CHAPTER II

SUPPLY SITUATION IN THE INDUSTRY

Production in General

In Malaya there are 2 systems of cultivation of rubber - estates and smallholdings. The differentiation between these 2, although arbitrary, is very important.

Estates are production units having land more than 100 acres and sometimes they may be several thousand acres each. Most of them are owned either by one company, group or individuals. These are large concerns operated by large labour force and with substantial capital. The great bulk of the estate acreage are in European hands; only about ¼ are in the hands of the Asiatics. Estates occupy about 46% of the total acreage under rubber.

The other 54% of the total acreage is under the smallholding system of cultivation. Although the smallholdings occupy 54% of the total acreage under rubber, they produce only 44% of the total rubber production. Smallholdings are usually defined as production units of less than 100 acres. A good proportion of the smallholdings are less than 25 acres - about 80%; the majority of the smallholdings are less than 4 acres. These smallholdings are generally in the hands of the peasant proprietors. The larger the holdings the more likely they are owned by the relatively efficient and hard-working Chinese. Operators on smaller plots are usually conducted by the Malays on a more haphazard basis. These smallholdings are worked by family labour.

The present day sees 4.162 million acres of rubber under cultivation in Malaya and it is an excellent example of a plantation industry operated by large concerns and smallholders alike. These 4 million over acres are almost equally divided between the 2 categories of cultivation.

In 1964 smallholdings occupied about 2,210,000 acres of land while the estates covered only 1,899,000 acres.

Production from both estates and smallholdings vary greatly. Although in Malaya the acreages under estates and the smallholdings are quite proportional, the production from estates far exceeded those from the smallholdings. In 1964 estate production accounted for 476.8 thousand tons and the smallholdings output was only 347.3 thousand tons. Although there were more acres under smallholdings, the production from them was proportionately less. This is mainly due to the fact that production per acre is low in the smallholdings.

Low production is due mainly to the old age of the trees and to the low yielding species planted by them.

The rubber tree takes seven years to mature. But once planted it will yield latex continuously for about 30-35 years. On initial tapping, production per acre is comparatively low but it rises as years go by. Production will reach its peak when the tree reaches the age of 18-20. After this peak yield will slowly decline until it becomes uneconomical to tap it. Because of the long life of the tree and because once planted it does not demand care so much as other trees. Dr. Bateman, Controller of Rubber Research and Chairman of the Malayan Rubber Fund Board, said that it is a very attractive crop to the smallholder. Besides having a high cash value the rubber trees will supply latex continually throughout the year.

But since the rubber tree takes 7 years to mature the volume of production at any period of time is limited by the number of trees in existence, the age and also the quality of the trees. Because of the time period between planting and maturity rubber supply is very inelastic and does not respond to rise or fall in price very easily and quickly. Even at a time of low prices producers prefer to produce at a loss rather than no production at all. This is very true of estates where large overheads have to be met and production is very inflexible. Reduction in output means further increase in cost per unit. Besides latex if not tapped is latex irretrievably lost and cannot be regained in any way. Furthermore, labour force has to be kept together because they cannot be easily recruited if the price of rubber should rise.

Even in periods of rising prices estates expand their output very narrowly. They are farsighted and refuse to resort to heavy-tapping for in the long run such action will lead to damage of trees and sometimes even death.

But in the case of smallholdings a sharp advance in price would call forth a quick response from them. They could respond more quickly because they do not have large capital and large hired labour to consider. These smallholders can be subclassified into 2 subgroups:

(1) Those who depend entirely on the sale of rubber for their income - i.e. those who do not grow other crops besides rubber. This sole dependence on rubber makes them very sensitive to price changes. They try to maintain their cash income at whatever price rubber fetches so when the price of rubber falls they resort to overlapping to get the minimum cash income.

(2) The other group grows rubber only as a supplementary to other crops which may be rice, tapioca, etc. When the price of rubber falls they will switch to the other crops and concentrate on them. They are not so dependent on rubber for their income and may totally refrain from tapping rubber if the price of rubber falls to very low levels.

