# **Global Conference on Aquaculture 2010**

Farming the Waters for People and Food



"Who's Who"

## **Presenters**

## **Sessional Chairs**





QUACULTURE SO

### Who's who at GCA 2010

The organisation committee was of the view you the participants should be provided with short biographies of persons who will make presentations at the Global Conference on Aquaculture 2010; in a manner giving you an idea of the expertise that this conference has attempted to bring together. This document endeavours to achieve this objective. The biographies are arranged sequentially in conformity with the conference programme.

**Keynote Speakers** 

#### Professor Monkombu Sambasivan Swaminathan (India)

### Keynote Address 1: Aquaculture and sustainable nutrition security in a warming planet

Professor Swaminathan's main areas of research are cytogenetics, plant breeding, agriculture, biodiversity and eco-development. He was one of three from India included in TIME Magazine's 1999 list of the "20 most influential Asian people of the 20th century", the other two being Mahatma Gandhi and Rabindranath Tagore. He is a Fellow of the Royal Society of London, the U.S. National Academy of Sciences, the Russian Academy of Sciences, the Chinese Academy of Sciences, the Italian Academy of Sciences and the European Academy of Arts, Science and Humanities. He is recipient of many distinguished awards, both international (e.g., Ramon Magsaysay Award for Leadership [1986], Albert Einstein World Science Award [1986], first World Food Prize [1987], UNESCO Gandhi Gold Medal, France [1999], Franklin D. Roosevelt Four Freedoms Medal, Netherlands [2000], Volvo and Tyler Prize for Environment, Shining World Leadership Award, Singapore [2007]. Sahametrei Medal of the Royal Government of Cambodia [2007]) and national (e.g. Lifetime Achievement Award of All Indian Management [2007], Lal Bahadur Shastri National Award [2007], Indira Gandhi Prize for Peace, Disarmament and Development [2000], Shanti Swarup Bhatnagar Prize [1961]). He holds 58 honorary doctorate degrees from universities around the world.

#### Mr Jiansan Jia (FAO)

## Keynote Address 2: Global aquaculture development since 2000: progress made in implementing the Bangkok Declaration and Strategy for Aquaculture Development Beyond 2000

Jiansan Jia has been working with the Food and Agriculture Organization of the United Nations (FAO) as Chief of the Aquaculture Service since 1998. Before joining FAO, he worked for the Government of the People's Republic of China for more than 20 years holding several important leading positions with provincial and central government authorities in both national and international agriculture and fisheries and aguaculture development (e.g. Director General of the China National Corporation for International Cooperation in Agriculture, Livestock and Fisheries; Director General of the International Cooperation, Ministry of Agriculture: Executive Vice-President of China National Fisheries Corporation; Deputy Director General of the Bureau of Fisheries; Vice Governor of Wujiang County, Jiangsu Province). During the past 12 years, he has devoted himself to sustainable development of aquaculture at global and regional levels by leading the FAO Aquaculture Service based in Rome; he was one of the leading organisers of the Conference on Aquaculture in the 3rd Millennium held in Bangkok in 2000, and promoted the establishment and advancement of the FAO's Committee on Fisheries (COFI) Sub-Committee on Aquaculture. Mr Jia is currently the Co-Chair of the International Organising Committee of the Global Conference on Aquaculture 2010.

**Plenary Lecturers** 

#### Dr Patrick Sorgeloos (Belgium)

### Plenary Lecture I: Resources and technologies for future aquaculture: a needs assessment for sustainable development

Patrick Sorgeloos is Professor of Aquaculture at Ghent University in Belgium and has been involved in fish and shellfish larviculture R&D in Europe, Asia, Latin America and Africa ever since the mid seventies. He initiated aquaculture education at Ghent University and so far over 250 Master and 50 PhD alumni have graduated in the field of aquaculture. Prof. Sorgeloos is a strong promoter of international networking in aquaculture and is involved many partners and networks including the World Aquaculture Society (1999-2000 President), the European Commission (chairman Thematic Network Aquaculture – AquaTnet; member Advisory Group DG Research FP7 theme 2 "food, agriculture and biotechnology; chairman ASEM Aquaculture Platform), the European Aquaculture Technology & Innovation Platform (board member). He received honorary awards in China, Egypt, Greece, Thailand, USA and Viet Nam.

#### Dr Neil Ridler (Canada)

#### Plenary Lecture II: Sector management and governance in aquaculture: an overview

Neil Ridler is Professor Emeritus of Economics at the University of New Brunswick (UNB) Saint John in Canada where he has taught for 35 years. He has served in a number of administrative roles including as the Chair of the Social Science Discipline and a member of UNB Senate and Board of Governors. Prof. Ridler has published around 70 peer-reviewed articles and more than 40 book chapters/reports. His reputation as an international scholar has seen him serve on a number of missions to Africa, Asia, Europe, Latin America and the Middle East. He has dedicated a good amount of his time on aquaculture research both in Canada and internationally, and with the United Nations Food and Agriculture Organization in Rome where he regularly serves as a visiting scientist and has co-authored several reports.

#### Dr Max Troell (Sweden)

### Plenary Lecture III: Maintaining environmental integrity through responsible aquaculture: constraints, opportunities and challenges

Max Troell is Associate Professor at the Beijer Institute, Royal Swedish Academy of Sciences, and the Stockholm Resilience Centre, Stockholm University. His research focuses on sustainable aquaculture development with special emphasis on resource management and environmental impact assessment. His research on aquaculture involves analysing and developing farming techniques building on ecological engineering. His research portfolio also comprises biodiversity and resilience studies in temperate coastal habitats, as well as identification and valuation of ecosystem goods and services.

