Contributors

Mahfuzuddin Ahmed
WorldFish Center, Malaysia

Mahfuzuddin Ahmed is Principal Scientist (Fisheries Economist) and Director of Policy, Economics and Social Science Discipline at the WorldFish Center. He has focused on the bioeconomics, market studies and economic valuation of fisheries in his research. His career began in the late 1970s as a researcher and economics lecturer at the University of Chittagong (birthplace of ‘Grameen Bank’). Since the mid-1980s he has worked for the Mekong River Commission, DANIDA, the Asian Development Bank and the Centre for Integrated Rural Development for Asia and the Pacific. He is the current President of the International Institute for Fisheries Economics and Trade (IIFET), a founding governor of the ‘Grameen’ Fisheries Foundation, scientific adviser to the International Foundation for Science and associate editor of Asian Fisheries Science. He has recently co-authored the book Fish to 2020: Supply Demand in Changing Markets, published by the WorldFish Center and the International Food Policy Research Institute (IFPRI).

Ragnar Arnason
Department of Economics, University of Iceland

Ragnar Arnason is a Professor of Fisheries Economics at the University of Iceland. With a master’s degree in mathematical economics and econometrics from the London School of Economics, he received his PhD in natural resource economics from the University of British Columbia in 1984. Professor Arnason has published extensively in the area of fisheries economics and fisheries management. He has also been active in consultancy work on fisheries policy and fisheries management systems around the world.

Manuel Barange
GLOBEC International Project Office, UK

Dr Barange has been the Director of the International Office of GLOBEC (Global Ocean Ecosystem Dynamics) since 1999. Previously he was a Specialist Scientist and Head of the Surveys and Fish Behaviour Division at
Marine and Coastal Management in Cape Town, South Africa. Dr Barange has a PhD in Ecology from the University of Barcelona, Spain (1991), and has published extensively on zooplankton and Antarctic krill ecology, physical-biological interactions, fish feeding, behaviour and life history strategies, pelagic fish assessment, hydroacoustic techniques, fish survey design, and more recently, global change impacts on marine ecosystems. He is a member of the SPACC (Small Pelagic Fish and Climate Change Programme) Executive Committee and Chair of the International Advisory Panel of the southern African research project BENEFIT. He regularly advises and provides evaluations for national and international agencies and funding bodies, and has a particular interest in linking natural and social sciences in the development of sustainable, ecosystem-based management options.

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Roehl Briones is an economist now working as a consultant in the Philippines. He obtained his PhD in economics from the University of the Philippines, Diliman, in 2000. Previously he was an Assistant Professor of Economics at the University of the Philippines, Los Baños, as well as the Ateneo de Manila. Most recently he was a postdoctoral fellow at the WorldFish Center, Malaysia, where he worked on priorities for aquatic resources research, and on impact assessment. His research studies and publications cover a range of topics in fish supply and demand, the rural economy, household welfare and macroeconomic modelling.

Greg Cripe
Spokane Falls Community College, USA

Greg Cripe is currently a full time instructor of Mathematics at Spokane Falls Community College. He received his PhD in applied mathematics in 2002 and his MA in computer science from the University of Montana. His research includes computer modelling and simulations relevant to the management and conservation of biological resources.

Pierre Fréon
Institute of Research for Development, France

Pierre Fréon is a specialist in fish biology and population dynamics at the Institute of Research for Development (IRD). He has studied coastal pelagic fish species in West Africa, Venezuela, West Indies and Southern Africa. He is author or co-author of more than 40 scientific papers in inter-
national journals, of 20 book chapters and, with O. Misund, of the book entitled *Dynamics of Pelagic Fish Distribution and Behaviour: Effects on Fisheries and Stock Assessment*. He is leading the IRD Upwelling Ecosystems international programme, which involves 80 scientists mainly from France, Morocco, Peru and South Africa, and aims at developing, in the Humboldt, Canary and Benguela currents, comparative analysis of the structure and functioning of upwelling ecosystems in order to implement an ecosystem approach to fisheries.

