

UNIVERSITI TEKNOLOGI MARA

**REVITALIZATION OF SKUDAI RIVERFRONT
SPACE BASED ON ECOLOGICAL ASPECT IN
KAMPUNG LAUT BATU 10, JOHOR BAHRU**

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ABSTRACT

Sustainability of a watershed is typically influenced by a variety of factors, including climatic, hydrological, environmental, social, economic, and biological ones. Water quality degradation and flash floods are the two main problems in Malaysian watersheds. In the last few decades, economic development activities have multiplied, impacting numerous watersheds, including the Skudai River watershed. This study divided the Skudai River watershed into 25 sub-watersheds (SW), and it created a sustainability index for the watershed by taking into account factors for potential water quality degradation and potential flood damage. In Skudai River, very few reconstruction projects have undergone an impartial post-project appraisal. As a result, opportunities to use past experience to improve project design in the future have been lost. The importance of the project's goals, which were guided by geomorphology and ecology, is illustrated through a case study on the Muda River in Kedah. The study method involves revitalizing the Skudai River in the Johor district and treating the landscape as infrastructure.

Keyword: River, restoration, natural diversity, river corridor, green infrastructure, revitalizing, ecology

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CHAPTER ONE

INTRODUCTION TO THE TOPIC

1.1 INTRODUCTION

This chapter depicts the introduction and general background of this study. Next, the research problem statement is written, which explains why the researcher is conducting this research. The problem statement also introduces the study area's physical location. Then, design goals and objectives are defined, study questions and significant studies are stated in sections 1.5, 1.4 and 1.6. The following section explains how the overall study methodology is carried out. At the end of this chapter, the summary of the thesis is presented.

1.1.1 Study Introduction

Rivers are one of the components of the landscape nature, which contributes significantly to human life and the environment (Abd Wahab et al., 2019; Redzuan & Latip, 2016; Md. Yassin, 2011). The function of the river as a water drinking, fishing, aesthetic enjoyment, transportation, power generation, flood control, livestock, agriculture, irrigation, industry and urban business (Amelia & Utami, 2021; Youssef & Abou, 2017; Izydorczyk et al., 2013; Negussie et al. al. 2011; Naiman & Decamps, 1997). Rivers serve many functions in the city, including connecting landscapes and communities and integrating people into a creative environment. Rivers are the fundamental focal point of a city's development and evolution (Youssef & Abou, 2017).

Due to the variety of river functions drawn, early human inhabitants occupied the area along the riverbank (Shangi et al., 2020; Yassin et al., 2012; Md. Yassin, 2011). Famous cities such as London's Thames, Paris' Seine, Budapest's Danube and New York's Hudson are all developed and shaped linearly along a river path (Youssef & Abou, 2017). Similarly, Malaysia is not excluded from this phenomenon. Many historic cities, including Kuala Lumpur, Melaka, Kuantan, Kota Bharu, Kuching, and Terengganu, sprang up and were established after settlements developed along riverbanks (Andaya & Andaya, 2001; Latip et al., 2010; Weng, 2005). It means rivers play a vital role in the city's development. The relationship between cities and rivers is getting closer and closer (Liu, 2020).