

Strengthening networking to promote sustainable aquaculture in Asia-Pacific

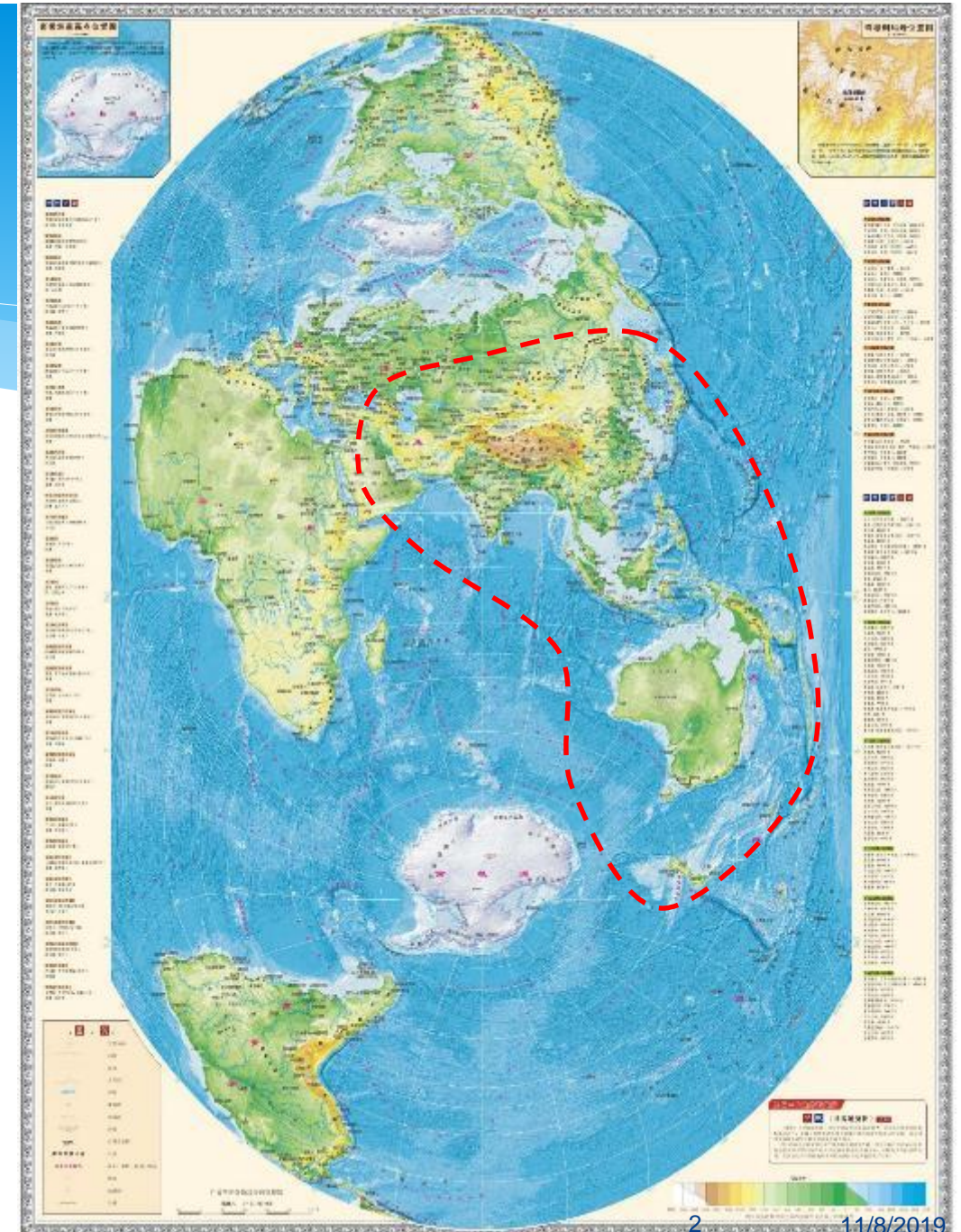
Dr. Jie HUANG, Director General
Network of Aquaculture Centres in Asia-Pacific (NACA)



