

**SOME POSSIBLE CAUSES FOR THE
DECLINE IN YIELDS ON TEA ESTATES
IN THE UVA REGION**

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I have in this paper attempted to set out the various causes for the decline in yields on the estates in the Uva Region. I have described them under the following broad headings:

It must be remembered that the causes for decline in yield on estates cannot be generalised. Each estate must be taken separately and we will find that one or more of the factors discussed would be applicable.

I. Agricultural

- (a) Senility
- (b) Pruning
- (c) Fertilizer application
- (d) Plucking
- (e) Shade
- (f) Soils

II. Manufacture

III. Management

I have also attempted to discuss very briefly ways and means by which this decline could be arrested.

I. Agricultural

- (a) Senility:

We must remember that our tea is hundred years old. With every cycle bushes that have not been replaced by infilling are declining in their productivity.

With every prune we are removing moribund and dead bushes and re-supplying them with V.P. tea. This is only an interim measure whereby we are trying to maintain earlier yield levels. But the fact remains that old tea is still existing with declining productivity levels.

Apart from the actual casualties that occur due to senility there is a gradual reduction in the productive branches of the tea bush itself. Although the Superintendent may not notice any dead bushes after a prune, in actual fact, in my assessment there could be up to a 20% reduction in the number of productive branches in almost every tea bush. This, when accumulated over the cycles, form a major cause for the drop in production.

(b) Pruning:

In most estates we hear that the recovery after pruning has not been satisfactory. This could be attributed to one or more of the following causes:

1. Incorrect timing of pruning
2. Pruning too severe
3. Inadequate lungs left at pruning
4. Blister Blight: Fields recovering from pruning are not adequately protected from blister blight resulting in an initial setback and loss in crop

These are salient factors which could be corrected at the next prune, but does result in a loss in crop in that cycle. However, what is most important and tends to be overlooked in most instances are the following factors.

(c) Fertilizer application:

1. Incorrect timing of fertilizer application - i.e. applications either made too close to a prune or too soon after a prune, both practices being harmful and lead to waste. The former takes place due to the ad hoc manner in which pruning programmes are changed. The latter occurs when Superintendents are not mindful of the recovery of a field, after pruning when an application is made.

2. Due to a common misconception the Superintendent in his enthusiasm to harvest maximum crop, initially virtually gives the death blow to the bush by making excessive application of fertilizer in the pruning year.

Apart from the incorrect approaches to manuring of pruned fields, there are also instances when adequate attention is not paid to fertilising of mature fields as well. We have had instances when the Superintendent in his eagerness to complete his estimated manuring programme commences applications, no sooner the first showers are received after a drought but to find that the showers received were inadequate for fertilizer assimilation to take place.

3. High pH value: The increase in the acidity of our soils by the continued use of SA based mixtures has resulted in leaching of important nutrients leading to a decline in yields.

(d) Plucking: The following generally have a direct bearing on low production.

1. Delayed plucking rounds
2. Poor bush management
3. Illicit plucking

1. Delayed plucking rounds: There are certain periods when we have to accept this position like during festivals or after a strike, but it must be pointed out that some estates are not managing rounds properly and continually pluck on extended round, as a result of which "breaking back" has to be resorted to, whereby valuable crop is wasted.

2. Poor bush management: Plucking below the plucking table, stripping and inadequate attention to maintaining slopes has become a common feature on many estates. The cumulative effect of this is realised in the 4th and 5th years of the cycle when 'resting' has to be very reluctantly resorted to whereby the loss in crop on such fields become considerable.

3. Illicit plucking: As a result of certain estates being compelled to manufacture smallholders' leaf, estate leaf is illicitly plucked whereby the result is a gain to the smallholders and a loss to the estates. We must also not forget that extended rounds are an attraction to illicit plucking.

(e)&(f) Eroded soils: Most of the estates in the Uva have very poor and highly eroded soils. This is due to the large number of vacancies which should be identified and planted with a grass. It is also important that adequate high and low shade should be established which will also contribute to leaf fall and improvement of soil fertility.