The response of the first group of smallholders to rising prices is generally much faster than the estate producers. In times of rising prices the smallholders in general are more proned to heavy-tapping and local labour is attracted to the smallholdings by the offers of share-tapping. But although output would expand to reach the maximum it would not stay there for long "firstly because yield would eventually decline and secondly because the modesty of the smallholders' needs rather limit the incentive of expanding income while investment may take place promptly in response to higher prices. The increment in production capacity emerges only 5 or 6 years later when the trees can begin to be tapped. Even so peak yields are not reached until several years later. By that time conditions of demand may be changed again. Moreover in the past both estates and small-holdings tended to overinvest."[1]

Table 1 shows the production of estate and smallholdings in Malaya.

TABLE 1

PRODUCTION ON ESTATE AND SMALLHOLDINGS IN MALAYA 1,000 TONS

Period Average for 5 Years Ended	Estate	Smallholdings (estimated)	Total
1940	272.2	151.2	423.4
1950	342.4	279.2	621.6
1960	355.7	278.8	664.5
Years			
1960	413.2	292.8	706.0
1961	428.5	306.1	734.6
1962	438.5	311.2	749.5
1963	458.3	328.4	786.7
1964	476.8	347.3	824.1

Source: Rubber Statistics Handbook, 1964

[1] A study of Trade between Asia and Europe — U.N. Publication 1953.

Production and Problems

There are many problems faced by the Malayan rubber industry. One of the many problems faced by the industry is competition from synthetic rubber which we shall discuss in detail in Chapter 4. Here we shall deal with the problems according to production itself.

By far the most important factor of production in the natural rubber industry is labour. Labour cost takes up about 40-50% of the total cost of production and with continual development in the agriculture and industry demands for skilled labour would rise and with it the price of labour. So with increased productivity coming from high yielding clones, labour cost will be difficult to lower. So increase in productivity may be offset by increase in labour cost. This, of course, applies only to the estate where labour is hired. But the smallholdings faced other problems. They are continually exploited by the middlemen who buy their rubber from them and provide their needs. These middlemen frequently encourage the smallholders to borrow from them and once the smallholders are in debt they are at the mercy of the middlemen who forced them to sell their rubber at a certain price.

Another important setback is that most of the smallholders are illiterate. They do not know about government grants for replanting and even if they do they are discouraged by the length of time the government takes to deal with their cases.

Besides these problems, plants and weeds are great nuisance to rubber growers in general. And production of rubber may be retarded by them. During the winter season the leaves of the rubber trees are affected by widespread leduu disease. When the trees are affected their output will decrease by about 20% to 40%, thus reducing the supply of rubber at any period of time.

Cost of Production

John Hogavak in his article on the "Future of Natural Rubber [2] stated that about $500 per acre is required to bring plantation rubber into maturity, if started from scratch. The production from the plantation rubber is expected to be slightly more than a ton. In a synthetic rubber industry roughly about $10,000,000 is required to construct a plant with an optimum size producing 40,000 long tons of S.B.R. An initial capital investment of $250 must be made for every ton of rubber produced each year. So the initial capital investment in modern plantation rubber is approximately twice the cost which is required to produce a ton of S.B.R. in the most efficient size plant. But the life of the plantation rubber will last for over 30 years and it is twice the life of an efficient synthetic rubber plant. So in the long run the relative capital outlays to produce a ton of either natural or synthetic rubber is the same.

[2] Produced in Rubber Age February 1959.

But the plantation rubber is labour intensive and labour cost accounts for about 40% of the total cost. Besides labour, land is also used to a very large extent. But fortunately for us in Malaya both these factors of production are plentiful in supply. So in making use of them we are using resources which may otherwise be less economically utilised. The low wage of labour and the plentiful supply of land is an advantage that will last for quite some time.

The cost of production of natural rubber is quite difficult to assess because it depends on the efficiency of the producers. Besides there are two groups of rubber producers — estates and smallholders — and their costs are very different from each other. Besides the yield of the trees and their age will affect greatly the output and so the cost of production. But we shall take an average figure for the estates. This figure represents the breakdown of the estate costs and it represents large and well-organised estate with yield approximately 1,000 lb per acre.

