THE AWARENESS OF LOCAL COMMUNITIES ON COASTAL MANAGEMENT IN KUALA SELANGOR, MALAYSIA

BY

MOHAMMED AMER YOUNUS

A dissertation submitted in fulfilment of the requirement for the degree of Master of (Urban and Regional Planning)

Kulliyyah of Architecture and Environmental Design International Islamic University Malaysia

FEBRUARY 2013

ABSTRACT

Nowadays, there are many concerns about the environmental protection of coastal areas throughout the developed and developing countries. Malaysia is considered one of the countries, which has the administration of coastal zone management by the Federal Government, and it is also strong in surveillance and enforcement but lacks community-based management. Public participation and local-level involvement are recognized as important components of coastal management. This study will be expected to expose and evaluate the current awareness of local community on coastal management based on both; the provision of coastal management programs and the local community knowledge on coastal environmental issues. Moreover, this study also identified the challenges or constraints impeding effective awareness community practicing coastal management Kuala Selangor are selected to be the study area for this research. Additionally, the study outlined the issues of awareness of local community in coastal management and provided recommendations based on a survey conducted in the study area as well. These recommendations will provide the government agencies, private firms and its associations, with suggestions to improve local community awareness on coastal management, which are vital for the planning of coastal areas and implementing environmentally sound management programs that are involving local communities for effective coastal management.

ملخص البحث

قامت هذه الدراسة على التعريف وتحليل مستوى الوعى لدى المحتمعات المحلية في إدارةِ المناطق الساحلية في ماليزيا. إن المشاركة العامة وتفاعل المجتمع المحلى في إدارة المناطق الساحلية يعتبر عنصرمهما في الإدارة الساحلية. إن المستفيدون من المناطق الساحلية على وجه العموم يجب أن يكونوا على إستعداد تام للمشاركة بالمعلومة وتعريف المشاكل البيئة الخاصة بالمناطق الساحلية مما يؤدي إلى نفاذ المخطط المطلوب في تلك المناطق. إن التعريف والتحليل لماهية الوعي عند المجتمعات المحلية في الادارة الساحلية يعتمد على أمران, أولهما: هو وفرة البرامج التوعوية في إدارة المناطق الساحلية و ثانيهما: هو المعرفة العامة لدى المحتمع عن مشاكل البيئة الساحلية. إن الوعى الغير تام بالإضافة إلى نقص المعلومات عن البيئة الساحلية وإدارها يؤدي إلى ضعف مشاركة المحتمع المحلية في الادارة المحلية للمناطق الساحلية. لهذا السبب جاءهذا البحث ليقوم على دراسة الوعى على المستوى المحلى لإدارة الساحل مما يؤثر بشكل إيجابي في إتخاذ أي قرار من قِبل ذوي الخبرة في وضع المخططات لتلك المناطق. كوالا سيلانغور أختيرت كمنطقة للدراسة ويرجع ذلك لقربها من كلانج فالي الذي يعتبر أحد اهم المؤثرات الايجابية على المنطقة من خلال عملية التطور الذي يشهدها. في المحمل الدراسة استطاعت وضع الخطوط العريضة لمشكلة الوعى لدى المحتمعات المحلية ووضع المقترحات الملائمة الخاصة بمنطقة الدراسة. إنه لمن المتوقع أن التوصيات الخاصة بالدراسة سوف تزود الوكالات الحكومية والشركات الخاصة بمقترحات عن وعي المجتمع بالإدارة الساحلية والذي يعتبر جد مهم في تخطيط المناطق الساحلية وبيئتها بالإضافة إلى حزمة من البرامج التي تسهم في تفعيل دور المجتمع المحلى في إدارها بشكل فاعل.

APPROVAL PAGE

to acceptable standards of scholarly presentation a quality, as a dissertation for the degree of Master of	and is fully adequate, in scope and
	M.Zainora Bt. Asmawi Supervisor
I certify that I have read this study and that in my standards of scholarly presentation and is fully ad dissertation for the degree of Master of Urban and F	lequate, in scope and quality, as a
	Mohd Zin Bin Mohamed Examiner
This dissertation was submitted to the Departmen and is accepted as a fulfilment of the requirement Regional Planning.	
	Mariana Mohamed Osman Head, Department of Urban and Regional Planning
This dissertation was submitted to the Kuliyyah of Design and is accepted as a fulfilment of the requirement and Regional Planning.	
	Khairuddin Abdul Rashid Dean, Kuliyyah of Architecture and Environmental Design

DECLARATION

I hereby declare that this dissertation is the	ne result of my own investigations, except	
where otherwise stated. I also declare that	it has not been previously or concurrently	
submitted as a whole for any other degrees at IIUM or other institutions.		
Mohammed Amer Younus		
Signature	Date	

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

DECLARATION OF COPYRIGHT AND AFFIRMATION OF FAIR USE OF UNPUBLISHED RESEARCH

Copyright © 2013 by Mohammed Amer Younus. All rights reserved.

THE AWARENESS OF LOCAL COMMUNITIES ON COASTAL MANAGEMENT IN KUALA SELANGOR, MALAYSIA.

No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior written permission of the copyright holder except as provided below:

- 1. Any material contained in or derived from this unpublished research may only be used by others in their writing with due acknowledgement.
- 2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.
- 3. The IIUM library will have the right to make, store in a retrieval system and supply copies of this unpublished research if requested by other universities and research libraries.