II Manufacture

In the manufacturing aspect of tea production too there are areas if neglected could lead to decline in yields, on a property. The two main areas where this could occur in my opinion are as follows:

1. Continuous production of a high percentage of refuse tea
2. Theft of tea

1. High percentage of refuse tea: The decline in yields attributable to this aspect operates mainly on estates where the tea factory staff commission is based on the NSA of the property. The Factory Officer with a view to obtaining high prices does not extract some of the black tea from the refuse whereby there is a loss on the made tea production. The Factory Officer is personally motivated as commissions payable are based on the price realised.

2. Theft of tea: Apart from the reported losses of tea that take place occasionally in a factory there is another means of loss which is extremely difficult to detect. This of course is done by the field and factory staff operating together. The field staff understate the green leaf received by making unfair deductions from the pluckers. The green leaf handed over to the factory in turn is understated. The actual weight of green leaf under-

stated is made known to the factory staff and the leaf so manufactured leaves the factory undetected. The percentage outturn does not suffer by this method but in cases where no deductions are made in the field but where made tea still leaves the factory, it will be observed that there is a drop in outturn percentages.

Having discussed the causes that could lead to a drop in yields on our estates, I think we should see how best we could arrest such a decline. There are short term methods as well as long term methods which are enumerated below:

Short Term:

1. Undertaking an intensive Infilling Programme and demarcating fields for diversification away from tea in the long run.

2. To determine clearcut fertilising, plucking and pruning policies and ensuring that these policies are fully understood and implemented by the planters at the correct time and what is most important under proper supervision.

3. Control of blister blight: Undertaking prophylactic spraying in areas susceptible to blister.

4. Establishing of high and low shade as quickly as possible and in the interim period thatching all pruned fields in order to retain soil moisture and the fertilizer applied.

5. Smallholders' leaf to be manufactured in separate smallholders' factories.

6. Streamlining Incentive Schemes which should be geared towards production as well.

Long Term:

I wish to emphasise that whatever steps we may take in the short term period to arrest the decline of yields in our properties, the fact remains that our tea is hundred years old. The answer to overcome this is, a long term measure but this should be decided and acted upon immediately. This measure is replanting and this should not be something undertaken ad hoc but should be concentrated on estates with the following criteria.

1. Good soil,
2. Availability of labour,
3. Good management.

III. Management

Lack of efficient managerial supervision:

Although there are many efficient and dedicated Superintendents most of their working hours are devoted to paper work, accounts, etc., not forgetting attendance in Courts and settling strikes over trivial matters. A competent Superintendent must spend a fair deal of his time in the field supervising manuring and allied matters that augment the growth of the tea plant. There are also a fair number of inexperienced and non dedicated Superintendents who were obviously recruited during the past 10 to 12 years. They should be gradually but diplomatically eliminated. Those recruited should not only be qualified in science but also well disciplined young men.

Inadequate control in dealing with absentism of labour:

The prevailing rule is that a labourer must perform 22 days work per month. Absence, of course is excused on the ground of illness. This rule must be rigorously imposed. Dismissal should be the penalty meted out to those who presistantly violate this rule. Some labourers absent themselves from work but take up work on adjoining Gem lands where payment is attractive. This arbitrary action on their part may well be called acting with impunity and should be dealt with.

Proper distribution of labour on estates:

Transfer of labour from one estate to another where there is a shortfall of labour on one estate and a surplus on another. Production will definitely improve if this is done. I do not envisage any Union objection to this so long as work is provided. Production must suffer if leaf is not harvested owing to lack of labour.

In general, agricultural production well organised and supervised will unfailingly tend to increase from year to year, unless the tea bush is ruthlessly attacked by some pest and this has not happened. Tea Production in Sri Lanka should, in normal growing and supervisory conditions, increase by about 5 to 10 per cent per year.

To a discerning man, the Tea industry now stands as a monument of insufficient or inefficient managerial supervision, serving a niche where the process and strategy of thieving flourishes and takes refuge or shelter in this niche, and finally, as a weak and feeble master standing in control of a band of labourers who malingers and dodge their work, and get away with it, with impunity. We can only get away from this morass by good management, proper implementation of recommendations at the correct time, ensuring discipline and by a devotion to duty.