NACA Newsletter

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Kingdom of Saudi Arabia joins NACA

Chiang Mai, Thailand: The 32nd Governing Council today unanimously approved the Kingdom of Saudi Arabia's membership of NACA, bringing the total number of member states to 20.

Mr. Tanes Poomtong, Chair of the NACA Governing Council said, "I am delighted to welcome the Kingdom of Saudi Arabia to the NACA family."

"Our members believe that Saudi Arabia's membership will bring substantial benefits to NACA, opening new opportunities for technical exchange and sharing of experience for the mutual benefit of all."

Dr. Huang Jie, Director General of NACA said "Saudi Arabian membership will bring diversity, new ideas and thinking about how aquaculture can develop under different conditions."

"The innovative approaches to development in the Kingdom provide are instructive for the transformation of Asian aquaculture and provide a showcase of what should be possible in the region."

Accepting the letter of confirmation, Dr. Ali Mohammad Alshaikhi, CEO of the National Livestock and Fisheries Development Program, said "Although our aquaculture industry is still relatively small, the Kingdom of Saudi Arabia aspires to become a major producer and is committed to expanding production to meet its 2030 vision."

"Asia is the heart of global aquaculture production. As a member of NACA, there are many opportunities for us to learn from the other member states, and we are also excited to share our own experience."

Applications for the position of Director General, NACA

The incumbent Director General, Dr Huang Jie will be completing his term of office in April 2024. The NACA Governing Council has instructed to call for applications from suitably qualified and experienced persons from NACA member states for the position of Director General, tenable from May 2024 for a fixed period of five years. The selected candidate is expected to assume the position by 1 May 2024 after a brief handover period.

Applications will close at 5 PM (Bangkok time) on **31 January 2024**. Candidates must be less than 60 years of age on the closing date. Shortlisted candidates will be expected to attend an interview with the 33th NACA Governing Council

meeting, which is tentatively schedule for March 2024, India. Only short listed candidates will be notified of the results of application.

Responsibilities

The Director General is responsible for developing and conducting a work programme over a five year period in accordance with the mandate of NACA. The position will be based in the NACA Secretariat, Bangkok, Thailand.

The incumbent will be expected to travel extensively within and outside the region. The responsibilities of the Director General will include management of the Secretariat staff in pursuit of the goals of NACA both in terms of technical and administrative performance standards, and will be the chief financial officer.

Further supporting information can be found on the NACA website.

Qualifications

- A post-graduate degree related to aquaculture.
- A minimum of 15 years' experience in regional or international aquaculture development and research.
- An established track record of successful fund raising.
- Demonstrated expertise in project management and development.
- Previous experience in management and administration.
- Excellent inter-personal skills and experience in human resource management.
- Must be a citizen of a NACA member state.

Remuneration

The remuneration package includes health insurance, child education allowance, relocation and dependents allowances and a vehicle.

Applications

Those intending to apply for the position should submit the following via email to jie.huang@enaca.org with copies to ddgfs.icar@gov.in and info@enaca.org. Applications must include:

- Detailed curriculum vitae, including publication list and proof of age.
- A short statement why you are seeking the position of Director General (not exceeding one page).
- A short statement of your aspirations for NACA (not exceeding three pages).

The online version of this announcement / further details about the NACA organisation are available from: https://enaca.org/?id=1299.

NACA awarded the Aziz-Ul Haq Rural Development Medal

A highlight of the 32nd Governing Council Meeting in Chiang Mai was the award of the Aziz-Ul Haq Rural Development Medal to NACA by the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP).

The award was presented by Dr Cherdsak Virapat, Director General of CIRDAP on behalf of the CIRDAP Governing Council, which had determined to confer the award at a Special Session of the Executive Committee on 25 May.

The award was granted to NACA "…for its remarkable contributions to rural development through sustainable aquaculture and aquatic resource management programs, policy dialogue and regional cooperation in Asia and the Pacific region and for unwavering support to the CIRDAP mission to promote regional sustainable aquaculture development and resilience to climate challenges."

