

APPENDIX I

World: Production, Consumption and Export of Natural Rubber, 1970 - 1994, ('000 tonnes)

Year	Production	Consumption	Export
1970	3,105	2,990	2,785
1971	3,085	3,093	2,835
1972	3,120	3,230	2,810
1973	3,505	3,403	3,180
1974	3,445	3,518	3,110
1975	3,315	3,368	2,920
1976	3,575	3,505	3,165
1977	3,605	3,710	3,208
1978	3,715	3,715	3,245
1979	3,845	3,870	3,325
1980	3,850	3,760	3,270
1981	3,700	3,700	3,105
1982	3,750	3,655	3,065
1983	4,030	3,990	3,370
1984	4,255	4,230	3,520
1985	4,400	4,420	3,650
1986	4,490	4,460	3,630
1987	4,850	4,790	3,950
1988	5,130	5,160	4,080
1989	5,240	5,290	4,150
1990	5,210	5,240	3,990
1991	5,350	5,220	3,970
1992	5,630	5,530	4,080
1993	5,330	5,330	4,060
1994	5,690	5,580	3,920

Source: International Rubber Study Group.

APPENDIX II

**Major Producing Countries of Natural Rubber,
1980, 1990 - 1994, ('000 tonnes)**

Country	1980	1990	1991	1992	1993	1994
Africa	194.4	319.3	307.1	288.1	239.5	284.6
Cambodia	n.a.	32.0	33.0	39.0	31.0	42.0
China P.R.	133.0	264.2	296.4	309.0	326.0	335.0
India	155.4	323.5	360.2	383.0	428.1	464.4
Indonesia	1,020.0	1,262.0	1,284.0	1,387.0	1,301.3	1,353.9
Malaysia	1,540.0	1,292.0	1,255.7	1,173.0	1,074.0	1,097.8
Philippines	69.9	185.4	180.7	172.5	169.7	175.8
Sri Lanka	133.2	113.1	103.9	106.1	104.2	103.8
Thailand	501.1	1,271.1	1,340.8	1,531.0	1,551.4	1,710.8
Vietnam	45.8	102.0	88.0	113.0	93.0	89.0
Other countries	62.2	98.4	108.7	95.2	82.9	32.9
Total	3,855.0	5,262.0	5,358.5	5,597.1	5,401.4	5,690.0

Source: Statistics on Commodities, Ministry of Primary Industries Malaysia,
July 1995

APPENDIX III

Major Natural Rubber Consuming Countries,
1989 - 1994, ('000 tonnes)

Country	1989	1990	1991	1992	1993	1994
Canada	84.9	84.0	76.3	86.5	91.5	106.0
U.S.A.	866.9	807.5	755.8	910.2	966.7	1,001.7
Brazi	124.3	121.3	125.0	119.4	125.0	132.0
Mexico	83.0	73.0	85.0	72.0	70.0	73.0
Other Latin America	105.0	110.0	118.0	120.0	124.0	126.0
Belgium/Luxem	48.0	44.0	42.0	48.0	46.0	49.0
France	184.0	179.0	183.0	179.0	168.5	179.8
Germany	221.1	208.7	210.7	212.8	174.9	178.0
Italy	143.0	310.0	120.0	115.0	108.0	100.0
Spain	120.9	118.7	101.0	109.0	101.4	117.0
U.K.	132.5	136.0	119.0	124.5	119.0	135.0
Other E.C.	84.0	87.0	77.0	72.0	70.0	76.0
Belarus	-	-	-	14.0	19.0	9.9
Czech.	24.0	25.0	15.0	18.0	10.0	8.5
Poland	36.0	23.2	20.0	18.8	18.0	24.0
Romania	12.0	24.0	15.0	22.0	14.0	36.0
Russia	140.0	150.0	80.0	28.0	36.0	20.0
Turkey	49.0	46.0	66.5	66.8	76.0	61.0
Ukraine	-	-	-	5.0	7.0	3.0
Other Europe	120.0	84.0	45.0	48.0	31.0	32.0
South Africa	33.0	44.0	45.0	52.0	50.5	52.0
Other Africa	62.0	77.0	79.0	77.0	79.0	86.0
Australia	43.5	34.0	34.0	36.5	45.0	48.5
China	650.0	600.0	610.0	640.0	650.0	725.0
India	333.2	358.3	374.8	404.6	443.9	472.9
Indonesia	105.0	108.0	110.0	116.0	117.0	116.0
Japan	657.0	677.0	689.5	685.4	631.0	639.8
Rep. of Korea	232.0	254.5	263.5	275.6	271.0	290.0
Malaysia	121.6	183.5	216.0	248.6	268.6	292.2
Taiwan	100.0	105.0	120.0	115.0	109.0	105.0
Thailand	77.6	99.1	103.7	118.4	130.2	132.2
Other Asia	199.0	212.0	205.0	230.0	214.0	237.0
World Total	5,190	5,200	5,100	5,390	5,390	5,640