Affirmed by Mohammed Amer Younus	
Signature	Date

ACKNOWLEDGEMENTS

I would firstly like to thank Almighty Allah for making my pursuit for master education possible Al-hamdullah. I am deeply thankful to Assistant Professor M. Zainora Bt. Asmawi who has been a source of support during my Masters from the beginning until the end of my study; has given very immediate response of kind help to all the problems raised has managed to supervise my work and has given tireless advice on improving my research. I would also like to express my thanks to the examiners panel for sharing their knowledge and giving me helpful input. To all the lecturers in the Department of Urban and Regional Planning, I am thankful for their help, support and contribution of knowledge since I started my Master studies in this university.

I would like to record my appreciation to my parents for their love and support, for their patience in raising and taking good care of me, and for always being by my side when I am in need. I heartily thanked all my colleagues for their kind and pleasant cooperation, the numerous interesting and often enlightening discussions; and helpful and warranted advice on my thesis. Special thanks go to Ms Khiru Raphael, at Australian High Commission for her understanding she provided.

This thesis would not have been possible without the precious and multifold support from all these people to whom I would like to express my deepest gratitude.

I hope that this contribution to the theory and practice of local awareness in coastal management helps to build a road towards a further sustainable approach to coastal planning for the benefit of our coast and future generations and our role as Muslims to fulfill our commitment to Allah by protecting this earth.

Thank you all!

TABLE OF CONTENTS

Abstract	ii
Abstract in Arabic	iii
Approval Page	iv
Declaration Page	V
Copyright Page	vi
Acknowledgements	vii
Table of Contents	ix
List of Tables	xii
List of Figures	xiii
List of Abbreviations	XV
CHAPTER ONE: INTRODUCTION	1
1.1 Introduction.	
1.2 Statement of Problem.	
1.3 Objectives of Study	
1.4 Research Questions.	
1.5 Scope of Study	
1.6 Significance of the Study	
1.6.1 Significance Towards Planning	
1.6.2 Significance Towards Community	8
1.6.3 Significance Towards Environment	
1.7 Study Structure/Design	10
1.7.1 Background and Theoretical Studies	10
1.7.2 Data Collection and Gathering	10
1.7.3 Analysis of Data Findings	11
1.7.4 Conclusion and Recommendations	
1.8 Limitations of Study	12
1.9 Conclusion.	13
CHAPTER TWO: LITERATURE REVIEW	
2.1 Introduction.	
2.2 The Definitions and Terminologies	
2.2.1 Coastal Area (Zone)	
2.2.2 Coastal (Zone/Area) Management	
2.2.3 Integrated Coastal (Zone/Area) Management	
2.2.4 Concept of Integration in ICM	
2.3 Threats Issues and Environmental Problems of Coastal Zones	
2.3.1 Coastal Erosion	
2.3.2 Flood Risks	
2.3.3 Land use Impact and Coastal Population	
2.3.4 Other Threats	
2.4 Management Issues in CM at Local Level	
2.5 Communities Resource Management	
2.5.1 The Concept of Community Management	