#### Ms Lara Barazi-Yeroulanos (Greece)

### Plenary Lecture IV: Responding to market requirements and challenges: making aquaculture a competitive food producing sector for the benefit of world consumers

Lara Barazi-Yeroulanos is Chief Executive Officer of KEFALONIA FISHERIES S.A., the oldest farm in Greece and the first Greek organic producer. She studied development economics and finance in the US at Columbia and Harvard University. Ms. Barazi is the current Chairman of the Marketing Commissions of FEAP (Federation of European Aquaculture Producers) as well as FGM (Federation of Greek Mariculture).

#### Dr Gary Jensen (USA)

### Plenary Lecture V: Improving knowledge and information sharing, research, extension and communication on aquaculture

Gary Jensen currently serves as the National Program Leader for Aquaculture in the National Institute of Food and Agriculture of the United States Department of Agriculture with mission areas in research, education and extension and federal partner with land grant universities and colleges nationwide. He has PhD and M.S. degrees specialising in aquaculture from Auburn University and B.S. in fisheries from the University of Washington and held aquaculture positions at three universities prior to joining the Department of Agriculture in 1990. He has worked on long- and short-term aquaculture development projects in North Africa and Latin America, chaired the External Evaluation Panel of the U.S. Agency for International Development's Aquaculture Collaborative Research and Support Program, and was a U.S. Peace Corps volunteer in Central America. He is also the federal program manager for aquaculture research and extension grants and five regional aquaculture centres that serve as models for collaborative and integrated farmer, research and extension projects. He has received numerous awards and recognition from industry associations, professional societies and the Department of Agriculture.

#### Dr Modadugu Gupta (India)

### Plenary Lecture VI: Enhancing the contribution of aquaculture to poverty alleviation, food security and rural development

For over four decades, Dr. Gupta has been involved in the development of low-cost, smallscale aquaculture practices that could be sustained by small-scale farmers. He worked with Mekong Secretariat of UN-ESCAP, FAO and the WorldFish Center for nearly 30 years in a number of countries. He has been consultant to a number of regional and international organisations and development agencies. Dr. Gupta is recipient of a number of awards and honorary degrees and a distinguished fellow of many scientific societies. In recognition of his contribution to alleviating poverty and hunger through aquaculture, he was given the World Food prize in 2005.

### **Invited Guest Lecturers**

#### Mr Ulf Wijkström (Sweden)

### Invited Guest Lecture I: Is feeding fish with fish a viable practice for aquaculture development?

After taking an MBA at the University of Lund, Sweden, in 1966, Ulf Wijkström worked two years with private enterprises (in the USA and Colombia) before joining FAO in 1969. After six years with FAO field projects (India, Ghana, Tanzania) Mr Wijkström moved to FAO headquarters in Rome where he worked four years with the Industries Division before joining the Aquaculture Development and Coordination Programme in 1979. Four years later he moved back to Sweden and continued to work as a consultant economist in fisheries and aquaculture, mostly for FAO. In 1993 Mr. Wijkström rejoined FAO as Chief of the Fisheries Development Planning Service from where he retired in 2005 after 27 years of service with the organisation.

#### Ms Shakuntala Haraksingh Thilsted (Denmark)

#### Invited Guest Lecture II: The role of aquaculture in healthy communities

Shakuntala Haraksingh Thilsted has recently been appointed as Senior Nutrition Adviser at the WorldFish Center. She was formerly with the Department of Human Nutrition, University of Copenhagen, Denmark. Her broad area of research and expertise is food-based strategies for improved food and nutrition security in low-income countries. She has carried out work in Bangladesh, Cambodia, West Bengal and Nepal, together with government institutions, universities and NGOs, focusing on the potential of nutrient-dense small fish in combating and preventing vitamin and mineral deficiencies, in particular, vitamin A, iron, zinc and calcium, especially in women and children. At the WorldFish Center, she will be developing and implementing the CGIAR Mega Programme 4: Agriculture for Improved Nutrition and Health.

#### Prof. Sena S. De Silva (Thailand)

### Invited Guest Lecture III: Coping with climate change: a need and a challenge for aquaculture

Professor Sena S De Silva (BSc, PhD, DSc) is the current Director General of NACA and Honorary Professor, Deakin University, Victoria, Australia, and has over 35 years experience in many areas related to aquaculture development and inland fisheries management. He has worked in the academia in many parts of the globe (Sri Lanka, UK, Singapore, Australia) for over 30 years prior to taking up the current position at NACA in 2006, when he moved from his position as Professor of Aquatic Sciences, Deakin University. Prof. De Silva has acted as the principal investigator and coordinated aquaculture related projects in many Asian countries and coordinated the delivery of the first ever post-graduate course in aquaculture in the "distance mode" at Deakin University. He is a leading researcher recognised by peers for his contributions to inland fisheries, fish nutrition and aquaculture, with over 250 publications in peer reviewed journals, senior author of three advanced texts and editor of many conference proceedings; he also serves on the editorial board of many journals and is the Editor in Chief of the newly launched journal, Reviews in Aquaculture. Prof. De Silva has been the recipient of many international awards.

Prof. De Silva will also present the review on Aquaculture Development in Asia-Pacific.

### Regional and Global Aquaculture Development Reviewers

#### Dr Benedict Satia (USA)

#### Aquaculture development in Sub-Saharan Africa

Benedict Philips Satia is Affiliate Professor, School of Marine Affairs, University of Washington, Seattle, USA. Prior to November 2004 he was Chief, International Institutions and Liaison Service, Fisheries and Aquaculture Department of the Food and Agriculture Organization (FAO) of the United Nations; Secretary to the FAO Committee on Fisheries (COFI) and the Advisory Committee on Fisheries Research (ACFR). He was a Member and Vice Chair of the FAO Advisory Committee on Marine Resources Research (1981-1988); member and Leader for Sub-Saharan Africa on the FAO/World Bank/UNDP/Norway Global Thematic Evaluation of Aquaculture; Member and Chair of the Programme Committee of ICLARM Board of Trustees and recently Panel Chair for the Third External Programme and Management Review of WorldFish Center. For several years he was the director of a regional fisheries project covering twenty coastal countries in West Africa from Mauritania to Angola. He has authored over 50 professional and technical papers and four book chapters in fisheries and aquaculture.

