

发展中国家海水养殖技术培训班项目简介表

项目名称	发展中国家海水养殖技术培训班		
承办单位	福建海洋研究所		
举办时间	2022 年 4 月 7 日至 4 月 27 日	项目语言	英语
邀请国别	发展中国家	计划人数	25 人
培训目标	培训内容覆盖海水“鱼、虾、贝、蟹、藻”的主要养殖品种，通过课堂讲座、研讨交流和云参观考察相结合的培训课程系统而全面地向参训学员介绍中国海水养殖的基本情况和实用技术，提高参训学员的海水养殖理论水平和实际应用能力，为参训国增加海水养殖从业人员人才储备，同时也将促进中国与各参训国间在海水养殖方面的交流与合作。		
学员要求	专业背景	——领域或专业：海水养殖相关的科研技术人员、海水养殖从业人员、企业管理人员、政府渔业生产、渔业管理相关部门官员等 ——相关领域的工作年限：不少于 1 年 ——其他：无	
	年龄	不高于受援国法定退休年龄	
	身体健康	身体健康，能够按时参加线上培训	
	语言能力	学员应具备英语听、说、读、写能力	
	其它	能够使用会畅通讯视频会议平台，完成项目日程	
培训内容介绍	<p>1. 主要培训课程及内容介绍</p> <p>(1) 中国国情概况：从中国的历史、地理、民族、政治、社会、经济、生活、文化、教育、媒体到扶贫做简要介绍，并从个人视角和感受讲述了改革开放四十年来自己家庭的变化，图文并茂、生动有趣。此外，课程中还使用一些我国主流媒体和社交媒体的视频，帮助受众了解真实的中国。</p> <p>(2) 蓝色食品：中国海水养殖业的现状与展望：针对国内外海水养殖产业的发展历程和现状，典型鱼虾贝藻的生产模式和特点，水产养殖在粮食安全发挥的重要作用，以及未来面临的机遇和挑战等进行介绍。</p> <p>(3) 中国海水贝类养殖产业进展：介绍了中国贝类养殖的现状，以牡蛎、鲍鱼和珍珠贝等典型物种为代表，阐述贝类苗种生产、育种及绿色养殖技术等方面取得的成绩，并提出今后发展的方向和设想。</p> <p>(4) 对虾健康种苗生产与生态养殖技术：介绍了对虾繁殖习性、育苗生产设施以及南美白对虾规模化繁育生产，从种虾培育、促熟到产卵孵化和幼体培育等种苗健康化生产的技术工艺；基于生物絮团技术的对虾生态养殖技术。</p> <p>(5) 生物饵料培养技术及其在海水鱼虾育苗场中的应用：介绍了水产养殖中常见的几种重要生物饵料，包括微藻、轮虫、卤虫、桡足类的生物学特性、人工培育技术、营养价值、营养强化及在海水鱼虾育苗中的应用方法等内容，此外也介绍了生物饵料应用相关的最新研究进展，新技术和新方法。</p> <p>(6) 石斑鱼人工繁殖与养殖技术：介绍了石斑鱼生物学、全球石斑鱼产业发展状况、石斑鱼人工繁殖及人工育苗技术、石斑鱼苗种中间培育及石斑鱼健康养殖技术、石斑鱼病害防治技术。</p> <p>(7) 青蟹养殖技术：介绍了青蟹生物学、青蟹的养殖模式与养殖技术、青蟹的人工繁育技术等。</p> <p>(8) 热带海水鱼类繁育及人工养殖技术：介绍了热带海水鱼类繁殖习性、育苗生产设施设备及热带海水鱼类规模化繁育技术，涵盖了从亲鱼培育、促熟到孵化、育苗、标粗、循环水和深水网箱养殖技术。</p> <p>(9) 微生物制剂在对虾养殖病害防控中的应用：介绍了微生态制剂的概念分类；常用的多种微生态制剂的应用与注意事项以及微生态制剂的未来发展方向。</p> <p>(10)对虾工厂化养殖发展现状以及主要病害防控：介绍了对虾工厂化循环水养殖的养殖</p>		