NACA's support to CIRDAP's mission has included collaborating on a joint statement on building Climate Resilience in Aquaculture and Agriculture Systems for the Shanghai Declaration Session on SDG 13 (Climate Action) at the Global Conference on Aquaculture Millennium +20, co-authoring a thematic article on Strengthening resilience of small-scale farmers and farming systems to climate change impacts through aquaculture: a regional perspective, and collaborating with CIRDAP to development of projects to address climate change action.

NACA would like to express our thanks and gratitude to CIRDAP and its staff for the enduring partnership between the two organisations.

CIRDAP DG Dr Cherdsak Virapat (right) presenting the medal to NACA DG Dr Huang Jie.

Training Course on Risk Analysis in the Aquaculture Value Chain held in Bangkok

FAO organised a Training Course on Risk Analysis in the Value Chain, under the project GCP/GLO/352/NOR from 3-5 September in Bangkok, Thailand, in collaboration with the Department of Fisheries (DoF) and the ASEAN Network of Aquatic Animal Health Centres led by the Thai DoF, and NACA and INFOFISH. The organisers wish to gratefully acknowledge the financial support provided by the Norwegian Agency for Development Cooperation (Norad) and the Thailand DoF.

The development of a national aquatic organism health strategy is a key component of safeguarding a country's aquaculture industry and biodiversity. It also plays a key role in securing international trade in aquatic products and in maintaining market access.

Risk analysis is an essential component of a national aquatic organism health strategy. Now widely applied in many fields, risk analysis provides a science-based framework for evaluating hazards, determining the likelihood and extent of potential harms, mitigating risks and guiding policy decisions.

Value chain analysis is a detailed study of the processes throughout the value chain, including production, marketing, processing, retailers, and consumers. This includes understanding aquaculture production systems and how stakeholders operate and the decisions they make.

Combining risk and value chain analysis provides a risk-based and people-centred approach to managing disease risks and planning control measures for aquaculture systems.

The course aimed to build capacity in conducting risk analysis to support the development of national aquatic organism health strategies, as a first step in the implementation of the four-stage Progressive Management Pathway for Aquaculture Biosecurity initiative of FAO.

The course included training on:

- Disease emergence in aquaculture.
- Risk-based approaches to progressive management pathways to aquaculture biosecurity.
- National aquatic organism health strategies.
- Health management and biosecurity.
- Import risk analysis.
- Value chain analysis.
- Transmission pathways.
- Biosecurity vulnerabilities, risk hotspots and risk factors.
- How to create risk pathways, assign likelihoods and use matrices.
- Movement of aquatic organisms in ASEAN.

Participants conducted a desktop value chain risk analysis exercise for selected aquatic commodities involving value chain risk analysis, hazard identification, identification of risk factors and biosecurity vulnerabilities, and a risk assessment proper. Participants also completed five elearning lessons from the FAO elearning Academy on Pathway to aquaculture biosecurity: managing risks in the value chain and received a digital badge.

The course was attended by some 70 participants from 16 countries from south and southeast Asia, Australia, China, Ethiopia and Saudi Arabia, representing government, private sector and academia. It was taught by Dr Richard Arthur (Canada), Dr Yuko Hood (Australian Department of Agriculture, Fisheries and Forestry), Dr Brett Mackinnon (City University of Hong Kong), Dr Melba Reantaso (FAO) and Dr Saraya Tavornpanich (Norwegian Veterinary Institute).

The manual for the course is available for download from the link below.

https://enaca.org/enclosure/?id=1291

Free FAO publication: Genetic management of Indian major carps

Indian major carps are cultured widely across the sub-continent with the main culture system being a multi-species polyculture in ponds, often including other carp species. The sector is supported by hatcheries producing over 50 billion seed/year.

This study analyses genetic management of Indian major carps since they were first domesticated in the 1950s. A literature review and survey of common hatchery practices identifies significant problems prevalent in the sector including loss of genetic diversity, inbreeding and uncontrolled hybrid introgression.

