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AN ANALYSIS OF THE STANDARD MALAYSIAN RUBBER SCHEME (SMR) AND ITS IMPLICATIONS FOR THE PERFORMANCE OF THE RUBBER INDUSTRY IN MALAYSIA

BY

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ABSTRACT

The Malaysian natural rubber (NR) industry has had over 100 years of existence. It has grown to become an important industry in Malaysia, especially in terms of employment opportunities for rural smallholders' families, foreign exchange earnings and downstream activities. However, over the last few years the NR industry has faced a multitude of problems in the fields of economics, production and related aspects.

The purpose of this study is to investigate the performance of rubber industry in Malaysia, mainly the SMR Scheme within the time frame of 1985-1995.

The Malaysian NR industry is determined to overcome it's problems by implementing the (Standard Malaysian Rubber) SMR Scheme. The SMR Scheme has a crucial role to play in the process of securing the status quo which natural rubber had been enjoying before the establishment of the synthetic industry.

This study also attempts to examine the performance of the SMR Scheme in the international market. It was revealed that SMR has the ability to compete against other grades in the international market, as it has emerged to become stronger, more efficient, dynamic and competitive in the international scene.

In order to conduct this study, the researcher used descriptive analysis and also monitored the changes in terms of percentage (%). The secondary data was directly obtained from the Rubber Statistics Handbook, Malaysia 1996.

The findings revealed that although the rubber production decreased over the past 10 years the SMR Scheme has played a crucial role by increasing the production of rubber in both estates and smallholdings in Malaysia. This paper also shows that SMR leads the field among other types of rubber in the international market as is in heavy demand and is exported to almost 34 countries.

TITLE OF PROJECT: AN ANALYSIS OF THE STANDARD MALAYSIAN RUBBER SCHEME (SMR) AND ITS IMPLICATIONS FOR THE PERFORMANCE OF THE RUBBER INDUSTRY IN MALAYSIA

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Declaration

1 hereby declare that the project paper is the result of my own investigation, except where otherwise stated. Other sources are acknowledged by references and a bibliography is appended

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CHAPTER 1

INTRODUCTION

1.1 Standard Malaysia Rubber Concept

Standard Malaysia Rubber is a revolutionary change in the grading and presentation of natural rubber in the struggle with synthetic rubber. Hence the SMR scheme has a crucial role to play in the process of securing the status quo which natural rubber had been enjoying before the establishment of the synthetic industry.

Standard Malaysia Rubber (SMR) is fast becoming a household word both among natural rubber (NR) producers and consumers. It was first introduced as the result of a long-felt need to improve the system of quality grading and presentation of Malaysian NR.

Formally launched by the Minister for Commerce and Industry in 1965, the SMR Scheme has, over the years, established full buyers' confidence in the technical grading system adopted and consumers have unreservedly accepted the improvements in the presentation of SMR.

Prior to the advancement of the SMR scheme natural rubber was only available in the conventional form of the sheets and creeps. The only method of grading was by visual appraisal. Color is the main concern of the producers. Hence the visual method of grading

created many different classes and types and crepe rubber. As a result buyers' lost confidence in natural rubber because there is no guarantee of uniform quality and properties between the grades. Presentation is the accrued rubber itself, often viewed as the 'pool relative'.

A brief review of the past methods of grading natural rubber will explain the case in a more rational and systematic manner.

The first basic grading system of natural rubber was announced in 1914 in the London market. Crude rubber was then available for sale under three different classes namely: -

1. Sheet.....a) Smoked
   b) Unsmoked.
2. Pale crepe.
3. Light Brown Crepe...Cuplump etc.

In 1917 the concept of first quality ribbed smoked sheet or R.S.S.I was introduced. Within each type of crude rubber a description was designated as good, inferior or slight mouldy. By 1927 there were eight grades of crude rubber, namely, four ribbed smoked sheets and four pale crepes. Within these R.S.S.I and pale crepe there are two thick and two thin grades. On October 28 Th. 1927 the Rubber Association of America (now known as Rubber Manufacturer's Association or RMA) formulated

another scheme. This scheme is the direct precursor of the present International Ribbed Smoked grading system. In 1928 an international grade was established which was termed ' Amber'. This term is referred to as remilled grades. Remilled grades are further sub- divided into two categories, Brown Crepes (two grades) and Blanket Crepes (three grades).