2.5.3 The Relationship between Community and Stakeholders. 2.5.4 Community-based Coastal Resource Management (CB-CRM). 3. 2.5.5 Community-based Integrated Coastal Management (CB-ICM). 4. 2.6 Participation in Coastal Management. 4. 2.6.1 Community Participation. 4. 2.6.2 Pyramids, Ladders and Wheels of Participation. 4. 2.6.3 Community Participation in Coastal Management. 5. 2.7 The Role of Awareness on Participation. 5. 2.8 Integrated Coastal Management (ICM) in Malaysia. 5. 2.8.1 ICZM in the States of Penang, Sabah and Sarawak. 5. 2.8.2 Coastal Resource Management Plan Southern Johor (CRMPSJ). 5. 2.8.3 Role of communities in Sabah. 5. 2.8.4 National Physical Plan and Coastal Areas in Malaysia. 5. 2.9 Conclusion. 6. CHAPTER THREE: RESEARCH METHODOLOGY. 6. 3.1 Introduction. 6. 3.2 Research Design. 6. 3.3 Mixed Methods. 6. 3.3.1 Data Collection Methods and Sampling. 6. 3.4 Data Analysis. 7. 3.5 Conclusion. 7. CHAPTER FOUR: THE STUDY AREA. 7. 4.1 Introduction. 7. 4.2 Kuala Selangor. 7. 4.2.1 Historical Background. 7. 4.2.2 Kuala Selangor Nature Park (KSNP). 7. 4.2.3 Kuala Selangor Planning Profile. 7. 4.2.4 Kuala Selangor Planning Profile. 7. 4.2.5 Level of Education of Respondents. 8. 5.2.1 Occupation. 8. 5.2.2 Level of Education of Respondents. 8. 5.3 Analysis on the Discussion of Key Research Question and Findings. 9. 5.4 Determining the Local Communities Participation (Awareness on Local Level). 9. 5.4.1 Awareness on Coastal Management. 9. 5.4.2 Importance of Coastal Education. 9. 5.5.2 Environmental Issues Impact. 9. 5.5.4 Programs Provision. 9. 5.5.5 Responsibility. 9. 5.5.6 Recommendations by Respondents.	2.5.2 Community	32
2.5.5 Community-based Integrated Coastal Management (CB-ICM)	2.5.3 The Relationship between Community and Stakeholders	33
2.5.5 Community-based Integrated Coastal Management (CB-ICM)	2.5.4 Community-Based Coastal Resource Management (CB-CRM)	36
2.6 Participation in Coastal Management		
2.6.1 Community Participation. 4 2.6.2 Pyramids, Ladders and Wheels of Participation. 4 2.6.3 Community Participation in Coastal Management. 5 2.7 The Role of Awareness on Participation. 5 2.8 Integrated Coastal Management (ICM) in Malaysia. 5 2.8.1 ICZM in the States of Penang, Sabah and Sarawak. 5 2.8.2 Coastal Resource Management Plan Southern Johor (CRMPSJ). 5 2.8.3 Role of communities in Sabah. 5 2.8.4 National Physical Plan and Coastal Areas in Malaysia. 5 2.9 Conclusion. 6 CHAPTER THREE: RESEARCH METHODOLOGY 6 3.1 Introduction. 6 3.2 Research Design. 6 3.3 Mixed Methods. 6 3.3.1 Data Collection Methods and Sampling. 6 3.4 Data Analysis. 7 3.5 Conclusion. 7 4.2 Kuala Selangor. 7 4.2.1 Location. 7 4.2.2 Historical Background. 7 4.2.3 Kuala Selangor Nature Park (KSNP). 7 4.2.4 Kuala Selangor Planning Profile. 7 4.3 Conclusion. 8 5.1 Introduction. 8		
2.6.2 Pyramids, Ladders and Wheels of Participation	<u> </u>	
2.6.3 Community Participation in Coastal Management 5 2.7 The Role of Awareness on Participation 5 2.8 Integrated Coastal Management (ICM) in Malaysia 5 2.8.1 ICZM in the States of Penang, Sabah and Sarawak 5 2.8.2 Coastal Resource Management Plan Southern Johor (CRMPSJ) 5 2.8.3 Role of communities in Sabah 5 2.8.4 National Physical Plan and Coastal Areas in Malaysia 5 2.9 Conclusion 6 CHAPTER THREE: RESEARCH METHODOLOGY 6 3.1 Introduction 6 3.2 Research Design 6 3.3 Mixed Methods 6 3.1 Data Collection Methods and Sampling 6 3.4 Data Analysis 7 3.5 Conclusion 7 CHAPTER FOUR: THE STUDY AREA 7 4.1 Introduction 7 4.2.2 Historical Background 7 4.2.2 Historical Background 7 4.2.2 Kuala Selangor Planning Profile 7 4.3 Conclusion 8 5.1 Introduction 8 5.2 Respondents Profile 8 5.2.1 Occupation 8 5.2.2 Level of Education of Respondents<		
2.8 Integrated Coastal Management (ICM) in Malaysia. 5 2.8.1 ICZM in the States of Penang, Sabah and Sarawak. 5 2.8.2 Coastal Resource Management Plan Southern Johor (CRMPSJ). 5 2.8.3 Role of communities in Sabah. 5 2.8.4 National Physical Plan and Coastal Areas in Malaysia. 5 2.9 Conclusion. 6 CHAPTER THREE: RESEARCH METHODOLOGY. 6 3.1 Introduction. 6 3.2 Research Design. 6 3.3 Mixed Methods. 6 3.3.1 Data Collection Methods and Sampling. 6 3.4 Data Analysis. 7 3.5 Conclusion. 7 CHAPTER FOUR: THE STUDY AREA. 7 4.1 Introduction. 7 4.2 Kuala Selangor. 7 4.2.1 Location. 7 4.2.2 Historical Background. 7 4.2.3 Kuala Selangor Planning Profile. 7 4.3 Conclusion. 8 5.1 Introduction. 8 5.2 Respondents Profile. 8 5.2.1 Occupation. 8 5.2 Respondents Profile. 8 5.2.1 Decupation. 8 5.3 Analys		
2.8 Integrated Coastal Management (ICM) in Malaysia. 5 2.8.1 ICZM in the States of Penang, Sabah and Sarawak. 5 2.8.2 Coastal Resource Management Plan Southern Johor (CRMPSJ). 5 2.8.3 Role of communities in Sabah. 5 2.8.4 National Physical Plan and Coastal Areas in Malaysia. 5 2.9 Conclusion. 6 CHAPTER THREE: RESEARCH METHODOLOGY. 6 3.1 Introduction. 6 3.2 Research Design. 6 3.3 Mixed Methods. 6 3.3.1 Data Collection Methods and Sampling. 6 3.4 Data Analysis. 7 3.5 Conclusion. 7 CHAPTER FOUR: THE STUDY AREA. 7 4.1 Introduction. 7 4.2 Kuala Selangor. 7 4.2.1 Location. 7 4.2.2 Historical Background. 7 4.2.3 Kuala Selangor Planning Profile. 7 4.3 Conclusion. 8 5.1 Introduction. 8 5.2 Respondents Profile. 8 5.2.1 Occupation. 8 5.2 Respondents Profile. 8 5.2.1 Decupation. 8 5.3 Analys	2.7 The Role of Awareness on Participation.	52
