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PLANNING AND HYDRAULIC DESIGN OF FISHERY HARBOURS

A DISSERTATION SUBMITTED TO

THE



University of Moratuwa, Sri Lanka.
DEPARTMENT OF CIVIL ENGINEERING
UNIVERSITY OF MORATUWA
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IN

PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF
MASTER OF ENGINEERING

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B.Sc. (Eng.)

NOVEMBER 1995

64756

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to Dr. S.S.L. Hettiarachchi for the help and advice kindly given, in all stages of this project from the outset.

My thanks extend to Dr. Ranasoma and others who assisted me in the preparation of this report.

I am very grateful to Natural Resources and Environmental Policy Project (NAREPP) for granting me a scholarship to follow this Post Graduate Course.



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Finally I wish to thank the Department of Civil Engineering at University of Moratuwa for offering Post Graduate Course in Environmental Engineering and Management.

M.T.P. Jayasinghe

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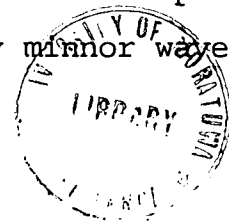


SUMMARY

The main purpose of a fishery harbour is to offer a sheltered area of water, where fishing crafts can anchor, come alongside jetties or quay walls to unload their catch and obtain necessary services. It has number of general functions which are common to all harbours and characteristic functions which apply to fishery harbours only and can be classified from basic to advanced depending on the size of the vessels, duration of the trips, method of catch.

The planning activities which should precede the final investment in the improvement or development of fishery harbour are many and varied. They can be basically classified as economic justifications and engineering planning and design. In this report engineering planning and design are described. This consist of following activities;

- (1) physical planning which covers the collection, processing and use of all relevant data with regard to natural conditions
- (2) hydraulic considerations as the harbour should provide safe mooring and/or berthing with only minor wave and current action.
- (3) work related to fishery harbours.
- (4) harbour facilities - mooring, handling, transport.



- (5) general and technical assesment of fishery harbours which give the method of site selection by considering various aspects such as the type of fishery industry, existance of population centers and the availability of protected waters within easy reach of fishing grounds, existance of good roads etc.

Breakwaters are one of a major features in most fishery harbours and they are constructed to negate the force of incoming waves from the external sea and prevent an adverse effect of tides on water conditions inside the harbour. An Environmental Impact Assessment should be carried out prior to the construction of fishery harbour to identitfy the negative impacts on harbour environment. Mitigatory methods should be given in the planning stage to minimise these impacts.



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