



# NACA Newsletter

Published by the Network of Aquaculture Centres  
in Asia-Pacific, Bangkok, Thailand

ISSN 0115-8503

Volume XXIX, No. 2  
April-June 2014

## 25th NACA Governing Council held in Vientiane, Lao PDR

The 25th Governing Council Meeting was convened from 25-27 March 2014 in the Mercure Hotel, Vientiane, Lao PDR. The meeting was attended by 17 member governments, the Australian Centre for International Agricultural Research (ACIAR), the Food and Agriculture Organization of the United Nations (FAO), INFOFISH, the Mekong River Commission (MRC), the Southeast Asian Fisheries Development Center (SEAFDEC) and the USAID MARKET Project. A welcome address was given by The Hon. Dr H.E. Phuang Parisack Pravongviengkham, Vice Minister for Agriculture and Forestry. Opening remarks were given by the outgoing Chair of the Governing Council, Dr Nguyen Huy Dien, the incoming Chair Dr Bounthong Saphakdy and Dr Ambekar Eknath, Director General of NACA.

Highlights of the meeting included:

- NACA welcomed the Republic of the Maldives as the 19th member government of NACA. As a small island developing nation the Maldives is heavily dependent on fisheries resources for economic development. Given the limitations of its wild fisheries and a comparative advantage in the high quality of its marine environment the Maldives wishes to develop a mariculture industry and to focus on value-adding to provide an alternative source of income and employment to fishers. The Maldives therefore looks forward to collaboration with NACA members in these areas.
- The Governing Council elected Dr Cherdasak Virapat as the next Director General of NACA, who will serve a five year term from 2014-2019. Dr Virapat (see bio overleaf) will commence duties in June after a handover period from the outgoing Director General, Dr Ambekar Eknath.
- The Governing Council has commissioned a comprehensive review of NACA to evaluate its role, operations, staffing and funding levels in light of the contemporary operating environment and changing needs of member governments. The development landscape has changed considerably over the past 25 years of NACA's existence as an independent inter-governmental organisation and it was considered timely to evaluate the status and direction of the organisation.
- Aquatic animal health (particularly the current state of acute hepatopancreatic necrosis disease of shrimp) and aquaculture certification and benchmarking issues featured prominently in the discussions.

The 26th NACA Governing Council meeting will be held in Indonesia in 2015, the date and venue will be announced at a later time.



*The 25th Governing Council.*

## Dr Cherdsak Virapat elected as next Director General of NACA

The NACA Governing Council elected Dr Cherdsak Virapat as the next Director General of NACA. Dr Virapat will commence duties in June 2014 and will serve a five-year term.

Dr Virapat is presently Executive Director of the International Ocean Institute (IOI), where he has worked since May 2008. He previously served as an officer of the Royal Thai Government for 27 years. He worked as a fishery biologist for the Department of Fisheries, Ministry of Agriculture & Cooperatives during 1981–2002. He was appointed director of IOI–Thailand Operational Centre by the Office of the Thai Marine Policy and Restoration Committee, Office of the Prime Minister, and worked voluntarily in this position during 2000–2008. He was also chief of the Public Sector Development Group, Ministry of Natural Resources & Environment, during 2003–2005 and chief of International Coordination and assistant executive director of Thailand's National Disaster Warning Center, Office of the Prime Minister and the Ministry of Information & Communication Technology, during 2005–2008.

He holds a BSc in fishery management from Kasetsart University, Thailand; an MSc in fishery science from the University of Helsinki, Finland; and a PhD in fisheries management from Dalhousie University, Canada. While serving in the Royal Thai Government, he obtained the Royal Decorations of the Exalted Order of the White Elephant and the Noble Order of the Crown of Thailand.

## 9th Symposium on Diseases in Asian Aquaculture 24-28 November 2014, Vietnam

The Fish Health Section (FHS) of the Asian Fisheries Society (AFS) is very pleased to announce the 9th Symposium on Diseases in Asian Aquaculture (DAA9) in Ho Chi Minh City, Vietnam from 24-28 November 2014.

The Fish Health Section of the Asian Fisheries Society was founded in May 1989. The FHS is credited with holding triennial symposia on "Diseases in Asian Aquaculture" (DAA) where members and aquatic animal health professionals meet to discuss broad issues and specific topics related to aquatic animal health in Asian Aquaculture.

The symposium usually brings together more than 300 aquatic animal health scientists, students, government researchers and industry personnel from over 30-40 countries. In keeping with the unique tradition of previous DAA symposia, DAA9 in Vietnam is going to be a unique experience that you don't want to miss.

The symposium is being organised by the Viet Nam Department of Animal Health (DAH) coming under the Ministry of Agriculture and Rural Development (MARD) will be our local host and will organize the event in close cooperation with FHS. The DAH has already formed a Local Organising Committee and has launched the official DAA9 website for

handling registrations, hotel bookings, abstract submissions and other logistics. Please visit [www.daa9.org](http://www.daa9.org) for more details including a downloadable flyer.