(1)	Field upkeep	11%
(2)	Tapping and collection	48%
(3)	General charges	28%
(4)	Manufacturing, packing, despatch	13%
		100%

It can be noticed at once that there is no allowance made for

(1) export duties
(2) cesses
(3) provision for replanting

From the above given collection and tapping accounts for a high proportion of the total cost. But to the smallholdings much of the labour in particular can be costed only on a notional basis because labour is provided by the family.

General charges take about 28% of the total cost. This includes provision for workers amenities, accommodation, hospitals, and educational services which are a common feature of estates and do not apply to smallholdings.

So on the basis of cost saved smallholders stand a very good chance of surviving in the Malayan rubber industry. They are an extremely important economic unit.

On the possibility of cost reduction, Mr. Bateman[3] said that the future of rubber is bright and can still face synthetic rubber through increasing yield and reduction of cost. "Time"[4] reported that under the pressure of competition from synthetic rubber the price

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[3] Talk given by Mr. Bateman on "Rubber in the Changing World Technology.

[4] Time — August 10th 1962, page 67.

of natural rubber dropped from US 46¢ to US 28¢ per lb in the past year but at the same time the Malayan rubber producer brought the price of rubber down to US 15¢ from US 23¢. "Time" further pointed out the possibility of further reduction of cost to perhaps US 10¢ for our Malayan rubber as now all newly planted trees are high-yielding ones. In 1961 with the price of rubber at US 23¢ per lb, our Malayan rubber producer received a profit margin of US 12¢ a lb. If costs were reduced to US 10¢ per lb, the natural rubber producers could offer their products at US 15.7¢ and still make a profit of £7. So with the price of rubber so low synthetic rubber can hardly compete with it. But cost can only be reduced through increased production which can come about through increased productivity and increased yield per acre. Recently it has been reported that R.R.I. 600 series produced about 3,000 lb and if this species is planted on a wide scale natural rubber possesses a great advantage in competing with synthetic rubber for the remaining 40% of the rubber consumption market.

During 1963 the Statistics Division[5] undertook a detailed study of the cost of production of rubber on estates and found that at any rate over a yield range of 500-1,000 lb per acre, there was an almost linear relationship between cost of production per lb in the total factor of production costs for each increase of 100 lb in yield. A producer obtaining 1,000 lb per acre can sustain a fall in price and is still in a position to compete with synthetic rubber but yields of less than 600 lb are liable to be unprofitable if a fairly modest fall in price occurs.

A breakdown of the data for a sample of estates having an average yield of 600 lb showed that R.S.S. price of 80¢, tapping and collection accounted for 40% of the direct operating cost per lb. So stimulation is important to increase yield because tapping costs are markedly reduced by increasing yield per acre. So the more efficient producer may be able to survive and still compete with synthetic rubber as the price of rubber gradually declines but those still dependent on ordinary high cost rubber for their livelihood (i.e. productivity per acre is very low) may gradually be squeezed out of production.

The Replanting Schemes

Since the 1930's more and more attention has been given to increasing capacity through higher yields rather than through extension of acreage. This has been done by replanting trees with high yielding properties and bud-grafting. Although replanting started quite early in Malaya it has not been carried on seriously. This was due to the fact that the rubber planters thought it unnecessary

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[5] Statistics Division of the Rubber Research Institute.

to renew their plants. Moreover serious replanting was interrupted by the ware and the restriction scheme (the Stevenson scheme and the rubber regulation scheme).

But in 1952 the government took a serious interest in public replanting. Forced by synthetic rubber competition and price instability the only solution for the industry is to increase production and try to reduce cost. This can only come about through replanting with high yielding trees. Moreover during this period, i.e. 1950's most of the trees which had contributed to the prosperity of the country are all low yielding ones and they are now very old, so that tapping them would be uneconomical.