The Asia-Pacific

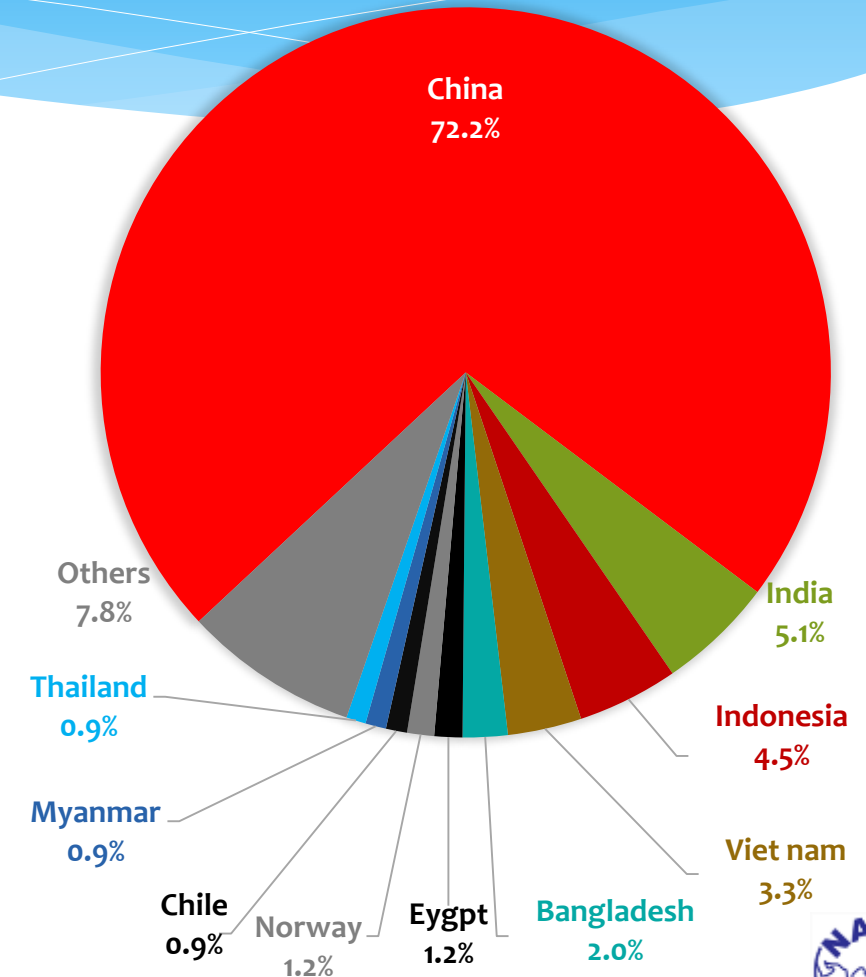
□ The most

- * mixture of lands and waters
- * populations in the world
- * economic diversity
- * diversity of language & culture
- * aquacultural production



We are the leading region for aquaculture in the world

- ❑ **>90%** global aquaculture production in Asia
- ❑ Asia-Pacific aquaculture provides **62%** food fishes
- ❑ Aquaculture and relative chains provides more than **35 million** jobs for the region



Features in Asia-Pacific aquaculture



- * Diversity
 - * Diversity of aquatic species
 - * Differentiation of industries
 - * Complementary capability & capacity
 - * Complexity of knowledge & education
- * Dependence
 - * Labor intensive
 - * Technology
 - * Investment
- * Risks
 - * Biosecurity
 - * Environment
 - * Safety
 - * Climate change

Network of Aquaculture Centres in Asia-Pacific

NACA is ONE

Ownership of Members

Network of Resources

Expertise of Aquaculture

*to link the diversified regional aquaculture as **ONE***

About NACA

- * Intergovernmental organization
 - * 19 Members (governments)
- * Promotes rural development through sustainable aquaculture
 - * Technical exchange between developing countries
- * NACA members produce more than 90% of world aquaculture production by volume
 - * Australia, Bangladesh, Cambodia, China, Hong Kong SAR, India, Indonesia, IR Iran, DPR Korea, Lao PDR, Malaysia, Maldives, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, and Vietnam

19 NACA Current Members

- Australia
- Bangladesh
- Cambodia
- China
- Hong Kong SAR
- India
- Indonesia
- IR Iran
- Lao PDR
- DPR Korea
- Malaysia
- Maldives
- Nepal
- Pakistan
- Philippines
- Thailand
- Sri Lanka
- Vietnam



About NACA

NACA as an
FAO/UNDP Project
1976-1989



Ramu Pillay
INDIA



Plodprasop Suraswadi
THAILAND



Chua Thia-Eng
MALAYSIA



Pinij Kungvankij
THAILAND



Chen Foo Yan
SINGAPORE

Founders and Project Coordinators

NACA as an
intergovernmental
organization
Since 1990



Banchong Tienongrusmee
THAILAND



Hassanai Kongkaew
THAILAND



Pedro B. Bueno
PHILIPPINES



Sena De Silva
SRI LANKA



Ambekar Eknath
INDIA



Cherdasak Virapat
THAILAND

Former NACA Coordinators & Director Generals

NACA Governing Council (2019)

