Training Course on Mariculture Technology for Developing Countries Project Description

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| Full Name | Training Course on Mariculture Technology for Developing Countries | | | | | |
| Organizer | Fujian Institute of Oceanography | | | | | |
| Holding Time | April 7 to April 27, 2022 | | Language | English | | |
| Invited countries | Developing Cour | Developing Countries | | 25 | | |
| Training objectives | The training contents cover the main cultured species of marine fishes, shrimps, shellfishes, crabs and seaweeds. The training course is going to introduce China's basic condition and practical technology of mariculture to the participants in a systematic and comprehensive way with the activities combining lectures, discussion & communication as well as virtual field trips. The training course is aimed at improving participants' theoretical level and practical application capacity in mariculture so as to enlarge mariculture talent pool of recipient countries, moreover, to promote the communication and cooperation in mariculture between China and the recipient countries. | | | | | |
| Requirements for trainee | Professional background | -Field or specialty: scientific research personnel, technicians, practitioners and business management staff in mariculture, and governmental officials in fishery production, fishery management, etc. - Years of working in related fields: no less than one year - Others: None | | | | |
| | Age | Not higher than the legal retirement age in the recipient country | | | | |
| | Physical Health | Ability to attend online training course activities on time | | | | |
| | Language Ability | Fluency in listening, speaking, reading, and writing in English | | | | |
| | Others | Able to use the Bizconf Video platform to complete the project schedule | | | | |
| Training Course Content | 1. Main training courses and content introduction (1) Introduction of China's National Conditions: mainly introduces China's history, geography, ethnicity, politics, society, economy, lifestyle, culture, education, media and poverty alleviation. It seeks to contextualize changes that have taken place in the last 40 years of reform and opening up with personal stories, pictures and words. On top of that, the course uses videos from Chinese mainstream media and social media to help audiences understand the real China. (2) Blue Food: the State and Prospect of Mariculture in China: introduces the development process and current situation of mariculture industry in China; especially the production mode and characteristics of typical fish, shrimp, shellfish and algae. The important role of aquaculture in food security, as well as the opportunities and challenges faced in the future will be also addressed. (3) Development of Marine Shellfish Aquaculture Industry in China: introduces the current situation of shellfish aquaculture in China, takes typical species such as oyster, abalone and pearl shell as representatives, expounds the achievements in shellfish seedling production, breeding and green culture technology, and puts forward the direction and assumption of development in the future. (4) Healthy Seedling Production and Ecological Culture Technology of Shrimp: introduces shrimp breeding habits, seedling production facilities and large scale multiplication production of vannamei, technology and know-how of healthy seeding production including broodstock cultivation, maturation promotion, hatchery and seedling culture as well as bio-floc technology application in ecological shrimp culture, etc. | | | | | |

- (5) Live Feeds Culture Technology and Its Application in Marine Fish and Shrimp Hatchery: Introduces the biological characteristics, artificial cultivation technology, nutritional value, nutrition enrichment and application in the marine fish and shrimp hatchery about several common important live feed, including microalgae, rotifer, Artemia and Copepods. Besides, the lecture introduces the latest research progress, new technology and methods in live feed.
- (6) Artificial Breeding and Farming Technology of Grouper: introduces biological characteristics of Grouper, artificial breeding and multiplication technology, intermediate rearing and healthy farming technology, diseases prevention and control technology of Grouper as well as global Grouper industry development state.
- (7) Mud Crab Culture Technology: introduces biology of mud crab and its culture mode and technology, and artificial multiplication technology of mud crab, etc.
- (8) Breeding and Artificial Culture Technology of Tropical Marine Fish: introduces the breeding habits, seedling production facilities and large-scale breeding technology of tropical marine fish, covering the incubation, maturation, hatching, seedling, nursery, circulating water and deep-water cage culture technology.
- (9) Application of Microbial Preparation in Disease Prevention & Control in Shrimp Culture: introduces conceptual classification of microbial preparation; application and considerations of common microbial preparations; development trend of microbial preparation.
- (10) Development Status and Disease Prevention & Control of Factory Shrimp Culture: introduces culture facilities, water supply facilities and culture technologies such as micropore oxygen aeration, immuno enhancement, water quality control, culture tailwater treatment, etc. in factory shrimp culture with circulating water. The culture mode can realize efficient and ecological shrimp culture via multiple disease prevention & control means in culture facilities, culture technology and management, featuring water circulation, stable eco-environment, artificial regulation in culture process, tailwater drained reaching the standard, etc.
- (11) Artificial Breeding and Reproduction Technology of Sea Algae: introduces breeding characteristics, seedling cultivation facilities, reproduction technology and artificial culture technology of sale of large sea algae in China and the lecture contents include the introductions ranging from broodstock cultivation, artificial rearing, to cultivation modes and technology.
- (12) Diseases Diagnosis, Prevention and Control of Marine Cultured Fish and Shrimp: introduces causes, symptoms, prevalence status, diagnosis and main prevention & control methods of main diseases in marine cultured fish and shrimp, including viral disease, bacterial disease, fungal disease, parasitic disease, etc.
- (13) Fight Against COVID-19 Together for a Shared Future: introduces global latest updates about COVID-19, shares China's successful experience in fighting against COVID-19, moving stories about heroes who fight against COVID-19, multiple measures taken by Xiamen to combat COVID-19 and China's wisdoms and answers in the post-COVID-19.
- (14) Current Situation of Mariculture and Countermeasures for Sustainable Development: introduces mariculture state including main culture species and modes, the relations between culture and environment and pollution issues caused by mariculture activities, sustainable development strategies and thoughts for mariculture industry and also brings the exploration and discussion on environmentally friendly culture mode.
- 2. Virtual field trip introduction

