

# THE ECONOMIC ASPECTS AND PROBLEMS OF REPLANTING

Gordon K. Newton

---

At a Conference held during February 1955 attention was drawn by a number of scientists associated with the T.R.I. at that time to the age of a considerable area of the tea planted in Ceylon, the deterioration in condition of part of the area in question, and the fact that research at the Institute's estate, St. Coombs, had established the fact that tea (*Camelia sinensis*) may be grown successfully from cuttings taken from proven mother bushes, certain strains grown under suitable conditions being capable of yielding at far higher levels than had been obtained from any known area of tea planted with seedlings. The practice had become commonly known as vegetative propagation.

The Scientists having focussed attention on the importance of maintaining or improving the capital value of the 570,000 acres of tea planted in Ceylon, representatives of the Government then urged that the discoveries at St. Coombs should be actively exploited by business interests, in fact particular impetus was given to the subject by the Governor-General, Sir Oliver Goonetilleke, who in his opening remarks, at the 1955 Conference amongst other things, stated:—

“How many of you have plans for replanting areas of old tea with vigorous, high-yielding, high-quality material? In the Tea Control Year 1953/54, only ten acres were replanted. I know your answer—‘new planting or replanting is all too expensive.’ But is it too expensive when you remove the incidence of costs of a new factory and of additional accommodation for labour? Is it too expensive when you consider that the yield per acre, if planted with clonal plants produced by methods of vegetative-propagation, is certain to be well over 1,200 pounds per acre? All of us must listen very carefully to Mr. Portsmouth's paper this morning. You will see in this study a challenge to the industry and to the Institute. The former arises from the fact that the cost of production of tea is based directly on the yield per acre and that the rising cost of production can only be met by increased production. The challenge to the Institute lies in their responsibility to educate the working planter and to provide planting material suitable for all areas.”

On making enquiries recently I find that the position in respect of Tea Replanting has not progressed much during the intervening 3 years.

I have to acknowledge gratefully, costing details from many sources; replanting in Ceylon is still restricted to a few acres annually and the cost of the work undertaken shows a wide variation between Rs. 2,500/- and Rs. 6,000/- per acre. In many cases the efforts have not been entirely successful. This all goes to show how essential it is to have for guidance the experience of those who have replanted successfully.

As illustrated three years ago production costs from a large area of tea at present under cultivation continue to make them uneconomic to keep in production for a market which, since bulk purchases ceased in 1947 including two boom periods the average price paid at the Colombo Auctions for the 11 years has been—

		Rs.
Up-country	(4,000 ft. elevation upwards)	2.16
Mid-country	(2,000 ft. „ to 3,999 ft.)	1.84
Low-country	(Sea level „ to 1,999 ft.)	1.90
Total all sales weighed average		1.95½

It was indicated then that an acre of tea may be uprooted, the soil rehabilitated for several years, replanted with selected clonal cuttings and brought to bearing again at a high yielding level on a cycle of 6-10 years under circumstances fairly well comparable to the areas under test at St. Coombs. The estimated cost would be in the region of Rs. 6,000/- per acre and the question was posed as to how, with the narrow margin between production costs and sale prices over the years, those responsible for the fortunes of large numbers of shareholders as well as individual planters could embark on any large scale very expensive replanting. Work from current profits seemed out of the question even then following a boom year 1954 when all teas sold in Colombo averaged Rs. 2.56 per pound, compared now with a Colombo average of Rs. 1.74 for all teas sold to the end of October 1958.

At that time it was stressed that if the tea industry was to prosper in maintaining and improving not only the equity of Tea Company shareholders and proprietors but the chief source of revenue of the Island, then some encouragement should be given by the Government which fundamentally is most concerned of all.

That view was accepted by the Associations representing the Ceylon Tea Industry and schemes were drawn up embracing the policy of replanting on the expectation of assistance from the Government in the form of rebate from the export duty levied on each pound of tea exported from Ceylon.

Since the Conference of February 1955 and subsequent negotiations, profound changes have taken place, those now responsible for the general agricultural policy of Ceylon recognised the advice given by our research scientists, but, instead of lifting the burden of an export duty which is severely handicapping the marketability of Ceylon tea in consumer countries, have made the task for the producer more onerous by the imposition of an additional export duty levied under terms of the Tea Subsidy Act No. 12 of 1958.

Briefly, at present the Act provides for the collection of .04 cents per pound on each pound of tea exported from Ceylon. The buyer/exporter pays the duty but in purchasing tea from the producer the buyer in Colombo discounts the amount of duty from the price he is prepared to pay on a world market, and in the case of producers consigning their tea for sale elsewhere the levy is a charge at the point of export from Ceylon.

Thus we are presented with a picture of an agricultural industry of which two-thirds is at present struggling for existence faced with the burden of an additional tax collected for:

1. the replanting of estates and small holdings,
2. the rehabilitation of estates and small holdings,
3. the marketing of green tea leaf of estates and small holdings,
4. the manufacture of made tea from such green tea leaf.

For the purpose of consideration at this symposium, we are chiefly concerned with No. 1—'The replanting of estates and small holdings'—and in this respect regulations have been framed through the Tea Control Department for payments from the Tea Subsidy cess to estates undertaking replanting.

The amount of the subsidy payable for replanting shall be Rs. 2,500/- in respect of each acre of the area replanted, and shall be paid in six instalments. The target figure for the proposed replanting is 30,000 acres or 1 per cent. of large estates a year for 6 years. The period over which the instalments may be paid will to a great extent be governed by the soil rejuvenation period. The period envisaged will be six years — it may take longer, perhaps up to 10 years.

It seems likely that those participating will wish to replant the most impoverished and lowest yielding areas which will probably require longer periods of rejuvenation. Instead of a total replanting period of 6 years it seems more likely that a fair average of 8 years will be required.