2.8.1 ICZM in the States of Penang, Sabah and Sarawak. 5. 2.8.2 Coastal Resource Management Plan Southern Johor (CRMPSI). 5. 2.8.3 Role of communities in Sabah. 50. 2.8.4 National Physical Plan and Coastal Areas in Malaysia. 5. 2.9 Conclusion. 6. CHAPTER THREE: RESEARCH METHODOLOGY 6. 3.1 Introduction. 6. 3.2 Research Design. 6. 3.3 Mixed Methods. 6. 3.3.1 Data Collection Methods and Sampling. 6. 3.4 Data Analysis. 7. 3.5 Conclusion. 7. CHAPTER FOUR: THE STUDY AREA. 7. 4.1 Introduction. 7. 4.2 Kuala Selangor. 7. 4.2.1 Location. 7. 4.2.2 Historical Background. 7. 4.2.3 Kuala Selangor Nature Park (KSNP). 7. 4.2.4 Kuala Selangor Planning Profile. 7. 4.3 Conclusion. 8. 5.2.1 Occupation. 8. 5.2.2 Level of Education of Respondents. 8. 5.3 Analysis on the Discussion of Key Research Question and Findings. 9. 5.4 Determining the Local Communities Participation		
2.8.3 Role of communities in Sabah		
2.8.3 Role of communities in Sabah	2.8.2 Coastal Resource Management Plan Southern Johor (CRMPSJ)	57
2.9 Conclusion 6 CHAPTER THREE: RESEARCH METHODOLOGY 6 3.1 Introduction 6 3.2 Research Design 6 3.3 Mixed Methods 6 3.3.1 Data Collection Methods and Sampling 6 3.4 Data Analysis 7 3.5 Conclusion 7 CHAPTER FOUR: THE STUDY AREA 7 4.1 Introduction 7 4.2.1 Location 7 4.2.2 Historical Background 7 4.2.3 Kuala Selangor Nature Park (KSNP) 7 4.2.4 Kuala Selangor Planning Profile 7 4.3 Conclusion 8 5.1 Introduction 8 5.2 Respondents Profile 8 5.2.1 Occupation 8 5.2.2 Level of Education of Respondents 8 5.3 Analysis on the Discussion of Key Research Question and Findings 9 5.4.1 Awareness on Coastal Management 9 5.4.2 Importance of Coastal Education 9 5.5.1 Environmental Issues Impact 10 5.5.2 Environmental Issues Impact 10 5.5.4 Programs Provision 10		
CHAPTER THREE: RESEARCH METHODOLOGY 6 3.1 Introduction. 6 3.2 Research Design. 6 3.3 Mixed Methods. 6 3.4 Data Collection Methods and Sampling. 6 3.4 Data Analysis. 7 3.5 Conclusion. 7 CHAPTER FOUR: THE STUDY AREA. 7 4.1 Introduction. 7 4.2 Kuala Selangor. 7 4.2.1 Location. 7 4.2.2 Historical Background. 7 4.2.3 Kuala Selangor Nature Park (KSNP). 7 4.2.4 Kuala Selangor Planning Profile. 7 4.3 Conclusion. 8 5.1 Introduction. 8 5.2 Respondents Profile. 8 5.2.1 Occupation. 8 5.2.2 Level of Education of Respondents. 8 5.3 Analysis on the Discussion of Key Research Question and Findings. 9 5.4.1 Awareness on Coastal Management. 9 5.4.2 Importance of Coastal Education. 9 5.5.1 Environmental Issues Impact. 10 5.5.2 Environmental Factors. 10 5.5.3 R	2.8.4 National Physical Plan and Coastal Areas in Malaysia	59
3.1 Introduction 6 3.2 Research Design 6 3.3 Mixed Methods 6 3.3.1 Data Collection Methods and Sampling 6 3.4 Data Analysis 7 3.5 Conclusion 7 CHAPTER FOUR: THE STUDY AREA 7 4.1 Introduction 7 4.2 Kuala Selangor 7 4.2.1 Location 7 4.2.2 Historical Background 7 4.2.3 Kuala Selangor Nature Park (KSNP) 7 4.2.4 Kuala Selangor Planning Profile 7 4.3 Conclusion 8 5.1 Introduction 8 5.2 Respondents Profile 8 5.2.1 Occupation 8 5.2.2 Level of Education of Respondents 8 5.3 Analysis on the Discussion of Key Research Question and Findings 9 5.4.1 Awareness on Coastal Management 9 5.4.2 Importance of Coastal Education 9 5.5.1 Environmental Issues Impact 10 5.5.2 Environmental Issues Impact 10 5.5.3 Responsibility 10 5.5.4 Programs Provision 10		
3.1 Introduction 6 3.2 Research Design 6 3.3 Mixed Methods 6 3.3.1 Data Collection Methods and Sampling 6 3.4 Data Analysis 7 3.5 Conclusion 7 CHAPTER FOUR: THE STUDY AREA 7 4.1 Introduction 7 4.2 Kuala Selangor 7 4.2.1 Location 7 4.2.2 Historical Background 7 4.2.3 Kuala Selangor Nature Park (KSNP) 7 4.2.4 Kuala Selangor Planning Profile 7 4.3 Conclusion 8 5.1 Introduction 8 5.2 Respondents Profile 8 5.2.1 Occupation 8 5.2.2 Level of Education of Respondents 8 5.3 Analysis on the Discussion of Key Research Question and Findings 9 5.4.1 Awareness on Coastal Management 9 5.4.2 Importance of Coastal Education 9 5.5.1 Environmental Issues Impact 10 5.5.2 Environmental Issues Impact 10 5.5.3 Responsibility 10 5.5.4 Programs Provision 10		
3.2 Research Design		
3.3 Mixed Methods 6 3.3.1 Data Collection Methods and Sampling 6 3.4 Data Analysis 7 3.5 Conclusion 7 CHAPTER FOUR: THE STUDY AREA 7 4.1 Introduction 7 4.2 Kuala Selangor 7 4.2.1 Location 7 4.2.2 Historical Background 7 4.2.3 Kuala Selangor Nature Park (KSNP) 7 4.2.4 Kuala Selangor Planning Profile 7 4.3 Conclusion 8 5.1 Introduction 8 5.2 Respondents Profile 8 5.2.1 Occupation 8 5.2.2 Level of Education of Respondents 8 5.3 Analysis on the Discussion of Key Research Question and Findings 9 5.4 Determining the Local Communities Participation (Awareness on Local Level) 9 5.4.1 Awareness on Coastal Management 9 5.5.2 Importance of Coastal Education 9 5.5.1 Environmental Issues Impact 10 5.5.2 Environmental Factors 10 5.5.3 Responsibility 10 5.5.4 Programs Provision 10		
3.3.1 Data Collection Methods and Sampling	$\boldsymbol{\varepsilon}$	
3.4 Data Analysis 7 3.5 Conclusion 7 CHAPTER FOUR: THE STUDY AREA 7 4.1 Introduction 7 4.2 Kuala Selangor 7 4.2.1 Location 7 4.2.2 Historical Background 7 4.2.3 Kuala Selangor Nature Park (KSNP) 7 4.2.4 Kuala Selangor Planning Profile 7 4.3 Conclusion 8 5.1 Introduction 8 5.2 Respondents Profile 8 5.2.1 Occupation 8 5.2.2 Level of Education of Respondents 8 5.3 Analysis on the Discussion of Key Research Question and Findings 9 5.4 Determining the Local Communities Participation (Awareness on Local Level) 9 5.4.1 Awareness on Coastal Management 9 5.4.2 Importance of Coastal Education 9 5.5.1 Environmental Issues Impact 10 5.5.2 Environmental Factors 10 5.5.3 Responsibility 10 5.5.4 Programs Provision 10		