Table 1.1 shows the comparison between the grading systems of 1928 and the present International Grazing system adopted for natural rubber.

TABLE 1.1 – TYPES AND GRADES OF 1928 AND 1995

TYPES	GRADES	
	R.M.A SYSTEM 1928 1X,1 to 5	INTERNATIONAL SYSTEM 1995
1. R.S.S	1 to 2	1x, 1 to 6
2. Pale Crepe thick	1x, 1 & 2	1x, 1 to 3
3. Pale Crepe thin	1x & 2x	1x, 1 to 3
4. Estate Brown Crepe	1 to 3	1x to 3x (thick and thin)
5.Remilled Brown Crepe	B,C,D,	1 to 4
6.Blanket Crepe (Amber)	-	2 to4
7.Flat Bark Crepe	-	1 to 4
8.Smoked Blanket Crepe		pure

Source: Allen P.W., " The Evolution of market grade," Rubber Development, Vol.25, No10, 1996.

It is apparent from the above table that there have been marked changes in the conventional grading system since 1928. The International Grading System of 1995 differs from that of 1928 in the number of types within one grade, for example, R.S.S grade increased from5 to 6. Other than this, the basic concept is still adopted.

After the advent and rapid growth of the synthetic rubber industry, rubber manufacturers changed their priorities with regard to their raw polymer requirements. Rubber manufacturers became more concerned with the need to reduce unnecessary handling and processing steps in the face of increasing labor costs, and consequently, insisted on raw polymers of greater consistency to eliminate or reduce rejects in their increasingly automated plants. NR even under the TC scheme required excessive handling and a number of extra steps such as preclening, thawing, cutting of large bales and pre-mastication. An improvement to the TC scheme to cater for the changing requirement of the consumer was, therefore, necessary.

The need was for a concept and a scheme, which would at once meet the increasingly exacting demands of the consumer and offer NR as a technically graded and quality guaranteed product. After much thought, the R.R.I.M. conceived the SMR Scheme. At the outset the SMR Scheme took into account: (I) The requirements of the

modern consumer, (ii) The experience gained through the operation of the TC scheme, and (iii) The capabilities of producers. The Schemes provides for the following features:

- Good, clean presentation of NR in small, easily handled bales.
- Guaranteed limits for contaminants and certain basic raw rubber properties.
- Consistency in technical properties (which is being improved upon by constant investigation and service)
- Better and easier adaptation to consumer needs
- Production of specialty rubbers for particular purposes.

The technological guarantees that were introduced with the SMR Scheme had the immediate effect of increasing NR acceptability and therefore its competitive position. Malaysian SMR types of rubber should be further upgraded, especially in terms of processability, consistency and homogeneity, so that they can be appropriately differentiated in the market place in terms of price, quality and end- use applications. Efforts in processing to increase SMR exports to 75% from about 50% now should be vigorously pursued.

At the national level, the marketing of small holder rubber is still amenable to further improvements. Reducing its marketing chain can cut down marketing costs. Rationalizing market areas by intensifying the business volumes of dealer or processor to cover intermediate areas needs to be looked into so that the current over capacity of factories can be reduced.

The presence of MARDEC and RISDA agents buying small holder rubber in a particular place has improved prices received by small holders. MARDEC and RISDA should expand their purchasing activities into larger areas to improve the prices small holders obtain.

On the International scene, there is a need to rationalize NR marketing. There is a need to find ways to market NR in the same ways as manufactured items for which prices are negotiated directly with buyers for a given period of time, taking into account the cost of production and product quality.

There is also the need to achieve a formula for the best product mix of rubber in terms of the amount of SMR, RSS and latex grades to be produced for exports. There is also a need for market segmentation and in this context the Malaysian marketing strategy should be more aggressive to sustain not only the existing market shares in all major consuming countries but also for expansion of the market share in the East Asia region where the market is growing. We should also stress the credibility of our suppliers in fulfilling their commitments and contractual terms, the quality and packaging of NR and the reliability of Malaysian Shipping services.

The long – term outlook for the Malaysian NR industry is bright. NR enjoys the position of the preferred polymer on account of its excellent technical properties and its price competitive capability. The Malaysia NR industry can confidently weather the

current crisis at it has successfully overcome various challenges in the past. It will emerge to become stronger, more efficient, dynamic and competitive.

1.2 SMR Investigation

This project attempts to investigate the performance of rubber production in Malaysia, mainly the SMR scheme from the time frame of 1985 – 1995.

