Assessment, Management and Future Directions for Coastal Fisheries in Asian Countries

Edited by

Geronimo Silvestre
Len Garces
Ilona Stobutzki
Mahfuzuddin Ahmed
Rowena Andrea Valmonte-Santos
Cesar Luna
Lualhati Lachica-Aliño
Patricia Munro
Villy Christensen
and
Daniel Pauly

2003































WorldFish Center Assessment, Management and Future Directions for Coastal Fisheries in Asian Countries

Edited by

Geronimo Silvestre
Len Garces
Ilona Stobutzki
Mahfuzuddin Ahmed
Rowena Andrea Valmonte-Santos
Cesar Luna
Lualhati Lachica-Aliño
Patricia Munro
Villy Christensen
and
Daniel Pauly

2003

Published by the WorldFish Center, PO Box 5000 GPO, 10670 Penang, Malaysia and the Asian Development Bank (ADB), 6 ADB Avenue, Mandaluyong City, Philippines

G. Silvestre, L. Garces, I. Stobutzki, C. Luna, M. Ahmed, R.A. Valmonte-Santos, L. Lachica-Aliño, P. Munro, V. Christensen and D. Pauly (eds.). 2003. Assessment, Management and Future Directions for Coastal Fisheries in Asian Countries. WorldFish Center Conference Proceedings 67,1 120 p.

Perpustakaan Negara Malaysia Cataloguing-in-Publication Data

Assessment, management and future directions for coastal fisheries in asian countries.

edited by G. Silvestre, L. Garces, I. Stobutzki, C. Luna, M. Ahmed, R.A. Valmonte-Santos, L. Lachica-Aliño, P. Munro, V. Christensen and D. Pauly (eds.).

ISBN 983-2346-22-3

1. Fisheries-Asian, Southeastern. 2. Fisheries Management-Asian, Southeastern.

I. Silvestre, Geronimo T. 338.372795

Technical editorial support : Francisco Torres, Jr., Kristine F. Santos, Meii bt M. Norizam and Nurulhuda

Ahmad Fatan

Copyediting & Proofreading: P. Munro, Kathleen Matics and Uthaya K. Raman

Cover design & layout : INTACT Communications (M) Sdn Bhd Cover photos : D. Lever, L. Garces and I. Stobutzki Layout : INTACT Communications (M) Sdn Bhd

Indexing : P. Munro and INTACT Communications (M) Sdn Bhd

ISBN 983-2346-22-3

WorldFish Center Contribution No. 1705

Printed in Penang, Malaysia



WorldFish Center is one of the 16 international research centers of the Consultative Group on International Agricultural Research (CGIAR) that has initiated the public awareness campaign, Future Harvest.

Contents

Foi	reword, Muhammad A. Mannan (ADB)	VII
Foi	reword, Meryl J. Williams (WorldFish)	IX
Pre	eface	XI
Ro	le of the Editorial Board	XIII
1	South and South-East Asian Coastal Fisheries: Their Status and Directions for Improved Management. Conference Synopsis and Recommendations by Geronimo T. Silvestre, Len R. Garces, Ilona Stobutzki, Mahfuzuddin Ahmed, Rowena Andrea Val Santos, Cesar Z. Luna and Weidong Zhou	1 Imonte-
2	An Overview of the Fisheries Resource Information System and Tools (FiRST) Version 2001: A Database Management System for Storing and Analyzing Trawl Survey Data by Len R. Garces and Geronimo T. Silvestre	41
3	Fisheries Impact on the South China Sea Large Marine Ecosystem: A Preliminary Analysis using Spatially-Explicit Methodology by Villy Christensen, Len R. Garces, Geronimo T. Silvestre and Daniel Pauly	51
Res	source Analysis	
4	Status of the Demersal Fishery Resources of Bangladesh by Md. Ali Azam Khan, Nasir Uddin Sada and Zubair Ahmed Chowdhury	63
5	Status of Demersal Fishery Resources of Malaysia by Abu Talib Ahmad, Mahyam Mohd. Isa, Mohamad Saupi Ismail and Sharum Yusof	83
6	Status of Demersal Fishery Resources in the Gulf of Thailand by Amnuay Kongprom, Pakjuta Khemakorn, Monton Eiamsa-ard and Mala Supongpan	137
7	Preliminary Analysis of the Demersal Fish Assemblages in the Bangladesh waters of the Bay of Bengal by M. Golam Mustafa	153
8	Demersal Fish Assemblages of the Southwest Coast of India by M. Srinath, V.N. Pillai, E. Vivekanandan and K.N. Kurup	163
9	Analysis of Demersal Assemblages off the North Coast of Central Java, Indonesia by Subhat Nurhakim	187
10	Preliminary Analysis of Demersal Fish Assemblages in Malaysian Waters by Alias Man	207