The necessity for replanting has been recognised by large estates and they normally replanted up to 3% every year of their planted acreage. But the smaller estates usually locally owned do not have any fixed programmes and their replanting was carried on at random and when they could afford it. In the case of smallholdings there was hardly any replanting at all. So in 1952 the rubber smallholding Enquiry Committee was set up to enquire after the question of absolescence in smallholdings rubber and they came up with the conclusion, as was later stressed by the Mudie Mission in 1954, that the smallholders' rubber trees are old; most of them are over 30 years and replanting is a "must" if the industry is to survive.

In 1953 replanting was embarked on a gigantic scale to ensure that there would be an adequate supply of natural rubber. From 1947-6; there were about 1.75 million acres of old rubber trees replaced with high yielding material three or four times their old output. The overall acreage yield for estates and smallholdings in Malaya increased from 545 lb in 1960 to 675 lb per acre in 1965, an increase of 24%. The average yield in estate rose by more than 24%, from 676 lb per acre in 1960 to 840 lb per acre in 1965.

Replanting in both smallholdings and estates are largely carried out by government subsidies which are derived from the Replanting Funds. These Replanting Funds are in turn financed by rubber export taxes and cesses. The Federation government imposed a sliding-scale cess for the purpose of building up funds to finance replanting. This sliding scale cess was only operative when the price of rubber was 60¢ per lb. The price of rubber is the important determinant of the amount collected. This schedule II tax, as it was called, was abolished in 1954 after the recommendation of the Mudie Mission. In 1951 the yield of the cess was about 250 million dollars because at that time the price of rubber was high.

In March 1952 another cess was introduced. It is a 4½¢ flat rate on a lb of rubber, irrespective of price. The schedule tax is an additional replanting tax especially for smallholders and it is still in operation.

Under the Rubber Industry (Replanting) Fund Ordinance of 1952, 2 funds were set up, Fund A and Fund B; Fund B for the smallholders and Fund A for the estates.

TABLE 2

MALAYAN RUBBER REPLANTING 1947-65 '000 ACRES

Year	Estates	Smallholdings	Total
1947	25	4	29
1948	45	2	47
1949	53	2	55
1950	44	3	47
1951	58	4	62
1952	52	4	56
1953	30	29	59
1954	39	23	62
1955	58	25	83
1956	78	46	124
1957	76	50	126
1958	65	60	125
1959	68	69	137
1960	75	70	145
1961	71	57	128
1962	63	69	132
1963	59	83	142
1964	59	80	139

Source: (1) Compiled from Dr. Lim Chong Yah's work on
'Exports of Port Swettenham' Traffic flow
through Port Swettenham Projected to 1975.

(2) Rubber Statistics Handbook, 1964.

In case of smallholders Schedule II and Schedule IV taxes were paid into Fund B. The participants of Fund B did not get any financial aid unless they replant. Besides this money from the funds which was collected through the cesses on taxes the government also allocated a sum of $112 million to the smallholdings for replanting purposes. The replanting grant was originally fixed at $400 per acre. Later this amount was raised to $500 in 1954, and subsequently it was raised to $600 and now $750 per acre. But for land less than 5 acres, $750 is given as grants for replanting. Under this scheme the small-holders are allowed to replant up to 1/3 of their total acreage and if the possessed land less than 15 acres, 5 acres could be replanted all at once. The payment of the replanting grant is spread over 7 instalments covering 5½ years.

The replanting schemes for estates made provision for $400 per acre towards cost of replanting and new planting up to 21% of the total acreage. The actual replanting had to be started within 7 years of the commencement of the scheme and assistance is paid in 5 instalments. The government provided $168 million for this purpose. The area of estates at the beginning was estimated to be 2,010,135 acres so that the aim of the scheme was to replant 423,000 acres. But because estates had been subdivided to take advantage of the better grants given by smallholders' Replanting Fund, the original target was not achieved. Only 306,664 acres had been replanted between 1955 and 1961.

Estates which had replanted before the scheme still received assistance to the extent of the instalments appropriate in each case and only appropriate instalments of $150 and $250 per acre were paid in respect of 1953 and 1954 replantings which did not count for the 21% eligibility.

