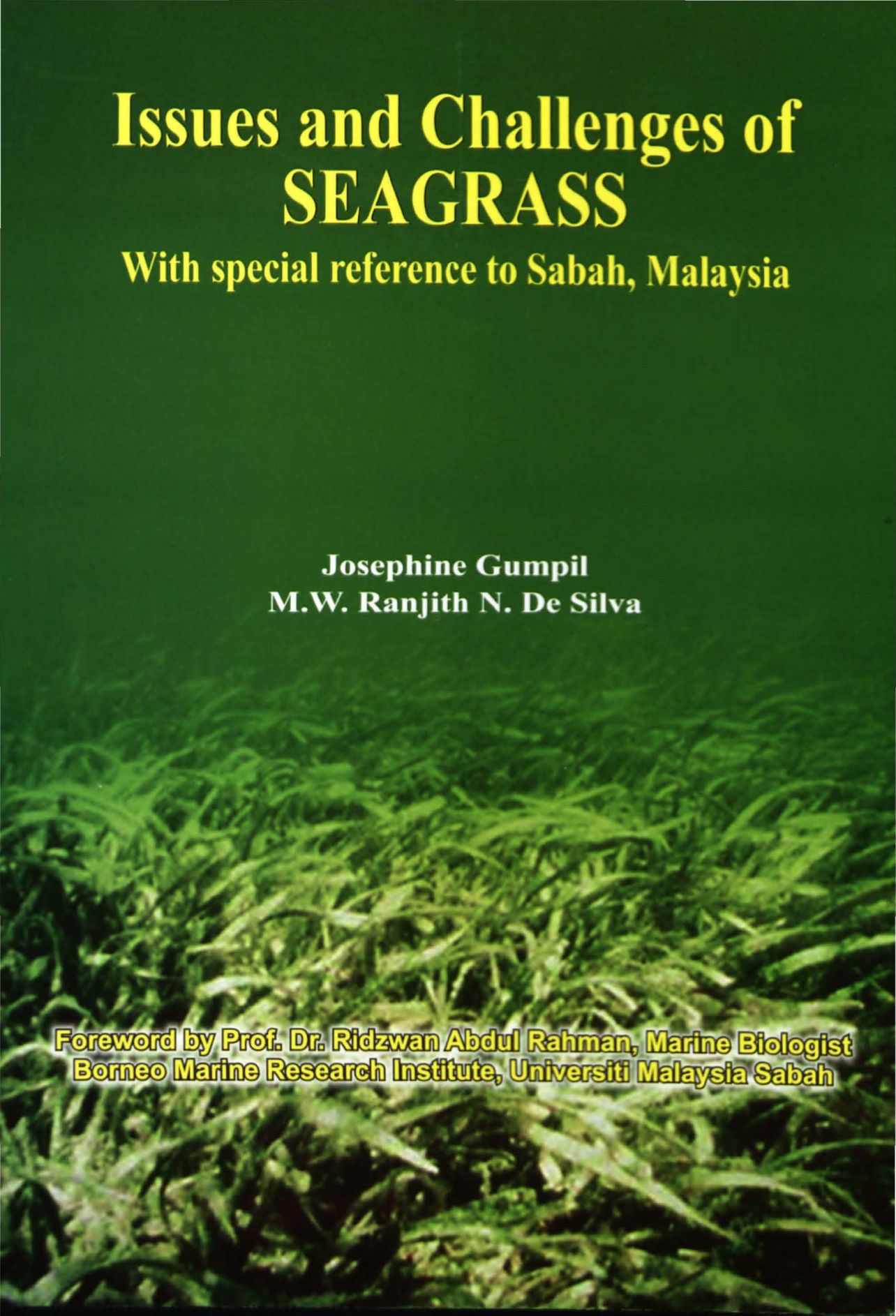
Issues and Challenges of SEAGRASS

With special reference to Sabah, Malaysia

Josephine Gumpil
M.W. Ranjith N. De Silva



Foreword by Prof. Dr. Ridzwan Abdul Rahman, Marine Biologist
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FOREWORD

It is a privilege and honour to be able to introduce this book on a little appreciated but extremely important and productive coastal ecosystem - the seagrasses. Although largely based on scientific research carried out in Sabah, its application to tropical seagrasses in general needs to be emphasized. The authors have been able to present the issues and challenges faced by the seagrass ecosystems in a very readable and simple manner while retaining the factual and scientific nature making it useful to both researchers and laymen.