#### Dr Laszlo Varadi (Hungary)

#### Aquaculture development in Europe

László Váradi, is Director of the Research Institute for Fisheries, Aquaculture and Irrigation (HAKI), Szarvas, Hungary, where he has been working since 1975. He has 30 years experience in aquaculture research, development, and training. He works regularly, as a consultant, for development assistance programmes in developing countries. From 2006 to 2008 he was the President of the European Aquaculture Society (EAS) and he is presently the focal point for the Network of Aquaculture Centres in Central and Eastern Europe (NACEE) as director of the coordinating institution.

#### Mr Carlos Wurman (Chile)

#### Aquaculture development in Latin America and the Caribbean

Carlos Wurmann has a Masters in Economics from Hull University, UK and a degree in Industrial Civil Engineering from the University of Chile. He served as Marine Resources Manager at Fundacion Chile in Chile where he played a key role in the countries aquaculture development of aquaculture for the country. He worked on various assignments as a consultant for FAO, UNIDO, World Bank and other international agencies. He was the Director of "Aquanoticias", the Chilean aquaculture Magazine with international coverage. He has been an active member of the Executive Committee of the International Institute of Fisheries Economics and Trade (IIFET). He has produced multiple publications and presentations on planning and development of aquaculture and fisheries in Chile and in Latin America, market surveys and business enterprise development in aquaculture, prospective technological, and industrial markets and projects in related areas. He is currently the Executive Director AWARD Ltda, Chile, international consultants specialised in aquaculture and fisheries, member of Committee Fisheries and Aquaculture FONDEF, National Scientific and Technological Commission, Chile.

#### Dr Issam Krouma (Syria)

#### Aquaculture development in the Near East and North Africa

Issam Krouma is a Syrian citizen with a B.Sc. in Agricultural Sciences received in 1972 from the University of Damascus, an M.Sc. in Fisheries 1980 and D.Sc. in Aquaculture 1983 Univ. of Zagreb. He is the founder, regulator and Director of Fisheries Resources Department in the Syrian Ministry of Agriculture. Dr. Krouma worked in the Syrian Ministry of Agriculture from 1986 until his retirement in 2010. He has established licensing systems for fish farms, fishing vessels, fishing and aquaculture rights in retention lakes and irrigation systems and was leader of several projects for fisheries and aquaculture development. He headed Syrian delegations to many meetings including INFOSAMAK, COFI, GFCM and ICCAT. He is also the Syrian Scientific Coordinator in IMO for marine environment and he authored many articles in the Arab Encyclopedia.

#### Dr Paul Olin (USA)

#### Aquaculture development in North America

Paul Olin works as an Academic Coordinator in the University of California Sea Grant Extension Program administratively housed at UC San Diego/Scripps Institution of Oceanography. He conducts applied research and extension programmes in aquaculture and in Northern California is engaged in endangered coho salmon recovery. Dr. Olin is a member of the U.S. – Japan Natural Resources Panel on Aquaculture, the NOAA-Korea Joint Coordination Panel for Aquaculture Cooperation, and the California Aquaculture Development Committee. Prior to his work at the University of California he coordinated an international training programme in shrimp aquaculture and was the Aquaculture Specialist for the University of Hawaii Sea Grant Program. He earned a B.S. in biology from the University of Miami, a M.S. in animal science at UC Davis, and a Ph.D. in zoology at the University of Hawaii.

#### Dr Imtiaz Ahmad (Bangladesh)

#### Global aquaculture development: a comprehensive analysis

Imtiaz Ahmad has thirty years of experience in sustainable rural development programmes. As a former senior World Bank operations professional, he has extensive and diversified experience in developing, supervising and evaluating projects and in formulating sector policies, strategies and plans. He was the Team Leader for three World Bank-financed

fisheries projects in Bangladesh. As a consultant, he has worked in the fisheries sector for the World Bank and FAO. He is presently working as a consultant for FAO on the global aquaculture review and small-scale aquaculture.

### **Thematic Review – Lead Panelists**

## Thematic Session I: Resources and technologies for future aquaculture

#### Dr Barry Costa- Pierce (USA)

### Expert Panel Presentation I.1: Responsible use of resources for sustainable aquaculture

Barry A. Costa-Pierce is Professor of Fisheries and Director of the Rhode Island Sea Grant at University of Rhode Island. He has a Ph.D. in Oceanography (University of Hawaii) and an M.Sc. in Zoology (University of Vermont). As Professor, his Ph.D. students currently work on trophic ecology, life cycle assessments, and carrying capacity issues in aquaculture. He has held a wide range of marine science/science administration posts in six U.S. states and internationally with ICLARM in Asia and Africa. Costa-Pierce has >100 publications including 15 edited books/monographs in aquaculture/fisheries/aquatic ecology. Since 1999 he has been an international editor of Aquaculture, managing ~300 manuscripts each year.

#### Dr Craig Browdy (USA)

### Expert Panel Presentation I.2: Novel and emerging technologies: can they contribute to improving aquaculture sustainability?

Dr Craig Browdy is a past president of the World Aquaculture Society and served as Assistant Director of the SCDNR Marine Resources Research Institute, leading the aquaculture section's Waddell Mariculture Research and Development Center. His research over the past 25 years has targeted aquaculture technology innovation to improve availability and of seafood resources, specifically focusing on financial and environmental sustainability of marine shrimp culture. He has developed collaborations and consultancies in several countries in Asia, Latin America and the Middle East. Dr. Browdy is now senior manager for aquaculture research for Novus International Inc. a global leader in animal nutrition and health applications.