**Len Garces**  
*WorldFish Center, Malaysia*

Len Garces is a Research Fellow (Fisheries Scientist) at the WorldFish Center and currently involved with the implementation of Coastal Fisheries Projects of the Center. He was involved in the implementation of the multidisciplinary Project on ‘Sustainable Management of Coastal Fish Stocks in Asia’, widely known as ‘TrawlBase’. The project documented from scientific trawl surveys a 5–30 per cent decline of fisheries resources from their levels prior to the expansion of the fishing industry in South and Southeast Asia. Mr Garces is also involved with site assessments on coastal fisheries and marine environments in several fishing grounds in the Philippines (for example San Miguel Bay, Lagonoy Gulf, Manila Bay, Carigara Bay, Honda Bay and the Visayan Sea). His research work is focused on innovative ways of assessing and managing small-scale fisheries in developing country situations.

**Peter Golubtsov**  
*Moscow State Lomonosov University, Russia*

Peter Golubtsov is Professor in the Division of Mathematics, Physics Department of the Moscow State Lomonosov University, Moscow, Russia. His areas of research include information science, decision making theory, game theory, probability and statistics, fuzzy sets and systems, mathematical physics, computer simulation, algebra and category theory. In the centre of his studies is the concept of informativeness for information transformers (measurement systems in a wide sense), which generalizes the notion of sufficiency in statistics. This approach allows the study of processes of information transformation from a unified viewpoint independent of the concrete method used to describe these processes and is based on category theory.
Lawrence Hamilton
*University of New Hampshire, USA*

Lawrence Hamilton is Professor of Sociology at the University of New Hampshire. His interdisciplinary research examines human-environment interactions in the circumpolar North. Since 1996, Hamilton has directed research projects supported by the Arctic System Science and Arctic Social Sciences programmes of the US National Science Foundation, studying responses to environmental change among fisheries-dependent communities of the North Atlantic Arc (NAArc). Publications based on this research describe some broad common patterns, and also present more detailed case studies of fishing communities in Newfoundland, Greenland, Iceland, Norway and the Faeroe Islands.

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Rögnvaldur Hannesson is Professor of Fisheries Economics at the Norwegian School of Economics and Business Administration, Bergen, Norway. He has published several books on fisheries economics and management and a large number of papers in scientific journals. Apart from fisheries economics, his interests include the economics of petroleum and other natural resources. He has advised the Norwegian and Icelandic governments on fisheries policy and done consultancy work for the OECD, the FAO and the World Bank. He is a member of the advisory committee on fisheries management for the Director General of the FAO.

Samuel F. Herrick Jr
*US National Marine Fisheries Service, USA*

Samuel F. Herrick Jr is an Industry Economist with the US National Marine Fisheries Service in La Jolla, California. His areas of interest include welfare economics, fisheries conservation policy analysis and the economics of climate change and fisheries. Currently he is pursuing these interests by conducting economic research on the conservation and management of small pelagic fisheries in the eastern Pacific Ocean.

Kevin Hill
*National Marine Fisheries Service, USA*

Kevin Hill is a Research Fishery Biologist with the National Marine Fisheries Service in La Jolla, California. His areas of interest include fish population dynamics, age determination, stock assessment modelling and fisheries management, focusing primarily on coastal pelagic species.
(Pacific sardine and Pacific mackerel) since 1997. He serves on the Pacific Fishery Management Council’s Coastal Pelagic Species Management Team and is Chair of the Council’s Scientific and Statistical Committee.

Torbjørn Lorentzen  
*University of Bergen, Norway*

Torbjørn Lorentzen has a Masters degree in Economics at the University of Bergen, and works as a researcher at the Institute for Research in Economics and Business Administration (SNF) in Bergen. His main subjects are industrial and international economics and market and structural analysis, focusing on the fishing industry.

Robert McKelvey  
*University of Montana, USA*

Robert McKelvey was educated at Carnegie Mellon University (BS, 1950) and the University of Wisconsin (PhD, 1954). He has been a faculty member in Mathematical Sciences at the University of Colorado, and subsequently at the University of Montana (as Professor Emeritus since 1993). His scientific research has been in mathematical analysis and applications. Since 1980 he has focused on bioeconomic modelling of natural resource systems and, most recently, on game theoretic analysis of multinational natural resource management institutions, especially those concerned with high seas marine ecosystems.

Kathleen Miller  
*National Center for Atmospheric Research, USA*

Kathleen Miller works with the Institute for the Study of Society and Environment (ISSE) at the National Center for Atmospheric Research, in Colorado, USA. She received a PhD in Economics from the University of Washington in 1985. Dr Miller conducts research on the management of climate-sensitive natural resources and the socioeconomic impacts of climate variability and climate change. She was recently appointed to serve as a member of the Scientific Steering Committee for the CLIOTOP (Climate Impacts on Oceanic Top Predators) project under the auspices of GLOBEC (Global Ocean Ecosystem Dynamics).

