## **Nutrition in Tropical Aquaculture**

Essentials of fish nutrition, feeds, and feeding of tropical aquatic species

Edited by Oseni M. Millamena, Relicardo M. Coloso, and Felicitas P. Pascual



Aquaculture Department SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER Tigbauan, Iloilo, Philippines May 2002

NAST - 0848

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ISBN 971-8511-58-X

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For comments and inquiries:

Training and Information Division SEAFDEC Aquaculture Department Tigbauan, Iloilo, Philippines

Fax : (63-33)335 1008, 336 2891 Email : training@aqd.seafdec.org.ph devcom@aqd.seafdec.org.ph

website : http://www.seafdec.org.ph

Cover design by Nelson V. Golez

### Foreword

Aquaculture has been recognized as the fastest growing food producing sector, contributing significantly to national economic development, food supply, and food security. Alongside aquaculture development are the fisheries schools that supply the knowledge needs of the industry. These fisheries schools need current educational materials relevant to aquaculture in the tropics. This need prompted SEAFDEC Aquaculture Department (SEAFDEC AQD) to establish the textbook writing program. It was also established to fulfill SEAFDEC AQD's mandate of disseminating up-to-date knowledge in aquaculture technology. This textbook on Nutrition in Tropical Aquaculture is now the second in a series.

In developing countries, the growth of aquaculture is often hampered by a lack of expertise in aquaculture nutrition and knowhow on aquafeed formulation and preparation as well as evaluation of the nutritional and economic value of feeds. This book is intended to provide a foundation of scientific knowledge and understanding on nutrition, feeds, and feeding with emphasis on tropical aquaculture species. It is important that students in aquaculture realize the crucial role that proper nutrition, management, and economics of feeding plays in sustainable aquaculture development. The research-based information contained here are mostly products of several years of research experience in fish nutrition and feed development at SEAFDEC AQD.

While the textbook is intended for use primarily by fishery students, other aquaculture enthusiasts, like researchers, fishfarmers, feed manufacturers, farm managers, and technicians may also find it useful as a reference book. We welcome suggestions from students, instructors, and learners on how to improve this textbook.

It is our hope that, through this book, SEAFDEC AQD would be instrumental in advancing the frontiers of knowledge in aquaculture through education.

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