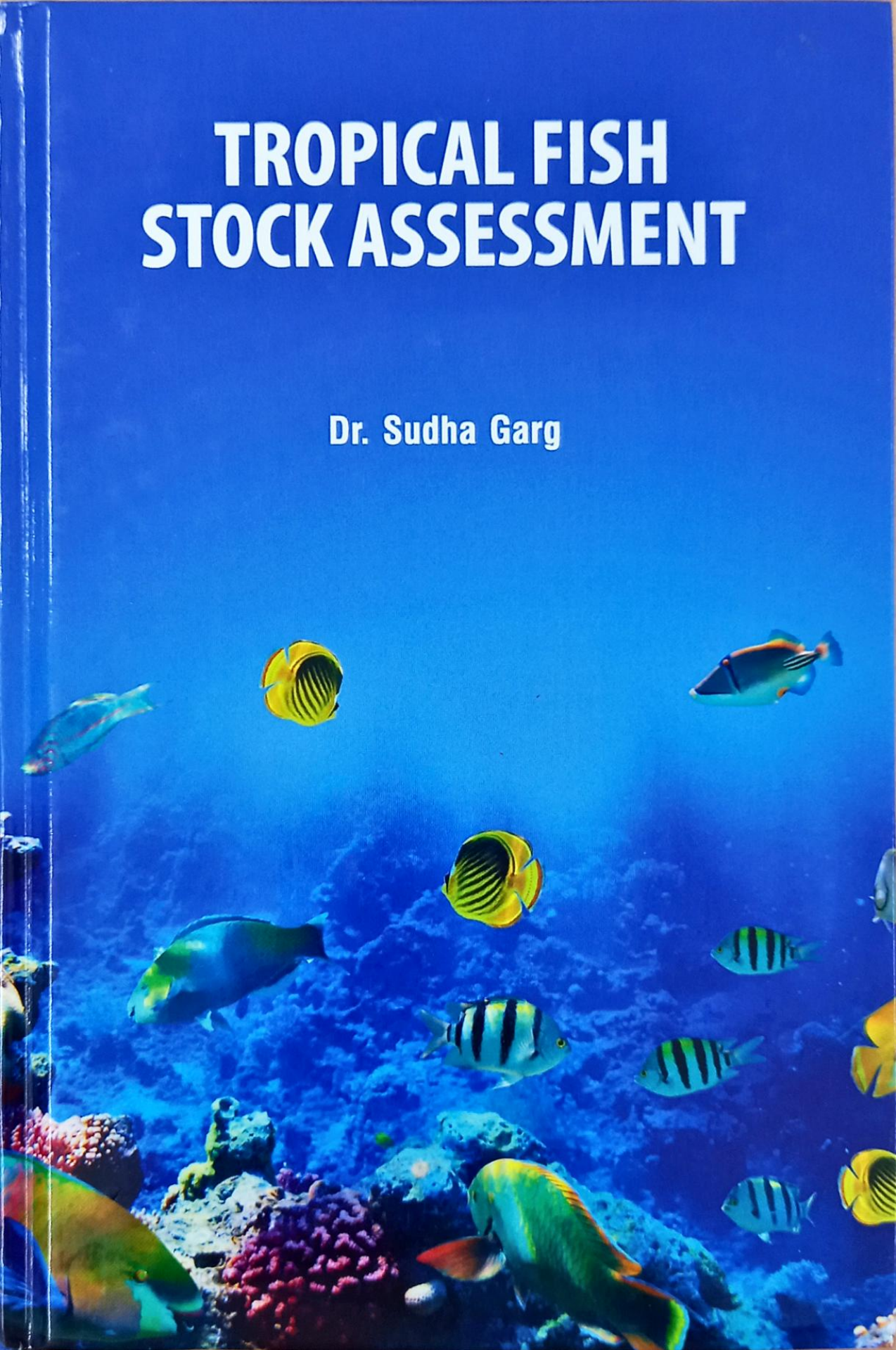


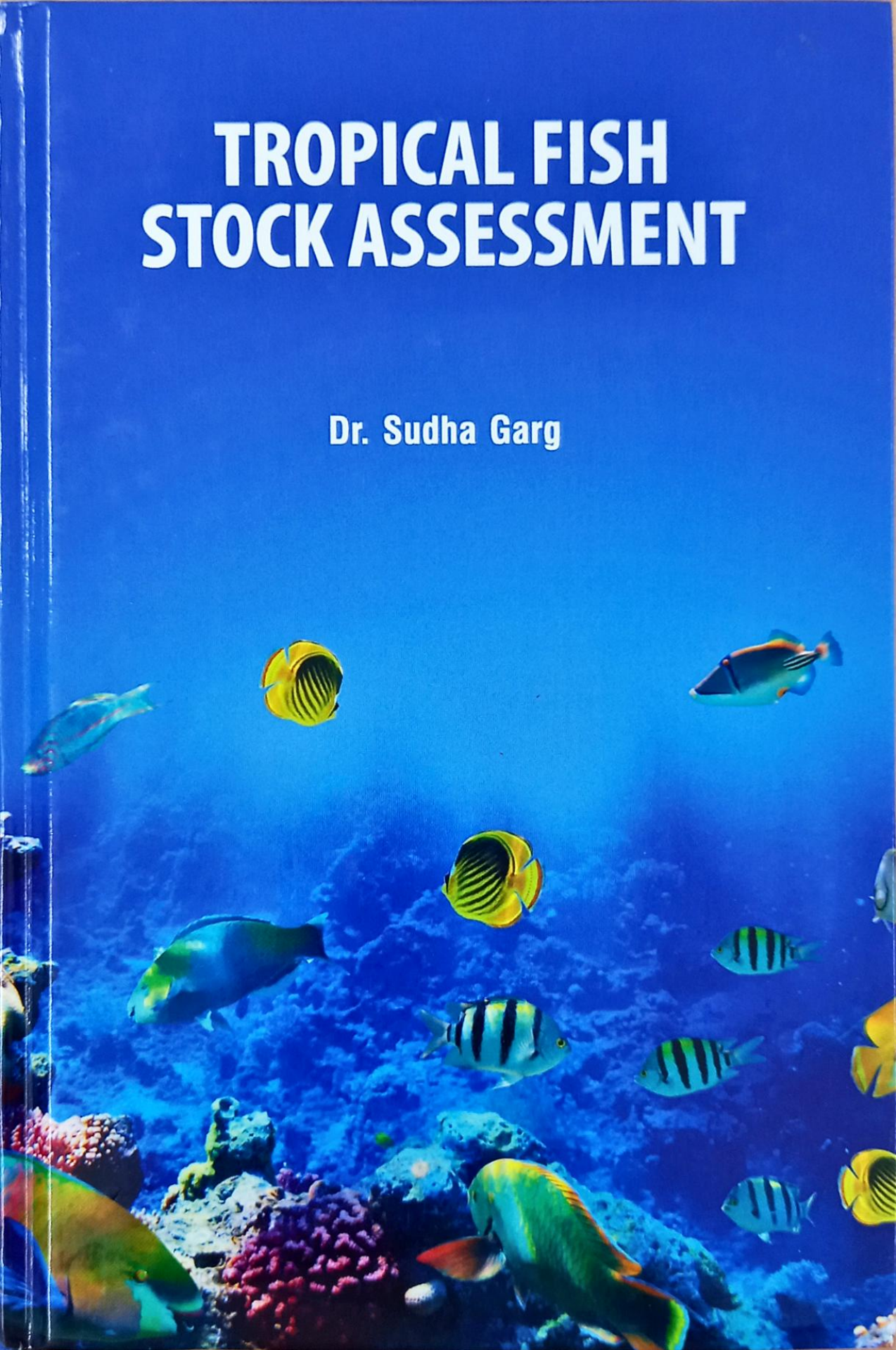
TROPICAL FISH STOCK ASSESSMENT

Dr. Sudha Garg



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RANDOM PUBLICATIONS

NEW DELHI (INDIA)

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ISBN 978-93-86372-16-1

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Published in 2017 in India by

RANDOM PUBLICATIONS

4376-A/4B, Gali Murari Lal, Ansari Road
New Delhi-110 002

Phone : +9111-43580356, 011-23289044, 011-43142548

e-mail: sales@randompublications.com,
info@randompublications.com, randomexports@gmail.com

Type Setting by : Friends Media, Delhi-110089

Printed at : Sanat Printers

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TROPICAL FISH STOCK ASSESSMENT

The main objective of fish stock assessment of exploited stocks is to predict what will happen in terms of future yields, biomass levels (sustainability) and value of the catch, if the level of fishing effort remains the same or if it is changed in one way or another. Tropical fish include fish found in tropical environments around the world, including both freshwater and salt waterspecies. Tropical fish are popular as aquarium fish, due to their often bright colouration. In freshwater fish, this colouration typically derives from iridescence, while salt water fish are generally pigmented. Stock assessments provide fisheries managers with the information that is used in the regulation of a fish stock. Biological and fisheries data are collected in a stock assessment. A wide array of biological data may be collected for an assessment. These include details on the age structure of the stock, age at first spawning, fecundity, ratio of males to females in the stock, natural mortality (M), fishing