

COASTAL ENVIRONMENTAL PROFILE
OF
OLANGO ISLAND, CEBU, PHILIPPINES

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Coastal Resource Management Project
of the
Department of Environment and Natural Resources
supported by the
United States Agency for International Development

2001

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2001

PRINTED IN CEBU CITY, PHILIPPINES

Citation: Sotto, F.B., J.L. Gatus, M.A. Ross, M.F.L. Portigo and F.M. Freire. 2001. *Coastal Environmental Profile of Olango Island, Cebu, Philippines*. Coastal Resource Management Project, Cebu City, Philippines, 129 p.

This publication was made possible through support provided by the United States Agency for International Development (USAID) under the terms and conditions of Contract No. AID-492-C-00-96-00028-00 supporting the Coastal Resource Management Project. The opinions expressed herein are those of the author and do not necessarily reflect the views of the USAID. This publication may be reproduced or quoted in other publications as long as proper reference is made to the source.

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Front cover: *Aerial view of Barangay Santa Rosa wharf*. Inset: *Women's group busy tying coral fragments for rehabilitation*.

Back cover: *PCRA participants in Olango Island; "Pokot" or nets for pelagic fishing; Gilutongan Marine Sanctuary*

CRMP Document No. 28-CRM/2001

ISBN 971-92290-1-2

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ACRONYMS and ABBREVIATIONS

BFAR	Bureau of Fisheries and Aquatic Resources
CPUE	catch per unit effort
CRM	coastal resource management
CRMP	Coastal Resource Management Project
DA	Department of Agriculture
DENR	Department of Environment and Natural Resources
IMA	International Marinelife Alliance
LGU	local government unit
MIIMPS	Mactan Island Integrated Master Plan Study
NIPAS	National Integrated Protected Areas System
NGO	nongovernment organization
NSO	National Statistics Office
OBST	Olango Bird and Seascape Tour
OIWS	Olango Island Wildlife Sanctuary
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PAMB	Protected Area Management Board
PAWB	Protected Areas and Wildlife Bureau
PAWD	Protected Areas and Wildlife Division
PCRA	Participatory Coastal Resource Assessment
PD	Presidential Decree
PEGAMASU	<i>Pederasyon sa Gagmay'ng Mangingisda sa Sugbu</i>
PhP	Philippine pesos
RA	Republic Act
SB	<i>Sangguniang Bayan</i> (Municipal Council)
SCUBA	Self Contained Underwater Breathing Apparatus
SK	<i>Sangguniang Kabataan</i> (Youth Council)
SUML	Silliman University Marine Laboratory
UPMSI	University of the Philippines – Marine Science Institute
USAID	United States Agency for International Development
USC-MBS	University of San Carlos-Marine Biology Section
USC-WRC	University of San Carlos-Water Resources Center

ACKNOWLEDGMENTS

The University of San Carlos and the Coastal Resource Management Project (CRMP), a project of and implemented by the Department of Environment and Natural Resources (DENR) and managed by Tetra Tech EM Inc. thank the following persons, nongovernment organizations (NGOs) and government organizations (GOs) for their invaluable assistance in the completion of this profile:

Mr. Danilo Dy, for his assistance in the gathering and analysis of some physical and oceanographic data in the waters off Olango Island;

The fisherfolk of Olango Island and its satellite islets, for their cooperation and participation in the participatory coastal resource assessment (PCRA) in 1997 and 1998 and throughout the preparation;

The representatives of the various government line agencies and the respective departments and councils of Lapu-Lapu City and the municipality of Cordova, who took the time to accommodate the researchers and provide additional baseline data and review comments;

Silliman University Marine Laboratory through its Director, Dr. Hilconida Calumpong, for providing data;

The International Marinelife Alliance (IMA) personnel, particularly Alex Ansula, Erlinda Corpuz, Freddie Reyes, Alicon Garcia, Edgar Tisoy, Alberto Andam, and Amante Panganiban, for their technical assistance during the PCRA;

The Caw-oy Women's Group and Caw-oy Fishermen's Association, for logistic support during the PCRA in their *barangay*;

The Lapu-Lapu City Agricultural Officers, Mr. Wilson Maribojoc and Dewey Monsanto, as resource speakers during the conduct of the PCRA;

The representatives of the Department of Environment and Natural Resources-Region 7 (DENR-7), for their technical assistance during the PCRA and to 'Momoy' Mapalo for sharing additional information;

CRMP personnel, most especially to Ms. Evelyn T. Deguit, Dolores Ariadne D. Diamante-Fabunan, and Reggie P. Blanco, for spearheading the PCRA and providing the summary of the PCRA data for this book;

Fr. President, Ernesto M. Lagura, SVD and Assistant Vice-President for Research and Human Resource Development, Fr. Theodore D. Murnane, SVD of the University of San Carlos, for supporting this project;

Mary Cashman, United States Peace Corps Volunteer stationed at Olango Island, for helping during the PCRA;

GEOPLAN Cebu Foundation through Dr. Karl Peter Traub, Josephus Unabia, Christine Homez, Emerlyn Abarquez, Cerilo Abrinica, and Michael Ocana, for providing the PCRA maps;

The research and administrative personnel of the Marine Biology Section, University of San Carlos, for providing additional data and logistic support, respectively;

Juliet V. Basa, Alan T. White, and Letty Dizon for editing the final draft;

Leslie S. Tinapay for production; and

The numerous persons, institutions, and agencies which we may have failed to mention but in their own way have contributed to the realization of this coastal profile.