Altogether about 30% of the total Malayan rubber acreage had been replanted by 1955 and by 1960 the percentage rose to 46%. Small-holding planting and replanting increased from 95,000 to 140,000 acres during 1960-1965. This increase has been due primarily to the small-holders replanting program and the activities of the F.L.D.A. as well as the other programmes for opening up land for rubber cultivation.[6] By 1964 more than 200,000 acres were replanted by both estates and small-holdings giving a total of 2.3 million acres (55%) of the total acreage in Malaya under rubber for the post war period. These new plants are expected to give 1,200 lb in 1970.

Again in 1964 about 80% of the rubber produced by estates in Malaya were from high yielding trees. This reflects on the fact that there was massive replanting by these estates during the last decade. Although there is already much replanting being carried on both estates and smallholdings cannot afford to relax an act until 100% of their rubber trees are replanted with high yielding trees.

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6 Malayan Five-year Plan.

Although the yield per acre of the replanted rubber is high, the average yield per acre of the old seedling rubber which is still in production has been dropping steadily from 449 lb in 1961 to 429 lb per acre in 1964.

TABLE 3

YIELD PER ACRE PER ANNUM ON ESTATES

Year		lb per acre
1955	. . . .	490
1960	. . . .	676
1961	. . . .	719
1962	. . . .	745
1963	. . . .	780
1964	. . . .	817

There was an increase of 67% from 1955-1965

Source: Rubber News, May 1966

TABLE 4

YIELD OF UNSELECTED SEEDLINGS PER ACRE

Year		Yield per Acre(lb)
1960	. . . .	442
1961	. . . .	449
1962	. . . .	440
1963	. . . .	445
1964	. . . .	429

Source: Rubber Statistics Handbook, 1964

Although the smallholders know that replanting now with high yielding material will benefit them later, they are quite unwilling to face the problems posed by replanting itself. They are unwilling to be deprived of their income during the 6-7 years of waiting. Moreover it has been estimated that it would cost them about £810 to replant an acre. So besides not receiving any income they stand to

lose and most of the smallholders are too poor to afford any loss. Moreover if he allows part of his stand to go out of production his labour is not fully utilized and labour unlike other factors of production once lost cannot be regained.

There is yet another problem. This concerns with replanting of trees amidst mature trees. Root competition between the mature and immature trees may finally result in malnutrition for the new trees and this often results in failure or distortion of many of the trees. Furthermore the replanting of new trees on old land raises the problem of soil fertility and viability of new trees. Fertility is necessary and this will lead to further cost because fertilizers may have to be applied.

The government did realise the difficulties of the small-holders and made a very wise move in helping them out through grants (financial aid).

The Future Rubber Production

There are many forecast made on the Malayan rubber production in the next 5 to 10 years. One of the most recent forecast was made by the Department of Economics, University of Malaya. This forecast which comes up to 1975 comes quite close to that made by Paandekooper and Kellet.

This forecast is based on several assumptions like new planting and replanting of rubber is expected to fall both from estates and smallholdings because "the swollen backlog of replanting work accumulated pre-war during the Japanese occupation and during the immediate post war period in the main has become completed by now. Besides agricultural diversification, stiff competition from synthetic rubber and the uncertainty of rubber prices tend to make replanting of rubber on a large scale unlikely. Total acreage of estates planted with rubber is assumed to decrease more rapidly through replanting with oil palms and fragmentation to about 1,955,000 acres in 1975. Replanting and new planting is expected to decline to 45,000 acres between 1972 to 1975 as compared to 97,000 acres in 1960.

The yield per acre of old seedling rubber is expected to decrease to 350 lb per acre in 1975. This is quite possible as in 1962 yield of only 440 lb was recorded". The post war high yielding trees are expected to increase slowly from 927 lb in 1961 to 1,200 lb per acre in 1975.