1.3 Objective of the study

a) To acquire an overall picture of the SMR Scheme & its implications on the performance of the rubber industry in Malaysia.

b) The project aims to examine & to analyze the performance of the scheme in the international market and to suggest a set of recommendations, to increase the rubber productivity in Malaysia.

1.4 Research Guidelines

Several questions were formulated to serve as guidelines to investigate data of SMR Scheme.

1. Has the production of the rubber industry decreased in Malaysia during the time frame of 1985-1995?

2. Does the SMR scheme have the capability to fulfill the demand of the international market?

3. Did the application of SMR scheme and the management of it increase the rubber production during the time frame from 1985 – 1995?

4. Does the SMR scheme have the ability to compete with other types of rubber production in Malaysia?

1.5 Significance of the study

a) To improve the performance of the rubber industry in the future.

b) To provide an analysis on the internal and external marketing systems of the rubber industry.

c) To help to identify the problems and opportunities in order to increase the performance of the rubber industry.

d) To provide recommendations to the scheme managers to enable them to perform better in order to increase the rubber productivity and to improve the SMR quality control, in total.

1.6 Limitations of the Study

The study is confined to the performance of the rubber industry especially SMR Scheme consecutively for the year of 1985 – 1995. The failure to extend the research on SMR scheme till year 2000 is due to the lack of concrete primary data and secondary data about the topic of interest to the researcher. The absence of secondary data for the

purpose of further research is due to the practice of Department Of Statistic, which complies the statistic of rubber only once in 10 years.

1.7 Organizations of the project paper.

The project paper is organized into five chapters. The first chapter touches on the concept of SMR Scheme, the objective of the study, statement of the problem, research guidelines and the significance of the study. Limitations of the study are also mentioned in this chapter.

The second chapter provides a review of the literature. The review of the literature includes the characteristics or revision of SMR Scheme, problems and opportunities in SMR productions, practices of management techniques in rubber industry and the performance of rubber industry and its implication on the marketing system.

Research design and methodology are discussed in the third chapter. This chapter discusses the data collection approach, definitions of key terms, rubber industry measurement. It also covers the limitation of the study, research guidelines, hypotheses, research hypotheses and statistical analysis of data that can be used for the study.

Chapter four critically analyzes all aspects of the SMR Scheme (1985-1995) and the rubber industry as a whole. This chapter explains the characteristics of the secondary data and the results of the hypothesis test.

Chapter five provides the conclusion and suggestions. It discusses and explains the major findings of the study, limitation of the study and implications of the study. Finally, the last section of this chapter provides suggestions for future research.

CHAPTER 2

REVIEW OF LITERATURE

This chapter consists of 4 sections. The first section touches on SMR characteristic. The second section discusses the problems and success that occurs in SMR production. The third section covers practices of management techniques in rubber industry. The final section puts forward the performance of rubber industry and its implication on the marketing system. This section is divided into three subsections comprising open market, internal marketing and external marketing.

2.1 SMR Characteristics

Ponniah (1982) revealed that the main features or characteristics of the revision are as shown below:

a) Grade Structure.

Four existing grades (SMR CV70, SMR LV, SMR WF and SMR 50) with little market demand have been deleted, whilst 2 new constant viscosity field grades have been incorporated as SMR 10CV and SMR 20CV. Other grades (SMR CV60, SMR CV50, SMR L, SMR 5, SMR GP, SMR 10 and SMR 20) have been retained because of their sustained or stable uptake by consumers.

b) Material Composition.

The premium latex grades (SMR CV60, SMR CV50 and SMR L) are required to be derived from bulked and controlled acid-coagulated wholesale latex. This is necessitated by the need for good blending at the latex bulking stage in view of the more difficult and relatively less efficient mixing and blending of partially acid-coagulated wet lumps from the field. The former procedure ensures good uniformity in technical properties. It also produces rubber, which is lighter in color.

c) Regrading

Regrading of SMR GP to SMR 10 or SMR 20 has been discontinued. Although SMR GP may fit into SMR 10 or SMR 20 specification –wise, regraded SMR GP can be differentiated from normal SMR 10 to SMR 20 in terms of certain processibility behavior for example, mastication breakdown characteristics. The new scheme introduces a relatively small volume of regraded SMR GP into much larger quantities of the field grades, which would detract from the requirement for improvement within grade consistency. (Refer to Table: 2.1)