# Review of Natural Rubber Market during the Year 2007 and the Outlook for the Short and Medium Terms

This report is organized into three sections. Section 1 examines the trends in NR prices from January to December 2007. Section 2 analyses the various factors which influenced the price during the period under review. Outlook on NR supply for the short and medium terms is presented in Section 3.

### 1. Trends in Prices during January to December 2007

The movements of weekly average prices of RSS in Singapore, Bangkok, Colombo and Kottayam (India) markets from January to December 2007 are shown in Figure 1. It is seen that RSS prices in Singapore and Bangkok markets moved more or less along the same path during the entire period under review. In both these markets, prices had taken an increasing trajectory from January to the May. However, from June onwards the prices in the two markets took a declining path before recovering from the last week of July.

The prices in Kottayam (India) and Colombo had generally kept a lower position to those in Singapore and Bangkok. This pattern was more pronounced during the period up to the mid-July. The Indian market, till the mid-July, was badly affected by excess stock caused by a surge in import. However, the situation changed, thanks to shortfall in the production and improvement in export by taking advantage of the lower domestic price.



#### Figure 1: Trends in RSS Prices during 2007(US\$/100 kg)

The trends in prices of TSR in Medan (Indonesia), Bangkok and Kuala Lumpur are depicted in Figure 2. In all the three markets, the prices had moved almost along the same path during the whole year.





A comparison between the prices of TSR, RSS and latex is given in Figure 3. Although the pattern of movement had been similar during the entire period under review, TSR and latex went on keeping a lower rate than RSS. This gap had been considerably wide from the mid-February to the end of May.

#### Figure 3: Prices of TSR, RSS and Latex during 2007 (RS\$/100 kg)



## 2. Factors Influenced NR Prices during 2007

Major factors governing NR prices are supply-demand conditions, currency fluctuation and oil price. The influence of these factors on NR prices during 2007 is separately discussed in the following three sub-sections:

### (i) Trends in Supply and Demand

Reports received from major producing countries revealed a decline or a slowdown in production during 2007 as compared to the previous year, with the notable exception of Vietnam. The production in Thailand declined by 2.6% during 2007 as against 6.8% increase in the previous year. In Indonesia, the production slowed down during 2007 to 3.6% from 4.2% growth attained in 2006. The production in Malaysia declined during 2007 by 4.0% as compared to 13.9% increase attained during 2006. Following a similar trend, the production in India declined by 5.2% during 2007 as against 10.5% increase in the previous year.

In sharp contrast to the trends in all other major producing countries, the production in Vietnam had accelerated from the rate of growth of 17.9% during 2006 to 18.3% during 2007. The yield, estimated in terms of production per hectare of mature area, in 2007 was 1767 kg/ha for India, followed by 1701 kg/ha for Thailand and 1640 kg/ha for Vietnam. In Sri Lanka also, the production had accelerated during 2007.

However, the acceleration in output growth in Vietnam and Sri Lanka could not offset the effect on global supply caused by the slowdown in other producing countries. Estimates on global production of NR reported by International Rubber Study Group (IRSG) and the LMC International are in agreement with the trends reported by member countries of the Association of Natural Rubber Producing Countries (ANRPC), which together accounts for 94.5% of the global output.

Table 1 summarises the production trends reported by the respective countries and the estimates on global production reported by the IRSG and the LMC International Ltd.

		Production		Growth	
		('000 tonnes)		(%)	
		2006	2007 <sup>p</sup>	2006	2007 <sup>p</sup>
Thailand		3137	3055	6.8	-2.6
Indonesia		2367	2453	4.2	3.6
Malaysia		1283	1232	13.9	-4.0
India		853	811	10.5	-5.2
Vietnam		553	654	17.9	18.3
Sri Lanka		109	118	4.8	8.3
World	Reported by IRSG	9680	9685	8.9	0.1
	Reported by LMC	9597	9730	8.7	1.4

Table 1: Production of NR during 2006 and 2007

P: Provisional

The ANRPC makes its assessment on global demand for NR, by using secondary data available from other agencies, because the ANRPC region accounts for only 44% of the global consumption of NR. Estimates from the LMC International Ltd. show that NR consumption had maintained the same growth of the previous year. But, as per estimates from the IRSG, world consumption of NR grew at a faster rate during 2007 than the previous year. Table 2 summarises the estimates from the LMC International Ltd. and the IRSG.

