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RUBBER GROWERS NEED TO BE PROACTIVE TO CONQUER THE ADVERSE EFFECTS OF VOLATILE TRADING CONDITIONS

A Nugawela

INTRODUCTION

As for any other commodity, the rubber prices too fluctuate. From the year 2003 up to the latter part of 2008 the rubber prices were attractive to the growers and in early 2008 it was even more than Rs.400 per kg. However, towards the end of 2008 rubber traded at around Rs.80 and Rs.120 per kg with very little or no demand at farm gate level and at the Colombo auctions, respectively. This scenario of relatively low prices is not new for the rubber growers and probably they would have experienced such poor trading conditions many times in the past. As for any other crop, the rubber grower too does not have complete control over the price they get for their produce. Growers are not the price makers but they are price takers. This is especially true for the rubber growers in Sri Lanka since our contribution to the world production is a mere 1.2% of the total where our produce is traded at the international market either as raw rubber or as a finished product. In the light of this situation the message the grower should perceive is to produce at the lowest possible cost through high land productivity, worker productivity and low capital and management costs. With this approach the growers will be able to generate a profit margin even during poor trading conditions whilst maximizing profits when prices are attractive. A share of profits generated during favorable trading conditions could be used to build a reserve fund to be used during poor trading periods. To meet the challenges the rubber growers are faced with today, it is appropriate for them to do an analysis of their cost of production and cultivation cost to identify areas where reductions are possible with minimum or no adverse effects on the overall performance.

Cultivation costs

There are certain agronomic practices that can not be compromised to save on costs. Quality of planting material, planting techniques and immature upkeep, fertilizer use and fencing are some of them. Any short comings in these will have a huge negative impact on land productivity and in turn on profitability. Therefore these activities should be undertaken using the available funds effectively and efficiently.

The correct adoption of recommended agronomic practices during land preparation will result in significant savings in disease control, *e.g.* control of white root disease. Weed control is incurring heavy expenditure to the growers. Establishment of legume covers will definitely help grower to reduce this expenditure item significantly. Proper soil and moisture conservation methods together with

legume covers will help the grower to reduce fertilizer costs through reducing the quantity of fertilizer that needs to be applied. Further, the applied fertilizer will be used by the plants, more efficiently and effectively when good soil management practices are in place.

It is now known that with the establishment of a good ground cover using *Mucuna,* 50% of the recommended N fertilizer could be cut down. Further it is reported that 50% of K and 25% of N fertilizer could be reduced by using paddy straw as mulch. Methods of reducing fertilizer costs that are not supported by scientific evidence should not be adopted as they can have negative effects on the overall performance of the plantations and smallholdings.

Cost of production

The average cost of production of a kilogram of crepe rubber in the Plantation Sector during the year 2008 was around Rs.156.90 (Table 1).

Table 1. *The cost of production of a kilogram of crepe rubber in the Plantation sector*

Cost item	Cost/kg (Rs)	% of the total
1. Tapping	57.00	37.0
2. General charges	61.79	40.2
3. Mature area upkeep	13.79	9.0
4. Manufacture	21.32	13.8
Total	153.90	100

The major components of the cost of production are Tapping and General Charges. Hence strategies should be adopted to reduce them. High general charges indicate high fixed costs. In order to reduce this cost component whilst reducing the relevant cost items, the total production of the estate has to be increased.

Having a complete stand of vigorous trees is a prerequisite for the grower to harvest the potential yield from any recommended clone planted. The yield potential of currently recommended clones is around 2500-3000 kilograms of dry rubber per hectare per year. In addition to a complete stand of vigorous trees, tapping systems, quality of tapping, number of tapping days per annum and fertilizer use are some important determinants of productivity. As far as the current revenue areas are concerned though we are unable to do any improvements in the stand per hectare, by assessing the current level of adoption of the other factors identified above and taking appropriate action to rectify any draw backs could bring in some immediate improvements in productivity and the total production.

Fig. 1. High productivity and profitability through high standards in agricultural practices (use of rainguard technology)

During rains tapping panel of rubber trees get wet and tapping is not recommended on such trees. As a result, in a calendar year rubber growers loose more than 100 days of tapping. Use of rainguards are recommended to overcome the adverse impact of wet weather on tapping. With the correct use of rainguard technology land productivity could be increased by more than 20%. There is no doubt that this is a technology that could enhance the productivity significantly lowering the cost of production especially in the plantation sector where the fixed costs are relatively high.