The present study on seagrasses was part of a comprehensive programme to formulate an integrated management plan for Darvel Bay, Sabah by the Borneo Marine Research Institute under the marine component of Universiti Malaysia Sabah (UMS) - Danish Cooperation for Environment and Development (DANCED) Biodiversity Conservation Project. I am sure that this book based on Ms. Josephine Gumpil's M.Sc. thesis with its suggested management options, will dovetail nicely into an Integrated Management Plan for Darvel Bay.

I am glad that Ms. Josephine Gumpil with a keen interest in seagrasses of Sabah and Dr. M.W. Ranjith N. D Silva a former Professor of the Borneo Marine Research Institute, UMS, now back in his home country Sri Lanka, have been able to come up with this valuable contribution to the seagrass ecosystem.

Prof Dr. Ridzwan Abdul Rahman
Marine Biologist and
Director of the Research Management Centre
Universiti Malaysia Sabah

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We are grateful and indebted to Prof. Dr. Ridzwan Abdul Rahman, the Director of the Research Management Centre, Universiti Malaysia Sabah who was the co-supervisor of the Master of Science programme of the primary author on "Status, Utilization and Suggested Management Strategies of Seagrass Beds in Darvel Bay, Sabah, Malaysia, for his enthusiastic support, assistance, suggestions and encouragement both during the writing of this book and research work.

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We wish to thank the UMS - DANCED Biodiversity Project of Universiti Malaysia Sabah for providing financial support for carrying out a post graduate research programme which led to this book; Borneo Marine Research Institute and the Research Management Centre, Universiti Malaysia Sabah for all the assistances; Mr. G.P.H.S. De Silva and Professor Datin Dr. Hjh. Ann Anton for reviewing the book and for helpful suggestions.

The primary author would like to record her appreciation to many of the government departments for their co-operation and assistance, namely, the Sabah Parks, Department of Fisheries Sabah, District offices in Lahad Datu and Kunak as well as the Forestry Department of Lahad Datu, particularly during the interview surveys.

Last but not least, the primary author wishes to thank her family members and close friends, Val, Cory, Fin, Justin and Lilian; a heart felt thank you for always being there.

THE SCOPE OF THE BOOK

This book is designed for multilevel users. It focuses on the importance and threats to the high productive seagrass ecosystems of Sabah, Malaysia which are not yet widely known nationally and internationally. Little or no published information is available as to how seagrass beds are being utilised, what the actual and potential threats to them are and what management options are needed to ensure their sustainability. This book aims to bridge some of these information gaps. The book by no means claims to provide the readers with an in-depth knowledge of seagrasses and associated organisms but attempts to introduce them to the seagrass ecosystems of Sabah, Malaysia that have been investigated. It is our fervent hope that this will lead the way to "knowing and loving the seagrass ecosystem" and culminate in the conservation and sustainable use of marine resources spear-headed particularly by our younger generation.

The book targets the following:

POLICY AND DECISION MAKERS

In particular, those involved in Integrated Costal Zone Management, fisheries Protected Areas.

STUDENTS

It would be useful to obtain a working knowledge of the seagrass ecosystem and associated organisms. It also aims to promote interest among students and create awareness of the importance of seagrasses as an ecosystem.

RESEARCHERS

It would serve as a basic reference for researchers interested in the seagrasses of Sabah, Malaysia and is intended to open the door to promote further development of research on seagrass ecosystems in Malaysia and elsewhere.

NATURALISTS AND MARINE ENVIRONMENTALISTS

It would enhance the knowledge of a little appreciated but extremely important and productive marine ecosystem that should be used wisely for the benefit of present and future generation.

Josephine Gumpil
M.W. Ranjith N. De Silva
April 2006