11	Analysis of Demersal Fish Assemblages in Selected Philippine Fishing Grounds by Wilfredo L. Campos	227			
12	Preliminary Analysis of Demersal Fish Assemblages in Coastal Waters of the Gulf of Thailand by Narongsak Khongchai, Somchai Vibunpant, Monton Eiamsa-ard and Mala Supongpan	249			
13	Trophic Model of the Coastal Ecosystem in the waters of Bangladesh, Bay of Bengal by M. Golam Mustafa	263			
14	Trophic Model of the Coastal Fisheries Ecosystem of the Southwest Coast of India by E. Vivekanandan, M. Srinath, V.N. Pillai, S. Immanuel and K.N. Kurup	281			
15	Marine Fisheries Resources of the North Coast of Central Java, Indonesia: An Ecosystem Analysis by Subhat Nurhakim	299			
16	Trophic Model of the Coastal Fisheries Ecosystem of the West Coast of Peninsular Malaysia by Alias Man	313			
17	A Trophic Model of the Coastal Fisheries Ecosystem off the West Coast of Sabah and Sarawak, Malaysia by Len R. Garces, Alias Man, Abu Talib Ahmad, Meii Mohamad-Norizam and Geronimo T. Silvestre	333			
18	An Ecosystem Model of San Pedro Bay, Leyte, Philippines: Initial Parameter Estimates by Wilfredo L. Campos	353			
19	Trophic Model of the Coastal Fisheries Ecosystem in the Gulf of Thailand by Somchai Vibunpant, Narongsak Khongchai, Jarupa Seng-eid, Monton Eiamsa-ard and Mala Supong	365 ipan			
So	Socioeconomic/Bioeconomic Analysis				
20	A Socioeconomic and Bioeconomic Analysis of Coastal Fisheries of Bangladesh by Sekander M. Khan and Muhammad Sirajul Haque	387			
21	A Preliminary Assessment of the Coastal Fishery Resources in India - Socioeconomic and Bioeconomic Perspective by S. Immanuel, V.N. Pillai, E. Vivekanandan, K.N. Kurup and M. Srinath	439			
22	Socioeconomic and Bioeconomic Analysis of Coastal Resources in Central and Northern Java, Indonesia by Bambang Edi Priyono	479			

23	An Overview of the Socioeconomic Status of Fisheries in Malaysia by Abu Talib Ahmad, Kamaruzaman Salim, Chee Phaik Ean, Mahyam Mohd. Isa and Lim Chai Fong	517			
24	Socioeconomic and Bioeconomic Performance of Philippine Fisheries in the Recent Decades by Annabelle Cruz-Trinidad	543			
25	Socioeconomic Assessment of Marine Fisheries of Thailand by Pongpat Boonchuwongse and Waraporn Dechboon	577			
26	The Role of Fisheries Sector in the Coastal Fishing Communities of Sri Lanka by B. Wijayaratne and Rekha Maldeniya	629			
27	A Preliminary Analysis on the Socioeconomic Situation of Coastal Fishing Communities in Vietnam by Nguyen Long	657			
Ma	Management Situation Reviews/Planning				
28	Coastal Resources Management Policy and Planning in Bangladesh by Md. Masudur, Zubair Ahmed Chowdhury and Md. Nasir Uddin Sada	689			
29	Marine Fisheries along the Southwest Coast of India by E. Vivekanandan, M. Srinath, V.N. Pillai, S. Immanuel and K. N. Kurup	757			
30	Status and Management of the Java Sea Fisheries by Purwanto	793			
31	Overview of the National Fisheries Situation With Emphasis on the Demersal Fisheries off the West Coast of Peninsular Malaysia by Abu Talib Ahmad, Tan Geik Hong and Abd. Hamid Yasin	833			
32	Philippine Coastal Fisheries Situation by Noel C. Barut, Mudjekeewis D. Santos & Leony L. Mijares, Rodelio Subade, Nygiel B. Armada and Len R. Garces	885			
33	Strategic Review of the Fishery Situation in Thailand by Wantana Janekitkosol, Hassapong Somchanakij, Monton Eiamsa-ard and Mala Supongpan	915			
34	Management of Coastal Fisheries in Vietnam by Dao Manh Son and Pham Thuoc	957			
35	Review of National Fisheries Situation in Sri Lanka by R.A.D.B. Samarayanke	987			
Appendices					
Ар	Appendix I Program of Activities				

Appendix II	List of Participants and resources Persons	1 017
Appendix III	Compilation of Population Parameters of Trawl-caught Fishes in Souith and Southeast Asia	1 025