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RAIN-GUARDS, THE RAPID WAY TO INCREASE RUBBER PRODUCTION

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The local consumption of rubber has been on an increase since 1992 and today nearly 52% of the total raw rubber manufactured in the country is consumed locally for the manufacture of end-products. The main end-products produced by BOI approved companies for export under world reputed trade names are:-

- Solid tyres
- Examination and surgical gloves
- Foot-wear
- Ballons and toys *etc.*

Although Sri Lanka is the 8th largest rubber producer in the world producing 1.8% of the world Natural Rubber requirement, yet Sri Lanka has the reputation as the largest producer of solid tyres for the world market, and even examination and surgical gloves production wise Sri Lanka is at present occupying the 4th place.

Unfortunately, the total rubber production in the country fell below 100,000 MT in 1998. This was mainly due to the very low prices paid in the world market for raw rubber as a result of the currency crisis in the South-East Asia since 1997. Countries affected mostly by the currency crisis were the three rubber producing giants in the world, namely Thailand, Indonesia and Malaysia. These three countries jointly produce over 60% of the total Natural Rubber requirement of the world and when their currencies were devalued by 40%, their rubber production increased unexpectedly. Mainly due to this reason and due to few other factors, the rubber prices in the world market fell by 50-55% within a period of less than a year. As a result, the price paid for all grades of rubber produced in Sri Lanka too, fell by a similar percentage and hence most of the rubber farmers in the country refrained from tapping their plantations. In some instances some smallholders have even uprooted and planted some other crops other than rubber. During this period a lot of rubber lands also have been used for housing and for industrial purposes as well.

In 1978 there were 202000 ha of rubber in the country. But by 1997, this extent came down to 150000 ha. Moreover, as a result of the above mentioned crisis, replanting and new planting activities were also neglected and, therefore, the actual extent of rubber in the country has come down to below 150000 ha. Further, the average productivity of rubber in Sri Lanka which reached a figure of approximately 1000 kg/ha/yr in 1997 has now fallen down to about 800 kg/ha/yr. This is quite comparable to a similar situation that arose in Malaysia, where the productivity which prevailed at 1200 kg/ha/yr has now fallen down to 750 kg/ha/yr, according to the recent records available from Malaysia.

The production of Natural Rubber in Sri Lanka in 1999 was around 97,000 Mt. In order to meet the growing demand from the local rubber manufacturers, while converting around 35,000 MT into premium grade crepe rubber for export at a high price to Europe, USA and Japan, the total rubber production should be increased within the next couple of months back to 105,000 -110,000 MT level. Although there are many new technologies available to increase rubber production even to much higher levels, most of them are long-term processes and would take about 10 years or so. The only rapid way to increase the production by about 20 -30% in a couple of months is the use of rain-guards.

By means of rain-guards, contaminated rain water dripping along the trunk of the rubber tree could be diverted from the freshly tapped wound, thus preventing bark rot which would otherwise upset the latex supply. A rain-guard is a pleated polythene skirt fixed to the rubber tree by means of a sealant made out of tar. This sealant is made according to a recipe developed and patented by the RRISL scientists and the formula is made available to any interested parties to do the mixing in their own plantations at a very low cost. From a kilo-gram of sealant, rain-guards can be fitted in 10 rubber trees and the total cost of fitting a skirt type rain-guard is around Rs.8/- per tree which can be recovered in 3-4 days of extra tapping at the prevailing rubber prices.

The scientists of the RRISL have now been able to further develop the sealant into a brushable liquid. By means of this brushable sealant, from one litre of the sealant, about 60 trees can be fitted with rain-guards. Hence, the cost of a rain-guard fitted by means of the new improved sealant is now reduced to about Rs.5/- per tree.

In order to simplify the method of fixing the pleated skirt to the rubber tree, now some of the estate managers are using a ready-made pleated polythene skirt made by sewing one side of the pleated skirt to keep the pleats in position and hence fixing the rain-guard on the tree is quicker and convenient. But after about 2 months such rainguards fixed by means of the brushable sealent should be examined for leaks and another layer of sealent is applied on the earlier sealent layer to seal off any cracks or openings.

From the trials carried out at RRISL and in many other plantations all over the country during the past couple of years, very attractive results have been achieved. In each plantation it has been able to tap the trees on over 325 days compared to 185-195 days normally tapped by small-holders without rain-guards.

In estates where rain-guards are not fitted, recovery tapping is done for over 70-75 days annually which is causing a damage to the trees. If recovery tapping is not performed carefully and systematically, the chance of tapping panel of the trees getting dry is very high. But by means of the rain-guards that risk also can be avoided while tapping 325-330 days annually. By this means, while protecting the tree completely from the possibility of undergoing tapping panel dryness, extra 25-30% yield can be obtained easily.

This is the only possible rapid way of increasing the rubber production in the country within the year to cater to the growing demand for raw rubber by the rubber products industry. It must also be brought to the notice of planters and small-holders that the rubber products manufacturers under the BOI are making requests from the Government to permit them to import raw rubber to run their industries without production interruptions. This is because they cannot purchase the grades of rubber they need for their industries at the correct time, because the rubber production is interrupted by rain, more often now than in the past decade. Last year and so far this year, the usual traditional dry months such as February, July and August have been the wettest months recording high rainfall. Hence, more than in the last decade, under the prevailing weather conditions, it is essential to have rain-guards now to obtain the maximum yield from rubber lands.

However, fitting rain-guards should be continued preferably before the commencement of the South-West monsoon in May, 2000. Hence, this is the correct time for smallholders to commence fitting rain-guards to their plantations for the year 2000. If they do so, up to 30% increase in the production can be guaranteed. From all the predictions of experts and economists, rubber prices will not fall below the present level in the near future. They all predict that crepe rubber will reach Rs.90/- per kg limit by August 2000. RSS prices will proportionately go up to between Rs.50/- and Rs.65/- per kg.

Hence, in order to make the best out of this situation, under the variable weather conditions, all the plantation companies and smallholders should go for rain-guards within the next two months. All the necessary technical support for the same will be available from the Telewala Road (Ratmalana) laboratories of the RRISL. If all the plantation companies and smallholders go for rain-guards in the year 2000, not only the rubber industry of the country can be helped, but also they can make a tremendous contribution to the economy of the country.