Investigation and visits on shrimp fries production, factorized farming management and pests and diseases prevention and control technology.

3. Materials to be prepared by participants

In order to have better communication with Chinese professionals, please prepare communication materials related to training theme, for example, 1. mariculture industry development state and planning; 2. mariculture development opportunities and challenges; 3. the present situation of mariculture international cooperation, managerial modes and cooperative demands, etc.

| Host City | Xiamen City, Fujian Province | Cities to visit | Xiamen City, Zhangzhou City Fujian Province |
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1. This program uses the Bizconf Video platform for online training. 2. During the training course, participating officials are invited to observe training course sessions time and ensure attendance. 3. Testing sessions will be arranged by the organizer. Participants are expected to contact the organizer for the test sessions 10 days before the training course begins. Notes 4. Preparation before the training course: Enter the Bizconf Video classroom 15 minutes in advance. Change personal title to First name/Last name-Country style. 5. Disciplinary requirements: Please strictly abide by the training course schedule. 6. Participants are required to prepare relevant materials for the training course according to the schedule, and submit relevant electronic materials as required. 7. Training course activities are equipped with professional English translation. Fujian Institute of Oceanography (FJIO), located in Xiamen city – a special economic zone lying in the southeastern coast of China, is a full-funding public institution affiliated to Fujian Provincial Department of Science & Technology, as well as a non-profit comprehensive maritime research and development institution. Its scientific research building (also the administration building) covers a building area of 3,671 m² with fine-equipped laboratories and scientific research facilities. In addition, FJIO owns "Yan Ping No.2" oceanographic research vessel with a displacement of 800 tons. In the process of offering the main service to the governmental marine management and social marine development, FJIO has accumulated rich technology and professional experience in the fields of Mariculture, Integrated Coastal Management, Marine Fisheries Management as well as Marine Economic Sustainable Development. Since 2005 when FJIO started to undertake the China-Aid training programs sponsored by About the the Ministry of Commerce, PRC, FJIO has successfully organized more than 122 bilateral or Organizer multilateral training courses/ seminars/ workshops of China-Aid training programs, including 4 online training programs held in 2021, accumulating important experience for online training. The programs organized by FJIO focus on the following program topics - Mariculture Technology, Integrated Coastal Management, Marine Fisheries Management, Marine Management and Blue Economic Development, Marine-related Industries, Marine New Technology and Marine Spatial Planning. The working languages include English, Portuguese, French, Spanish, Arabic, Thai and so far. There are more than 3311 ministerial or director-general level officials and technical personnel (including 8 ministerial level and 26 vice-ministerial level officials) from 108 developing countries along with Portugal and 1 regional international organization (League of Arab States) of 5 continents worldwide, participating FJIO's training programs. The above programs organized by FJIO have been all popular with the participants and received high reputation. Contact person: Wang Xiaoqin (Ms.) / Guan Ying (Ms.) Office Phone: 0086-592-6032030 Cell phone: 0086-15060728798 (Wang) / 0086-15159299891 (Guan) Contact of the Fax: 0086-592-6032030 Organizer WeChat ID: wang396216(Wang) /anyway123 (Guan) QQ: 349088017(Wang) / 923176337(Guan)

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