While thanking these individuals and the agencies for all the information and assistance, the authors assume responsibility for any error in the publication and for the views expressed therein.

FOREWORD

The Philippines is endowed with a wealth of coastal resources along its 18,000 km of shoreline. Olango Island and its adjoining islands under the political jurisdiction of Lapu-Lapu City and Cordova Municipality, are no exception and contain extensive coral reefs, mangroves, wetlands, and clean marine waters. The coral reefs that surround Olango, that are responsible for its physical presence, support sizeable fisheries that provide food and income to the people on the island. In addition, the reefs and wetlands hold tremendous potential for tourism when managed properly.

Studies have documented the economic value of the coral reefs and wetlands of Olango Island. The 40 km² of coral reef alone can potentially generate between US\$1.53 and 2.54 million annually from well-managed fisheries and tourism. Wetlands can generate another US\$0.4 million from sustainable use and tourism to the Olango Island Bird Sanctuary.

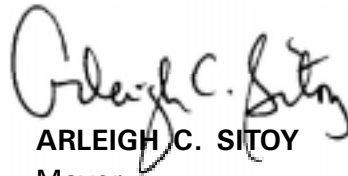
These amounts are not now being realized because of poor management and because the coastal resource base is being degraded through a variety of human caused impacts. Fisheries are depleted from excessive fishing effort and use of destructive methods. Shoreline habitats are either being damaged or converted to alternative uses that no longer support viable fisheries and tourism. All these problems emphasize the need for integrated coastal management.

The first step toward an improved planning and management regime for coastal resources is to develop an information base that guides planning. This *Coastal Environmental Profile of Olango Island, Cebu, Philippines* is an important first step in the management process. It can help guide the long-term solutions to the problems of resource degradation and provide baseline data for measuring changes in the environment and the status of people over time. It can also be used to measure the effectiveness of coastal management projects of the local governments and others.

We, as Mayors with jurisdiction over the Olango Island area, fully endorse this environmental profile as an important step to improve the management of the area. We are committed to the needed coastal resource stewardship that will provide immediate and long-term benefits to people within our city and municipality and to all Filipinos.



ERNEST H. WEIGEL, JR.
Mayor
Lapu-Lapu City



ARLEIGH C. SITOY
Mayor
Cordova Municipality

FOREWORD

The Philippines, comprised of many islands, has one of the world's longest coastlines. As such, coastal resource management, especially the interaction between humans and the coastal environment, should become an integral part of any meaningful development plan. The compilation of this coastal environmental profile thus becomes essential for developing a rational coastal resource management plan.

This book is about Olango Island and its various characteristics—physical, biological, socioeconomic, sociopolitical, environmental, and others. Though focused only on one island, the variables and methodology applied in coming up with a coastal environmental profile can be replicated in other coastal municipalities in the province of Cebu as well as in other parts of our country. It is envisioned that a well-documented coastal environmental profile can help policy-makers design appropriate coastal resource management strategies in their particular locality.

Our task now, using this coastal environmental profile, is to develop and implement coastal resource management strategies for Olango Island. We must pursue strategies that are participatory and which encourage island dwellers and others to be good stewards of their coastal environment.

FR. FRANCISCO T. ESTEPA, SVD
President, University of San Carlos

COMMONLY USED LOCAL TERMS

<i>albulario</i>	traditional healer/native doctor
<i>arais</i>	boat captain
<i>balat</i>	sea cucumber
<i>Bantay dagat</i>	fish warden
<i>Bantay dawat</i>	recipient of bribes
<i>banyeras</i>	tin basin for fish
<i>baroto</i>	small outriggered paddle boat
<i>bibiron</i>	baby's feeding bottle
<i>bobo</i>	large fish trap
<i>daug</i>	win
<i>dayo</i>	to travel/journey
<i>guso</i>	commercially farmed red alga, including <i>Eucheuma spinosum</i> or <i>Kappaphycus alvarezii</i>
<i>habagat</i>	southwest monsoon
<i>ice-ice</i>	disease in the red alga <i>Eucheuma</i> or <i>Kappaphycus</i> characterized by a whitening of the thallus or branch
<i>kinhason</i>	shells
<i>kugita</i>	octopus
<i>lab-asera (o)</i>	female fish dealer; with the "o" ending, refers to male fish dealer
<i>lapas</i>	abalone (<i>Haliotis</i> spp.)
<i>mamamanga-ay</i>	middlemen
<i>mobiyahe-ay</i>	traveller
<i>pakyaw</i>	chartered trip
<i>pamalo</i>	drift net 50-100 m in length with a mesh size of 30 mm in diameter
<i>pandayo</i>	literally "to go to some place", but here to go to a remote fishing ground
<i>panggal</i>	smaller fish trap, typically made of bamboo or chicken wire
<i>panglapas</i>	to collect abalone
<i>pinobreng panagat</i>	gear of the poor
<i>plaka</i>	record, record-shaped table centerpiece made of small cowry shells
<i>sapyaw</i>	scoop net
<i>sigay</i>	small cowry (<i>Cypraea</i> spp.)
<i>sudsud</i>	fishing gear made of simple triangular frame with a fine mesh net and provided with a handle for pushing
<i>tubli</i>	wild vine (<i>Derris elliptica</i>), the root extract of which is the source of rotenone and used in stunning fish
<i>tuhog</i>	strand of fish
<i>vale</i>	cash advance