed preparation of small-scale aquaculture, the processing,</p>		

treatment and storage technology of aquatic feed, etc.

— Large-scale feed development and management, mainly introduces feed quality management and evaluation, feed machinery and small-scale feed factory production and management, precise feeding technology, etc.

(5) **Module 3**—Fishery industry development:

— China's fishery industry development and policies, mainly introducing the construction and development of cooperatives with leading enterprises as the core and various specialized cooperative organizations, as well as relevant government support and guarantee policies.

— Aquatic product quality & safety control, mainly introducing China's aquatic product safety and quality control technology and management system.

— Fishery product marketing management, mainly introducing the fishery product marketing strategy and the construction of the circulation system.

2. Introduction to Cloud Visit

(1) It is planned to arrange participants to visit fine seed farms and artificial breeding bases, etc., and conduct online investigation and exchange on fish breeding and farming;

(2) It is planned to arrange for participants to visit mature domestic aquatic feed processing and development enterprises, and conduct online study tours on the production and management of large-scale feed factories, business models and technology applications.

3. Introduction to presenters

(1) Xu Pao: Ph.D., Professor, PhD advisor of Nanjing Agricultural University, current DG of Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences, Dean of Wuxi Fisheries College of Nanjing Agricultural University, Chief Scientist of Chinese Academy of Fishery Sciences; Main research fields: fish genetics breeding, ecological aquaculture of high-value freshwater species, purification fishery;

(2) Ge Xianping: Ph.D., Professor, PhD advisor of Nanjing Agricultural University, current Deputy Director General of Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences, chief scientist of China Agriculture Research System (Conventional Fish), and the chief scientist of the Chinese Academy of Fishery Sciences; Main research fields: aquatic animal nutrition and feed, healthy aquaculture;

(3) Dong Zaijie: Ph.D., Professor, currently the Deputy director of the Fish Genetics Breeding Division of the Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences, and PhD advisor in Nanjing Agricultural University and Shanghai Ocean University, the expert enjoying special government subsidies from the State Council. He has been engaged in fish genetic breeding and molecular biology research for a long time, and has carried out systematic and innovative research and development on the genetic basis of aquatic animals, breeding technology, and breeding demonstration and promotion, and has achieved remarkable results.

(4) Zhu Jian: Professor, currently the Director of the Scientific Research Division of Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences, Scientist of China Agriculture Research System (Conventional Fish); Main research fields: ecological aquaculture, fish genetics breeding;

(5) Liu Bo: Ph.D., Professor, PhD advisor of Nanjing Agricultural University, MsC advisor of Shanghai Ocean University, freshwater shrimp nutrition and feed post scientist of national shrimp and crab industry technology system. Currently the Director of fish feed and disease division of the Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences. Main research directions: aquatic animal nutrition and epigenetic regulation, aquatic animal stress-related signaling pathways and functional feed research and development, etc.

(6) Ren Mingchun: Ph.D., Professor, MsC advisor of Nanjing Agricultural University, Main research directions: aquatic animal nutrition and epigenetic regulation, aquatic animal stress-related signaling pathways and functional feed research and development, etc.

4. Materials to be prepared by the participants

In order to facilitate communication with Chinese experts, please prepare the materials related to training topics, such as: ① The development status and existing problems in the field of fish seed production and feed processing and development; ② The future cooperation foundation and direction with fish seed industry.

Host City	Wuxi City	Cities for Cloud visit	Yangzhong City and Yixing City of Jiangsu Province
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Notes	<ol style="list-style-type: none"> 1. ZOOM platform will be used for online training. 2. During the training, participants are requested to abide by the schedule time and training discipline. Attendance records will be used as the basis for issuing training certificates. 3. Class preparation: Participants are required to enter the ZOOM room 15 minutes in advance. And personal name needs to be changed into English (name-country name). 4. Disciplinary requirements: During the implementation, please strictly abide by the project schedule. 5. Participants are required to prepare relevant materials for the training according to the schedule. 6. The course is equipped with online simultaneous/consecutive interpreter.
About the Organizer	<p>Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences (FFRC) was established in 1978. It is a comprehensive institution for fisheries research and development, combining together scientific research, teaching and training, technology transfer and information exchanges within the National Agricultural Sci-tech Renovation System. It has 8 research divisions, 5 technical practice bases and 13 technological innovative platforms such as 2 international joint laboratories; Designated Institution for Clinical Test on Fishery Medicines, MARA; Institution for Effectiveness Testing of Feed and Feed Additive, MARA; Genetic & Breeding Center for Tilapia, MARA, etc.. It is the leading institute for the Key Laboratory of Freshwater Fisheries and Germplasm Resources Utilization, and the National Technology Innovation Systems for Conventional Freshwater Fishes (CARS-46) and for Tilapia (CARS-49) of the Ministry of Agriculture. FFRC has 193 staff members, of which there are 69 professors, 11 PhD advisors and 39 MSc advisors in aquaculture sciences. Since its establishment, FFRC has been awarded with 10 national level prizes, 66 provincial or ministerial level prizes and has acquired over 300 authorized patents of invention.</p> <p>In 2014, FFRC was authorized as FAO Reference Centre for aquaculture and inland fishery research and training. In 2018, the Agriculture Minister Han Changfu and Director-General of FAO jointly issued the "China-FAO Special Contribution Agency for South-South Cooperation Reward" to FFRC. As an important component of FFRC, the Asian-Pacific Regional Research and Training Centre for Integrated Fish Farming (IFFC) has been consecutively conducting over 180 international training courses and seminars in fishery and aquaculture since 1981. These training programs covered a wide topics, such as integrated fish farming, pond fish farming, land-based aquaculture, industrialized aquaculture, technical extension, fish seed production, fish feed development, fishery environment and climate change, plan and policy for fishery development, processing technology of aquatic products, quality and safety of aquatic products, value-added fishery products development, healthy management and quarantine of aquatic animals, etc.. Up to now, over 4980 senior fisheries technical and managerial personnel from over 133 countries and regions have been trained. In 2011, it was certified with the ISO9001 Quality Management System Certificate in education and training. Meanwhile, the MSc and PhD programs were initiated in 2011 and currently 40 oversea students are studying at FFRC.</p>
Contact of the Organizer	<p>Contact: Ye Wei (Mr.) Tel: 0086-510-85555112 Mobile: 0086-15961800794 Fax: 0086-510-85555112 Email: yewei@ffrc.cn</p>

