



UNITED NATIONS ENVIRONMENT PROGRAMME

*Proceedings of the First ASEAMS Symposium on
Southeast Asian Marine Science and
Environmental Protection*

UNEP Regional Seas Reports and Studies No. 116

Prepared in co-operation with



Association of Southeast Asian Marine Scientists

UNEP 1990

Note: This document was prepared for the United Nations Environment Programme (UNEP) with the editorial assistance of the Association of Southeast Asian Marine Scientists (ASEAMS) under the project FP/5102-82-05 as a contribution to the development of the action plan for the protection and development of the marine and coastal areas of the East Asian Seas Region.

The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of UNEP concerning the legal status of any State, Territory, city or area, or of its authorities, or concerning the delimitations of its frontiers or boundaries.

For bibliographic purposes this document may be cited as:

ASEAMS/UNEP: Proceedings of the First ASEAMS Symposium on Southeast Asian Marine Science and Environmental Protection. UNEP Regional Seas Reports and Studies No. 116. UNEP, 1990.



UNITED NATIONS ENVIRONMENT PROGRAMME

*Proceedings of the First ASEAMS Symposium on
Southeast Asian Marine Science and
Environmental Protection*

UNEP Regional Seas Reports and Studies No. 116

Prepared in co-operation with



Association of Southeast Asian Marine Scientists

UNEP 1990

PREFACE

The United Nations Conference on the Human Environment (Stockholm, 5-16 June 1972) adopted the Action Plan for the Human Environment, including the General Principles for Assessment and Control of Marine Pollution. In the light of the results of the Stockholm Conference, the United Nations General Assembly decided to establish the United Nations Environment Programme (UNEP) to "serve as a focal point for environmental action and co-ordination within the United Nations system" [General Assembly resolution (XXVII) of 15 December 1972]. The organizations of the United Nations system were invited "to adopt the measures that may be required to undertake concerted and co-ordinated programmes with regard to international environmental problems", and the "intergovernmental and non-governmental organizations that have an interest in the field of the environment" were also invited "to lend their full support and collaboration to the United Nations with a view to achieving the largest possible degree of co-operation and co-ordination". Subsequently, the Governing Council of UNEP chose "Oceans" as one of the priority areas in which it would focus efforts to fulfil its catalytic and co-ordinating role.

The Regional Seas Programme was initiated by UNEP in 1974. Since then the Governing Council of UNEP has repeatedly endorsed a regional approach to the control of marine pollution and the management of marine and coastal resources and has requested the development of regional action plans.

The Regional Seas Programme at present includes ten regions ^{1/} and has about 120 coastal States participating in it. It is conceived as an action-oriented programme having concern not only for the consequences but also for the causes of environmental problems and addresses them through the management of marine and coastal areas. Each regional action plan is formulated according to the needs of the region as perceived by the Governments concerned.

The development of the East Asian Seas action plan was initiated by the decision of the fifth session of the Governing Council of UNEP [UNEP/GC/106, annex I, Decision 88(v), section D] in 1977, at the request of the Governments of the East Asian Seas Region.

The action plan for the East Asian Seas region was adopted by the representatives of Indonesia, Malaysia, Philippines, Singapore and Thailand, at the Intergovernmental Meeting on the Protection and Development of the Marine Environment and Coastal Areas of the East Asian Region (Manila, 27-29 April 1981). The "development and protection of the marine environment and the coastal areas for the promotion of the health and well-being of present and future generations" was adopted as the principal objective of the action plan.

Within the Action Plan, the Governments have approved a number of projects and assigned priority to some of them. UNEP has provided technical backstopping and support for the implementation of these projects, in co-operation with a number of national institutions and specialized agencies. In this context, the Oceans and Coastal Areas Programme Activity Centre (OCA/PAC) of UNEP closely co-operated with the Association of Southeast Asian Marine Scientists (ASEAMS) in planning and convening the first Scientific Symposium of the Association with the title "Southeast Asian Marine Science and Environmental Protection" (Quezon City, The Philippines, 7 February 1989).

^{1/} Mediterranean Region, Kuwait Action Plan Region, West and Central African Region, Wider Caribbean Region, East Asian Seas Region, South-East Pacific Region, South Pacific Region, Red Sea and Gulf of Aden Region, Eastern African Region and South Asian Seas Region.