## NACA to convene the 11th AFS Asian Fisheries and Aquaculture Forum

NACA has agreed to convene the 11th Asian Fisheries and Aquaculture Forum in conjunction with the Asian Fisheries Society, which will be held in Bangkok, Thailand in 2016. The meeting is tentatively scheduled for late April/early May. The Asian Fisheries and Aquaculture Forum is the premiere event of the Asian Fisheries Society and is held tri-annually. The forum usually attracts in the vicinity of 1,000 professionals from the region and beyond. Further details concerning co-convenors, venue, sponsorship opportunities, abstracts and registrations will be announced in due course through a dedicated website.

## Free primers for specific detection of bacterial isolates that cause acute hepatopancreatic necrosis disease

Efforts to control AHPND have been hampered by the lack of a specific and rapid detection method that could be used to determine the reservoirs of the causative bacterial isolates, to insure their absence in shrimp broodstock and post larvae, to monitor shrimp during cultivation and to aid research on possible control measures.

In Thailand and Taiwan Province of China since 2012, our two groups have been conducting cooperative research on possible PCR methods to detect isolates of AHPND bacteria. On 5 December 2013 we obtained the sequence comparison information that allowed us to prepare several test PCR detection methods, and we have spent the last 20 days validating them. Today we are announcing the best method we have found so far. For the full details, please download: <http://www.enaca.org/publications/health/disease-cards/ahpnd-detection-method-announcement.pdf>

In Thailand, this research has been carried out through cooperation among researchers at Centex Shrimp (Mahidol-BIOTEC cooperative center) and the Department of Public Health both at Mahidol University and the Aquaculture Business Research Center, Faculty of Fisheries, Kasetsart University. The work has been supported since 2011 by contributory funds from many sources including the Agriculture Research and Development Agency, the National Research Council of Thailand, the Thai Commission for Higher Education, Mahidol University, the National Science and Technology Development Agency, the Patani Shrimp Farmers Club, the Surathani Shrimp Farmers Club, the Thai Frozen Foods Association, Charoen Pokphand Company, SyAqua Co. Ltd. and Thai Union Co. Ltd. In Taiwan Province of China, the research has also been supported from several sources including the Taiwan National Science Council, National Cheng Kung University (NCKU), National Taiwan University (NTU) and Unipresident Enterprises Corporation.

*Contributed by Tim Flegel and C.-F. Lo.*

## World Aquaculture Adelaide 2014: Special session on regional cooperation for improved biosecurity

A special session on regional cooperation for improved biosecurity will be held at World Aquaculture Adelaide 2014, which runs from 7-11 June. The special session will be held on 11 June from 9am to 12:30pm.

Aquatic animal health issues cause massive losses in the aquaculture industry each year. It is estimated that in tropical shrimp production alone around 40% is lost to disease. Much of the impact falls upon small-scale farmers, who constitute the majority of producers in the Asian region, with devastating effects on their incomes and livelihoods as well as on international trade.

Due to close trade connections aquatic animal pathogens tend to spread rapidly throughout the region and internationally, multiplying the losses and impact on farmers. Effective health management is a shared responsibility that requires a coordinated approach from all countries. This is particularly true of emergent (previously unknown) pathogens such as the acute hepatopancreatic necrosis syndrome of shrimp, where containment requires a rapid response from the international community.

There are good reasons to believe that wide and increasing inbreeding is also a significant factor in frequent epidemics observed in the aquaculture industry, especially in stocks raised by small-scale farmers. Inbreeding generally causes increased susceptibility to disease and loss of genetic diversity is a contributing factor to epidemics. Very few hatcheries or farms have broodstock management plans in place to maintain the genetic integrity of their stock. Inbreeding is widely acknowledged as a serious and growing problem across the aquaculture industry as a whole. If inbreeding continues to increase the severity and frequency of epidemics is likely to increase.

The special session will be organised into three sub-sessions:

- **Regional cooperation in aquatic animal health management:** The rationale, trans-boundary nature of aquatic animal diseases, current aquaculture practices and global trade, what has been done and accomplished, where are the gaps, what needs to be done and the way forward.

Presenters will include Dr Brett Herbert (Department of Agriculture, Forestry and Fisheries) and Dr Eduardo Leano (NACA).

- **Dealing with emerging diseases - focus on shrimp acute hepatopancreatic necrosis disease ("EMS"):** Why do new disease emerge? Can we predict disease emergence in aquatic systems? What have we learnt from emerging diseases in the region? Updates on AHPNS including primary pathogens, geographical spread, and the latest on diagnostics and management interventions. Presenters will include Peter Walker (CSIRO) and Siripong Thitamadee (Mahidol University).
- **Domestication programmes and disease emergence / management:** Concept of domestication and breeding programmes, implications of genetic diversity, disease susceptibility and resistance, dependence of the Asian shrimp industry on SPF *P. vannamei*. Are we heading on the right path and should there be regional efforts for domestication of native species? What are the implications for disease occurrence and production? Presenters will include Dr Greg Coman (CSIRO) and Prof. Roger Doyle (Genetic Computation Ltd.).