	<p>设施和水处理设施以及微孔增氧、免疫增强、水质调控、养殖尾水处理等养殖技术，通过在养殖设施、养殖技术、管理上多方位实施病害防控措施，实现了对虾高效、生态化养殖，具备水体循环利用、生态环境稳定、养殖过程人工调控、尾水达标排放等特点。</p> <p>(11)海藻人工繁育及养殖技术：介绍了中国大型海藻繁殖习性、育苗生产设施设备、规模化繁殖技术及人工养殖技术，涵盖了从种藻培育、人工育苗、栽培方式以及人工栽培技术等。</p> <p>(12)海水养殖鱼虾的疾病诊断和防治：介绍了海水养殖鱼、虾的病毒性疾病、细菌性疾病、真菌性疾病、寄生虫病等主要疾病的病原、发病症状、流行情况、诊断方法与主要防控方法。</p> <p>(13)携手抗疫，共建人类命运共同体：介绍了全球疫情最新动态，分享中国抗疫成功经验、抗疫英雄的感人故事、厦门多措并举抗击疫情和后疫情时代的中国智慧、中国答案。</p> <p>(14)海水养殖现状及其可持续发展的思路与对策：介绍了海水养殖现状，包括主要养殖品种和养殖模式；养殖与环境之间的关系及养殖污染问题；养殖可持续性发展策略与思考；环境友好型养殖模式的探讨。</p> <p>2. 参观考察活动介绍</p> <p>参观考察主要是考察对虾的苗种生产、工厂化养殖的管理与病害防控技术。</p> <p>3. 培训班学员需准备的材料</p> <p>为方便与中国专家的交流，请准备好贵国与培训主题相关的交流材料：①海水养殖产业发展现状与规划②海水养殖产业发展现状与存在问题③与中国的海水养殖业国际合作现状、管理模式与合作需求等。</p>		
举办地点	福建省厦门市	参观考察城市	福建省厦门市、漳州市
备注	<p>1. 本次培训使用会畅通讯视频会议平台进行线上培训。</p> <p>2. 培训期间，请参训学员遵守活动时间和培训纪律，保证出勤率。</p> <p>3. 参训学员至少在开班前十天与承办单位联系，以便提前调试上课软件及网络环境。</p> <p>4. 课前准备：需提前 15 分钟进入会畅通讯视频会议平台准备上课。将个人姓名改为英文（姓名-国别名称）。</p> <p>5. 纪律要求：在项目实施过程中，请严格遵守项目日程安排。</p> <p>6. 参训学员需按照日程安排准备专题培训相关材料，按照要求提交相关电子素材。</p> <p>7. 培训活动配备线上英语同传/交传。</p>		
承办单位简介	<p>福建海洋研究所位于中国东南沿海经济特区厦门市，是福建省科学技术厅所属全额拨款事业单位，是一所公益性海洋综合研究开发机构，拥有建筑面积 3671 平方米的科研办公楼，配备齐全的实验室和科研设备以及一艘排水量 800 吨的“延平 2 号”海洋科学考察船。在服务于政府海洋管理与社会海洋开发建设过程中，积累了丰富的海水养殖、海岸带综合管理、海洋渔业管理和海洋经济可持续发展等方面的技术和专业经验。</p> <p>福建海洋研究所自 2005 年开始承担中华人民共和国商务部对外援助培训项目，已圆满完成海洋领域“海洋生物实用养殖技术”、“海岸带综合管理”、“海洋渔业管理”、“海洋管理与蓝色经济发展”、“海洋产业经济”、“海洋新技术”和“海洋空间规划”等专题共 122 期多/双边培训/研修/研讨班，其中包括 2021 年已实施的四期线上培训项目，积累了较为丰富的线上培训经验。项目工作语言包括英语、葡萄牙语、法语、西班牙语、阿拉伯语和泰语等语种，共有全球 5 大洲 107 个发展中国家、葡萄牙和 1 个区域性国际组织（阿拉伯联盟）的 3311 位部级和司局级官员及技术人员（其中包括 8 位正部级和 26 位副部级官员）参加培训项目活动，培训项目受到各参训国官员的极大欢迎和高度肯定。</p>		
承办单位联系方式	<p>联系人：王晓勤（女士），关颖（女士）</p> <p>办公电话：0086-592-6032030</p> <p>手机：0086-15060728798（王），0086-15159299891（关）</p> <p>传真：0086-592-6032030</p> <p>微信号：wang396216（王），anyway123_（关）</p> <p>QQ 号：349088017（王），923176337（关）</p> <p>电子邮件地址：349088017@qq.com, 923176337@qq.com（关）</p>		

Training Course on Mariculture Technology for Developing Countries

Project Description

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 Countries	Planned Number of Participants	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:		

	<p>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.</p> <p>(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.</p> <p>(7) Mud Crab Culture Technology: introduces biology of mud crab and its culture mode and technology, and artificial multiplication technology of mud crab, etc.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>2. Virtual field trip introduction</p> <p>Investigation and visits on shrimp fries production, factorized farming management and pests and diseases prevention and control technology.</p> <p>3. Materials to be prepared by participants</p> <p>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.</p>		
Host City	Xiamen City, Fujian Province	Cities to visit	Xiamen City, Zhangzhou City Fujian Province

Notes	<ol style="list-style-type: none"> 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. 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.
About the Organizer	<p>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.</p> <p>Since 2005 when FJIO started to undertake the China-Aid training programs sponsored by the Ministry of Commerce, PRC, FJIO has successfully organized more than 122 bilateral or 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.</p>
Contact of the Organizer	<p>Contact person: Wang Xiaoqin (Ms.) / Guan Ying (Ms.) Office Phone: 0086-592-6032030 Cell phone: 0086-15060728798 (Wang) / 0086-15159299891 (Guan) Fax: 0086-592-6032030 WeChat ID: wang396216(Wang) /anyway123_(Guan) QQ: 349088017(Wang) / 923176337(Guan) Email address: 349088017@qq.com (Wang) / 923176337@qq.com(Guan)</p>