The Symposium brought together a number of marine scientists and other professionals from Southeast Asia, and provided an excellent opportunity for the exchange of information and experience between experts working in fields related to marine science and protection of the marine environment.

The present report is a compilation of sixteen (16) scientific papers that were presented at the Symposium, and were made available to ASEAMS and UNEP for publication.

EDITOR'S PREFACE

The Association of Southeast Asian Marine Scientists (ASEAMS) was formally established on 6 February 1989 at the first General Assembly of its founding members who numbered about one-hundred and twenty (120). On the following day, the first scientific symposium of the Association was held with the title "SOUTHEAST ASIAN MARINE SCIENCE AND ENVIRONMENTAL PROTECTION." It was held in conjunction with the Third Meeting of Experts on the East Asian Seas Action Plan. All the above activities were sponsored by the Oceans and Coastal Areas Programme Activity Centre (OCA/PAC) of the United Nations Environment Programme (UNEP) within the framework of its Regional Seas Programme. They were held in Quezon City, the Philippines, with organizational support provided by the Marine Science Institute of the University of the Philippines.

The formation of ASEAMS may be said to have been catalyzed by the very vigorous efforts of UNEP in the East Asian Seas region for the protection and conservation of its marine and coastal environment. Because of a shared political, social and cultural heritage, and the use of a common resource (the regional seas), marine scientists and other professionals from Southeast Asia acknowledged the need for a more unified and concerted effort to achieve common goals. The framework for interaction was already established by UNEP's East Asian Seas Action Plan which was implemented since 1981 under the authority of the Governments of the region, represented by the Co-ordinating Body on the Seas of East Asia (COBSEA). Specifically, concrete recommendations for the formation of an Association of marine scientists and other professionals from Southeast Asia were made at the UNEP-sponsored First Meeting of Experts on the East Asian Seas Action Plan held in Bangkok, Thailand, 8-12 December 1986.

Many of the scientific papers presented at the first ASEAMS symposium embody results of studies carried out under the various projects comprising the East Asian Seas Action Plan. Others draw on related activities in the region which have been funded from sources other than UNEP. Altogether, they present a picture of the marine environmental concerns facing Southeast Asia at present. They also provide an introduction to the types of research and other activities being undertaken in the effort to understand and then, hopefully, solve such problems.

The present volume is a compilation of sixteen (16) scientific papers that were presented at the Symposium. Abstracts of two papers which were presented but were not submitted for publication are also included. They represent the fields of meteorology, physical oceanography, pollution, coastal ecosystem research, management, and legislation.

For the preparation of the Proceedings, the substantial support of Mr. Edgardo D. Gomez, ASEAMS Chairman, and Ms. Evangeline F.B. Miclat is gratefully acknowledged. The following Research Assistants of the Marine Science Institute, University of the Philippines also rendered invaluable service: Ms. Marivic Pajaro, Ms. Hildie Maria Nacorda and Mr. Augustus Rex Montebon.

HELEN T. YAP
Editor

TABLE OF CONTENTS

		PAGE
Koh Teck Cheong	Precipitation and pressure distribution over the South China Sea and adjacent areas.....	1
Absornsuda Siripong	The causes of circulation in the Gulf of Thailand.....	21
Manuwadi Hungspreugs et al.	Mussel-watch type programme in Thailand (1980-1987).....	37
I. A. Ronquillo	Red tides and other fish kills in Philippine waters.....	45
Twee Hormchong et al.	Studies on population dynamics of phytoplankton and zooplankton in connection with the eastern seaboard development project	51
A. G. C. del Norte et al.	Stock assessment of the Bolinao reef flat fishery: I. Fishing patterns and species composition (ABSTRACT).....	65
Teodulo F. Luchavez	Estimate of potential yield from an artificial reef off Dumaguete City, Philippines.....	67
A. C. Alcala	Comparative growth of hard corals on natural and artificial substrata in the central Philippines.....	77
Malikusworo Hutomo and Mudjiono	Coastal habitat of Tanjung Jati, Jepara with emphasis on the effect of sedimentation on	73

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/report?reportId=5_15473



5

7

9