# Do not kill the goose: there is no such thing called “Golden Eggs”

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**Rubber price**

At last, the rubber price is improving; the event we have long waited for, but we do not know for how long it will last. The growers had to undergo a long frustrating period with rubber as far as the price is concerned, and therefore, it is not unreasonable or wrong to get the full benefit of the prevailing high price.

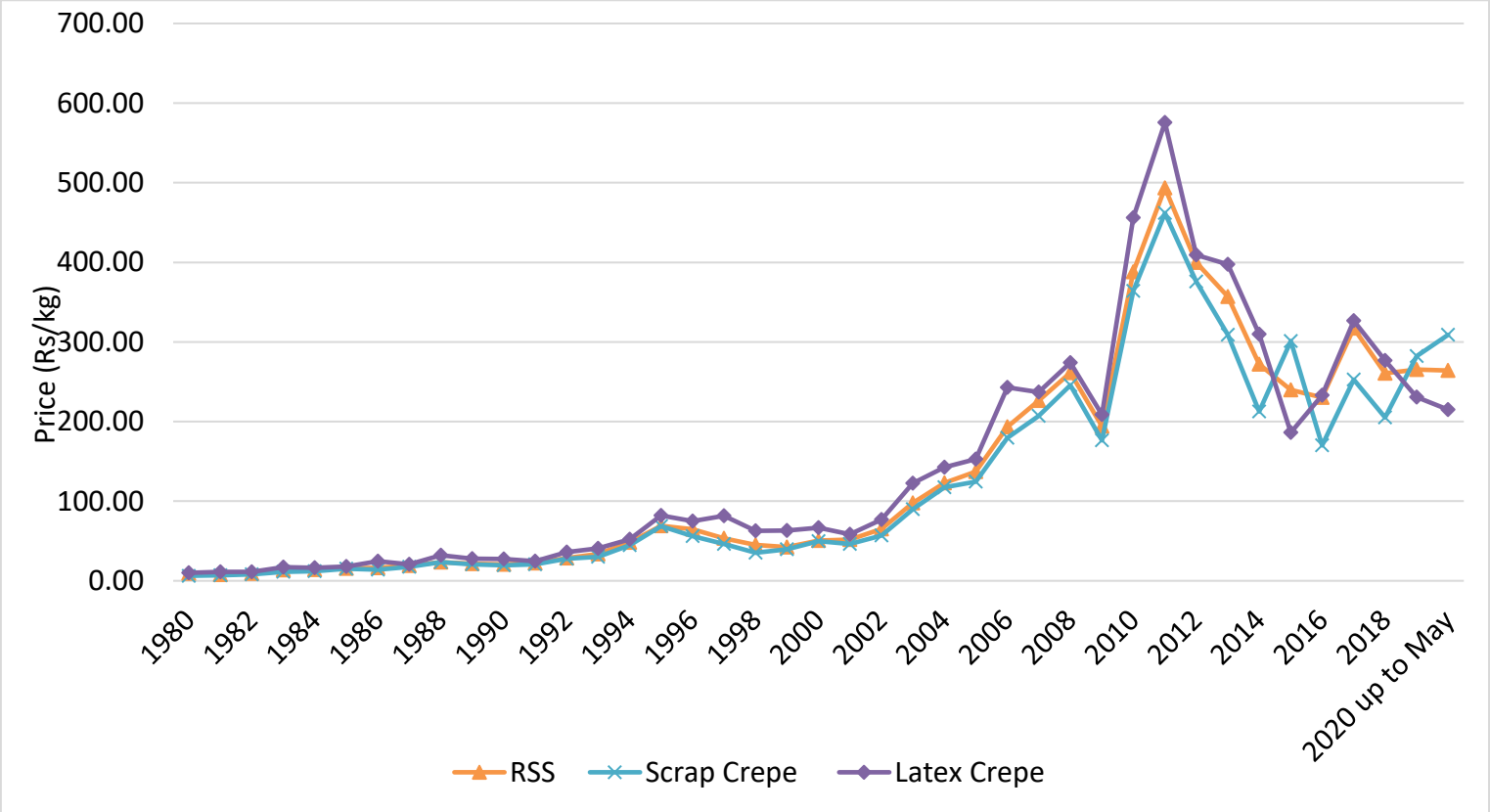
But, we should never forget that we have once experienced all this some time back, and we must learn lessons from past experience. By mid-2011, the price of a kilo of rubber reached unbelievably and unrealistically high Rs.625.00 and lasted for a short period. But, that short period was long enough to do permanent damage to many rubber fields in the country. Unfortunately, many farmers did not know of the consequences of excessive tapping. Just to get the advantage of the high price prevailed, farmers tried to harvest as much as latex from the trees, without paying any attention to the tapping quality or tapping frequency.

