

Specially dedicated to my late mother,

Allahyarhamah Hjh. Rajmah Hj.Kassim

To my beloved Father,

Hj. Oyop Sabidin

Dearest siblings

Bang Long, Kak Idah, Kak Ziah, Ateh

Kak Maz, Bang Yan, Bang Yanz and Poey

*for their support and once again providing encouragement throughout
this project..*

Also not to forget,

to my lab mates and housemates

for giving me advice and always be there for me...

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Science

**COMPLIANCE AUDIT OF
SAFETY, HEALTH, ENVIRONMENT AND SERVICES
AT SELECTED ECOTOURISM SITES
IN MALAYSIA**

By

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The purpose of this research is to evaluate the compliances on Safety, Health, Environmental and Services (SHE) parameters in ecotourism sites. A number of ecotourism sites in Peninsular Malaysia were chosen randomly for analysis. The success indicators were identified for each parameter and data of evaluation activities were gathered by using a checklist to quantify the performances of the 17 selected ecotourism sites. The evaluation focuses on the relevant practices and consistency of the environmental management system towards sustainable ecotourism that was applied on-site.

The result showed that in order of importance, the four dominant elements are safety (12.63 percent), services (11.48 percent), environmental (9.65 percent) and health (8.64 percent). There is 57.60 percent left as a residue of percentage and this explained most of operators in ecotourism sites did not fully addressed SHE management issues. Compliances of each ecotourism sites showed their differences

by the indicators and therefore grouped into grades of ECO 1, ECO 2 and ECO 3. Site 10 was ranked as the highest level of ECO 3 and Site 4, Site 7, Site 8, Site 11, Site 12, Site 13, Site 14 and Site 15 were ranked as the lowest level of ECO 1.

Based on the ranking of ecotourism sites, the percentages showed small figures as it have been transformed into certainty factors in order to suit the ranking system for basic module in ESRG website. The values ranges from the lowest (-52.95 percent) for Site 7 to the highest (40.25 percent) for Site 10. A Compliance Performance Report on Site 1 was made as a sample towards corrective and preventive actions. The indicators used for this research were inserted into Moderator's Rating Page meant to rate ecotourism sites and to serve as an important diagnostic tool in evaluating the sites performance for SHE.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan untuk ijazah Master Sains

**PENILAIAN TAHAP KEPATUHAN
KESELAMATAN, KESIHATAN, ALAM SEKITAR DAN PERKHIDMATAN
DI KAWASAN EKOPELANCONGAN TERPILIH
DI MALAYSIA**

Oleh

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Kajian ini dibuat bertujuan untuk menilai tahap kepatuhan kawasan ekopelancongan terhadap parameter keselamatan, kesihatan, alam sekitar dan lain-lain perkhidmatan (SHE). Beberapa kawasan ekopelancongan di Semenanjung Malaysia dipilih secara rawak untuk dianalisa. Tahap pencapaian penunjuk-penunjuk telah dikenalpasti bagi setiap parameter dan kesemua data terkumpul yang diperolehi dari senarai semakan tahap perlakuan di setiap 17 kawasan ekopelancongan digabungkan bagi tujuan mengenalpasti tahap pencapaian setiap penunjuk di kawasan-kawasan kajian. Penilaian difokuskan terhadap penggunaan yang sesuai dan amalan sistem pengurusan alam sekitar yang berterusan di kawasan kajian.

Hasil kajian menunjukkan bahawa susunan turutan tertinggi bagi empat unsur utama ialah keselamatan (12.63 peratus), perkhidmatan (11.48 peratus), alam sekitar (9.65 peratus) dan kesihatan (8.64 peratus). Terdapat 57.60 baki peratusan dan ini

menunjukkan bahawa kebanyakan pengurus di kawasan ekopelancongan tidak mengamalkan isu pengurusan SHE. Kepatuhan bagi setiap kawasan ekopelancongan menunjukkan perbezaan dari segi penunjuk dan ia telah dikumpul mengikut gred ECO 1, ECO 2 dan ECO 3. Kawasan 10 menduduki tahap tertinggi iaitu ECO 3 dan Kawasan 4, 7, 8, 11, 12, 13, 14 dan 15 menduduki tahap yang paling rendah iaitu ECO3.

Berdasarkan pengkelasan kadaran kawasan-kawasan ekopelancongan, nilai peratusan berkurangan selepas diubah kepada faktor kepastian. Tujuannya ialah memastikan kesesuaiannya dengan model asas sistem kadaran yang terdapat di laman jaringan ESG. Didapati nilai kadaran tersebut adalah dari tahap terendah (-52.95 peratus) bagi Kawasan 7 kepada tahap yang tertinggi (40.25 peratus) bagi Kawasan 10. Satu Laporan Perlakuan Kehendak ke atas Kawasan 1 telah dibuat sebagai sampel untuk tujuan tindakan pembetulan dan tindakan pencegahan. Penunjuk-penunjuk yang digunakan dalam kajian ini telah dimasukkan ke dalam *Moderator's Rating Page* bagi tujuan kadaran kawasan ekopelancongan dan seterusnya bertindak sebagai satu alat pengesanan yang penting untuk menilai perlakuan terhadap kawasan dari segi pencapaian SHE.

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I certify that an Examination Committee has met on 29th May 2006 to conduct the final examination of Siti Mastura Binti Oyop on her Master of Science thesis entitled “Compliance Audit Of Safety, Health, Environment And Services At Selected Ecotourism Sites In Malaysia” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

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DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations, which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

SITI MASTURA BINTI OYOP

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LIST OF ABBREVIATIONS

ASP	Active Server Page
BNA	Bureau of National Affairs
CAPA	Corrective/ Preventive Action
CERL	Construction Engineering Research Laboratory
CFs	Certainty Factors
CD	Compact Disc
EPA	Environmental Protection Agency
ERP	Emergency Response Plan
ESOK	Ecotourism Society of Kenya
ESRG	Expert System Research Group
FRIM	Forest Research Institute of Malaysia
FSW	Fish and Wildlife Service
IT	Information Technology
LAC	Limits of Acceptable Change
NEAP	National Ecotourism Assessment Project
OECA	Enforcement and Compliance Assurance
PVQ	Pre- Visit Questionnaire
QMBA	Quality Management Benchmark Assessment
SPSS	Statistical Package for Social Sciences
TIES	The International Ecotourism Society
UPM	Universiti Putra Malaysia
USDA	United States Department of Agriculture
USA	United States of America
VERP	Visitor Experience and Resource Protection Process

VIM	Visitor Impact Management
WA	Western Australia
WTO	World Tourism Organisation
WWF-M	World Wildlife Fund Malaysia
WWW	World Wide Web