Source: Rubber Statistical Bulletin, Vol. 50, No. 1, October 1995

Appendix IV

Buffer Stock Quanta (tonnes)

ED ES	- 0.2	- 0.25	- 0.3	- 0.35	- 0.4	- 0.45	0.5
0.2	265800	299034	232266	365483	398652	431937	465168
0.25	299034	332266	365483	398652	431937	465168	498394
0.3	332266	365483	398652	431937	465168	498394	531621
0.35	365483	398652	431937	465168	498394	531621	564847
0.4	398652	431937	465168	498394	531621	564847	598075
0.45	431937	465168	498394	531621	564847	598075	631299

Notes: ED - Elasticity of demand

ES - Elasticity of supply

Source: P.O. Thomas (1982)

World outlook for natural rubber, a techno-economic analysis,
(unpublished), Table 7.1, pp 341

Appendix V

**Variation in Prices With and Without
the Influence of INRO's BSO**

(a)	RSS 1		
No intervention by INRO	Mean	SD	CV(%)
March 1983 - December 1984	238.73	26.38	11.05
April 1990 - July 1991	232.45	5.49	2.36
November 1994 - October 1995	387.17	52.16	13.47
Periods under influence of INRO			
November 1981 - February 1983	202.71	8.81	4.35
May 1985 - January 1986	186.37	7.41	3.97
September 1987 - March 1989	299.88	31.93	10.65

(b)	RSS 3		
No intervention by INRO	Mean	SD	CV(%)
March 1983 - December 1984	229.04	26.69	11.65
April 1990 - July 1991	220.11	5.82	2.64
November 1994 - October 1995	382.88	52.11	13.61
Period under influence of INRO			
November 1981 - February 1983	182.74	6.39	3.50
May 1985 - January 1986	177.67	9.57	5.39
September 1987 - March 1989	285.03	41.69	14.63

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(c)	SMR 20		
No intervention by INRO	Mean	SD	CV(%)
March 1983 - December 1984	216.61	17.09	7.89
April 1990 - July 1991	205.90	5.50	2.67
November 1994 - October 1995	376.68	62.92	6.70
Periods under influence of INRO			
November 1981 - February 1983	175.87	6.36	3.61
May 1985 - January 1986	167.35	10.30	6.15
September 1987 - March 1989	271.85	19.67	7.23

PERIODIC WATER QUALITY REPORT

Appendix VI

**Malaysia: Average Annual F.O.B. Prices of Natural Rubber,
1965 - 1994, (sen/kg)**

Year	RSS 1	RSS 3	SMR 20
1965	154.38	149.92	-
1966	144.16	139.81	-
1967	119.39	111.60	-
1968	117.09	112.12	-
1969	153.56	150.36	-
1970	124.40	118.31	-
1971	101.64	91.63	-
1972	93.48	86.27	89.05
1973	165.61	156.03	158.12
1974	179.44	159.40	159.99
1975	136.69	128.96	131.64
1976	199.06	188.51	189.68
1977	202.76	193.37	195.77
1978	229.99	221.47	215.53
1979	279.28	270.13	263.83
1980	312.35	297.89	273.73
1981	257.82	229.77	219.94
1982	201.13	180.35	175.46
1983	247.22	238.30	218.73
1984	224.55	214.58	209.18
1985	188.70	179.84	173.54
1986	208.42	202.09	191.30
1987	248.66	236.43	224.31
1988	309.99	301.37	277.86
1989	261.72	247.00	226.81
1990	233.37	220.62	204.64
1991	226.73	216.92	213.07
1992	218.92	212.57	208.68
1993	213.02	207.05	203.25
1994	293.27	288.54	292.69

Source: Malaysian Rubber Exchange and Licensing Board