# UNIVERSITI TEKNOLOGI MARA

# ACCEPTANCE OF RICE FARMING TEKNOLOGY BY PADDY GROWERS IN GRANARY AREAS OF INTEGRATED AGRICULTURAL DEVELOPMENT PROJECT (IADP) PENANG

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## Acceptance of Rice Farmin<sup>l</sup>g Technology by Paddy Growers in Granary Areas of Integrated Agricultural Development Project (IADP), Penang: A Case Study

## ABSTRACT

Even though the Ministry of Agriculture and the Malaysian Agricultural Research and Development Institute (MARDI) released super yielding paddy varieties suitable for double cropping such as MR 219 and MR 220 that could achieve 10 tons per hectare, paddy yield in the Penang rice bowl areas of Integrated Agricultural Development Project (IADP) is generally below 5.0 tons per hectare. The study was carried out to evaluate the possible reasons for paddy growers obtaining such a low yield.

The methodology of study comprised the formulation of questionnaire which was used for field survey and subsequently the analysis of data. It comprised the questionnaire covering both quantitative and qualitative approaches. The data collected were subjected to statistical analysis using Statistical Analysis System (SAS), which included the analysis of variance and multivariate analysis.

Several factors had contributed to low paddy yield. They included the lackadaisical attitude of the majority of the paddy growers in the cultivation of paddy. In addition, other contributing factors included high dependence of paddy growers on external service providers and unwillingness of the paddy growers to adopt the recommended technological package provided by MARDI. Paddy growers discriminated cultural practices almost at all levels of crop requirements.

## Candidate's Declaration

I declare that the work in this thesis was carried out in accordance with the regulation of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any other degree or qualification.

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## CHAPTER 1 INTRODUCTION

### 1.1 Introduction

Rice can be looked upon as a strategic commodity as well as a staple food crop. The 1997 financial crisis resulted in the review of the National Agricultural Policy on issues of self-sufficiency, reduce dependency on importing paddy from neighboring countries and the need to increase rice production. A super paddy variety, which has a yield potential of 10 tons per hectare was introduced.

However, paddy growers' harvested yield still remained under the average yield bracket. This has driven the study to uncover the actual problems that underpinned the national target and aspiration. As an introduction, the first chapter focuses to elaborate on the historical development in cultivation of paddy, scope of work and objectives of study.

## 1.2 Historical Perspectives

Rice has been cultivated for such countless ages that its origin must always be a matter for conjecture. Historical evidence shows rice was the staple food and antiquity in the Asian regions. Rice cultivation records as far back from the ice age were found in countries such as India, China, Japan, Ceylon and the Southeast Asian region.

Paddy growing was so important even names of ancient kings, religious offerings and cultures were very much associated with rice. Interestingly, rice cultivation in the sub-region of South East Asia Indonesia has claimed to be the land of its origin. Indeed, Java means 'The Island of Rice' (Grist, 1975).