

TEA RESTRICTION.

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In view of the likelihood of restriction of crop being imposed during the coming year it seems desirable to discuss various methods by which restriction may be attained. Several alternatives are available and the relative merits of these will depend on how far they secure economy as well as restriction, and on their effect on the future strength and vitality of the bush. The latter consideration is perhaps likely to be overlooked but is of particular importance, as it is obviously undesirable that methods should be adopted which may possibly check normal production for a considerable period after restriction is removed.

We may perhaps group restriction methods under the following heads:—

- (a) Plucking methods.
- (b) Resting of fields.
- (c) Restriction or modification of the manurial programme.
- (d) Manufacture.

(a) PLUCKING.

A finer standard of plucking may be adopted. This not only restricts crop but may confidently be expected to improve quality. Finer plucking may of course involve more frequent plucking and this not only adds to plucking costs but is an additional strain on the bush. If the normal plucking round is maintained then breaking back may be necessary which again means more time and labour.

If, on the other hand, the normal standard of plucking be maintained then restriction may be obtained by increasing the length of the plucking round. Here again breaking back will be necessary unless the extra leaf is left on the bush. The latter is beneficial in so far as it increases the leaf surface and thus increases the food supply assimilated by the bush. It is inconvenient, however, in that the level of the plucking table will gradually be raised and as stronger growth usually arises from the centre, the bush will tend to acquire a conical shape and the usual flat plucking table may be difficult to maintain.

Finer plucking will increase the cost of production but this may not be material as it may well be offset by the improvement in quality. Any successful attempt to improve quality must have a far-reaching effect in improving tea prices generally and is therefore desirable in itself apart from the restriction aspect.

The margin of restriction available under the head of plucking will naturally vary greatly in different estates. There is undoubtedly considerable scope in many cases and particularly on these estates, unfortunately not few in number, where coarser plucking has lately been carried out to reduce cost of production and to compensate for reduced yields due to cessation of manuring.

(b). RESTING OF FIELDS.

This would appear to be one of the most advantageous methods of restriction. In the first place it gives an immediate and readily calculable degree of restriction, the method is capable of considerable elasticity of application and finally, particularly in the case of weak fields, it is likely to be of considerable ultimate benefit to the tea. Various possibilities may be considered.

(1). Taking the widest application first it might well pay estates which normally obtain but poor prices to rest a large proportion of the estate, utilising the export quota thus set free either for the benefit of more profitable estates in the same group or company or selling the quota to outside estates more favourably situated.

(2). Poor and weak fields may be put out of plucking. Should resources permit this will permit of attention to bush sanitation, replacement of uneconomic bushes and other general improvements before the field is again brought into plucking.

(3). Resting individual fields, for a period to be determined, before or after pruning.

RESTING BEFORE PRUNING.

The advantage of this is that the bush is given every opportunity for the formation of ample food reserves before pruning. Much better recovery from pruning may therefore be expected and far less loss from dieback and subsequent deaths. This aspect is of particular importance in the Low and Mid-Country up to, say, 3,000 feet.

The importance of adequate food reserves at pruning has been definitely established and is, in fact, now generally recognised by planters.

That disadvantage of the system is perhaps that by this method it is the older leaf that is sacrificed and the total crop will therefore contain a rather higher percentage of young leaf. This, however, will be compensated for if young fields can also be rested.

RESTING AFTER PRUNING.

This method, which is applicable only to a clean or rim-lung prune and not to a cut-across or Travancore, has the advantage that better wood formation is encouraged and as one eventually cuts back

into red wood at the tipping level, better leaf from a manufacturing point of view is more quickly obtained when the bush is taken back into plucking.

In general, resting before pruning would appear to be the more advantageous procedure in the Low-Country. Here the prime consideration is good recovery from pruning. If this is not attained then resting after pruning cannot be expected to be of much utility except purely from the restriction aspect. Since resting before pruning leads to a stronger recovery good wood formation may be expected to follow to some extent from this method also.

The period for which a field should be rested before pruning will depend on the degree of restriction necessary and also on the condition of the field. From the point of view of bush recovery, however, the resting period should not be less than three months if the field is in poor condition.

In the case of resting after pruning there is less choice of the time of resting possible as this will depend on the growth made. In general, for equal periods of resting, a greater restriction of crop will result from resting before pruning.

The resting of weak or unhealthy bushes is a common practice already which has been shewn to have beneficial results. Resting for restriction purposes is really only a wider application.

(c). MANURING.

Cessation of manuring must necessarily reduce crop but the effect may not immediately be shewn and the degree of restriction cannot be accurately forecasted. The rate and amount of fall in crop will vary with the previous history of the field in regard to manures and cultivation, and with soil conditions.

Reduction of yield brought about in this way is really a symptom of reduced efficiency in the bush. Such a condition must be regarded as definitely disadvantageous in the long run and is, moreover, one which may require a very considerable period for its amelioration.

If manures are *reduced* in quantity, which may be economically necessary, every effort should be made to maintain the supply of green material incorporated in the soil. Moreover, the reduction in manure should not fall on one particular manurial constituent. In other words a balanced mixture should be continued. In many cases the cost of such a mixture may be materially reduced by the substitution of inorganic artificials for the more expensive organics. This aspect of the case is discussed in another article in this issue but it would certainly appear preferable to maintain a reasonable manurial

level by the use of inorganic rather than to submit to a cessation of manuring on the grounds of the high cost of the organic mixtures at present in favour.

It should not be overlooked that undue cutting of manures, leading to a weakening of the bushes, may eventually necessitate a reduction in the pruning cycle. This is definitely disadvantageous, leading to a greater proportion of young leaf in the crop and so reducing quality. To avoid this it may be necessary when manuring is seriously curtailed to compensate for this by resting the fields for a period as indicated earlier in this article.

(d) MANUFACTURE.

Under this head there is perhaps less scope for restriction unless one considers cessation of manufacture for a definite period as a practical measure. In the case of many estates at the present time such a step would not appear to be economically possible.

Leaf might, however, be again picked over on arrival at the factory. If this were done the amount discarded would probably be a good deal more than is generally supposed and the teas would be improved.

An extra round of tipping leaf might also be discarded. Tip-pings and very young leaf only make inferior tea and by eliminating such material restriction would again be combined with an improvement in quality.

Various possible methods of restriction have been indicated in the above notes. No programme can be laid down capable of general application but on most estates it should be possible by the above methods, individually or in combination, to arrive at a system suitable to the particular conditions obtaining.

"Resting" on the whole appears the most advantageous plan. It is economical, easy of control and constructive in that it should lead to an improvement in the condition of the bushes, whereas the other methods discussed tend on the whole in the opposite direction.