Total production for estates on the whole is expected to increase from 430,000 tons in 1964 to about 821,000 tons in 1975. This figure is very much higher than that forecasted by the Rubber Research Institute. The Rubber Research Institute gives 1975 productive figure to be only 770,000 tons. This is because replanting is estimated to be higher than that forecasted by the

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TABLE 5

A COMPARISON OF THREE FORECASTS OF MALAYAN RUBBER PRODUCTION. '000 D.R.C. LONG TONS

Year	Estate	Small-holding	Total	Estate	Small-holding	Total	Estate	Small-holding	Total
							Dept. of Economics		
1961	428	297	725	430	323	753	428	302	730
1962	442	297	739	445	307	752	445	301	746
1963	454	299	753	470	315	785	463	305	768
1964	468	301	769	490	330	820	473	310	783
1965	486	307	793	515	340	855	492	324	816
1966	507	320	827	540	362	902	513	321	834
1967	531	340	871	570	390	960	549	347	896
1968	560	367	927	605	412	1,017	584	383	967
1969	588	400	988	640	440	1,080	615	424	1,039
1970	614	435	1,049	675	470	1,145	650	467	1,117
1971	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	680	510	1,190
1972	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	715	560	1,275
1973	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	750	612	1,362
1974	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	784	690	1,474
1975	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	821	715	1,536

Source: Traffic Flow through Port Swottenham Projected to 1975 —
Department of Economics 1962.

TABLE 6

ACTUAL MALAYAN RUBBER PRODUCTION 1960-1964 '000 TONS

Year	Estate	Smallholding	Total
1960	414	294.3	708.3
1961	429.5	307.2	736.7
1962	439.2	312.4	751.6
1963	459.3	329.2	788.5
1964	477.9	347.2	825.1

Source: Rubber Statistics Handbook 1964

Department of Economics.

The forecast on the smallholders rubber output can only to a rough estimate because of lack of sufficient data. Large areas have been replanted under various schemes and small-holders volume of production is expected to increase. At the same time subdivision of estates is expected to decrease.

The average yield of prewar trees is expected to decline slowly from the present level of 470 lb to 380 lb in 1975 and the post war high yielding plants is expected to increase steadily to about 966 lb in 1975 from about 581 lb in 1961.

By 1975 more than ½ of the smallholding rubber i.e. 1,449,000 acres out of 2,700,000 acres are expected to be of post war high yielding trees and the total output from smallholdings would be about 715,000 tons.

If the forecast is right, Malayan rubber production would be about 1,536,000 tons by 1975, an increase of 117% over 1960 production figure.

TABLE 7

ACREAGE TAPPED, PRODUCTION AND YIELD PER ACRE FOR HIGH YIELDING MATERIAL AND UNSELECTED SEEDLINGS ON ESTATES 1960-1964 STATES OF MALAYA AND SINGAPORE

Year	Planted Acreage		High Yielding Material			Unselected Seedlings			Total		
	Mature	Immature	Average Acreage Tapped	Production	Yield per Acre	Average Acreage Tapped	Production	Yield per Acre	Average Acreage Tapped	Production	Yield per Acre
	'000 acres		'000 acres	'000 tons	lb	'000 acres	'000 tons	lb	'000 acres	'000 tons	lb
1960	1,412	530	640	265	927	700	138	442	1,373	414	676
1961	1,383	562	683	294	965	626	126	449	1,337	425	719
1962	1,371	562	737	321	975	557	109	440	1,320	439	745
1963	1,372	553	802	354	987	492	98	445	1,318	459	780
1964	1,360	539	865	390	1,009	424	81	429	1,310	473	817

Source: Rubber Statistics Handbook 1964

GRAPH I

TOTAL ACREAGE PLANTED WITH RUBBER

ON ESTATES AND SMALLHOLDINGS

(SINGAPORE & MALAYA)