#### Dr Albert Tacon (USA)

### Expert Panel Presentation I.3: Aquaculture feeds: addressing the long-term sustainability of the sector

Albert G.J. Tacon earned his PhD in 1978 in aquaculture nutrition (University College, Cardiff, Wales) and his BSc in 1973 in Botany and Zoology (Westfield College, University of London, England). Dr Tacon has over 30 years of experience in aquaculture nutrition and feed development activities, including fourteen years with the FAO within national, regional and inter-regional aquaculture development projects. Dr Tacon is an aquaculture consultant based in San Diego and is the Technical Director of Aquatic Farms Ltd, Kaneohe, Hawaii, USA.

## Thematic Session II: Sector management and governance in aquaculture

#### Dr Nathanael Hishamunda (FAO)

### Expert Panel Presentation II.1: Improving aquaculture governance: what is the status and who is responsible for what?

Dr Nathanael Hishamunda, is a Senior Aquaculture Officer in charge of Economics, policy and planning with the Food and Agriculture Organization of the United Nations (FAO), Rome. He holds a Ph.D. in Agricultural Economics from Auburn University, USA, a Master's Degree in Aquaculture with focus on Aquaculture Economics from the same institution, and an Engineering degree in Agriculture from the Rwanda National University. Dr. Hishamunda, has extensive field experience working with FAO Member Countries worldwide in the formulation and implementation of policies, strategies and plans for sustainable aquaculture development. He authored and co-authored numerous articles in scientific journals, FAO technical papers, book chapters and monographs in aquaculture economics, policy and governance.

#### Dr Jolly Curtis (USA)

## Expert Panel Presentation II.2: Aquaculture and socio-economic growth and development: enabling policies, legal framework and partnership for improved benefits

Curtis Jolly is Alumni Professor, the Charles W. Barkley Endowed Professor and Chair of the Department of Agricultural Economics and Rural Sociology at Auburn University. Throughout his career he has been conducting research on the economics of aguaculture and economic development. His teaching engagement covers courses on the economics of aquaculture, economic development and international trade. He has over 25 years working experience in the Caribbean and Africa and he has also worked long and short term in 15 African countries. During his tenure at Auburn University he represented Auburn University on a USAID project in the Department of Farming Systems and Technology Transfer at the Institut Senegalais des Recherches Agricoles (ISRA). He also served as Farming Systems Economist on a similar project at the Institut de l'Economie Rurale in Bamako, Mali, He has received numerous awards for his scholarly research and teaching contributions. He is a member of the Board of Directors of Auburn University Credit Union, Overseas Representative of the Caribbean Agricultural Economics Society, and member of the American Agricultural Economics Association. Professor Jolly received his Bachelor of Science from Tuskegee University, Masters in Agricultural Economics from Auburn University, and his Ph.D. in Agricultural Economics from Louisiana State University.

#### Prof. Clement Tisdell (Australia)

### Expert Panel Presentation II.3: Investment, insurance and risk management for aquaculture development

Clement Tisdell is Professor Emeritus in the School of Economics at The University of Queensland, Brisbane, Australia. He was a founding member of the International Association of Aquaculture, Economics and Management and for several years served as its Vice-President and then its President. Also in the initial years, he was co-editor of the association's journal, Aquaculture Economics and Management. He continues with research on the economics of aquaculture.

#### Thematic Session III: Aquaculture and environment

#### Dr John Benzie (Ireland)

### Expert Panel Presentation III.1: Promoting responsible use and conservation of aquatic biodiversity for sustainable aquaculture development

John Benzie, BSc Hons (Aberdeen), PhD (Australian National University) has worked extensively for more than 25 years in government, university and private sectors worldwide, applying genetics to natural resource management and aquaculture. Prof Benzie led programmes in aquaculture, biotechnology and marine science for Australian Government agencies, the University of New South Wales, and a multi-national shrimp breeding company. He is currently Professor of Marine Molecular Biodiversity at University College Cork, Ireland.

#### Dr Doris Soto (FAO)

### Expert Panel Presentation III.2: Addressing aquaculture - fisheries interactions through the implementing ecosystem approach to aquaculture (EAA)

Doris SOTO, a Chilean National, obtained her Ph.D. in Ecology from the University of California, USA in 1988. She worked as a Professor at the Austral University in Puerto Montt, Chile, until 2004 where she was actively involved in the environmental management of aquaculture systems, and aquaculture fisheries interactions. She joined FAO as a Senior Aquaculture Officer in 2005 and she is currently leading a programme to develop a global framework for an Ecosystem Approach to Aquaculture. She has published numerous scientific papers and reports and implemented and managed many projects towards advancing aquaculture and environmental sustainability.

#### Dr Mike Hine (New Zealand)

### Expert Panel Presentation III.3: Improving biosecurity: a necessity for aquaculture sustainability

Mike Hine left university in England in 1970 for New Zealand, where he worked for 36 years on the parasites and diseases of marine and freshwater fish and shellfish for the Ministry of Agriculture and Fisheries. He also spent a year implementing movement controls on pearl oysters in Western Australia, to prevent the spread of disease between farms. As a result he became involved in national and international biosecurity issues with the OIE, FAO, and NACA, and was advisor to the Chief Veterinary Officer of New Zealand on aquatic diseases and global biosecurity issues.

## Thematic Session IV: Responding to market requirements and challenges

#### Mr Jonathan Banks (UK)

## Expert Panel Presentation IV.1: Facilitating market access for producers: addressing market access requirements, evolving consumer needs, and trends in product development and distribution

During his 30+ years in the fast moving consumer goods industry, Mr. Banks has held senior sales and marketing positions in multinational manufacturers and a retailer. He recently left Nielsen, the world's largest market research group, where for the last 7 years he was their European Business Insight Director. Jonathan specialises in tracking and predicting consumer behaviour and trends, to help manufacturers and retailers formulate winning strategies. He is a widely recognised figure in British and international media, as well as being a prominent speaker and moderator at key industry events around the world.