3.5 Conclusion		
CHAPTER FOUR: THE STUDY AREA. 7 4.1 Introduction. 7 4.2 Kuala Selangor. 7 4.2.1 Location. 7 4.2.2 Historical Background. 7 4.2.3 Kuala Selangor Nature Park (KSNP). 7 4.2.4 Kuala Selangor Planning Profile. 7 4.3 Conclusion. 8 5.1 Introduction. 8 5.2 Respondents Profile. 8 5.2.1 Occupation. 8 5.2.2 Level of Education of Respondents. 8 5.3 Analysis on the Discussion of Key Research Question and Findings. 9 5.4 Determining the Local Communities Participation (Awareness on Local Level). 9 5.4.1 Awareness on Coastal Management. 9 5.4.2 Importance of Coastal Education. 9 5.5.5 Determining the Level of Awareness towards Coastal Environment. 10 5.5.1 Environmental Issues Impact. 10 5.5.3 Responsibility. 10 5.5.4 Programs Provision. 10	•	
4.1 Introduction 7 4.2 Kuala Selangor 7 4.2.1 Location 7 4.2.2 Historical Background 7 4.2.3 Kuala Selangor Nature Park (KSNP) 7 4.2.4 Kuala Selangor Planning Profile 7 4.3 Conclusion 8 5.1 Introduction 8 5.2 Respondents Profile 8 5.2.1 Occupation 8 5.2.2 Level of Education of Respondents 8 5.3 Analysis on the Discussion of Key Research Question and Findings 9 5.4 Determining the Local Communities Participation (Awareness on Local Level) 9 5.4.1 Awareness on Coastal Management 9 5.4.2 Importance of Coastal Education 9 5.5.5 Determining the Level of Awareness towards Coastal Environment 10 5.5.1 Environmental Issues Impact 10 5.5.2 Environmental Factors 10 5.5.3 Responsibility 10 5.5.4 Programs Provision 10	3.3 Coliciusion	12
4.1 Introduction 7 4.2 Kuala Selangor 7 4.2.1 Location 7 4.2.2 Historical Background 7 4.2.3 Kuala Selangor Nature Park (KSNP) 7 4.2.4 Kuala Selangor Planning Profile 7 4.3 Conclusion 8 5.1 Introduction 8 5.2 Respondents Profile 8 5.2.1 Occupation 8 5.2.2 Level of Education of Respondents 8 5.3 Analysis on the Discussion of Key Research Question and Findings 9 5.4 Determining the Local Communities Participation (Awareness on Local Level) 9 5.4.1 Awareness on Coastal Management 9 5.4.2 Importance of Coastal Education 9 5.5.5 Determining the Level of Awareness towards Coastal Environment 10 5.5.1 Environmental Issues Impact 10 5.5.2 Environmental Factors 10 5.5.3 Responsibility 10 5.5.4 Programs Provision 10	CHAPTER FOUR: THE STUDY AREA	73
4.2 Kuala Selangor		
4.2.1 Location 7 4.2.2 Historical Background 7 4.2.3 Kuala Selangor Nature Park (KSNP) 7 4.2.4 Kuala Selangor Planning Profile 7 4.3 Conclusion 8 CHAPTER FIVE: DATA ANALYSIS AND FINDINGS 8 5.1 Introduction 8 5.2 Respondents Profile 8 5.2.1 Occupation 8 5.2.2 Level of Education of Respondents 8 5.3 Analysis on the Discussion of Key Research Question and Findings 9 5.4 Determining the Local Communities Participation (Awareness on Local Level) 9 5.4.1 Awareness on Coastal Management 9 5.4.2 Importance of Coastal Education 9 5.5 Determining the Level of Awareness towards Coastal Environment 10 5.5.1 Environmental Issues Impact 10 5.5.2 Environmental Factors 10 5.5.3 Responsibility 10 5.5.4 Programs Provision 10		
4.2.2 Historical Background	<u> </u>	
4.2.3 Kuala Selangor Nature Park (KSNP)		
4.2.4 Kuala Selangor Planning Profile		
4.3 Conclusion		
5.1 Introduction.85.2 Respondents Profile.85.2.1 Occupation.85.2.2 Level of Education of Respondents.85.3 Analysis on the Discussion of Key Research Question and Findings.95.4 Determining the Local Communities Participation (Awareness on Local Level).95.4.1 Awareness on Coastal Management.95.4.2 Importance of Coastal Education.95.5 Determining the Level of Awareness towards Coastal Environment.105.5.1 Environmental Issues Impact.105.5.2 Environmental Factors.105.5.3 Responsibility.105.5.4 Programs Provision.10		
5.1 Introduction.85.2 Respondents Profile.85.2.1 Occupation.85.2.2 Level of Education of Respondents.85.3 Analysis on the Discussion of Key Research Question and Findings.95.4 Determining the Local Communities Participation (Awareness on Local Level).95.4.1 Awareness on Coastal Management.95.4.2 Importance of Coastal Education.95.5 Determining the Level of Awareness towards Coastal Environment.105.5.1 Environmental Issues Impact.105.5.2 Environmental Factors.105.5.3 Responsibility.105.5.4 Programs Provision.10		
5.2 Respondents Profile		
5.2.1 Occupation		
5.2.2 Level of Education of Respondents		
5.3 Analysis on the Discussion of Key Research Question and Findings		
5.4 Determining the Local Communities Participation (Awareness on Local Level)	<u> </u>	
Level)		90
5.4.1 Awareness on Coastal Management		0.4
5.4.2 Importance of Coastal Education		
5.5 Determining the Level of Awareness towards Coastal Environment105.5.1 Environmental Issues Impact105.5.2 Environmental Factors105.5.3 Responsibility105.5.4 Programs Provision10		
5.5.1 Environmental Issues Impact105.5.2 Environmental Factors105.5.3 Responsibility105.5.4 Programs Provision10	•	
5.5.2 Environmental Factors105.5.3 Responsibility105.5.4 Programs Provision10		
5.5.3 Responsibility		
5.5.4 Programs Provision		
5.6 Recommendations by Respondents		
	5.6 Recommendations by Respondents	109