1960 - 1964
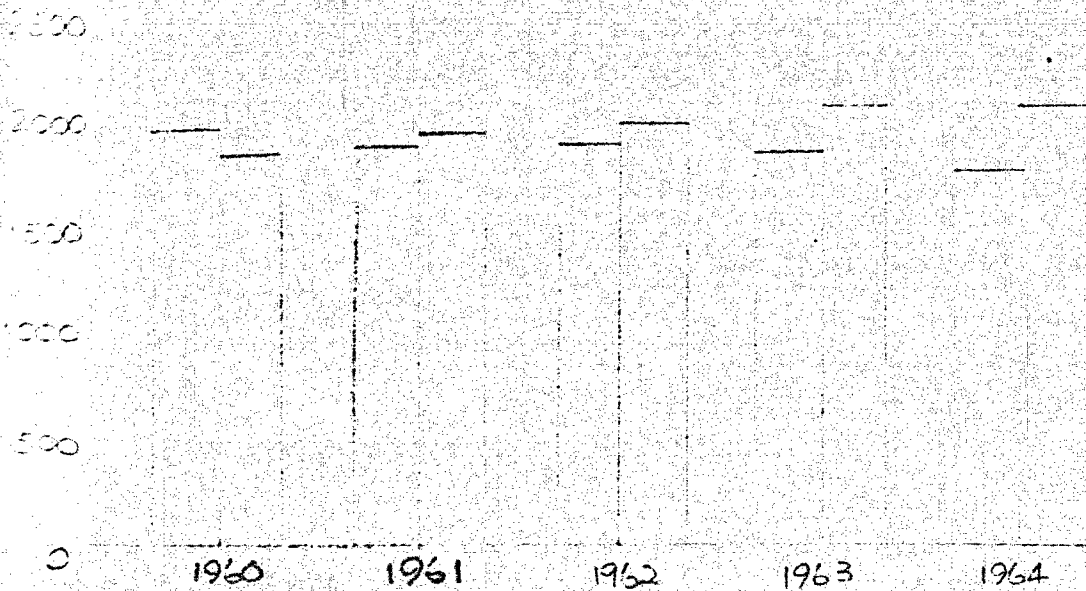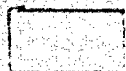
SOURCE RUBBER STATISTICS HANDBOOK 1964

GRAPH 2

TOTAL ACREAGE PLANTED WITH RUBBER

ON ESTATES 1964

JOHORE 533,174 ACRES

KEDAH & PERLIS 213,740

KELANTAN 45191 ACRES

MALACCA 111,338 ACRES

NEGRI SEMBILAN 272,946 ACRES

SINGAPORE
5855 ACRES

TRENGGANU
17004 ACRES

PAHANG 118,725 ACRES

PENANG & PROVIENCE
WELLESLEY 26,534 ACRES

SELANGOR 301,994
ACRES

PERAK 252,514 ACRES
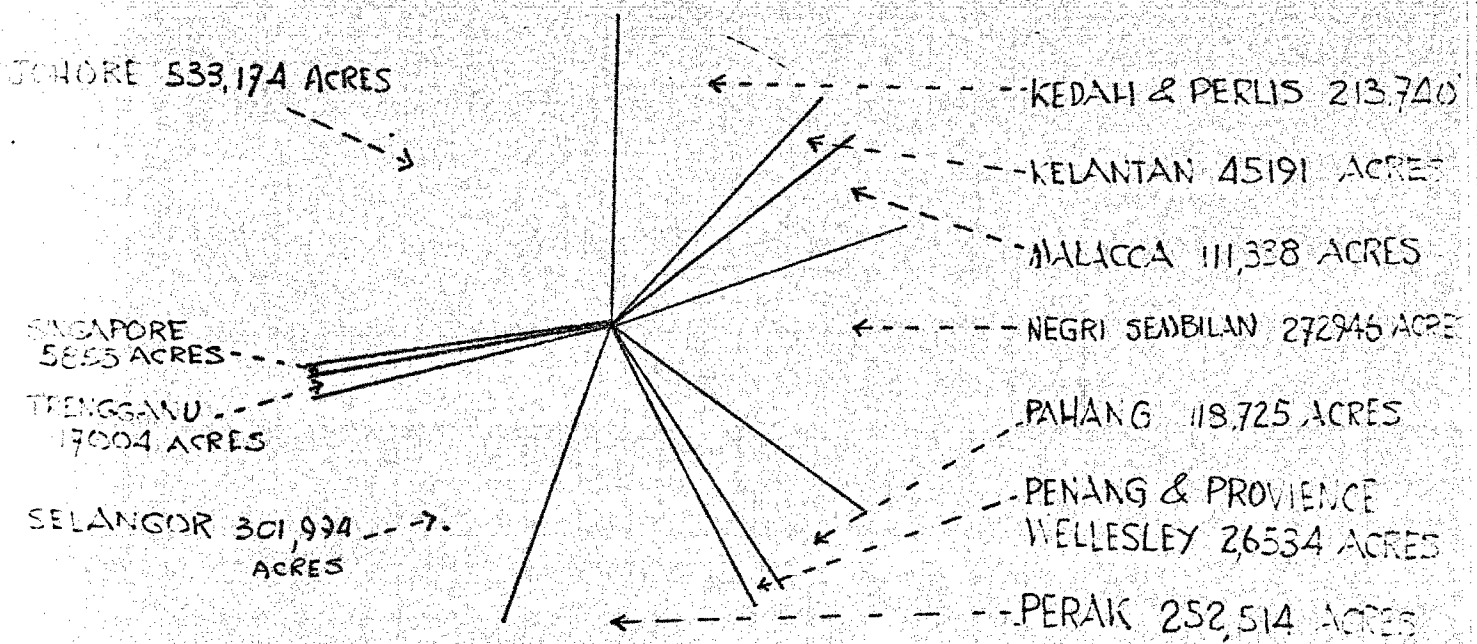
TOTAL ACREAGE — 1899015 ACRES