This case study identifies some of the root causes of poor genetic management and better practices that could bring about an improvement in hatchery management. Download this publication for free from:

https://enaca.org/enclosure/?id=1296

7th International Symposium on Cage Aquaculture in Asia (2nd announcement)

CAA7 will be held in Hainan, China, from 29 November to 2 December, with an option for online participation via Zoom for people that cannot attend in person. The symposium will be conducted in English and will feature a poster exhibition.

The theme of the symposium is "Sustainable development of cage aquaculture in Asia". Sessions will be held on:

- Production systems.
- Breeding and seed production.
- Nutrition and feed.
- Carbon sink and fouling organisms.
- Health and environmental management.
- Economics, gender, livelihood and policy.

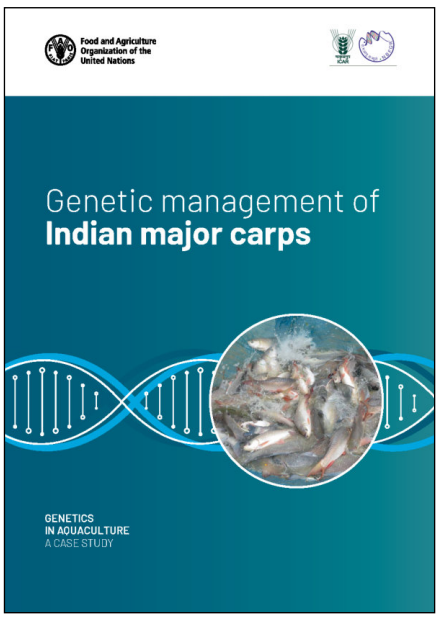
The symposium is organised by the Asian Fisheries Society, Hainan University, Shanghai Ocean University, and the China-ASEAN "Belt and Road" Joint Laboratory of Mariculture Technology, Center for Ecological Aquaculture.

For more information and registration details, please download the second announcement and prospectus below.

https://enaca.org/enclosure/?id=1294

PhD scholarships: Shanghai Ocean University PhD Programme 2024

Shanghai Ocean University (SHOU) is offering full scholarship PhD programmes in a wide range of marine sciences in 2024. Disciplines include: Aquaculture, biology, fishing science, fisheries resources, marine science, food science and engineering, fishery economics and management, marine engineering and information.



Scholarships

The scholarships are open to non-Chinese citizens under 30 years old who have a master's degree with a good academic record and outstanding research potential. The scholarships cover tuition, accommodation, medical insurance and include monthly stipend.

Applications

Applications are due 1 February 2024. For details of the programmes, eligibility criteria, required documentation and application procedures, please download the prospectus linked below.

If you have any questions, please email admissions@shou.edu.cn or add the Admissions Officer Ms. Louise as a Facebook contact or on WeChat (louise2shou).

Postgraduate opportunities

Postdoc positions are available for excellent graduates and full-time faculty positions are available for excellent international postdocs.

Download the prospectus:

https://enaca.org/enclosure/?id=1298

WAS Journal Special Issue:

Global Conference on Aquaculture Millennium +20 Thematic Reviews

Eight thematic reviews prepared as preparation for the Global Conference on Aquaculture Millennium +20 (GCA +20) have been published in a Special Issue of the Journal of the World Aquaculture Society "Aquaculture for Food and Sustainable Development". The reviews are available for download from:

https://onlinelibrary.wiley.com/toc/17497345/2023/54/2

The reviews were prepared under the guidance of the International Programme Committee, with the objective to review and update the current understanding on key issues relating to the development of sustainable aquaculture.

A group of experts prepared advanced working drafts of each thematic review and the key findings from each theme were presented and discussed by expert panels during the GCA +20. Participants were then invited to provide their feedback and perspectives on the reviews and their key messages for consideration in finalisation of the papers.