5.7 Conclusion	111
CHAPTER SIX: RECOMMENDATIONS AND CONCLUSION	112
6.1 Introduction	112
6.2 Summary of the Findings	112
6.2.1 Coastal Management	
6.2.2 Awareness and Education on Local Level	
6.3 Recommendations	114
6.3.1 Management Aspects	115
6.3.2 Awareness and Education Aspects	
6.4 Area of Future Studies	119
6.5 Conclusion.	120
REFERENCE	122
APPENDIX I	133

LIST OF TABLES

<u>Table</u>	e No.	Page No
2.1	Categories of Stakeholders	35
2.2	CBCRM Features, Functions, and Challenges	40
2.3	Ladders of Public Participation from vary literatures	49
4.1	Mukim (Counties) Total Area Sub-District and Block	82
5.1	Respondents Occupation Sectors	89
5.2	Beneficiaries of Awareness of Coastal Management in Kuala Selangor (<i>P</i> <0.001)	94
5.3	The relationship between the awareness on coastal management and the desire to attend program on local coastal management (Chi-square test), $(p < 0.001)$	96
5.4	Respondents Perceptions on Coastal Environmental Issues	102

LIST OF FIGURES

<u>Figu</u>	Figure No.	
1.1	Explaining the Scopes of the Study	6
1.2	Study Structure (The Flow of the Study)	12
2.1	The interaction between the Marine Environment and the Terrestrial Environment is understood to be the <i>coastal zone</i>	20
2.2	The Three Management Approaches to Coastal Management	38
2.3	The Ladder of involvement	47
2.4	The Wheel of Participation by Treby	50
2.5	The Pyramid of Participation by Scoullos	52
2.6	Author Interpretation to the theoretical Pyramid of Awareness	54
3.1	A Screen Snapshot of Raosoft.Inc, Sample of the Study Made Based on this Calculation	69
3.2	Location points of questionnaires survey	70
4.1	Location of the Study Area	74
4.2	The Author In front of the Natural Park Lake	77
4.3	Mangrove at Kuala Selangor Nature Park (KSNP)	77
4.4	Mudskipper fish at Kuala Selangor Nature Park (KSNP)	78
4.5	A View from Kuala Selangor Coast	79
4.6	The Damaged Mangroves in Kuala Selangor Coastal Area	80
4.7	Buildings Constructions Materials Waste in Kuala Selangor Coastal Are	a 80
4.8	Study Area of Kuala Selangor Sub-District	83
4.9	Study Area, the coastal zones in the District Selangor and Sabak Bernam	n 84

5.1	The numbers and percentages of respondents' education level	90
5.2	Beneficiaries of Awareness of Coastal Management in Kuala Selangor (<i>P</i> <0.001)	95
5.3	Local Awareness Percentages on Coastal Management in Kuala Selangor	98
5.4	Public Opinion on Educating local people about Coastal Areas Management (In Percentages)	100
5.5	Analysis of Coastal Environmental Issues	103
5.6	Causes of Coastal Environment Issues in Kuala Selangor	105
5.7	Responsibility of managing and planning the coastal areas in Kuala Selangor district	107
5.8	Provision of Coastal Programs in Kuala Selangor	109
5.9	Analysis of Recommendations	110

LIST OF ABBREVIATIONS

BP Planning Block

CB-CRM Community-Based Coastal Resource Management

CB-ICM Community-based Integrated Coastal Management

CEC Coastal Engineering Center

CETC Coastal Engineering Technical Center

CM Coastal Management

CRM Coastal Resource Management

CRMPSJ Coastal Resource Management Plan for South Johor

CZM Coastal Zone Management

DID Department of Irrigation and Drainage

DANCED Danish Cooperation for Environment and Development

EIA Environmental Impact Assessment

FAO Food and Agriculture Organization of the UN

IAPG Inter-Agency Planning Group

ICM Integrated Coastal Management

ICZM Integrated Coastal Zone Management

JSCC Johor State Consultation Committee

KSNP Kuala Selangor Nature Park

MDHS Hulu Selangor District Council

MDKS Kuala Selangor District Council

MOSTE Ministry of Science, Technology and Environment

MPK Klang Municipal Council

MPS Selayang Municipal Council

NCECC National Coastal Erosion Control Council

NPP National Physical Plan

NSC National Steering Committee

PU Planning Unit

RFZPPN Coastal Zone Physical Plan

UNCLOS United Nations Conference on the Law of the Sea

USAID United States Agency for International Development

CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

This study emphasizes on the awareness and the involvement of community in the management of coastal area at the local level. Despite the fact that, various researches have been conducted out regarding the management of coastal areas, but there are many questions about how the local level such as local communities can be equipped with the practice of management of the coastal area, particularly in Kuala Selangor. With the increase of environmental issues, the need to control the adverse effect of global warming and the uncontrolled activities of the coast have all developed to the interests in studying the awareness and the functions among the local level communities.