Training Course on Aquaculture for African Countries Project Description

Full Name	Training Course on Aquaculture for African Countries		
Organizer	Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences		
Holding Time	September 09- September 29, 2021	Language	English
Invited Countries	African Countries	Planned Number of Participants	25 in total
Objectives	To enable participants to understand current concepts, practical techniques, practical cases, and related policies in aquaculture technology in China; Participants can apply relevant technologies to their own fishery production based on what they have learned, and be able to put forward relevant suggestions that help fishery development and bilateral cooperation based on their own country's actual conditions.		
About the Participants	Background	--- Field or major: fishery and aquaculture --- Position : fishery-related government officials, university teachers, scientific research personnel, grassroots technical personnel, extension officials, business personnel and farmers, etc. ---Level, academic degree or other relevant qualification requirements: none	
	Age	Not higher than the statutory retirement age	
	Physical Health	Ability to attend online training courses on time	
	Language	Capable of listening, speaking, reading and writing in English	
	Others	Able to use the ZOOM platform and participate in the project schedule throughout the process	
Course Content	<p>1. Main content introduction</p> <p>(1) Overview of China's national status: mainly introducing the development status of China's politics, economy, society, culture, etc. and achievements in the past 70 years since the founding of PRC and 40 years since reform and opening up;</p> <p>(2) Knowledge and experience sharing of corona virus prevention and control: mainly introducing China's prevention and control measures against the epidemic and the current situation, and sharing anti-epidemic experience;</p> <p>(3) Module 1— Aquaculture technologies: --- Fish breeding, mainly introducing selective breeding, hybrid breeding, and molecular-level gene transfer breeding. --- Seed production technology, mainly introducing the process of cultivating the larvae of aquatic economic animals and plants into commercial-sized seedlings. --- Fish nutrition and feed technology, mainly introducing the nutritional requirements of common fish, the principle of feed formula design and the typical feed formula of several common fish.</p> <p>(4) Module 2— Aquaculture Management --- Aquaculture development strategy in China, mainly introducing development history, current status, development characteristic, and future development strategy; --- Aquaculture extension system, mainly introducing aquaculture extension system in China, the process, participants and achievements of aquaculture extension system; --- Aquatic products processing and quality management in China, mainly introducing processing technology, safety & quality control and management; --- Ecological aquaculture technology, mainly introducing China's pond intensive culture, cage culture, IMAT, digital fishery, etc.;</p> <p>(5) Module 3— Fishery industry development: --- China's fishery industry development and policies, mainly introducing the construction and</p>		

development of cooperatives with leading enterprises as the core and various specialized cooperative organizations, as well as relevant government support and guarantee policies.

- Development and management of fishery cooperatives, mainly introducing the concept, organizing principals, main types, main functions, running modes, and guarantee from government;
- Scientific achievements and its contribution to sustainable development of fishery, mainly introducing aquaculture species, aquaculture models, reformation and innovation on artificial breeding, disease prevention and control, fishery environment protection;
- Aquatic product quality & safety control, mainly introducing China's aquatic product safety and quality control technology and management system.

2. Introduction to Cloud Visit

(1) It is planned to virtually visit institutions of fishery and aquaculture research, education, technical extension, administration or business, etc., and conduct online exchanges and discussions on aquaculture technology;

(2) It is planned to virtually visit large-scale aquaculture production bases and feed production companies, and conduct online study on the planning, construction, operation and technology application of aquaculture bases and feed companies.