SOURCE — RUBBER STATISTIC HANDBOOK 1964

TABLE 8

PRODUCTION OF NATURAL RUBBER

Year	World Total Production	Malayan Production		
		Estates	Smallholdings	Total Production
1954	1,810,000	345,474	241,006	586,480
1955	1,917,500	352,536	286,212	638,748
1956	1,892,500	351,591	274,381	635,972
1957	1,905,000	368,601	268,936	637,537
1958	1,942,500	390,125	212,747	662,872
1959	2,024,500	407,961	289,805	697,766.
1960	1,990,000	414,074	294,303	708,377
1961	2,095,000	429,491	307,258	736,749
1962	2,130,000	439,211	312,350	751,561
1963	2,067,500	459,221	329,221	788,539
1964	2,232,500	471,028	347,309	818,337

Source: Rubber Trends

TABLE 9

FUTURE MALAYAN RUBBER PRODUCTION

Year	New & Replanting '000 acres			Average Yield per Acre(lb) estimated			Total Production '000 long ton	
	state	Small-holding	Total	Estate	Small-holding	National Total	Estate	Small-holding
1947	26	4	30	569	569	578	360	286
1948	52	4	56	564	667	603	403	295
1949	60	4	64	547	434	495	400	271
1950	50	6	56	511	417	500	378	317
1951	73	10	83	460	459	446	328	276
1952	59	11	70	485	382	442	341	242
1953	35	35	70	473	370	425	341	233
1954	46	26	71	481	375	431	345	241
1955	68	33	101	491	442	460	353	286
1956	93	59	152	497	421	460	352	274
1957	92	61	153	535	425	490	369	269
1958	79	71	150	586	429	513	360	273
1959	82	90	172	641	459	549	403	290
1960	97	95	192	675	462	566	414	294
1961	85	125	210	717	477	593	428	302
1962	80	125	205	739	479	606	445	301
1963	70	125	195	760	479	617	463	305
1964	70	125	195	764	485	622	473	310
1965	70	125	195	786	500	640	492	324
1966	60	105	175	803	481	638	513	321
1967	60	105	175	837	507	663	549	347
1968	60	105	175	876	537	700	584	383
1969	50	105	155	908	570	731	615	424
1970	50	105	155	944	606	765	650	467
1971	50	90	140	975	630	790	680	500
1972	45	90	135	1,015	667	826	715	560
1973	45	90	135	1,056	712	867	750	612
1974	45	90	135	1,097	762	923	784	670
1975	45	90	135	1,144	791	947	821	715

Source: Traffic Flow through Port Swettenham Projected
to 1975.