It is an open secret that some rubber fields in the Kaluthara district were tapped twice daily instead of once in two days! Many fields were tapped daily. During the short period, a high crop was recorded and good profits were made. Another thing that happened unintentionally and unknowingly was the increase in the cost of production. In other words, during that period, no one wanted to keep rubber trees untapped. Getting a rubber tapper to tap an abandoned rubber field was not easy and needed a lot of persuasions and it was costly. With compared to the selling price, a high wage for the tapper was possible and affordable. Accordingly, those who claimed that they could tap rubber trees were also employed in tapping without paying any attention to their experience or tapping quality. The price of any commodity fluctuates within a range. Similarly, the rubber price slowly declined and the crop too was reduced gradually as the trees were stressed.

Soon the farmers had to face the bitter reality. They ended up with a low price and poor crop. Though we all are aware that this is a man-made situation for the rubber industry, we soon forget the past and do the same mistake any number of times. The biggest damage happened with this high price, though prevailed only for a few months, even Rs.400.00 is considered as a low price, though we can never predict such a high price again. The fluctuation of rubber prices during the past four decades is shown in Figure 1. It is very clear from the Figure that the price during the period from 2008 to 2014, the fluctuation is out of the normal track. As

discussed this created more negative results than beneficial impacts on the sustainability of the rubber industry.

Figure 1. The fluctuation of rubber price of RSS, Latex crepe, and Scrap crepe from 1980 up to 2019 (Source: Agriculture Economics Unit of RRISL).




The main objective of writing this is to talk about the consequences faced after the previous price hike in 2011 and prevent the same thing from happening again.

**Harvesting rubber tree**

The economical life span of a rubber tree is about 30 years. The tree needs about five years to grow into the harvestable size of 50 cm girth measured at 120 cm from the ground and when a field has more than 70% of such trees the harvesting commences. However, the number of years that the trees can be taped or the economical life span actually depends on the tapping system or frequency of tapping. At each tapping, 1/20" (1.25 mm) thick bark shaving is

removed. Therefore, if the frequency is high, i.e. more tapping days per year, then the bark consumption will be high. The average bark consumption and the life span of each panel are given in Table 1 for daily tapping (d1), every other day tapping (d2), and once in every three days tapping (d3).

Table 1. Tapping frequency, the maximum number of tapping days per year, recommended average bark consumption, and the life span of each panel for daily tapping (d1), every other day tapping (d2), and once in every three days tapping (d3).

| Tapping Frequency | Maximum number of tapping days per year | Recommended bark consumption per year | Life span of each panel (years) |
|---|---|---|---|
| **d1-every day tapping** | 320 | 16” | 3 years |
| **d2- every other day tapping** | 160 | 8” | 6 years |
| **d3- once in every three days tapping** | 107 | 5.5” | 8 years and 8months |

Generally, only one half of the rubber tree is tapped at any given time, known as S/2, and under every other day tapping i.e. d2, one half of the tree or one panel can be tapped for 6 years for many clones. But there are some clones known as d3 clones as the recommended tapping system for such clones is d3. Clones like PB 260, a foreign clone recommended in group 1 in the current list of recommended clones is a d3 clone. Also, the clone RRISL 217 was recommended as d2 but after some years it was recommended to be tapped at d3 frequency as the dry tree percentage was high.

Since the present-day rubber cultivation has all high yielding clones such as RRIC 100, RRIC 102, RRIC 121, RRISL 203 and RRISL 2001, etc, frequency of tapping is the most important factor which determines the sustainability. The highest tapping frequency recommended for these clones is d2 or every other day tapping with no yield stimulants. However, if a d2 clone is tapped at d3 or d4, i.e. once in every 3 days or once in every 4 days, then a yield stimulant can be applied to get the same yield as d2 with no stimulation. But if the clone is a d3 clone such as PB 260 and RRISL 217, they should never be stimulated to tap at d3. If your field has a d2 clone and tapped at d2 or d3 frequency with ethrel stimulation, never exceed the ethrel concentration or the application frequency in order to increase the yield. More importantly, such fields that are converted to low-frequency systems should never be tapped at normal d2

frequency. By doing any of the malpractices mentioned, you will be able to see an increase in the crop but it is very temporary and the negative impact or the damage is permanent.
However, as it is clear from table 1, trees can be tapped longer with low-frequency tapping. In other words, the economical or commercial life span can be lengthened with low-frequency harvesting. As it is recommended by RRISL already, the clones that are recommended at d2 can be tapped at a lower frequency with an added advantage of lesser requirement of tappers by about 33% as each tapper can be given three blocks compared to two in d2 tapping. The most important factor to be considered in adopting low frequency is to adhere to RRISL recommendation and to make sure not to exceed the potential yield of the field. The potential yield of the field can be lower than the potential yield of the clone due to the poor growth condition of the trees.

