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UNIVERSITI
TEKNOLOGI
MARA

**CENTRE OF STUDIES FOR LANDSCAPE ARCHITECTURE
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING
UNIVERSITI TEKNOLOGI MARA**

MAINTAINING THE PURITY OF ENVIRONMENT:

CONSERVE THE SUSTAINABLE USE OF MARINE AND COASTAL ECOSYSTEM AT TANJUNG DAWAI, KEDAH

This academic project is submitted in partial fulfilment of the requirement for the
Bachelor of Landscape Architecture (Hons)

NURNADHIRA BINTI RIDZUAN

2015831924

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ABSTRACT

The cultural landscape is landscapes that have been affected, influenced, or shaped by human involvement. Collectively, cultural landscapes are works of art, narratives of culture, and expressions of regional identity. The purpose of this project was to explore the context of the cultural landscape in the viewpoint of the landscape field for maintaining the purity of environments at Tanjung Dawai, Kedah. In order to study the problem of Tanjung Dawai, two sites have been selected as case studies such as Kilim Karst Geoforest Park, Langkawai and Vung Ro Bay, Vietnam. Despite the significance of Tanjung Dawai, marine and coastal ecosystem there are severely affected by various human activities that carry out non-sustainable development, particularly land reclamation, aquaculture and industrial activities near the coast. This problem solved by conserving the sustainable use of marine and coastal ecosystem as well as the sustainable design proposal emphasizes on the collaboration of sustainable design treatment into existing cultural landscape features in a traditional village. Tanjung Dawai with a small town have a long time of created a significant sense of place with local, character, based on the natural, built and cultural heritage. The unique history and identity have provided the village itself street patterns that reflect the layout of early settlements. These settlements were also an important market and social centre for the surrounding rural areas. Sense of place created by a village's cultural heritage links directly to a community's sense of identity, which can be ultimately enhanced people's overall sense of being and belonging and quality of life. Through recommended design strategies, design principles, and comprehensive master plan, it is aimed to enhance local culture, historical value and other natural features and with dignity, respect and nurture local that minimize negative social, economic and environmental impacts.

Key Words: *Cultural Landscape, Sustainable Use, Marine and Coastal Ecosystem, Sustainable Design, Sense of Place*

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TABLE OF CONTENT

CONTENT	PAGE
Abstract	i
Acknowledgement	ii
Table Of Content	iii-ix
List Of Diagrams	x
List Of Illustrations	xi-xv
List Of Figures	xvi-xxv
List Of Plans	xxvi-xxviii
List Of Tables	xxix
 CHAPTER 01:	
1.0 Introduction to Topic	1
1.1 Topic Introduction	2
1.2 Prevalent Issues/Problem	3
1.2.1 Physical Issues	3
1.2.2 Environmental Issues	3
1.2.3 Social Issues	3
1.3 Aim and Objectives	4
1.3.1 Aim	4
1.3.2 Objectives	4
1.4 Definition of Terminologies	4
1.4.1 Landscape Character	4
1.4.2 Marine Ecosystem	4
1.4.3 Ecotourism	5

1.1 TOPIC INTRODUCTION

Marine ecosystem is an essential component of every human being in a continual life that closely related to spiritual, social and cultural dimensions. Marine ecosystems are defined as ecosystems of saline which is the largest aquatic ecosystem and cover almost 70% of the entire surface of the earth. It will contribute to positive things such as creating a friendly relationship between living and natural area. Marine ecosystem includes both coastal and open-ocean areas. The coastal area consists of various ecosystems such as sandy beaches, rocky beaches, coral reef shores, estuaries and mangroves.

According to Salleh et.al (2010), the marine ecosystem contains a variety of unique qualities that distinguish it from other aquatic ecosystems, among the important factors is the presence of dissolved compounds in it, especially salt content. Daily changes such as weather, currents, seasons change, temperature and location are the major causes of salinity change in any marine ecosystem. In areas such as mangroves and estuaries, freshwater from river ecosystems has a great influence on the determination of salinity in the area. This area often has a high salinity range.

Marine ecosystems are very important to overall fertility in both marine and land ecosystems. According to a study from the World Resources Center, coastal habitats provide for one third of total biological productivity (Falkowski and Raven, 1998). Productivity and diversity in marine ecosystems are important to humans as this ecosystem produces food and income sources. Coastal areas such as mangroves and coral reefs are the natural protectors of natural disasters. Although the importance of this ecosystem is very clear, however, the destruction of these ecosystems is still commonplace, such as fishing overtures, coastal development, pollution and the introduction of foreign species that have indeed posed a huge threat to biodiversity and marine ecosystems.