



UNIVERSITI PUTRA MALAYSIA

***PERCEPTION OF LOCAL COMMUNITY ON THE INDICATORS OF
GOVERNANCE IN TANJUNG PIAI NATIONAL PARK***

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**PERCEPTION OF LOCAL COMMUNITY ON THE INDICATORS OF
GOVERNANCE IN TANJUNG PIAI NATIONAL PARK**



By

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**A Project Report Submitted in Partial Fulfilment of the Requirements
for the Degree of Bachelor of Park and Recreation Science in the
Faculty of Forestry
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DEDICATION

For my beloved family:

Rozak Bin Don

Sabareah Binti Ibrahim

Also my siblings.

To all my friends,

Interviewees and residents I had done my interview.

Thank you for your encouragements supports

And the sacrifices that you have given.

Thank you for everything. May Allah Bless All of us.

ABSTRACT

Concerned with the rapid depletion of the mangrove and wetland ecosystems in Tanjung Piai National Park, a RAMSAR site, Johore, relevant government agencies are normally created and given the responsibilities to ensure that the establishment of the protected areas will achieve the objectives of protecting the ecosystem which are of national and perhaps of international interests. This research discusses the perception of local community of Tanjung Piai on role of good governance and community participation as tools to make environmental enforcement happen in Tanjung Piai National Park (TPNP). The findings of this research were based on structured questionnaire which by Likert Scale. They are categorised into 28 factors of 7 dimensions: Indicators of Governance, Management and Administration, Information and Knowledge, Policy and Plan, Environmental and Natural Resources, Facility and Infrastructure and Finance and Budget. Factor Analysis is used in this study to regrouping the question that significant with this research while Multiple Linear Regression Analysis is used to determine the factor affecting perception on governance roles in local community perception. By using Descriptive Analysis, a percentage and frequency for socio-demographic and mean for dependent and independent variable showed the overall image of the distribution data. With regard to a valid analysis reference, the study outcome can be applied to be the deciding factor in choosing the good governance guidelines for wetlands conservation that involving the participation of local community. Therefore, to achieve a conservation of wetlands, proper governance is recommended and better enforcement of the law is needed.

ABSTRAK

Berkenaan dengan pengurangan pesat bakau dan tanah lembap ekosistem di Taman Tanjung Piai Kebangsaan, tapak RAMSAR, Johor, agensi-agensi kerajaan yang berkaitan biasanya dicipta dan diberikan tanggungjawab untuk memastikan bahawa penubuhan kawasan perlindungan akan mencapai objektif untuk melindungi ekosistem diperingkat negara dan mungkin bagi kepentingan antarabangsa. Kajian ini membincangkan persepsi komuniti tempatan di Tanjung Piai mengenai peranan tadbir urus yang baik dan penyertaan masyarakat sebagai alat penguatkuasa alam sekitar untuk menjayakan Taman Negara Tanjung Piai (TPNP). Dapatan kajian ini adalah berdasarkan kepada soal selidik berstruktur yang dengan Skala Likert. Mereka dikategorikan kepada 28 faktor 7 dimensi: Petunjuk Pengurusan Tadbir Urus dan Pentadbiran, Maklumat dan Pengetahuan, Dasar dan Rancangan, Alam Sekitar dan Sumber Semula Jadi, Kemudahan dan Infrastruktur dan Kewangan dan Bajet. Analisis Faktor digunakan dalam kajian ini untuk mengumpul semula soalan yang signifikan dengan kajian ini manakala Analisis Regresi Linear digunakan untuk menentukan faktor yang mempengaruhi persepsi peranan tadbir urus dalam persepsi masyarakat setempat. Dengan menggunakan Analisis Deskriptif, peratusan dan kekerapan untuk sosio-demografi dan purata bagi pemboleh ubah bersandar dan bebas menunjukkan imej keseluruhan taburan data. Berhubung dengan rujukan analisis yang sah, hasil kajian ini boleh digunakan untuk menjadi faktor penentu dalam memilih garis panduan tadbir urus yang baik untuk pemuliharaan tanah lembap yang melibatkan penyertaan masyarakat setempat. Oleh itu, untuk mencapai pemuliharaan tanah lembap, urus tadbir yang sesuai adalah disyorkan dan penguatkuasaan yang lebih baik daripada undang-undang yang diperlukan.

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APPROVAL SHEET

I certify that this research project report entitled “**Perception of Local Community on the Indicators of Governance in Tanjung Piai National Park**” by Nurul Izatul Natasya Bt Rozak had been examined and approved as a partial fulfilment of the requirements for the degree of Bachelor of Park and Recreation Science in the Faculty of Forestry, Universiti Putra Malaysia.