Christian Mullon  
*Institute of Research for Development, France*

Christian Mullon is a mathematician at the Institute of Research for Development (IRD). He has been in charge of modelling studies of social
and natural complex systems, such as the integrated model of the inner delta of Niger in Mali, or the individual-based model of the recruitment of anchovy in the Benguela ecosystem. He is scientific coordinator of the IRD Upwelling Ecosystems programme, in charge of the development of socioeconomic studies of small pelagic fisheries.

**Helga Ögmundardóttir**  
_Uppsala University, Sweden_

Helga Ögmundardóttir received her fil.kand. in social anthropology and philosophy from Stockholm University, and MA in social anthropology from the University of Iceland. At present she is a PhD student in cultural anthropology at Uppsala University, Sweden, doing research on natural resources and land use in the Icelandic highland, with focus on the þjórsárver wetland reserve. Her fieldwork involves rural communities that have used the land there through the ages, as well as other groups in Iceland that have taken part in the dispute about whether to dam the rivers there, to produce electricity for heavy industry on the southwest coast. In addition, Ögmundardóttir contributed to Icelandic community studies for the North Atlantic Arc (NAArc) project.

**José De Oliveira**  
_Centre for the Environment, Fisheries and Aquaculture Science, UK_

José De Oliveira joined the Centre for the Environment, Fisheries and Aquaculture Science (CEFAS) in 2002 as part of the team providing advice and stock assessments in support of policy. He was previously employed as a Research Assistant in the Department of Mathematics and Applied Mathematics at the University of Cape Town, South Africa, and subsequently as a Stock Assessment Scientist at Marine and Coastal Management, Cape Town. There he convened South Africa’s Pelagic Working Group and was responsible for developing stock assessment models and simulation-tested management procedures for sardine and anchovy, the subject of his PhD.

**Oddmund Otterstad**  
_University of Science and Technology, Norway_

Oddmund Otterstad is educated as a sociologist and currently working as project manager at the Department of Marine Technology of the University of Science and Technology (NTNU) and Senior Advisor at SINTEF Fisheries and Aquaculture, both institutions situated in Trondheim, Norway. He has initiated and managed the majority of projects
he has been involved in during the last 25 years. The projects have mainly been within the fields of fisheries management and coastal development and funded partly by the Norwegian Research Council and partly by the European Commission. During the last five years he has devoted much time to integrated coastal management in the Balkan region.

**Christian Reiss**  
*National Marine Fisheries Service, USA*

Christian Reiss is a Research Fishery Biologist with the Antarctic Ecosystem Research Division of the National Marine Fisheries Service. His areas of interest include bio-physical coupling in marine environments and the development of environmental indices for inclusion in the stock assessment of marine populations.

**Kevin Stephanus**  
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Kevin Stephanus is lecturer in Fisheries and Natural Resource Economics at the University of Namibia’s Faculty of Agriculture and Natural Resources. His research interests include inland and marine fisheries management, economics of fisheries monitoring, control and surveillance (MCS), cost benefit analysis, land reform and ecosystem management. Stephanus has experience working in fisheries and natural resource projects in Namibia. At present he serves as a member of GLOBEC’s Focus 4 working group.

**Ussif Rashid Sumaila**  
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Ussif Rashid Sumaila is Director of the Fisheries Economics Research Unit at the University of British Columbia’s Fisheries Centre. He specializes in marine ecosystem valuation, bioeconomics and the analysis of global fish trade. Sumaila has experience working in fisheries and natural resource projects in Norway, Canada and the North Atlantic region, Namibia and the Southern African region, Ghana and the West African region, and Hong Kong and the South China Sea. Sumaila’s work has generated a lot of interest, and has been cited by, among others, *The Economist*, the *Boston Globe* and the *Vancouver Sun*. He has published in several journals including *Nature, Journal of Environmental Economics and Management, Land Economics, Natural Resource Modeling, Ecological Economics, Canadian Journal of Fisheries and Aquatic Science, Marine Resource Economics, Fish and Fisheries, Environmental and Resource*
Economics, and the ICES Journal of Marine Science. Sumaila has served as reviewer for over 15 different academic journals, and served as Visiting Professor to the University of Tromsø, University of Namibia and the University of West Indies, Cave Hill, Barbados.