Papers available for download:

- Editorial: A decadal outlook for global aquaculture
  Graham Charles Mair, Matthias Halwart, Yuan Derun, Barry Antonio Costa-Pierce

- The contribution of aquaculture systems to global aquaculture production
  Marc Verdegem, Alejandro H. Buschmann, U. Win Latt, Anne J. T. Dalsgaard, Alessandro Lovatelli

- Sustainable management and improvement of genetic resources for aquaculture
  A. K. Sonesson, E. Hallerman, F. Humphries, A. W. S. Hilsdorf, D. Leskien, K. Rosendal, D. Bartley, X. Hu, R. Garcia Gomez, G. C. Mair

- Perspectives on aquaculture's contribution to the Sustainable Development Goals for improved human and planetary health
  Max Troell, Barry Costa-Pierce, Selina Stead, Richard S. Cottrell, Cecile Brugere, Anna K. Farmery, David C. Little, Åsa Strand, Roger Pullin, Doris Soto, Malcolm Beveridge, Khalid Salie, Jorge Dresdner, Patricia Moraes-Valenti, Julia Blanchard, Philip James, Rodrigue Yossa, Edward Allison, Christopher Devaney, Uwe Barg

- Harvesting the benefits of nutritional research to address global challenges in the 21st century
  Brett Glencross, Débora Machado Fracalossi, Katheline Hua, Marisol Izquierdo, Kangsen Mai, Margareth Øverland, David Robb, Rodrigo Roubach, Johan Schrama, Brian Small, Albert Tacon, Luisa M. P. Valente, Maria-Teresa Viana, Shouqi Xie, Amararatne Yakupityage

- Biosecurity: Reducing the burden of disease
  Rohana Subasinghe, Victoria Alday-Sanz, Melba G. Bondad-Reantaso, Huang Jie, Andrew P. Shinn, Patrick Sorgeloos

- Dynamics of aquaculture governance
  Curtis M. Jolly, Beatrice Nyandat, Zhengyong Yang, Neil Ridler, Felipe Matias, Zhiyi Zhang, Pierre Murekezi, Ana Menezes

- Humanizing aquaculture development: Putting social and human concerns at the center of future aquaculture development
  C. Brugere, T. Bansal, F. Kruijssen, M. Williams

- Value chains and market access for aquaculture products
  Lahsen Ababouch, Kim Anh Thi Nguyen, Marcio Castro de Souza, Jose Fernandez-Polanco

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Seminar on *Artemia* Research and Production: Videos

A *Seminar on Artemia Research and Production: Exploring Translational Advancements, Global Perspectives, and Shared Benefits* was held on 28 July 2023 in Putrajaya, Malaysia, in conjunction with the first meeting of the International Artemia Aquaculture Consortium Steering Committee.

Video recordings of the technical presentations are available from the International Artemia Aquaculture Consortium website at:

https://artemia.info/news/?id=74

Technical programme

- NACA's role with the International Artemia Aquaculture Consortium
  Mr Simon Wilkinson, Network of Aquaculture Centres in Asia-Pacific

- Brine shrimp *Artemia* culture and research in Malaysia
  Prof. Yeong Yik Sung, Universiti Malaysia Terengganu

- Production and use of *Artemia* in Iran
  Prof. Naser Agh, Artemia and Aquaculture Research Institute, Urmia University, Iran

- UGent Laboratory of Aquaculture and Artemia Reference Center
  Prof. Annelies Declercq, Laboratory of Aquaculture and Artemia Reference Center

- AR-ARC actions towards sustainable utilisation of Artemia resources
  Prof. Sui Liying, Asian Regional Artemia Reference Center, Tianjin University of Science and Technology, China

- *Artemia* pond production: Pros and cons
  Prof. Nguyen Van Hoa, Can Tho University, Vietnam

- Feeding 9 billion by 2050: Embracing *Artemia* in nourishing a growing world
  Parisa Norouzitallab and Kartik Baruah, Swedish University of Agricultural Sciences

Reported Aquatic Animal Diseases in the Asia-Pacific Region during the First Quarter of 2023

With the implementation of the new aquatic animal disease reporting in the Asia Pacific region from January 2021, and in lieu of the published QAAD Reports (last issue published was 4th quarter of 2020), NACA is publishing reported aquatic animal diseases submitted by countries in the Asia-Pacific region.