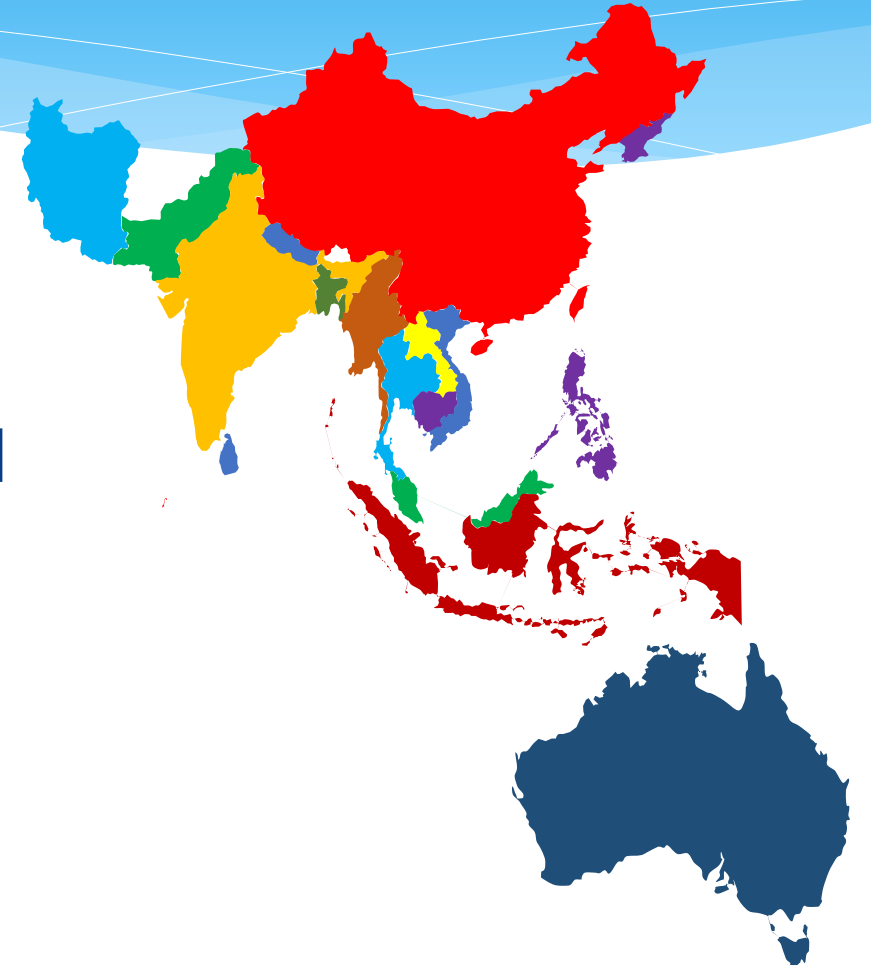
represents the Members and is the supreme body of NACA



The 30th NACA Governing Council Meeting
Guangzhou, China, March 26-27, 2019

Objectives of NACA

- ❑ Promote rural development through sustainable aquaculture and aquatic resource management.
- ❑ Seek to improve the livelihoods of rural people, reduce poverty and increase food security.



NACA Centres

- * Five Regional Lead Centres
 - * Freshwater Fisheries Research Centre, China
 - * Central Institute for Freshwater Aquaculture, India
 - * Aquaculture Department, SEAFDEC, Philippines
 - * Inland Fisheries Research & Development Bureau, Thailand
 - * Coldwater Fisheries Research Center, Iran
- * More than 30 participating centres throughout the region
 - * Collaborating in research
 - * Sharing information and resources
 - * Training and exchanging expertise



Our Strengths

- * The network of individuals, institutions and governments
- * Access to vast resources in the network
- * Network has extensive expertise in aquaculture
 - * Governance & policy, management, production technology, rural development, certification, global and regional standards, and BMPs
- * Good Track Record in promotion of International Codes of practice for responsible Fisheries and Aquaculture



Cooperation with organizations

- * International organizations and regional organizations
 - * FAO, OIE, UNEP, World Bank WWF



- * AIT, APEC, ASEAN, INFOFISH, SEAFDEC, WorldFish



Asia-Pacific
Economic Cooperation



ASSOCIATION
OF SOUTHEAST
ASIAN NATIONS



INFOFISH



Top 10 Achievements of NACA

Regional human resource development

Better aquaculture management practices

Global aquaculture development policy

Regional aquatic animal health network

Margarita Lizárraga Medal

Post-tsunami rehabilitation

Development of grouper hatchery technology

International principles for sustainable shrimp aquaculture

Technical Guidelines on the Responsible Movement of Live Aquatic Animals

Capacity building in broodstock management

Longitude of aquaculture cooperation

(Thematic programs to be extended)

- * Biodiversity and genetic resource
- * Sustainable aquaculture technology
- * Aquaculture health and biosecurity
- * Climate change and environment
- * Nutrition, feed, and intermediate inputs
- * Aquatic product safety and processing
- * Aquaculture economics and marketing
- * Information technology for aquaculture

Latitude of aquaculture cooperation

(Cross-cutting programs to be covered)