#### Dr Karunasagar Iddya (FAO)

### Expert Panel Presentation IV.2: Consumer assurance: market-based quality schemes, certification and traceability, ecolabeling, retailer specifications

Iddya Karunasagar holds a doctoral degree in microbiology and has been working in the area of aquaculture and fish safety for over three decades. Before joining FAO in 2007, he served as a member of Joint FAO/WHO Expert Committee on Microbiological Risk assessment and was a drafting group member for risk assessment for *Vibrio* spp. At FAO he has been working the Products, Trade and Marketing Service and contributing to the work in the area of fish quality, safety and risk assessment. He is working closely with the Codex Committee for Fish and Fishery Products and Codex Committee on Food Hygiene. He is currently working on projects to help FAO member countries in developing and

implementing good aquaculture practices to minimise use of veterinary drugs and minimise risks due to microbial contamination.

#### Dr Mark Prein (Germany)

### Expert Panel Presentation IV.3: Organic aquaculture: the future of an expanding niche market

Mark Prein, PhD. Project Officer in the Sector Project "Promotion of Responsible Fisheries", Division 45 - Agriculture, Fisheries and Food, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH. Graduated with a MSc (1986) and PhD (1990) in Fisheries Biology, Marine Zoology and Marine Chemistry at Kiel University, Germany, on multivariate analyses of fish production in integrated aguaculture-agriculture (IAA) systems for rural development in the Philippines, Zambia and Peru, and aquaculture production efficiency in Israel. He Joined ICLARM in 1991 leading a research project in Ghana on appropriate aguaculture systems. From 1994 at ICLARM's headquarters in Manila. From 1996 to 2004 he served as Senior Scientist and Programme Leader for IAA systems. From 2000 to 2006 he worked in Penang/Malaysia at the renamed WorldFish Center. Dr Prein's focus of research has been on the introduction and diffusion of integrated aguacultureagriculture into traditional smallholder farming systems in Asia and Africa for poverty alleviation, with field activities in Bangladesh, India, the Philippines, Viet Nam, Malawi, and Cameroon covering ponds, rice fields, seasonal floodplains and small water bodies. He contributed to in-house development of farmer participatory research tools for householdlevel monitoring and evaluation of adoption of IAA and its impact, using sustainability indicators and agroecological, social and economic parameters. He has held training courses on this approach ('RESTORE', including PRA field tools and software) in the Philippines, Viet Nam, Thailand, Bangladesh, Malawi, Ghana and Malaysia. From 2006 to 2009 he worked as a consultant for GTZ and FAO on aquaculture development issues.

## Thematic Session V: Improving knowledge and information sharing, research and extension in aquaculture

#### Dr Brian Davy (Canada)

### Expert Panel Presentation V.1: Investing in research, communication, training/ extension for responsible aquaculture

Brian Davy received his PhD in Biology from Texas A&M, focussing on fisheries biology and natural resource management. He has worked as a Postdoctoral Fellow at Cornell University and as a visiting scientist at Tokyo University of Fisheries. He has mainly worked with IDRC for 35 years, based in Canada as well as in Singapore. He has been the Executive Secretary for the Strategy for International Fisheries Research (a multidonor coordination body for enhanced fisheries research and development in the Third World). His interests lie in natural resource management with a focus on aquatic resources, especially aquaculture within these management systems.

#### Dr Michael Phillips (Malaysia)

### Expert Panel Presentation V.2: Servicing the aquaculture sector: role of state and private sectors

Michael Phillips PhD is Senior Scientist at the WorldFish Center based in Penang, Malaysia. He has a Ph.D. in Aquaculture and Fish Behaviour from the University of Stirling and has worked for over 23 years on aquaculture development in Asia, including as Environment and Aquaculture specialist from 1991-94 at the Asian Institute of Technology (AIT) in Thailand. He worked as an Environment Specialist and Research and Development Manager at the Network of Aquaculture Centres in Asia-Pacific (NACA) from 1994-2008, and most recently joined the WorldFish Center. He has been involved in various research and development projects related to sustainable aquaculture technologies and farming systems development, improving environmental sustainability of aquaculture and organisation of small-scale farmer groups, certification and market access for small-scale aquaculture farmers. He recently acted as co-coordinator of the Shrimp Farming and Environment consortium involving FAO, NACA, WWF, World Bank and UNEP which was awarded a World Bank Green Award 2006 for work on international principles for responsible shrimp farming, and since early 2005 was heavily involved in supporting rehabilitation of aquaculture following the earthquake and tsunami disaster in Aceh and Nias.

#### Dr João Gomes Ferreira (Portugal)

### Expert Panel Presentation V.3 Progressing aquaculture through virtual technology, using novel management and decision-making tools

João Gomes Ferreira is a Professor in Environmental Engineering at the Faculty of Sciences and Technology of the New University of Lisbon, Portugal, and currently on the Board of IMAR - Institute of Marine Research. He has coordinated the modelling component of 12 European research projects over the last 15 years, published over 40 papers in peer-reviewed journals, and is the author of the EcoWin2000 ecological modelling package and the FARM carrying capacity model.

#### Mr Xiaowei Zhou (FAO)

### Expert Panel Presentation V.4: Information and data needs: a strategy for improving aquaculture statistics

Zhou Xiaowei, MSc. is a Fishery Statistician (Aquaculture) for the Fisheries and Aquaculture Statistics and Information Service (FIPS) of the Fisheries and Aquaculture Department of FAO. After his graduation from Shanghai Fisheries University in Inland Fisheries in

1983, he started working as a research assistant at the Freshwater Fisheries Research Centre (FFRC), Chinese Academy of Fisheries Sciences. In 1986 he obtained his M.Sc. in aquaculture from the Fisheries College, University of the Philippines. From 1986-1993, he was involved in research projects on nutritional studies feed development of major freshwater aquaculture species in China in FFRC. He also served as coordinator as well as trainer/lecturer for the annually offered international training programme on integrated fish farming initiated by FAO and the Chinese Government. From 1994 until 2009 Xiaowei worked with the Network of Aquaculture Centres in Asia-Pacific (NACA). Since he joined FAO in March 2009, he has been responsible for and oversees the global aquaculture statistical data collection, analysis and dissemination, including updating the aquaculture statistical standards and data structure to meet the needs for data for planning and management.