Tapping cost is a significant component in the cost of production. To reduce this cost item the intake of the latex extractors has to be increased. Low frequency tapping with stimulation, *e.g.* 1/2S d/3 + Stimulation (5 rounds of stimulation per annum using 2.5% of ethepon) has been reported to increase the intakes/productivity of latex extractors by 50%. Even with an additional payment for over kilos this technology will reduce tapping cost at least by about 25%. Further by enhancing the economic life span of the tree, the adoption of low frequency tapping systems will help the growers to reduce the capital costs. The tapping system of 1/2S d/3 + stimulation will prolong the economic life span of a rubber tree from the current 30 to about 34 years.

Tapping very early in the day, tapping of all trees in a task, collection of latex only when the latex flow has completely seized, use of a quality and a sharpened tapping knife, alternating the points of commencement of tapping in a block are some other methods the latex extractors could adopt to enhance their in takes/productivity.

Excessive recovery tapping, requesting the latex extractors to tap his/her second block apart from the block to be tapped on that day would not enhance either the total production or the land productivity. Such attempts will only reduce the yield potential and economic life span of the trees by weakening them and growers will loose heavily in the long run.

Other management responsibilities

Developing policies and strategies to optimize return on investments, ensuring that such policies and strategies are fully adopted utilizing the resources effectively and efficiently are some important management responsibilities. Also knowing the highly volatile nature of the farm gate price of the commodity the management should develop contingency plans to be adopted during poor trading periods.

In order to fully implement company policies and strategies utilizing the available resources effectively and efficiently the management needs to align the staff and the workers to them. Regular monitoring of the implementation of company policies and strategies and performance based remuneration supports efficient and effective utilization of resources.

When prices are low, the concept of establishing a price stabilization fund by the government is often discussed and highlighted by the growers. Further, according to the growers the government needs to do this since profits generated by them during good trading periods are generally re-invested and hence savings are not available with them to be utilized when the profits are either low or negative. However, the management of financial resources to ensure that funds are available for capital and recurrent expenditure and also to establish a reserve fund to drive their contingency plans is of great importance when considering the highly volatile nature of the farm gate price of the commodity.

When components of the cost of production of rubber are analyzed it is apparent that the general charges are also a significant cost component (Table 1). The costs relevant to this item will need to be analyzed to identify areas of cost reduction. Through improvements in productivity, total production and curtailing general charges where possible, the management companies should endeavor to reduce this component to a reasonable level, *i.e.* may be 20% of the total cost of production.

The most popular methods adopted by the growers to control costs during poor trading periods are curtailing of replanting, suspension of fertilizer application to mature areas and not tapping rubber on Sundays and Poya days. These approaches could result in productivity losses both in the short and long term. Hence, such methods whilst not capable of solving the problem will also result in lowering of profitability when the prices recover. Tapping on Sundays and Poya days is something the latex extractors look forward to in order to earn an additional income. Thus, refraining from tapping on such days de-motivates the latex extractors since it has a negative impact on their income levels.

During extremely poor trading situations and when the plantations are running at a loss and are faced with a liquidity problem the soil scientists have gone to the extent of giving a special fertilizer recommendation aimed at reducing costs whilst minimizing the adverse effects of it to the plantations. Under such conditions the fertilizer cost could be reduced by a cut down of 25 and 100% of the soil and foliar based recommended quantity of fertilizer for B and C panel areas, respectively. However, for panel A tapped areas the entire quantity recommended through the soil and foliar analysis has to be applied. A further reduction in the chemical fertilizer, *i.e.* 75% of K and 30% of N is also possible with the use of paddy straw as recommended.

Commodity prices do fluctuate and so does the natural rubber prices. Hence the growers need to be prepared for this. High land and worker productivity together with minimum possible management costs are mandatory at all times in the plantations. Contingency plans should be made upfront to deal with poor trading conditions rather than rushing in to decisions later. It is said that money in a plantation is made in the field. Hence, field activities to enhance land and worker productivity together with minimal management costs are some key needs at all times for sustaining performance in the plantations/smallholdings.