

## THE CASE FOR REPLANTING OF OLD RUBBER ESTATES

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IT has become evident that old rubber of 20-35 years of age has passed its economic state and steps must be taken on such estates to replant it. Bark and leaf conditions are such that no amount of artificial manure can possibly recover the high yields that were harvested in the past. Tapping in its early stages was very different from tapping as carried out nowadays and it was not uncommon for 18 inches of bark to be removed in a year. The bark during the past 25 years has on old estates been removed and renewed 8-10 times so that it is not surprising that on many trees the renewed bark is so thin and hard that it cannot be tapped. Yields have dropped and are dropping and, with the present state of starvation on most estates and original bad opening, will continue to drop with the result that when restriction is removed those estates which have not large areas of young and vigorous rubber coming into bearing will be threatened with extermination.

It must further be remembered that the present rubber in Ceylon has in many cases not been manured at all and in others only during comparatively recent years, so that our efforts at cultivation now are analogous to a child that has been consistently starved until it has reached manhood and then efforts made to impart that growth and vigour that should have been done in youth. It is impossible with man and so it is with our present rubber.

We will now consider what one expects to gain by replanting and, for the sake of example, will take the case of an estate with 1610 acres of rubber in bearing, which decides to replant to the extent of 20 per cent. of its planted acreage as it is

allowed to do under the Rubber Restriction Ordinance during the years 1936, 1937 and 1938.

<i>Year.</i>	<i>Rubber in bearing</i>	<i>Replanted</i>
1936 ..	1,610 acres	107 acres
1937 ..	1,503 „	107 „
1938 ..	1,396 „	108 „
1939 ..	1,288 „	
		<u>322 acres = 20%</u>

We may assume that the 1,288 acres will from 1939 yield a crop of 708,400 lb. at 550 lb. per acre or 80 per cent. of the full crop that could have been harvested from the total acreage of 1,610 acres. It is likely that restriction will be continued for another term of 5 years after 1938 and it is unlikely that the percentage of release will be more than 80 per cent. during that time so that the crop is safeguarded up to an 80 per cent. release during restriction.

We will now assume that restriction ceases in 1943 and that the total 20 per cent. has been replanted as above. The first replanted 107 acres is then 7 years old and the assessment allowed by the Rubber Controller on 7-year-old rubber of approved clones is 6 lb. per tree. Given 120 trees to the acre this is 720 lb. per acre, rising in the 8th year to 8 lb. per tree and in the 9th year to 10 lb. per tree equivalent to 960 and 1,200 lb. per acre.

We may, therefore, in the 7th year of replanting expect the following crop:—

1943.	1,288 acres old rubber at 550 lb.	..	708,400 lb.
	107 acres budded rubber at 720 lb.		77,040 „
			<u>785,440 „</u>

and in the two subsequent years—

1944.	1,288 acres old rubber at 550 lb.		
	per acre	.. ..	708,400 lb.
	107 acres budded rubber at 960 lb.		
	per acre	.. ..	102,720 „
	107 acres budded rubber at 720 lb.		
	per acre	.. ..	77,040 „
			<u>888,160 „</u>

1945. 1,288 acres old rubber at 550 lb. per acre .. ..	708,400 lb.
107 acres budded rubber at 1,200 lb. per acre .. ..	128,400 „
107 acres budded rubber at 960 lb. per acre .. ..	102,720 „
108 acres budded rubber at 720 lb. per acre .. ..	77,760 „
	<u>1,017,280 „</u>
against a total crop if the estate had not been replanted of .. ..	885,500 lb.
an increase of .. ..	<u>131,780 „</u>

and this with the budded rubber only in its 7th, 8th and 9th year.

It has again been assumed that the old rubber would be able to produce 550 lb. per acre in 1945 which with its very definite backward trend is doubtful, even though heavy artificial cultivation was carried out. I have taken for the purpose of these figures the actual assessments allowed by the Rubber Controller, but there is no doubt that the budded areas would continue to increase in yield until they too had reached their peak years. It is possible that when the budded rubber had reached the age of 13 to 15 years it would be giving 2,000 lb. per acre when the yields would stand as follows:—

1,288 acres old rubber at 550 lb. per acre .. ..	708,400 lb.
322 acres budded rubber at 2,000 lb. per acre .. ..	644,000 „
	<u>1,352,400 „</u>

It is quite certain that the old rubber would not continue to produce 550 lb. per acre even with cultivation so that it is obvious that if restriction came to an end in 1943 the only wise plan would be to replant the balance 1,288 acres of rubber, assuming that it was 30 years old or so. If this were done and the total 1,610 acres completed, at 12 years old a crop of 1,500 lb. per acre might be expected, or 2,415,000 lb.

I have not gone into the economic side of the cost of production on these crops as it is evident that as one can increase the yield so will the costs be reduced.