# Thematic Session VI: Enhancing the contribution of aquaculture to poverty alleviation, food security and rural development

#### Dr Rohana Subasinghe (FAO)

### Expert Panel Presentation VI.1: Protecting small-scale farmers: a reality within a globalised economy?

Rohana Subasinghe, Senior Aquaculture Officer of the Fisheries and Aquaculture Department of FAO. Specialised in aquaculture, disease control and health management (with particular reference to microbiology and immunology). He has worked in all parts of the world, with most experience in Asia. He was responsible for many projects on aquaculture and aquatic animal health at national, regional and international levels. A former teacher of the University of Colombo and the Universiti Putra Malaysia, Prof. Subasinghe earned his BSc in Zoology from the University of Colombo, MSc in Aquaculture from the University of Plymouth and PhD in Aquatic Animal Health from the University of Stirling. He has been responsible for initiating major policy changes in aquatic health management in relation to aquaculture in the region and globally. Founder member of the Fish Health Section of the Asian Fisheries Society, he currently serves as Technical Secretary to the Sub-Committee on Aquaculture of the Committee on Fisheries of the FAO.

#### Prof. David Little (UK)

### Expert Panel Presentation VI.2: Alleviating poverty through aquaculture: how can we improve?

David Little is a Professor of Aquatic Resource Management at the Institute of Aquaculture, University of Stirling, Scotland. He has an active programme of teaching and research focusing on aquaculture in tropical countries with a focus on developmental impacts. Current research projects include coordinating a large scale collaborative research project under the EU FP7 programme, 'Sustaining Ethical Aquaculture Trade' aiming to support the dynamic trade in farmed fish and shellfish between Asia and Europe. As part of the Sustainable Aquaculture group within the Institute, he is also involved in a consortium promoting decentralised fish seed strategies in Asia, research project investigating the co-culture of sea cucumber with shrimp in Thailand and Pangasius production in Viet Nam and Bangladesh. He continues a long association with the Asian Institute of Technology in Bangkok through a range of training and networking activities.

#### Dr Kyoko Kusakabe (Japan)

### Expert Panel Presentation VI.3: Addressing human capital development and gender issues in aquaculture sector

Kyoko Kusakabe is an associate professor of Gender and Development Studies at the School of Environment, Resources and Development, Asian Institute of Technology in Thailand. She has been researching on gender issues in aquaculture in Thailand, Cambodia and Viet Nam, especially focusing on cross border fish trade and commodity chain of fish in Cambodia. She is a co-editor of a monograph "Gender concerns in aquaculture in Southeast Asia", and co-editor of the Gender and Fisheries issue in the journal Development.

#### Dr M.C. Nandeesha (India)

### Expert Panel Presentation VI.4: Supporting farmer innovations, disseminating indigenous knowledge and aquaculture success stories

M.C. Nandeesha is currently serving as Dean, Fisheries College and Research Institute under the Tamilnadu Veterinary and Animal Sciences University in Thoothukdi, Tamil Nadu, India. He has more than 27 years of experience in teaching, research and development in the field of aquaculture in India. Cambodia and Bangladesh with long term contracts. He spent nearly a decade at the grass root level on aquaculture projects supported by OXFAM in Cambodia and CARE in Bangladesh. Prof. Nandeesha has made significant contributions to aquaculture teaching, research and development and these are recognised through a number of awards. Some of the prominent awards that reflect his contribution to these areas include: "Best Teacher award of the Professional Fisheries Graduates Forum: "Jubilee award" of the International Foundation for Science. Sweden for the research contribution in fish nutrition; " Prof. H.P.C. Shetty award" of the Indian Branch of Asian Fisheries Society in recognition of his contribution to aquaculture research and development; "Sahameitrei award" of the Royal Government of Cambodia for the exemplary contributions made for aquaculture and Human Resource Development of that country; the Asian Fisheries Society Gold Medal award in recognition of his contribution to Asian Fisheries Science and the Society.

**Session Chairpersons** 

#### Mr Yngve Torgersen (Norway)

#### Session 2 – Regional and Global Reviews – Day 1 – 11.30 – 13.00

After graduating from the University of Oslo, with a degree in microbiology in 1989, Mr Torgersen worked with the National Veterinary Institute in Oslo, Norway, until 1996 as a scientist in fish health and disease preventative measures in aquaculture. Between 1996 and 2002 Mr Torgersen held various positions in the Ministry of Agriculture, Department of Veterinary Services, including Head of Animal Health Unit. In 2002 he moved to Brussels to work for the European Commission – DG Health and Consumer Affairs – Animal Health Unit where he was responsible for the development of the new EU-Aquatic Animal Health legislation that was adopted by the European Council in September 2006. Since September 2006 Mr Torgersen has been Deputy Director General in the Ministry of Fisheries and Coastal Affairs in Oslo – Norway, where he currently is responsible for policy development of matters relating to the environmental sustainability of Norwegian Aquaculture, including fish health and welfare. Over the years, Mr Torgersen has published more than 40 scientific papers and articles, and given numerous presentations around the world on various aquaculture related subjects.

#### Dr Waraporn Prompoj (Thailand)

#### Session 2 – Regional and Global Reviews – Day 1 – 14.30 – 17.15

Waraporn Prompoj, Director of Fisheries Foreign Affairs Division, Department of Fisheries, Thailand obtained her Ph.D. from the School of Planning, University of Waterloo, Canada. She has more than 25 years experience in fisheries and aquaculture working with the Department of Fisheries. She initiated the development of the Code of Conduct (COC) and Good Aquaculture Practice (GAP) shrimp standards and the certification system for Thailand, which has been widely used over the past decade. She was also a key player in the development of ASEAN Shrimp Alliance as well as the ASEAN Shrimp GAP. She deals with international affairs with regard to fisheries and aquaculture matters for Thailand.