More than 60 percent of the globe's population lives within 60 km of the coast (Post et al., 1996), included urban activities such as industrial facilities, agriculture, aquaculture, tourism, shipping, forestry and other various developments. According to FAO,(1998), The damages are happening increasingly not only because of fragility of populations, but mainly due to the development carried out in the coastal areas. Furthermore, there is much attractiveness for development of coastal areas for people, especially cities in coastal areas. The coastal city is the source of development for most of the coastal habitat. Unmindful developments of coastal areas whitin which cities sprawl are more vulnerable to environmental disasters.

The challenges are in some cases vast which vary from environmental exhaustion and degradation to management move toward problems and enforcement.

In addition, the difficulty of implementation, financial restraints and lack of skilled personnel which are being experienced at the district and local level have made it rather difficult at achieving a sound management of the environment in these areas. (Mariana M.O., 2008)

On March 11, 2011, Japan was hit by an 8.9 magnitude earthquake that caused great destruction. As a result of the earthquake, a tsunami broke out as well. A tsunami is caused by an underwater earthquake that happens because of the collision of plates ("Tsunami In Japan," 2011). Environmental degradation plays a critical role in triggering some disasters, and in making others worse. Catastrophes strike hardest the countries encounter by deforestation, erosion, over cultivation and over-grazing of marginal lands. The vulnerability to natural disasters is also growing due to increasing population and inadequately planned urban growth. The number and density of people living in cities within earthquake and tropical cyclone zones have risen dramatically in the past two decades (Programme, 2001).

Looking more specifically at the community dimension of Integrated Coastal Management (ICM), several authors e.g. Clark,(1996); Scura,(1992); and Sorensen,(1990) describe the overall goal of ICM as to improve the quality of life of the communities that depend on coastal resources as well as providing for needed development (particularly coastal-dependent development) while maintaining the biological diversity and productivity of coastal ecosystems in order to achieve and maintain desired functional and/or quality levels of coastal systems, as well as to reduce the costs associated with coastal hazards to acceptable levels (Visser, 2004).

In essence, this study provides a better understanding of awareness among the communities of Kuala Selangor being one of communities faced with economic development as well as its role as important part of State Selangor-Malaysia. Because

of this, there is the need for awareness of management of the coastal area so as to sustain these increasing trends in both the population and development in the area of study.

1.2 STATEMENT OF PROBLEM

Public involvement in decision making for numerous environmental impact is important for both local project issues and strategic planning (Petts, 1999). Cross boundary impacts are of particular concern with coastal processes where local solutions can pass on problems further along the coast or inland (King, 1999). Coastal areas and estuaries have complex dynamics and multiple effects on the natural and human landscapes that they influence. Because of these processes, people living in coastal areas have to adapt to change. Unless local people are aware of the changes, comprehend the processes and can be helped to adapt, there is always the potential for conflict with the powers that want to accelerate or impose changes that are not felt acceptable by the people living in the area (Guthrie et al., 2003).

Firstly, rapid urbanization and development in several of these local communities increase the challenges and necessitate the creation of environmental responsive solutions. Discussion is commonly what is perceived to acquire place at present and is a route that involves giving and receiving information and comments about proposals (Petts, 1999). Because of this active discussions, the range of environmental problems perceived to be major threats to human welfare has expanded considerably over the past two decades, from pollution issues at local, regional and then international scales, technical to widespread natural resource depletion and degradation (Colby, 1991). According to Lo, (1996) the urbanization of Kuala

Lumpur impact several district in Selangor state and that is include Kuala Selangor.

Secondly, the key challenges facing local communities in practicing coastal areas management in Kuala Selangor are not only limited to integration, imposition of Federal and State laws, policies and regulations but also in the awareness of the said laws, policies and regulations embedded at achieving a sustainable environment. Coupled with human resources and qualified professionals available to meet the challenges at local level.

Therefore, it is the argument of this research that there is not enough awareness of some stakeholders and the lack of a more responsible approach can be the cause poor participatory approach on coastal management. Participation that allows a quantity of influence on decisions (Htun, 1988), that is perceived, allows greater involvement and a reduction in conflict over the coastal natural resources utilization. A good and successful environmental management exists when the awareness is perfectly presented to accommodate the issues and problems and when the programs and activities set are well implemented and enforced. As such there is the need to study the awareness of local level communities practicing integrated coastal zone management/coastal management in coastal areas. This research aims to suggest ways in which such lack of participation could be avoided and propose some recommendations for better participation which will result in greater involvement in the practice of coastal management in Kuala Selangor.

1.3 OBJECTIVES OF THE STUDY

Based on some of the issues highlighted in the statement of problems, the aim of the study is to analyze the awareness of local communities in practicing coastal zone

management in Kuala Selangor. In order to achieve this aim the following objectives have been formulated:

- To provide a better understanding of awareness of the local communities in the coastal area of Kuala Selangor.
- 2. To identify the challenges or constraints on education impeding effective awareness of community practice on coastal management for the purposes of environmental protection.
- 3. To outline recommendations to improve the role and functions of the awareness on local communities in practicing Coastal Zone Management (CZM) or Coastal Management (CM).

