

ACU 7513

**THE INTERNATIONAL NATURAL RUBBER
AGREEMENT AND ITS IMPLICATIONS FOR THE
MALAYSIAN NATURAL RUBBER INDUSTRY**

by

FOO TEW NAM

CLOSED STACKS

A Research Paper Submitted to The University of Malaya
for the Degree of Master of Economics
in The Faculty of Economics and Administration
University of Malaya

Perpustakaan Universiti Malaya



A506441103

Dimikrofilmkan pada ... 15-04-1997
No. Mikrofilm ... 12905
Jumlah Mikrofilm ... 2

Amear ... A. Wahab.

Perpustakaan
Universiti Malaya
Kuala Lumpur

ACKNOWLEDGEMENTS

I wish to record my sincere gratitude to Associate Professor Dr. Pazim @ Fadzim Othman for his assistance and guidance in the course of undertaking this study.

I would also like to express my appreciation to Dr. P.O. Thomas and Mr. Steven Liew of the International Natural Rubber Organization who so generously provided me with the information necessary for this study. My thanks are also due to the staff members of the Association of Natural Rubber Producing Countries, the Ministry of Primary Industries, the Malaysian Rubber Research and Development Board and the Malaysian Rubber Exchange and Licensing Board who have given me the cooperation and assistance in many different ways.

Finally, I would like to thank my wife for her understanding and support throughout the writing of this paper.

FOO TEW NAM

1996

CONTENTS

	Pages	
ACKNOWLEDGEMENTS	i	
CONTENTS	ii	
LIST OF TABLES	iv	
LIST OF FIGURES	v	
ACRONYMS AND INITIALS	vi	
CHAPTER 1	INTRODUCTION	1
1.1	Introduction	1
1.2	Background of the Study	3
1.3	Methodology	7
1.4	Primary Commodities and Price Fluctuation	8
1.5	International Commodity Agreements	14
CHAPTER 2	THE NATURAL RUBBER INDUSTRY	19
2.1	Historical Development of Malaysia's Rubber Industry	19
2.2	Natural Rubber's Contribution to Malaysia's Economy	21
2.3	World Production and Consumption of Natural Rubber	23
2.4	Supply of Natural Rubber	27
2.5	Demand for Natural Rubber	31
2.6	Natural Rubber and Synthetic Rubber	35
2.7	Natural Rubber Price Formation	37
CHAPTER 3	PRICE STABILIZATION SCHEMES FOR NATURAL RUBBER	42
3.1	Stevenson Plan, 1922 - 1928	42
3.2	International Rubber Regulation Agreement, 1934 - 1943	45
3.3	Malaysian Crash Programme, 1974 - 1975	50
3.4	International Natural Rubber Agreement for Price Stabilization, 1976	53

3.5	International Natural Rubber Agreement I and II, 1979 - 1995	54
CHAPTER 4	INTERNATIONAL NATURAL RUBBER ORGANIZATION	58
4.1	Organization and Administration	58
4.2	Buffer Stock Operation	59
4.3	Price Range	63
4.4	Daily Market Indicator Price	68
4.5	The Size of Buffer Stock	70
CHAPTER 5	ANALYSIS ON PRICE STABILITY AND ITS EFFECTS	73
5.1	Methodology	73
5.2	Data	76
5.3	Variation in Rubber Prices before and after INRA	77
5.4	Variation in Rubber Prices during BSM's Intervention	82
5.5	Implications for the Natural Rubber Industry	87
CHAPTER 6	CHALLENGES, OUTLOOK AND CONCLUSION	92
6.1	Problems and Challenges facing the Malaysian Natural Rubber Industry	92
6.2	Outlook	97
6.3	Conclusion	99
NOTES		103
BIBLIOGRAPHY		104
APPENDIX I	World: Production, Consumption and Export of Natural Rubber	108
APPENDIX II	Major Producing Countries of Natural Rubber	109
APPENDIX III	Major Natural Rubber Consuming Countries	110
APPENDIX IV	Buffer Stock Quanta	111
APPENDIX V	Variation in Prices With and Without the Influence of INRO's BSO	112
APPENDIX VI	Malaysia: Average Annual F.O.B. Prices of Natural Rubber, 1965-1994	114

LISTS OF TABLES

		Pages
Table 1.1	Variation in Commodity Prices, 1971 - 1975	11
Table 1.2	Malaysia: Export Volume and Value of Rubber, 1991 - 1994	13
Table 1.3	Market Intervention Instruments of ICAs	16
Table 3.1	Basic Quotas, 1934 -1943	47
Table 3.2	Permissible Exportable Percentage of the Basic Quotas, 1934 - 1941	48
Table 4.1	Distribution of Votes of Members of INRO for the Year 1994	60
Table 4.2	Price Range for Buffer Stock Operation, INRA I and II	66
Table 5.1	Variation in Prices Before INRA, January 1965 - September 1980	79
Table 5.2	Variation in Prices Under INRA I, October 1980 - December 1987	80
Table 5.3	Variation in Prices Under INRA II, December 1988 - December 1995	81
Table 5.4	Variation in Prices With and Without INRO's Intervention	85
Table 6.1	Malaysia: Average Rubber Yield, 1980-1994 (kg/ha)	95

LIST OF FIGURES

		Pages
Figure 2.1	Major Producing Countries of Natural Rubber	24
Figure 2.2	RSS 1 and Styrene Butadiene Rubber (SBR) Prices in New York Market, 1977 - 1994	40
Figure 4.1	Determination of Price Level	62
Figure 4.2	Ceiling and Floor Prices in a Price Range	62
Figure 4.3	INRA's Price Range	65
Figure 4.4	INRO's DMIP, October 1980- November 1995	71
Figure 5.1	RSS 1 Prices in the Kuala Lumpur, Singapore, New York and London Market	78
Figure 5.2	Rubber Production of Malaysia, Indonesia and Thailand, 1970-1994	88

ACRONYMS AND INITIALS

ANRPC	Association of Natural Rubber Producing Countries
BSM	Buffer Stock Manager
BSO	Buffer Stock Operation
DMIP	Daily Market Indicator Price
ICAs	International Commodity Agreements
ICCA	International Cocoa Agreement
ICoA	International Coffee Agreement
INRA	International Natural Rubber Agreement
INRAPS	International Natural Rubber Agreement for Price Stabilization
INRO	International Natural Rubber Organization
ISA	International Sugar Agreement
ITA	International Tin Agreement
NR	Natural Rubber
OPEC	Organization of Petroleum-Exporting Countries
RSS	Ribbed Smoke Sheet
SBR	Styrene Butadiene Rubber
SR	Synthetic Rubber
TSR	Technically Specified Rubber
UNCTAD	United Nations Conference on Trade and Development