#### Mr Xaypladeth Choulamany (LAO PDR)

#### Session 2 – Regional and Global Reviews – Discussion - Day 1 – 17.15 – 18.00

Mr. Xaypladeth holds a Soviet degree, and a Master of Science in rural development planning and rural settlement programs from the Asian Institute of Technology in Bangkok.

As Deputy Director General of the Department of Planning and International Cooperation of the Ministry of Agriculture and Forestry, Lao PDR, Mr. Xaypladeth Choulamany has overseen international cooperation and investment in the agriculture and forestry for the past 5 years. Before that, he was actively involved in establishing the Living Aquatic Resource Research Center (LARReC) in Vientiane, serving as its founding director between 1999 and 2004. He has been active in developing numerous community fisheries programmes in the Lower Mekong Basin. He has been actively involved in formulating national strategies for agricultural development, biodiversity, watershed-based development, wetland management and forestry in the Ministry.

Mr. Xaypladeth prepared the aquatic resources component of the National Biodiversity Strategy in 2000. He also authored the report on "Traditional Use and Availability of Aquatic Biodiversity in Rice-Based Ecosystems" in 2005.

#### Prof. Upali Amarasinghe (Sri Lanka)

#### Session 3 – Thematic Session I – Day 2 – 08.30 – 10.00

Upali Amarasinghe is from the University of Kelaniya, Sri Lanka. He has over 30 years experience in fisheries research in Sri Lanka. For his life-long scientific contribution to fisheries biology, he was awarded a D.Sc. in 2010, by the Bangor University in UK. He was the winner of several awards for his research, TWAS award for young scientist, CVCD award for most outstanding scientist, Vice Chancellor's awards for best scientist in three consecutive years, several Presidential awards for authorships in papers published journal with high impact factor, award of Sri Lanka Association for Advancement of Science for most outstanding scientist. He has published over 100 scientific papers and edited several monographs. So far, he has produced 30 postgraduates at doctoral and masters levels. He is a Fellow of National Academy of Sciences of Sri Lanka and a Chartered member of Institute of Biology in Sri Lanka.

#### Dr Ambakar Eknath (India)

#### Session 3 – Thematic Session II – Day 2 – 10.30 – 15.00

Ambakar Eknath holds a Bachelors' and Masters degree in Fisheries Sciences from the prestigious College of Fisheries, Mangalore; PhD from Dalhousie University under Dr Roger Doyle with Dalhousie University Fellowship & IDRC support. He worked at ICLARM / WorldFish Center from 1987-1997 as principal architect of the (i) ICLARM Program on Fish Germplasm Enhancement and Breeding; (ii) the GIFT Tilapia Program; (iii) the International Network on Genetics in Aquaculture (INGA) sponsored by UNDP and participated in by 18 countries in Asia and Africa and several advanced scientific institutions as associated members; (iv) Public-Private Partnership in Fish Breeding Enterprises. From 1998-2006 he worked in GenoMar (BioSoft) as one of the founding scientists responsible for establishing GenoMar as a life sciences company in the University of Oslo research park, involving strategic planning and attracting venture capital from private 'angel' investors. He has been the Director of CIFA, a premier national institute responsible for research and development of freshwater aquaculture since 2008.

#### Dr Chumnarn Pongsri (Thailand)

#### Session 3 – Thematic Session I – Day 2 – 10.30 – 15.00

Chumnarn Pongsri is the Secretary-General of the Southeast Asian Fisheries Development Center (SEAFDEC). He obtained his B.Sc. in Fisheries from the Faculty of Fisheries, Kasetsart University in 1981, M.Sc. in Aquaculture from the Asian Institute of Technology (AIT) in 1985, and Ph.D. from the University of Wales, UK in 1994. He started working with the Department of Fisheries of Thailand in 1981 as Fisheries Biologist in several provinces in the north-eastern part of Thailand. From 2000 to 2003, he was the Director of the Environment Division of the Mekong River Commission (MRC) Secretariat and also served as Member of the Board of Advisors for the Greater Mekong Sub-region Academic Research Network (GMSARN), after which he returned to the DOF and continued working as a Senior Fisheries Biologist and Expert in Ecology. Dr. Chumnarn also served as Secretary to the Permanent Secretary of the Ministry of Agriculture and Cooperatives until 2009 when he was appointed as the Secretary-General of SEAFDEC.

#### Dr Fatchuri Sukadi (Indonesia)

#### Session 3 – Thematic Session III and IV – Day 2 – 16.15 – 17.45

Fatuchri Sukadi is a veteran aquaculturist in Indonesia and obtained his PhD from the University of Auburn, USA in 1989. He served as the Director of the Central Research Institute for Aquaculture in Indonesia from 1997 to 2001 and then moved to the Ministry of Marine Affairs and Fisheries Indonesia as the Director General of Aquaculture from 2001 to 2005. He is currently the Chairman of the Indonesian Fisheries Graduate Association, Chairman, Indonesian Ornamental Fish Association, Indonesian Board of Marine Affairs and Fisheries and many others.

#### Dr Fatimah Yusoff (Malaysia)

#### Session 3 – Thematic Session III – Day 3 – 08.30 – 12.00

Fatimah Yusoff is a professor in the Department of Biology and also serves as the Director of the Institute of Bioscience University Putra Malaysia (UPM). She received her Bachelor Degree (1977) in Zoology from Drew University, New Jersey, and M.S (1979) and PhD (1987) in Limnology from Michigan State University, USA. She joined UPM as a lecturer in the Faculty of Fisheries and Marine Science in 1980. Her research deals mainly with ecological studies of different aquatic ecosystems, focussing on water quality, biodiversity, and culture of planktonic organisms.