Discussion panels will be held after the sub-theme presentations to allow participants to interact with the presenters. The session will bring together industry and scientists performing agricultural research and development to discuss closer cooperation in health management and biosecurity. In particular, it will raise awareness of the link between genetic erosion and disease, an issue which has not been previously investigated or addressed by the aquaculture community. This is a foundation issue that must be addressed in domestication and genetic improvement programmes for prominent aquaculture species.

The session has been made possible through sponsored by the Australian Centre for International Agricultural Research, to whom NACA extends our thanks. For more information about World Aquaculture Adelaide please visit: <https://www.was.org/WAA14/>

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## AHPND detection discussion group established

A Google Group on AHPND detection has been established to promote communication about the two AHPND detection methods (AP1 and AP2) that Dr Chu-Fang Lo and Dr Tim Flegel announced on 24 December 2013 (see article on preceding page).

The purpose of the group is to allow people using the methods to send in their comments and experiences about use of these two methods and other methods that might be developed. For example, the IQ2000 method from Gene-

Reach in Taiwan Province of China was recently released and results using that system may be compared with those obtained using AP1 and AP2.

Anyone may join the group or view the discussion by visiting the link below. Please note that this group is specifically to discuss detection and is not for general advice on AHPND.

<https://groups.google.com/forum/#!forum/ahpnd>

## OIE Regional Workshop on Emerging Aquatic Animal Disease Response, in collaboration with NACA, Bali, Indonesia



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Centres in  
Asia-Pacific

The OIE has been working to improve aquatic animal health globally through various activities including the development of Aquatic Animal Health Code and Manual of Diagnostic Tests for Aquatic Animals. Considering that aquaculture is expanding and becoming a major food producing sector in the region of Asia and the Pacific, recent spread and outbreaks of some aquatic animal diseases in the region is our concern.

The OIE organised, in collaboration with the Network of Aquaculture Centres in Asia-Pacific (NACA), the Regional Workshop on Emergency Aquatic Animal Disease Response in Bali, Indonesia from 6 to 8 November 2013.

The objectives of the meeting included:

- To identify the factors that constrain regional members' abilities to apply appropriate sanitary measures to protect aquatic animal health;
- To raise awareness of OIE standards including standard setting procedures, OIE Aquatic PVS as well as FAO/NACA Asian Regional Technical Guidelines (TG) to support capacity building of members' effective application of those standards and guidelines;
- To inform participants about the OIE/NACA regional core for better reporting and information sharing;
- To help improving national coordination between OIE Focal Point and NACA National Coordinator which are not necessarily the same.

A total of 35 participants including country representatives from Bangladesh, China PR, India, Indonesia, Japan, Korea RO, Myanmar, Philippines, Sri Lanka, Thailand and Vietnam attended the workshop. The programme for the first two days of the workshop was dedicated to country reports on current aquatic animal disease situations in the selected countries and presentations on the national aquatic animal health programmes of China, Japan and Korea. In addition, case studies on the molluscan diseases

(Akoya Oyster Disease and Soft Tunic Syndrome), shrimp diseases (Acute Haematopancreatic Necrosis Syndrome, AHPNS) and finfish diseases (Koi Herpes Virus) were presented to facilitate the subsequent discussion on emergency response of those diseases in the national and regional level.

The workshop was successfully completed with the visit to the Institute for Mariculture Research and Development (IMRAD) and PT Suri Tani Pemuka Hatchery for Marine Fish (JAPFA), Gondol.

The OIE RRAP would like to thank to the Directorate General of Livestock and Animal Health Services and Directorate General of Aquaculture, Indonesia for hosting this important workshop with a nice field trip in Bali, Indonesia.

Please visit the link below to download the summary report, programme, presentations and photographs from the workshop: [http://www.enaca.org/modules/news/article.php?article\\_id=2017](http://www.enaca.org/modules/news/article.php?article_id=2017)

## United Kingdom – Southeast Asia Workshop on Sustainable Aquaculture

The British High Commission and NACA collaborated in organising a United Kingdom – Southeast Asia Workshop on Sustainable Aquaculture in Bangkok from 20-21 January 2014. The workshop brought together 32 participants from seven countries, namely Thailand, Indonesia, the Philippines, Vietnam and the United Kingdom.

The objectives of the workshop were to:

- Gain a better understanding of the current status of research in each country, including funding mechanisms and topic prioritisation mechanisms as well as funding opportunities.
- Identify specific areas of mutual interest, potential partners and their possible roles.

- Encourage the development of collaborative proposals that address key knowledge gaps.

The workshop covered a broad range of topics of mutual interest, although aquatic animal health issues featured very heavily. The workshop included a session on funding opportunities for collaborative projects between UK and Southeast Asia.

The workshop was very successful from a networking perspective and will be followed up with the preparation of joint project and funding proposals. The report of the workshop will be made available for download from the NACA website in due course.

NACA would like to thank the British High Commission for funding this event.

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NACA is a network composed of 19 member governments in the Asia-Pacific Region.



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