

A STUDY
ON
THE USE OF PLASTIC CONTAINERS
IN
THE HANDLING OF WET FISH

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PREFACE

This study was commissioned by the Malaysian Fishery Development Board (Lembaga Kemajuan Ikan Malaysia, or LKIM) to look into various innovative aspects of the fishery industry in Malaysia. It involved the determination of post-harvest fishery losses at the various stages of distribution; the potential use of a 1-ton refrigerated truck; and the practicality of introducing High Density Polyethylene (HDPE) plastic boxes for packing fish.

The study incorporated a national survey and scientific investigations. For the former, the work was extended throughout the whole of Peninsular Malaysia while for the latter such work was primarily carried out in the laboratories of the School of Applied Sciences, ITM, Shah Alam.

The study was coordinated by Mr. Choo Teck Keong, with the full-time participation of Dr. Vedhakumar Valliappan and Mr. Woon Kon Sung, all of whom are lecturers with the School.

The duration of the study was for one full year, but, because of the very extensive nature of the study, a further 12 months were granted.

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CHAPTER 1

INTRODUCTION

1.1 Post-harvest Fishery Loss

Defining post-harvest loss is difficult, but assessing it is a near impossible task. The inherent difficulties of determining post-harvest loss is embedded in definability and a methodology that is accurate enough to show the wide spectrum of fishery losses.

Whatever the level of post-harvest losses may be, economists and scientists feel more at home when it comes to attributing such losses to: factors such as improper handling, poor preservation and storage techniques, distribution and marketing problems as well as the non-utilisation of edible species.

1.2 Use of HDPE Plastic Containers

A great variety of containers are currently being used in the fishing industry - on board vessels, at the jetties and LKIM complexes, for transportation and at the wholesale and retail markets. The inter- and intra-transferring of fish causes problems of handling and packing as there is no uniformity of size among the containers. The predominant type of container that is used for short and long haul transportation of fish in this country is made from wood. Their ubiquitous use has given rise to a great number of problems, mainly of handling and hygiene. Plastic containers, be it for use in the food or industrial products factories, or for the fishery sector, offer excellent prospects for ameliorating some of the aforementioned problems.