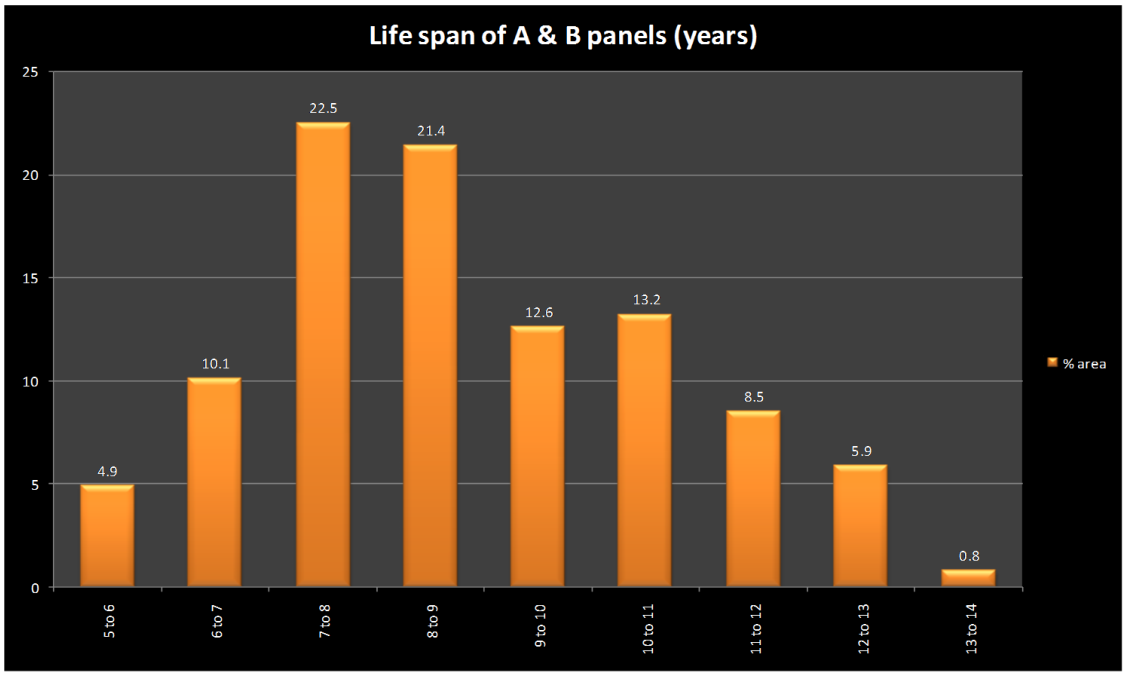
**Tapping Panel Dryness "Brown Bast"**

Tapping panel dryness is a physiological disorder, often a permanent state of bark becoming dry due to single or many factors, the main being over-exploitation. Unlike in 2011, rubber clearings today consist of a very high percentage of dry trees already, and the condition of rubber fields is far below the expected standards. Agro-management practices are not up to the standards or recommended levels in the majority of fields and this too has contributed to the current poor state of rubber fields. Accordingly, productivity also is far below the potential productivity of clones. As a result, most of the rubber fields are not profitable. The present-day rubber clearings cannot afford to have any more dry trees as we have already exceeded the maximum percentage of dry trees a clearing could have. About 5-10% of dry trees are acceptable even during the first panel due to the presence of week trees or runts and as a result of many factors. The dry tree percentage generally increases with the increase of the tapping years and that is also acceptable to some extent.

**Excessive tapping**

Rubber research institute of Sri Lanka conducted an island-wide survey on bark consumption covering over 5000 ha in the 2010-2011 period. The results gathered through the survey were alarming and shown in Figure 2. The deviation of the life span of A and B panels varied from 5-6 years and only about 6% of the clearings had 12-13 years as recommended and 0.8% showed 13-14 years.

Figure 2. The bark audit survey results on the bark consumption rate of Panels A and B.




Had this rate continued, there would not be rubber fields to harvest now. The Ministry of Plantation intervened to assist the Rubber Research Institute to harvest on base panels until the correct position is reached and a quarter upper cut namely CUT (Control Upward Tapping) was introduced until then.

Training programmes for the Rubber Development Officers, Rubber Extension Officers, and mainly the Field Staff and Managers of Estates under Regional Plantation Companies were done extensively during this period on Bark Auditing and tapping quality. Tapper training programmes and awareness programmes can be arranged on request in order to improve the productivity and the sustainability of the rubber industry.

As for Covid-19 for human beings, tapping panel dryness can be avoided in rubber plantations by proper adopting recommendations on harvesting. It is not a high flaunting technique but simply to get the maximum crop for a longer period without harming the tree.