This report covers the first quarter of 2023 and the original and updated reports can be accessed at https://enaca.org/?id=8.

The following diseases were reported:

Finfish diseases

- **Infection with *Aphanomyces invadans* (EUS):** Bangladesh in catla (*Catla catla*) and mrigal (*Cirrhinus mrigala*); and, India in tilapia (*Oreochromis* sp.), snakeheads (*Channa striata* and *Channa* sp.), rohu (*Labeo rohita*), Kuria labeo (*L. gonius*), catla (*L. catla*), *Cirrhinus mrigala*, grass carp (*Ctenopharyngodon idella*), silver carp (*Hypopthalmichthys molitrix*) and catfish (*Wallago attu*).
- **Infection with red seabream iridovirus (RSIV):** Chinese Taipei in hybrid grouper (*Epinephelus fuscoguttatus* x *E. lanceolatus*); and, India in seabass (*Lates calcarifer*).
- **Carp edema virus disease (CEV):** India in Koi carps (*Cyprinus carpio*)
- **Viral encephalopathy and retinopathy (VER):** Australia in groupers (*Epinephelus lanceolatus* and *E. malabaricus*); Chinese Taipei in hybrid grouper (*Epinephelus fuscoguttatus* x *E. lanceolatus*), seabass (*L. calcarifer*) and Japanese seabass (*Lateolabrax japonicus*).
- **Infection with Tilapia lake virus (TiLV):** India in tilapia (*Oreochromis niloticus*).

Molluscan diseases

- **Infection with *Perkinsus olseni*:** India in farmed mussel (*Perna viridis*), and wild samples of charru mussel (*Mytella strigata*) and short-neck clam (*Paphia malabarica*).

Crustacean diseases

- **Infection with white spot syndrome virus (WSSV):** Australia in black tiger shrimp (*Penaeus monodon*); Bangladesh in mudcrab (*Scylla serrata*); Chinese Taipei in whiteleg shrimp (*P. vannamei*); India in *P. monodon* and *P. vannamei*; and, the Philippines in *P. vannamei* (nauplii, PL, juveniles, grow-out culture, and adult), *P. indicus* (grow-out culture), *P. monodon*, and *S. serrata* (grow-out culture).
- **Infection with infectious hypodermal and haematopoietic necrosis virus (IHHNV):** the Philippines in *P. vannamei* (grow out culture).
- **Acute hepatopancreatic necrosis disease (AHPND):** Chinese Taipei in *P. vannamei*; and, the Philippines in *P. vannamei* (PL and grow-out culture) and *P. monodon* (brood-stock).
- **Infection with Infectious myonecrosis virus (IMNV):** India in *P. vannamei*.
- **Hepatopancreatic microsporidiosis caused by Enterocytozoon hepatopenaei (EHP):** Chinese Taipei in *P. vannamei*; and, India in *P. vannamei*.

Amphibian diseases

- **Infection with *Batrachochytrium dendrobatidis*:** Australia in tusked frog (*Adelotus brevis*).

Other diseases

- Bangladesh reported **infection with *Streptococcus agalactiae*** in tilapia (*O. niloticus*), and **infection with *Aeromonas* spp**. in shing catfish (*Heteropneustes fossilis*), and pangas catfish (*Pangasianodon hypophthalmus*).

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NACA is a network composed of 20 member governments in the Asia-Pacific Region.

Larvi 2024 and first International Artemia Aquaculture Consortium conference

The first conference of the International Artemia Aquaculture Consortium will be organized on September 9, 2024 in Ostend, Belgium. The 8th International Fish & Shellfish Larviculture Symposium - Larvi '24 - will be organised at the same venue in Ostend from 9-12 September 2024.

A more detailed first announcement with call for presentations will be mailed in the first week of October 2023. A preliminary website has been opened where you can register your interest to participate in this event:

https://forms.gle/rqfryjyqYGQgE63M8