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TABLE OF CONTENTS

	Page
DEDICATION	II
ABSTRACT	III
ABSTRAK	IV
ACKNOWLEDGEMENTS	V
APPROVAL SHEET	VI
TABLE OF CONTENTS	VII
LIST OF TABLES	IX
LIST OF FIGURES	X
LIST OF ABBREVIATIONS	XI
CHAPTER	
1 INTRODUCTION	1
1.1 Background of study	1
1.2 Tanjung Piai National Park as a RAMSAR site	2
1.3 Problem statement	3
1.4 Objectives	7
2 LITERATURE REVIEW	8
2.1 Introduction	8
2.2 Conflict in governance	8
2.2.1 Policy and Planning	9
2.2.2 Management and Administration	10
2.2.3 Information and Knowledge	11
2.2.4 Environment and Natural Resources	12
2.2.5 Facility and Infrastructure	13
2.2.6 Finance and Budget	13
2.3 Theoretical framework	15
2.4 Review of related studies	18
3 METHODOLOGY	19
3.1 Introduction	19
3.2 Theoretical approach	19
3.3 Study framework	20
3.4 Study area	21
3.5 Data collection	23
3.5.1 Sample size	23
3.5.2 Research instrument	25
3.6 Data analysis	26
3.6.1 Descriptive analysis	26
3.6.2 Exploratory factor analysis	26
3.6.3 Regression Analysis	27

4	RESULTS AND DISCUSSION	29
4.1	Introduction	29
4.2	Socio-demographic characteristics of local community	29
4.3	Analysis on local communities' perception	33
4.4	Factor analysis	40
4.5	Factors affecting perception towards indicators of governance	44
5	CONCLUSION AND RECOMMENDATIONS	48
5.1	Conclusion	48
5.2	Recommendations	49
	REFERENCES	52
	APPENDICES	
	Appendix A: Questionnaire	55
	Appendix B: Permission Letter	64



LIST OF TABLES

TABLE	PAGE	
2.1	Goals and Indicators of Governance	17
2.2	Literature Review from Various Authors	18
4.1	Socio- Demographic Characteristics of Local Community	30
4.2	Mean Score of Perception on Policy and Plan	33
4.3	Mean Score of Perception on Environment and Natural Resource	34
4.4	Mean Score of Perception on Facility and Infrastructure	35
4.5	Mean Score of Perception on Finance and Budget	36
4.6	Mean Score of Perception on Information and Knowledge	37
4.7	Mean Score of Perception on Management and Administration	38
4.8	Mean Score of Perception on Indicators of Governance	39
4.9	The Rotated Factor Matrix Results from the Factor Analysis	43
4.10	Multiple Linear Regression Analysis between Independent Variables and the Perception of Local Community Towards the Indicator Of Governance in TPNP	44

LIST OF FIGURES

FIGURES		PAGE
1.1	Shoreline Changes due to Coastal Erosion at Tanjung Piai	5
3.1	Conceptual Framework	20
3.2	Map of Tanjung Piai, Pulau Kukup and Sungai Pulai location	22



LIST OF ABBREVIATIONS

Abbreviations

PTNJ	Perbadanan Taman Negara Johor
JNPC	Johor National Park Corporation
TPNP	Tanjung Piai National Park
JPS	Jabatan Pengaliran Saliran
IRDA	Iskandar Regional Development Authority
IUCN	International Union for Conservation of Nature



CHAPTER 1

INTRODUCTION

1.1 Background of Study

Mangroves are salt-tolerant forest ecosystems of tropical and subtropical intertidal regions of the world. Mangroves eco system provide 'free' services whether direct and indirect product from mangrove forms the basis for mangrove dependent economic activities vital to many coastal peoples and their countries. These uses sustain many communities whose economies are based on harvesting the fish, shellfish, wood and other products. Mangroves are used as an important and potentially sustainable source of wood and charcoal to meet the increasing needs of developing countries for domestic fuel.

However the 'free' services provided by the mangroves would require considerable energy, technology, and money if they were provided by other sources. Since this is seldom taken into account, the total value of the mangrove resources generally is significantly underestimated. A scenario happens will generated pollution and affect areas with high biodiversity especially wetlands (Yokohari et al., 2000). More important, the coastal communities and the many economic regional and national activities are dependent on the continued viability of mangrove ecosystem.

As mangrove management experience increase, planners and developers will recognize the potential for multipurpose use without sacrificing ecosystem integrity. This broader perception of the potential economic and

social benefits that can be derived from compatible, multipurpose utilization can only be developed by an accounting of the benefits or costs from uses that are non-renewable because of their impact on critical ecosystem process.

1.2 Tanjung Piai National Park as a Ramsar Site

Tanjung Piai National Park (TPNP) is located to the south of Pulau Kukup, and it is known as the southern-most tip of continental Asia. This coastal mangroves and intertidal mudflats features are important especially for protection from sea-water intrusion and coastal erosion. This place also serves as eco-tourism park which have the include a visitor centre with boardwalks near the southern tip of the park to provide interpretive materials, guided walks, overnight facilities, and camping grounds above ground.