Unless it can be seen that the proposals include sufficient encouragement for replanting to be started in a big way, then the intention will fail and the more efficient section of the industry will find it financially impossible to replant large areas, but will be compelled to provide a large amount in cess for work of unknown value.

The amount of rebate payable to those who replant is fixed at a maximum of 6 per cent. of the area of large estates in production at Rs. 2,500/- per acre, but the estate contributes according to its yield thus—

1. An estate of average size — 700 acres having a yield of 500 lbs. per acre — contributes to the fund Rs. 20/- from each acre annually or	Rs.	14,000/-
2. An estate of the same size with the average yield of Ceylon tea — 700 lbs. per acre — will provide from each acre Rs. 28/- or	Rs.	19,600/-
3. A fairly high yielding estate of the same acreage at 900 lbs. per acre will provide Rs. 36/- from each acre annually or	Rs.	25,200/-
Assuming the period occupied for replanting takes 6 years, No. 1 will provide for the State	Rs.	84,000/-
And if full advantage of 6 per cent of the area for replanting is taken receives rebate for 42 acres × Rs. 2,500/-	Rs.	105,000/-
The amount received for replanting will be in excess of the cess paid by	Rs.	<u>21,000/-</u>
No. 2 will provide and receive	Rs.	117,600/- <u>Rs. 105,000/-</u>
In this case the estate will have paid in cess more than the maximum it will be allowed for replanting by	Rs.	<u>12,600/-</u>
No. 3 will provide and receive	Rs.	151,200/- <u>Rs. 105,000/-</u>
In this case the estate will have paid in cess more than the maximum it will be allowed for replanting by	Rs.	<u>46,200/-</u>

Taking the three estates together as a fair cross section, the State receives from cess Rs. 352,800/- and pays a maximum in subsidy ... .. Rs. 315,000/- putting Government in credit by ... .. Rs. 37,800/- from only 2,100 acres. In other words the Industry will pay approximately Rs. 18/- per acre more than the maximum it could receive in subsidy over 6 years or Rs. 3/- per acre annually.

Over the total acreage of large estates this represents 6 years  $\times$  Rs. 3/-  $\times$  500,000 acres = Rs. 9,000,000/- if all estates claim the full subsidy. If only say 50 per cent. of the large estates replant during the 6 year period up to the limit, then the gain by Government from the cess will be Rs. 18,000,000/-. But is it likely even 50 per cent. will replant?

An efficiently run estate such as example No. 3 provides Rs. 151,200/- for the replanting fund but the maximum rebate is Rs. 105,000/- amounting to a difference of Rs. 46,200/- in this case being the penalty of efficiency.

Put another way—say the 500,000 acres of large estates provide for export 350,000,000 lbs. they will in one year contribute Rs. 14,000,000/- and over 6 years Rs. 84,000,000/-. The maximum rebate claimable will be 6 per cent. of 500,000 acres @ 2,500/- = Rs. 75,000,000/-.

The surplus contribution to the State is Rs. 9,000,000/- being a similar figure to the detailed illustration and the same principle applies—is it likely 100 per cent. will replant, 50 per cent. or 10 per cent.?

If the rejuvenation period requires more than 2 years as allowed for in the regulations, and from data obtained from various sources it would appear to require a longer period to rejuvenate soil that has carried a mono-cultural crop for possibly 80 years, then the provision by the Industry for the State is greatly increased. For instance, should the overall period on an average for replanting found to be 8 years instead of 6, on the basis of 30,000 acres replantable the surplus provided by the Industry will be Rs. 49,500,000/- provided all estates replant and should only 50 per cent. avail themselves of the opportunity the surplus will be Rs. 80,750,000/-.

If estates do not replant they lose the subsidy benefit. If estates do replant they must find capital for an additional Rs. 2,500/- or more per acre to complete the work, and during the period of replanting lose the income from the tea uprooted in cases where the old tea is not completely uneconomic.

Let us look at the situation from the taxation angle as affecting shareholders.

Assuming land is available for development and it is desired to plant new areas, the capital required will be Rs. 4,000/- to Rs. 6,000/- per acre according to circumstances. I will leave out complications of providing buildings and machinery. Allowing for taxation at the present level approximately double the amount will be required from profits to provide for the work. Rs. 8,000/- to Rs. 12,000/- an acre is a capital sum of such magnitude as to dissuade any Board from contemplating extensions with the price levels ruling now.

What prospects could there be under the Tea Subsidy Act? We shall hear what planters have to say about the chances of success by replanting in various districts and likely costs to be faced under the varying circumstances. Up to

Rs. 3,500/- may be required above the rebate payable per acre. The work being chargeable to revenue—approximately half the amount needs to be found from taxed profits. Is it likely shareholders will encourage such expenditure ?

It seems that Government has realised that present day high costs of new plantations preclude the *entrepreneur* from utilising fresh capital and consequently offers some encouragement for replanting under the terms of the Tea Subsidy Act, in its apparent benevolence utilising the Industry itself to contribute part of the cost, and chiefly at the expense of that section most likely to undertake progressive work.

This cess of .04 cents per lb. plus an expected charge amounting to .06 cents per lb. for the proposed provident fund will raise costs of production to such a height that it will be impossible to undertake replanting in any large scale with the proposed level of payment. The regulations must provide for a more generous rebate from the Tea Subsidy Scheme for replanting successfully undertaken, or we may expect the proposals to fail. This requirement applies particularly to the area of 380,000 acres comprising the mid and low country tea areas.

Some say the whole conception of tea replanting in Ceylon is premature and sufficiently reliable material is not yet available, others say we are starting 10 years too late. Maybe the latter are right in the light of political and cost trends over the past 10 years.