

TEA RESEARCH INSTITUTE OF SRI LANKA

COST MANAGEMENT GUIDELINES

The recommendations given in the TRI Advisory Circulars are the most cost effective means of managing tea under normal situations. However, in order to overcome cash flow difficulties which may be faced by tea producers from time to time, the following guidelines are suggested but only for a period not exceeding one year. However, decisions regarding adoption lie with Plantation Managers themselves. This is a revised version of the earlier guideline issued on 14th September 1999.

The profit margin of an estate is mainly dependent on:

- Yield
- COP
- NSA

Management strategies

When tea prices fluctuate, the main aim should be to attain the best COP/NSA balance. Market forces fix prices and therefore the available options to increase the NSA is limited. The first step towards increasing NSA is to ensure the best quality end-product. The other option is value addition.

NSA can be maintained or improved by increasing the main grades percentage. To achieve this, a minimum standard of 65% good leaf should be maintained throughout the year.

1 To maintain high level of leaf standard

1.1 Pluck selectively and more frequently during lean cropping periods.

1.2 During a shortage of pluckers, rely more on the TRI shear which gives better selectivity.

1.3 During the last year of the pruning cycle, adopt light plucking.

2 Fertilizer application

2.1 Nursery & immature tea

Do not curtail fertilizer

2.2 Mature Tea

2.2.1 Earmarked for Replanting

- a In the last cycle, omit P fertilizers.
- b In the year of uprooting, reduce ground fertilizer as much as possible and spray plain urea.

2.2.2 Plucking fields

- a Use TRI recommended regional specific fertilizer mixtures and/or plain urea depending on yield potential.

VP tea yielding > 2000 kg/ha/yr

Use VP/LC880, UM910 and UVA945 depending on agro climatic region, with a minimum of 240 kg N/ha/yr

Give balance requirement of N based on yield slabs as plain urea

High yielding Seeding tea

Use ST/LC365, UM400 and UVA435 depending on agro climatic region, with a minimum of 90 kg N/ha/yr.

Give balance requirement of N based on yield slabs as plain urea.

VP teas yielding < 2000 kg/ha/yr

Use VP/LC880, UM910 and UVA945 depending on agro climatic region, but not exceeding 220 kg N/ha/yr

Low yielding Seedling tea

Give only N as plain urea not exceeding 90 kg N/ha/yr

Spray the recommended cocktail mixture of ZnSO_4 ($1.5\text{-}2.5 \text{ kg ha}^{-1}$), Urea ($2\text{-}4 \text{ kg ha}^{-1}$) and MgSO_4 ($4\text{-}6 \text{ kg ha}^{-1}$) after each ground fertilizer application.

- b Use site specific approach to estimate the fertilizer requirements in consultation with TRI.
- c Apply dolomite only just before pruning by estimating the quantity based on soil pH determined in the latter part of the penultimate year of cycle.
- d In the year of pruning, continue fertilizer applications.

3 Weeding

3.1 Immature tea

Apply Glyphosate not more than two times
Try to achieve good weed control by thatching alone.
Control problem weeds by hand pulling.

3.2 Mature tea

Adopt integrated measures.

4 Pruning

Do not delay scheduled pruning.

Complete pruning in the shortest possible time.

Commence early resting in debilitated fields.

Use pruning machines wherever possible.

Use hydrated lime for bush sanitation in preference to manual mossing.

5 Tipping & plucking

Do not resort to plucking in.

Leave 4-6 mature leaves above the pruning cut.

Use the plucking basket instead of urea bags to collect the leaves during plucking. Ensure minimum damage to the harvested leaves.

6 Shade

Shade management should be continued.

7 Diseases

Blister Blight

In the case of nurseries, new clearings, and pruned and mature fields, continue the usual recommendations.

In plucking fields use, mist blowers.

Make use of the available sunshine hours to cut down spraying rounds i.e. if the cumulative total sunshine hours is 20 for the past 5 days you may skip one round of application of fungicides.

8 Pests

8.1 SHB

Abandon spraying fenthion in mature fields.
Do not relax sanitation measures in good VP fields at pruning.

8.2 Low-Country Live-Wood-Termite

Abandon sanitation measures in heavily infected fields and earmark them for replanting.

8.3 Tea Tortrix

Be vigilant for outbreaks of Tea Tortrix in known pockets.

Set up improvised bio-traps using female pupae.

Resort to pocket spraying when positive outbreaks are noticed.

8.4 Mites

Spray sulphur to continue yellow mite in nurseries, new clearings and recovery fields.

Hard pluck mature fields.

If the bushes become very unproductive due to red spider mite and scarlet mite resort to pocket spraying.

8.5 White Grubs

Use carbofuran 3G instead of carbosulfan CR at planting.

In areas where White Grubs is a recurrent problem, do not relax control measures.

9 General

Undertake all agricultural operations with due care to their economics.

10 Labour

When labour is not a limitation, employ workers on more productive work such as burial of prunings, desilting, forking etc.

Employ surplus labour on tasks of a capital nature.

11 Processing

11.1 Withering

Use well dried fuel wood instead of oil.

Use variable speed drives for trough fans.

Use split, dry firewood instead of diesel in air heaters for generating hot air for withering and drying.

To reduce the electricity consumption;

load and loosen the green leaf properly,

avoid fan starvation,

avoid delivery of air with high humidity for withering,

switch off fans when the correct wither is achieved

(if and when possible, install suitable fans and motors in place of oversized fans and motors).

11.2 Rolling

Ensure efficient roll-breaking and proper extraction of dhools.

11.3 Drying

Maintain driers and air heaters properly.

Ensure suitable hot air ducting for withering.

Use Temperature alarm indicator to avoid over firing .

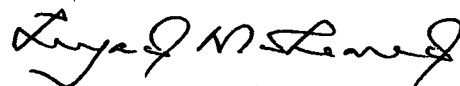
11.4 Packing

Use quality and standard materials and fittings in tea chests.

Use economical packing materials such as paper sacks whenever possible. (If and when possible, acquire bulking machines).

Programme all operations within the factory to minimize labour fatigue.

14 September, 2005



Dr M T Ziyad Mohamed
DIRECTOR