3. Introduction to presenters

(1) Xu Pao: Ph.D., Professor, PhD advisor of Nanjing Agricultural University, current DG of Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences, Dean of Wuxi Fisheries College of Nanjing Agricultural University, Chief Scientist of Chinese Academy of Fishery Sciences; Main research fields: fish genetics breeding, ecological aquaculture of high-value freshwater species, purification fishery;

(2) Ge Xianping: Ph.D., Professor, PhD advisor of Nanjing Agricultural University, current Deputy Director General of Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences, chief scientist of China Agriculture Research System (Conventional Fish), and the chief scientist of the Chinese Academy of Fishery Sciences; Main research fields: aquatic animal nutrition and feed, healthy aquaculture;

(3) Zhu Jian: Professor, currently the Director of the Scientific Research Division of Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences, Scientist of China Agriculture Research System (Conventional Fish); Main research fields: ecological aquaculture, fish genetics breeding;

(4) Dong Zaijie: Ph.D., Professor, PhD advisor of Nanjing Agricultural University and Shanghai Ocean University, current Director of the Dept. of Aquatic Genetics and Breeding of Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences, FAO Project Consultant, post scientist of the National Modern Agricultural Industry Technology System (conventional freshwater fish) ; Main research fields: genetics of aquatic animals, breeding technology and its demonstration and extension, etc.;

(5) Liu Bo: Ph.D., Professor, PhD advisor of Nanjing Agricultural University and Master advisor of Shanghai Ocean University, current the Director of the Dept. of Fishery Veterinary, Feed & Nutrition of the Freshwater Fisheries Research Center of the Chinese Academy of Fishery Sciences, freshwater shrimp nutrition and feed post scientist of the National Shrimp and Crab Industry Technology System. Main research fields: aquatic animal nutrition and epigenetic regulation, aquatic animal stress-related signal pathways and functional feed development, new Chinese herbal medicines and microbial preparations.

4. Materials to be prepared by the participants

In order to facilitate communication with Chinese experts, please prepare the materials related to training topics, such as: ①The current development status and existing problems in the fishery sector in your country; ②The basis for cooperation with China and the future direction of cooperation.

Host City	Wuxi City	Cities for Cloud visit	Guangzhou City of Guangdong Province; Yancheng City of Jiangsu Province
Notes	<p>1. ZOOM platform will be used for online training.</p> <p>2. During the training, participants are requested to abide by the schedule time and training discipline. Attendance records will be used as the basis for issuing training certificates.</p> <p>3. Class preparation: Participants are required to enter the ZOOM room 15 minutes in advance. And personal name needs to be changed into English (name-country name).</p>		

	<p>4. Disciplinary requirements: During the implementation, please strictly abide by the project schedule.</p> <p>5. Participants are required to prepare relevant materials for the training according to the schedule.</p> <p>6. The course is equipped with online simultaneous/consecutive interpretator.</p>
<p>About the Organizer</p>	<p>Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences (FFRC) was established in 1978. It is a comprehensive institution for fisheries research and development, combining together scientific research, teaching and training, technology transfer and information exchanges within the National Agricultural Sci-tech Renovation System. It has 8 research divisions, 5 technical practice bases and 13 technological innovative platforms such as 2 international joint laboratories; Designated Institution for Clinical Test on Fishery Medicines, MARA; Institution for Effectiveness Testing of Feed and Feed Addictive, MARA; Genetic & Breeding Center for Tilapia, MARA, etc.. It is the leading institute for the Key Laboratory of Freshwater Fisheries and Germplasm Resources Utilization, and the National Technology Innovation Systems for Conventional Freshwater Fishes (CARS-46) and for Tilapia (CARS-49) of the Ministry of Agriculture. FFRC has 193 staff members, of which there are 69 professors, 11 PhD advisors and 39 MSc advisors in aquaculture sciences. Since its establishment, FFRC has been awarded with 10 national level prizes, 66 provincial or ministerial level prizes and has acquired over 300 authorized patents of invention.</p> <p>In 2014, FFRC was authorized as FAO Reference Centre for aquaculture and inland fishery research and training. In 2018, the Agriculture Minister Han Changfu and Director-General of FAO jointly issued the "China-FAO Special Contribution Agency for South-South Cooperation Reward" to FFRC. As an important component of FFRC, the Asian-Pacific Regional Research and Training Centre for Integrated Fish Farming (IFFC) has been consecutively conducting over 180 international training courses and seminars in fishery and aquaculture since 1981. These training programs covered a wide topics, such as integrated fish farming, pond fish farming, land-based aquaculture, industrialized aquaculture, technical extension, fish seed production, fish feed development, fishery environment and climate change, plan and policy for fishery development, processing technology of aquatic products, quality and safety of aquatic products, value-added fishery products development, healthy management and quarantine of aquatic animals, etc.. Up to now, over 4980 senior fisheries technical and managerial personnel from over 133 countries and regions have been trained. In 2011, it was certified with the ISO9001 Quality Management System Certificate in education and training. Meanwhile, the MSc and PhD programs were initiated in 2011 and currently 40 oversea students are studying at FFRC.</p>
<p>Contact of the Organizer</p>	<p>Contact: Ye Wei (Mr)</p> <p>Tel: 0086-510-85555112</p> <p>Mobile: 0086-15961800794</p> <p>Fax: 0086-510-85555796</p> <p>Email: yew@ffrc.cn</p>