1.4 RESEARCH QUESTIONS

Based on the aim and objectives of the study, research questions have been identified as follow:

- 1. What are the levels of awareness amongst local communities in managing coastal areas?
- 2. What are the constraints for local-communities impeding successful coastal environmental management programs initiatives/participation?
- 3. Which approaches are possible to achieve effective engagement of local-community on coastal management programs?
- 4. How the awareness of public on coastal management and the participation in coastal management can be improved?

1.5 SCOPE OF STUDY

The study is also based on data and information available, which includes various experiences and areas local people have been involved in over the period of time in Kuala Selangor.

Firstly, the study focused on key aspects regarding the awareness of local communities in coastal areas in Kuala Selangor about the management of its coastal environment. However, because of time limitation and availability of resources, a few areas/zones were focused upon for data collection.

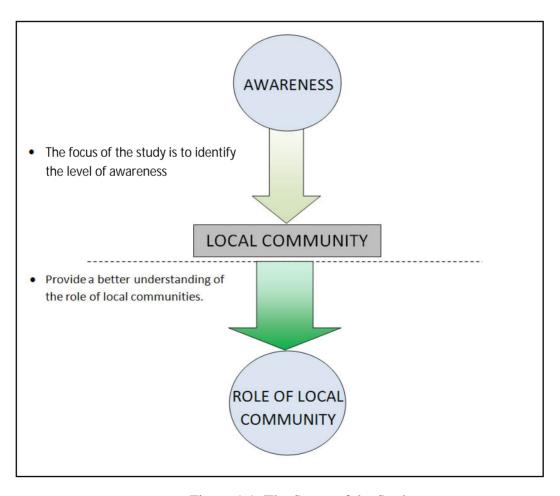


Figure 1.1: The Scope of the Study.

Secondly, the study looks into various roles of local communities coupled with human resources availability which include experience of each area regarding coastal environment, expertise and professionalism and availability of programs and activities carried out in managing the coast. These, together with other information available (level of education of community and local people, awareness on coastal environmental management and availability of training and its frequency among the public) and their various functions and roles, as well as the existing interaction within them, (Refer to Figure 1.1).

1.6 SIGNIFICANCE OF STUDY

There are reasons why I have chosen to focus on the roles played by local communities and their awareness on coastal management. Firstly, the coastal environment issue is a very dynamic one that concerns all. Secondly, the local communities have a very important role to play in the practice of coastal management since the direct consequences of the environmental crisis greatly falls on them. Furthermore, there is a need to find a resolution as to how the awareness of local communities can be improved and cooperation can be gained at solving the coastal environmental problems. This study also looks into impediments to effective awareness and coastal management at the practices of local communities.

1.6.1 Significance towards Planning

Community –based management approaches to planning are rely on the principles observed by local coastal communities in managing the resources upon which they depend. Community participation will help to ensure that the plan not only addresses

the full range of planning issues, but also engages local stakeholder support in implementing site-level activities, all of which contribute to successful short-and long-term outcomes. Coastal area management plays an important role in urban activities. There are many benefits in the planning context, especially on environment and economic sectors to ensure a sustainable development on local communities at coastal areas. In this study, awareness and participation of local community will be discussed to improve the planning process. Additionally, local community participation in planning and managing coastal areas provide a good platform for local community to show their role as effective stakeholder and improve the process of decision making. Hopefully, a partnership between local communities and local government in administrating coastal areas will flourish.

1.6.2 Significance towards Community

The community-based approach to coastal resources management is important for a better understanding of the concept of advancing practices of community's management (TEAM, 2001). Understanding of communities to the natural and dynamics of the coastal system is the right track for a successful coastal management. With community-shared responsibility is providing sufficient resource base for future generations, community based management has greater potential for effectiveness and equity (Ferrer, 1997). A fine implementation and enforcement of environmental related programs and activities also means the creation of a sustainable community and development. This will minimize any side effects of development on these areas and communities. People's participation in the management of resources also provides a sense of ownership over the resource which makes the community far more responsible for long-term sustainability of resources. There are two considerable

components of social sustainability that create its foundation. The first one, is social capital, or the investments and services that create the framework for society (Goodland, 2002). The second one and equally important component is human capital or the health, education, skills, knowledge, leadership, and available resources within a given community (Goodland, 2002). The importance of resources such as social and human capital is invaluable to coastal communities such as Kuala Selangor. The study emphasizes the importance of local community as stakeholder on coastal areas management. Identify the awareness as a major problem to be overcome is rational as local community needs to appreciate the purposes/reasons to attend programs on coastal management.

1.6.3 Significance towards Environment

As a result of the United Nation's Millennium Summit in September 2000, collaboration between American universities, the World Economic Forum, and the Joint Research Centre of the European Commission developed the most inclusive Global Environmental Sustainability Index to date (Peacock, 2008). According to this index, the environmental aspects of sustainability encompasses: environmental systems such as air quality, water quality, and biodiversity; environmental stressors such as human population growth, overfishing, freshwater, and ecological footprint; and environmental stewardship indicators that include greenhouse gas emissions, pollution, and conservations efforts (Peacock, 2008). The environmental components of sustainability are desirable to coastal communities such as Kuala Selangor. Environmental sustainability promotes positive outcomes that are enduring and support all aspects of life and society. An environmentally conservative society is by principle, based on conservation and reduced consumption of natural resources