On 31 January 2003, the TPNP was announced to be a part of Ramsar site. The area covers 325 hectares and 526 hectares of Ramsar area. Ramsar Convention is an intergovernmental treaty adopted on 2nd February 1971 in Ramsar City, Iran (Office of the Auditor General of Malaysia, 2009). It focusing on the conservation and wise use of wetlands mainly habitat for water birds. It has introduced to the world those wetlands as an ecosystem that important for biodiversity conservation and human communities.

Since 10th March 1995, Malaysia is one of the contracting parties to the convention. There are three locations in Johor that has been selected as a Ramsar site in Malaysia which are Pulau Kukup, Tanjung Piai and Sungai Pulai. This site is managed by the Johor National Park Corporation which is

established in 1989 under the Johor National Park Corporation (JNPC) enactment. The objective of this corporation are managing and conserving the wetlands natural resources which will be achieved through research activities, education and eco-tourism. Other than that, Ministry of Natural Resources and Environment (NRE) has allocated RM 3.07 million launching grant for this purpose.

1.3 Problem Statement

The unique interactions between terrestrial and marine environments lead to the challenging management issues and other problems in TPNP. According to the Population and Housing Census of Malaysia (2010) the population in Pontian district had increased 5000 - 7000 people from year 2000 until 2010 and will expected to increase more in future year. The issue of increasing total number of population year by year, develop the pressure on mangrove ecosystem, and the way to managed mangrove land has created problems.

The problem occur in TPNP has increased the vulnerability of coastal towns and cities and their populations. Based on (Cincotta & Engelman, 2000) document how growth in human population and increased use of resources per capita has impacted species and ecosystems.

According to Duxbury & Dickinson (2007), managing mangrove resources is made more difficult by the fragmentary nature of the information available. This information is crucial to understanding the interaction between the land, ocean and atmosphere in the mangrove area. These causes come from the separation of the scientific disciplines, physical, chemical and social. In

respect of this matter, it becomes harder to achieve the linkages and dissemination of information that enable collaboration between scientists, policy makers and residents in the coastal zone.

Besides, the stakeholders plan in the mangrove area (e.g. development of built capital for business use vs. residential use) can lead to conflict over land-use, natural and environment, facility, institutional and financial resources. For example, the management of TPNP below the Johor National Park Corporation has various legal provisions involving the departments related as Drainage and Irrigation Department, the State Forestry Department, Fisheries Department, the Department of Environment, Department of Agriculture. Each department has adopted legislation which varies according to the needs of the department. It has caused difficulties in the reference Legal Law Management activities since many legal aspects that are directly involved in this activity. The problem of breaking apart the responsibility among various government agencies has resulted in a lack of management integration, which has led to ineffective management.

From Astro Awani Jan 4, 2015, TPNP will disappear in the future due to erosion of the waves and tides as shown in Figure 1.1. They found that many dead trees near the water's edge and new walkways had to be built because the old route has been destroyed by the tidal wave.



Figure 1.1: Shoreline changes due to coastal erosion at Tanjung Piai from 1974 to 2011 (DID, 2013)

According to Directors Johor National Park Corporation (JNPC), Mohd Shakib Ali, he revealed that since 2013 JNPC had taken the initiative towards mangrove conservation in the region by establishing a conservation program of replanting mangrove trees. He said that JNPC had replanted a total of 1800 trees in 2013 and 1700 trees in 2015. One of the visitor who had been interviewed expressed regret for the beauty of nature that should be preserved now idle. He said the immediately initiative should be taken on the Ramsar site.

A study on the governance about the issues and problems at TPNP was conducted by Nafisa (2006). However, the study only mentioned in making the laws and guidelines much easier to refer through GIS application for manager in managing TPNP and do not prioritize the local community perception on the indicators of governance in TPNP.

In this study, it can be observed that relevant government agencies has been trying to made the responsibilities to ensure that the establishment of the protected areas will achieve the objectives of protecting the ecosystem which are of national and perhaps of international interests. The support can only be achieved if there is recognition that the objectives of governance of mangrove forests and wetlands is to achieve the multiple goals of conservation of the ecosystem without neglecting local culture and to establish that the first beneficiaries of the project must be the local communities.

1.4 Objectives

The main objective of this study is to access the community's perception on the indicators of governance in affecting the management of the mangrove protected areas and wetland in TPNP.

The specific objectives of this study are listed below:

- To identify the socio-demographic of local community in TPNP.
- To determine the level of local communities' perception on the indicators of governance on the management of TPNP.
- To determine the relationship on the factors that affects the indicators of governance in TPNP.

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