

**AN INTEGRATED APPROACH TO SUSTAINABLE MANAGEMENT
OF REEF-BASED SCUBA DIVE TOURISM:
A CASE STUDY OF KOH TAO, THAILAND**

Panwad Wongthong

Thesis submitted for the degree of Doctor of Philosophy

Discipline of Geography, Environment and Population

The University of Adelaide, South Australia

February 2013

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ABSTRACT

SCUBA dive tourism in coral reef environments has become a highly significant component of the international tourism market. The tourism industry can play an important and positive role in the socio-economic development of coastal areas as well as the conservation of species and natural habitats in destination countries. However, in the absence of proper controls and enforcement, unplanned tourism growth can cause environmental degradation and social and cultural conflicts which undermine the long-term sustainability of the dive tourism industry.

Given the significance of dive tourism in terms of its contribution to the global and local economies and its potential to create impacts on the coast around the world, the need to implement sustainable tourism practices has become important. There has been a growing body of research concentrating on physical impacts caused by dive tourism but there has been a lack of studies concerning the socio-economic factors related to dive tourism. In response to the research gaps, this study investigated the complexity of social interactions within dive tourism alongside the physical impacts in order to provide a holistic view of key issues confronting the management of reef-based SCUBA dive tourism. The study employed social survey techniques and selected a small and remote island of Koh Tao in Thailand as a case study. This is due to the unique characteristics of the island including the dominance of tourism over other land-based and marine-based activities, a lack of government control and the high dependence on imports and skilled expatriates. Importantly, Koh Tao accounts for the second highest number of annual dive certifications worldwide - only second to the Great Barrier Reef, Australia.

This study proposes a way forward for sustainable dive tourism based on management planning and governance frameworks drawn from the principles of integrated coastal management and sustainable tourism development. However, the study demonstrates that these two internationally accepted management frameworks are not always applicable to every dive tourism destination because each destination has its own uniqueness and limitations. The complexity of social interactions within the dive tourism industry is significant to the contribution to tourism impacts and practices, and therefore can facilitate or impede the sustainability. The study concludes that the management of dive tourism requires a greater focus on the social dimension, the collaboration of multi-stakeholders, the implementation of self-regulations, the enhancement of education and awareness, and good governance in order to achieve an effective incorporation of tourism as a component of coastal management.

DECLARATION

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, the thesis contains no material previously published or written by another person, except where due reference has been made in the text.

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Panwad Wongthong

14 February 2013

ACKNOWLEDGEMENTS

First and foremost, I would like to express my gratitude to my principal supervisor, Professor Nick Harvey and my external supervisor, Associate Professor Poh Poh Wong, who provided me with consistent encouragement, invaluable support and guidance from the time I commenced my study to the final production of the thesis. I am also grateful to my co-supervisor, Dr Melissa Nursey-Bray, for her useful comments on the first few chapters of my thesis. Their enthusiasm and unflagging support have made the PhD journey one of the most enjoyable experiences in my life.

I am thankful to Dr Dianne Rudd for her advice on several occasions and assistance in data analysis. I also wish to acknowledge Ms Christine Crothers for her cartographic skills. I would like to thank other staff members and PhD colleagues in the Discipline of Geography, Environment and Population at the University of Adelaide, particularly Ms Balambigai Balakrishnan, Mr Christopher Button, Ms Evi Sofiyah and Ms Nicole Pelton, for their advice, friendship and company over the years. Thanks to Mr Asheshwor Shrestha and Ms Rhiannon Niven, who assisted me in editing and formatting the final draft of the thesis.

My special thanks go to Ms Tippawan Chordchuang for her assistance with accommodation and the field survey on Koh Tao between November 2010 and February 2011. Also, I am grateful to Dr Pinsak Suraswadi from the Department of Marine and Coastal Resources in Thailand, Ms Radda Larpnun from the International Union for Conservation of Nature (IUCN), Mr Chaiyan Thurasakul and Mr Chad Scott, for their contributions to the study.

Lastly, I wish to sincerely thank my parents for their love, unconditional support and faith in my ability to complete the task, as well as Mr Sudhir Sharma, Ms Wang Qing and Ms Anchalee Srirangsan, for inspiring me during the hard times, creating a wonderful distraction from the thesis and keeping my priorities well sorted.

I have been so fortunate to have each and every one of them in my life. Thank you once again.

ABBREVIATIONS

BLT	Broker-Local-Tourist
BSAC	British Sub Aqua Club
CESA	Controlled Emergency Swimming Ascent
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMAS	Confédération Mondiale des Activités Subaquatiques/ The World Underwater Federation
CORAL	Coral Reef Alliance
CPAD	Coastal Preservation and Development Foundation
CU	University of Colorado
DASTA	Designated Areas for Sustainable Tourism Administration
DCI	Decompression Illnesses
DMCR	Department of Marine and Coastal Resources
DOF	Department of Fisheries
EAS	East Asian Seas Congress
EM	Effective Microorganisms
EMP	Environmental Monitoring Program
GBR	Great Barrier Reef
GBRMPA	Great Barrier Reef Marine Park Authority
GDP	Gross Domestic Product
IANTD	International Association of Nitrox and Technical Divers
ICM	Integrated Coastal Management
ICRAN	International Coral Reef Action Network
IDC	Instructor Development Course
IUCN	International Union for Conservation of Nature
KTDOC	Koh Tao Dive Operator Club
MRM	Marine Resource Management Course
MU	Mahidol University
NAUI	National Association of Underwater Instructor
NGOs	Non-Governmental Organization
PADI	Professional Association of Diving Instructors
PATA	Pacific Asia Travel Association

ABBREVIATIONS

Project AWARE	PADI Aquatic World Awareness, Responsibility and Education
PSU	Prince of Songkla University
REEF	Reef Environmental Education Foundation
REO	Regional Environmental Office
REST	Responsible and Ecological Social Tour Project
RU	Ramkamhaeng University
SCUBA	Self Contained Underwater Breathing Apparatus
SKT	Save Koh Tao Conservation Group
SKTMB	Save Koh Tao Marine Branch
SSI	Scuba Schools International
STD	Sustainable Tourism Development
TAO	Tambon Administrative Orgainzation
TAT	Tourism Authority of Thailand
TDA	Thailand Diving Association
TEATA	Thai Ecotourism and Adventure Travel Association
THB	Thai Baht
UNCED	United Nations Council on Environment and Development
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNWTO	United Nations World Tourism Organization
USD	United States Dollar
WRSTC	World Recreational SCUBA Training Council