#### Mr Rodrigo Infante (Chile)

#### Session 3 – Thematic Session IV – Day 3 – 08.30 – 12.00

Mr Infante is an agronomy engineer with a major in animal husbandry and more than 20 years of experience in the salmon aquaculture sector in Chile. He started as technical manager in a Chilean-Canadian company located in Chile, Hatfield international. He occupied for 20 years the position of Head of the Chilean Salmon Farmer's Association. From this position he developed important campaigns for Chilean salmon and participated in the formation of the first generic campaign for salmon in the US market, together with US and Canadian producers. He also coordinated the defence of the Chilean salmon in the US and European markets. Significant changes in the structure of the association, including providers of different services that form the salmon cluster where developed during his mandate. Currently he is an advisor for the industry in various topics related to the international development and regulatory processes for the industry.

#### Dr Jay Parsons (Canada)

#### Session 3 – Thematic Session V and VI – Day 3 – 13.30 – 15.45

Dr Jay Parsons is currently the acting Director General of the Science Strategies and Integration Directorate for the Canadian federal Department of Fisheries and Oceans. He is also the Director of the Aquaculture Science Branch for Fisheries and Oceans Canada, where he is responsible for the leadership and coordination of Fisheries and Oceans Canada's aquaculture research programmes, including national and international research collaborations. Dr Parsons is the current President of the World Aquaculture Society.

#### Mr Jacob Wani (Papua New Guinea)

#### Session 3 – Thematic Session V – Day 3 – 16.15 – 18.15

Jacob Wani holds a Bachelor of Science from the University of Papua New Guinea and a Masters Degree in Fisheries Sciences (Marine Biotechnology) from the Hokkaido University, Japan. He worked in thet PNG National Fisheries Authority from 2003-2010 as Principal Scientist, Aquaculture and Inland Fisheries Development. He has been involved in promoting and developing inland aquaculture as a food security and poverty alleviation tool. He has mainly been involved in working with impoverished communities to farm gift tilapia for food and income security.

#### Dr Geoff Allan (Australia)

#### Session 3 – Thematic Session VI – Day 3 – 16.15 – 18.15

Geoff Allan is the Research Leader, Aquaculture, and Director of the Port Stephens Fisheries Institute, Industry and Investment NSW, Australia. He leads national & international research on aquaculture and nutrition. He is Fisheries Program Consultant for Australian Centre for International Agricultural Research (ACIAR), a founding Trustee of Aquaculture without Frontiers and a past President of the World Aquaculture Society.

#### Ms Beatrice Nyandat (Kenya)

#### Session 3 – Thematic Session V and VI – Day 4 – 08.30 – 11.45

Beatrice Nyandat has been working with the Department of Fisheries in Kenya as Principal Fisheries Officer-Aquaculture since 1985. Until to 2008, she headed the Aquaculture Division in the department. She is currently the liaison officer for all aquaculture programmes being undertaken with FAO. Ms. Nyandat was instrumental in the development of both the Regional FAO/TCP in aquaculture and the National FAO/TCP that is currently being implemented with small scale farmers in Kenya. She has been and still is the National Representative in both National and Regional Aquaculture Programmes as well as the Aquaculture Network of Africa (ANAF). She is devoted to the sustainable development of aquaculture at national, regional and even global levels by attending various expert foras as well as the Sub-Committee on Aquaculture. She is a member of the expert panel on Alleviating poverty through aquaculture: progress, opportunities, and improvements of the Global Conference on Aquaculture 2010.

#### Mr Wilson Mwanja (Uganda)

#### Session 3 – Thematic Session VI – Day 4 – 09.15 – 11.45

Wilson Waiswa Mwanja works with the Ministry of Agriculture, Animal Industry and Fisheries in the Republic of Uganda as the Commissioner for Fisheries in charge of the Directorate of Fisheries Resources. He is a fisheries scientist schooled in fish conservation and population genetics of cichlid and labeine fish species of the Lake Victoria Region, and a graduate of the Ohio State University. He has been working with the Ministry since March 2001. Previously he worked for the National Institute for Fisheries Resources Research from 1991 to 2000; and as a lecturer of fisheries biology and evolution with Makerere University from 2000 to 2001.

#### Professor Barry Hill (UK)

#### Session 4 – Summary Presentation – Day 4 – 13.30 – 15.00

Until his recent retirement, Dr Hill was the Chief Advisor for Aquatic Animal Health to the UK's Department for Environment, Food and Rural Affairs (DEFRA). For almost 40 years, he played the lead role in advising the UK government on scientific aspects of new legislation and policy on fish and shellfish diseases and also provided expert advice to the European Commission on EU legislation on aquatic animal health. Dr Hill has been a member of the Aquatic Animals Health Standards Commission of the World Organisation for Animal Health (OIE) for over 20 years serving as Secretary General, Vice-President and (currently) as President. He is responsible for leading the policy development and implementation aspects of the EU FP7 SEAT (Sustaining Ethical Aquaculture Trade) project in the four Asian partner countries (Bangladesh, China, Thailand and Viet Nam).

#### Prof. Peter Edwards (Thailand)

#### Session 4 – Summary Presentation – Day 4 – 15.30 – 17.00

Peter Edwards is currently an Emeritus Professor at the Asian Institute of Technology in Thailand where he founded the aquaculture programme. He has over 30 years experience in aquaculture education, research and development, especially in the Asian region. His main areas of interest are in small-scale farming, poverty alleviation and the environment in developing countries. He has published over 200 papers, about a quarter in refereed international journals, several reviews, authored two books and edited two more. He also writes a regular column on rural aquaculture for the Network of Aquaculture Centres in Asia's (NACA's) quarterly magazine Aquaculture Asia. He has been a consultant for many international organisations such as ACIAR, ADB, ESCAP, FAO, UNDP, WorldFish and the World Bank. Most recently he has been assisting the FAO initiatives to develop guidelines for an ecosystem approach to aquaculture and for small-scale aquaculture.