- * Strategy and policy
- * Science and technology innovation
- * College and postgraduate education
- * Training and demonstration
- * Standardization and certification
- * Quarantine of aquatic products
- * Investment and industry development
- * Trade and exhibition
- * Equality and social inclusion

Thematic priorities in the region

	Genetic resource	Biosecurity and health	Farming technology	Climate and environment	Nutrition and feed	Safety products	Economics / IT tech
Governance	+++	+++	+++	+++	+	++	++
Innovation	+++	+++	+++	++	++	+	++
Education	+++	+++	+++	++	++	+	+
Training	+++	+++	+++	+	+	++	+
Standards	++	+++	++	+++	+++	+++	++
Industry	+++	++	+++	++	+++	++	+++
Trade	+	+	+	+	+++	+++	+++
Social	+	+	+	++	++	+++	+++

Designation of more NACA regional centres for aquaculture cooperation

- * Regional strategy cooperation centres
- * Regional innovation cooperation centres
- * Regional education cooperation centres
- * Regional training cooperation centres
- * Regional quarantine cooperation centres
- * Regional product cooperation centres
- * Regional demonstration cooperation centres
- * Regional commercial cooperation centres

Initiate cooperation of aquaculture education

- * Network of education cooperation centres
- * Integration of fisheries education in Asia
- * Exchange students
- * Short-term training
- * Summer camp
- * Teacher collaboration and training
- * Online distance education for aquaculture
- * Cooperation in aquaculture research
- * Graduate student forums

Promote cooperation on aquaculture innovation

- * Initiate strategical plan on innovation cooperation
- * Discussion of consensus on specific subject
- * Propose of cooperative projects
- * Promote innovation-technicalization-industrialization approaches
- * Discussion intellectual property sharing issues on specific innovation
- * Organization of workshop
- * Exchange of knowledge and technology
- * Exchange of research materials
- * Visiting scholarship of scientist
- * ...

Promote cooperation on aquaculture industry and trade

- * Initiating the consensus of cultural concepts among enterprises
- * Promoting the communication of aquaculture related enterprises
- * Technological training and extension for industries
- * Exhibition for aquatic products and aquaculture technology
- * Technological advisory expert group for enterprises
- * Regional study tour for aquaculture investment and marketing
- * Standards and assessment for aquaculture products
- * Regional aquaculture network between research-education-industries
- * Establishment of information interactive network for aquaculture

Sub-Networks of aquaculture centers in Asia-Pacific for specific categories

Sub-networks for species

- * sNACA for species of finfish
 - * sNACA for ornamental fish
- * sNACA for species of crustaceans
 - * sNACA for *Penaeus monodon*
- * sNACA for species of mollusk
- * sNACA for amphibians
- * sNACA for macroalga
- * sNACA for microalga
- *

Sub-networks for subjects

- * sNACA for aquatic genetic breeding
- * sNACA for rice-fish system
- * sNACA for aquaculture biosecurity
- * sNACA for shrimp diseases
- * sNACA for aquatic alien species
- * sNACA for aquariums
- *

Sub-NACA operation

- * **Strategy to establish sNACA**
 - * The Secretariat will release sNACA strategy and relevant regulations upon NACA GC's acknowledgement
 - * A competent institution can apply for a NACA Lead Centre with nomination or approval of the Secretariat
 - * The NACA Lead Centre is responsible to organize the sNACA in name of NACA
- * **Identification and designation of sNACA centres**
 - * The NACA Lead Centre can find existing NACA centres to be involved in sNACA
 - * The NACA Lead Centre can recommend institutions for the specific subject
 - * The recommended institution applies as a new NACA centre to join sNACA with approval of the Secretariat
- * **Planning and organization of activities**
 - * The NACA Lead Centre takes charge of planning and organization of annual activities of sNACA
 - * The secretariat shall be notified for the activities in name of NACA
 - * The secretariat reserves the power to propose or veto activities in name of NACA
- * **Rights and responsibilities**
 - * Participation of NACA activities and meetings
 - * Organizing sNACA activities in name of NACA
 - * Participation of international meetings informed by NACA Secretariat and as representative of NACA
- * **Communication and annual reports**
 - * All NACA centres shall submit annual report to NACA for their activities on specific subject in aquaculture
 - * The NACA Lead Centre for the specific subject shall submit annual report for the sNACA
 - * All annual reports will be published on NACA website

Thanks for supporting and cooperation

- * Contact us at:
 - * PO Box 1040, Kasetsart Post Office
 - * Jatujak, Bangkok 10903, Thailand
 - * Ph: +66 (0)2 561 1728
 - * Fax: +66 (0)2 561 1727
 - * Email: info@enaca.org; dg@enaca.org
- * Or visit:
 - * www.enaca.org

