

FINAL YEAR PROJECT

A STUDY ON MUD TRANSPORT PATTERN IN TANJUNG PIANDANG, PERAK D.R.

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NOVEMBER 1996

ACKNOWLEDGEMENTS.

Firstly, I would like to wish deep appreciation and very thankfully to the Project Advisor,

En. Mohd Najib Abdullah and Project Co-ordinator, Dr. Azmi for all their assistance,

guidance and continuous advice throughout the preparation and completion of the project.

Their invaluable contribution will not be forgotten.

Thus, I would like to wish thankfully specially to Ir. Siti Aishah and Ir. Nor Hisham Ghazali

from Department of Irrigation and Drainage (Coastal Engineering Division) for their

co-operation and supplying the vital facilities, source and information to completed this

project.

Lastly, to my mother, father who can't see my successfully, parent and all my friend, thanks

for supported to me to finished my studied.

Thank for everything.

MUHAMAD FAZIL MOHAMAD ARIF.

NOV. 1996

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A STUDY ON MUD TRANSPORT PATTERN.

ABSTRACT

This project describes the mud transport pattern that occured at the coastal area in Tanjung Piandang, Perak D.R. subjected to the action of the waves and currents. For this study, the mud transport considered as a multilayer mode differs from the multifraction mode by including waves, a more detailed description process and a layered description of the bed and it usually located at the mangrove area.

The mud characteristic is described by layers, where the processes included are settling, flocculation, deposition, erosion, consolidation, sliding and liquefaction. For the actual sediment concentration, MIKE21 modellings are being to use for the simulation. The MIKE21 MT describes the erosion, transport and deposition of mud under the action of waves and currents.

1.0 INTRODUCTION.

1.1 COASTAL EROSION.

The coastal belt of Malaysia are on area of great social and economic significance. It was reported that 65% of the population live in coastal area. The coastal areas support a range of economic activities such as agriculture, industry, transportation, recreation, aqualculture, mining, offshore oil exploration etc. (Table 1.1). Being located at or near the interface of land and sea, the coastal zone are also sensitive ecological areas requiring considerable care and skill for its management in the interest of sustainable economic development and environment preservation.

The national coastal erosion study conducted in 1985 found that erosion occurred in about 1300 km., representing about 30% (Figure 1.1) of the total length of coastline in our country. The retreat rates range from 1 to 100 metres per annum. The study also found that only 10% of the coastline is accreting while the remaining 60% is relatively stable (Figure 1.2). The area of coastal erosion are fairly well distributed over the country. The study has identified improperly planned development as the most significant cause as well as victim of coastal erosion.

It must be clarified that coastal erosion is only one of the many manifestation of potential environment impacts resulting from improperly planned development. The other impact include pollution, depletion of marine resources, loss of vegetation cover, siltation of river mouth, etc. These problems are cause in large part by destructive resource exploitation and use practise which have led to conflicts between resource uses and environment.