mortality (F), growth rate of the fish, spawning behavior, critical habitats, migratory habits, food preferences, and an estimate of either the total population or total biomass of the stock. This book concerning the study of the stock, the fishing pattern and its components are defined, the most used models for the stock-recruitment relation are presented, as well as the short- and long-term projections of a stock.

Contents: Introduction; Management Plans, Measures and Strategies of Fisheries; Fish Selection; Integrated Fish Farming; Comparative Assessment of Fish Parasite; Fish Stocks in Freshwater; Fish Stocking in Small Reservoirs; Yield and Stock Effects of Fishing; Fishery Industries; Aquaculture and Stock Enhancement.

About the Author

Dr. Sudha Garg received his B.Sc and M.Sc. from C.C.S. University, Meerut and M.phill from C.C.S. University, Meerut, U.P., India. She obtained Ph.D from C.C.S. University, Meerut. She has 12 years of experience of teaching of graduate and post graduate classes and five years of research experience as JRF and Ph.D scholar. She also participated in 15 different workshop/conferences/seminars/training and other courses. She has few books & articles on his credit published in National/International Journals besides participation in National Seminars/Workshops & Conferences. Presently, She is working as an Associate Professor, Department of Zoology, Hindu College, Moradabad, U.P India.



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4376-A/4B, Gali Murari Lal, Ansari Road, Daryaganj
New Delhi-110002, Ph : +91-11-43142548/43580356 / 23289044
Email : randomexports@gmail.com,
sales@randompublications.com,
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ISBN 978-93-86372-16-1



9 789386 372161

6.995/- (px.)