	Consumption of NR ('000 tonnes)		Growth (%)		
	2006	2007	2006	2007	
Reported by IRSG	9216	9715	1.5	5.4	
Reported by LMC	9375	9692	3.4	3.4	

Table 2: Global Consumption of NR during 2006 and 2007

Source:

(1) RUBBER, December, 2007, LMC International Ltd.

(2) Rubber Industry Report, January/February 2008, International Rubber Study Group.

As per IRSG's estimate, the demand had accelerated during 2007, but LMC's data shows that the growth had been the same during 2006 and 2007.

Comparing the trends in production and consumption during 2007, it is seen that the supply had slowed down, whereas the demand had either accelerated or at least maintained the previous year's growth. This lopsided demand-supply position made the fundamentals quite favourable for the prices to increase during 2007.

## (ii) Currency Movement

International trading of NR is generally done in the US Dollar. Hence, fluctuations in the currencies of NR exporting countries, against the Dollar, have a strong influence on NR prices. Appreciation of currencies in NR exporting countries against the Dollar helps NR prices to increase in terms of the Dollar.

In order to understand the influence of currency movement on NR prices during 2007, the trends were analysed in respect of all relevant currencies, except Vietnam Dong, which is pegged against the US Dollar. Figure 4 to Figure 8 show the currency movement in Thailand, Malaysia, Singapore, India and Indonesia during the period from January to December 2007. The trend lines are shown in dotted lines.



Figure 4: Thai Baht Equivalent to 1US\$

د. 4 + 6-Jan

20-Jan

3-Feb 17-Feb

3-Mar

17-Mar

31-Mar

14-Apr

28-Apr

12-May

26-May

9-Jun

23-Jun

4-Aug

18-Aug

1-Sep

15-Sep

29-Sep

13-Oct

27-Oct

10-Nov

24-Nov

8-Dec

22-Dec

ending 21-Jul

Fugure 7: Indian Rupee Equivalent to 1 US\$







For all currencies, with the notable exception of Indonesian Rupiah, the trends were downward sloping, implying that the US Dollar could be purchased with less local currency. To be more specific, currencies of Thailand, Malaysia, Singapore and India have gained strength against the US Dollar, whereas the Indonesian Rupiah depreciated. India, not being a major exporter of NR, appreciation of Indian Rupee could not influence international prices of NR. The stronger currencies of Thailand, Malaysia and Singapore should have exerted strong upward pressure on NR prices quoted in terms of the US Dollar. In Indonesia, the devaluation of Rupiah has helped exporters in that country to be more competitive to offer NR at lower Dollar. This is evidenced by the expansion of Indonesia's *Pie* in the global export of TSR during 2007. Exports from Indonesia should have exerted downward pressure on international prices of NR, especially TSR.

But, the Japanese Yen has a totally different relationship with NR prices. When the Yen devaluates, speculators show a tendency to invest their Yen in commodities. This helps upward movement of TOCOM rubber futures. This means that, devaluation of the Yen supports NR prices to increase and *vice versa*. The year 2007 had seen wide fluctuations

in Yen. Against the Dollar, Yen had appreciated during January to March, then depreciated during April to June and again appreciated from July to December. A certain extent of fluctuations in NR prices during 2007 should have been due to the Yen's movement.

#### (iii) Oil Price

Oil price can influence NR prices by way of substitution between natural and synthetic rubbers. But more than the substitution that actually takes place; it exerts strong psychological influence on NR prices. This has been more pronounced in the last few years when speculation started dominating the market. The trends in oil price were analysed on the basis of weekly average FOB spot price of crude oil at WTI (West Texas Intermediate), reported by the Energy Information Administration of the US government. Figure 9 shows the trends in crude oil price from January to December 2007.



As the graph shows, oil price registered a steep increase from less than 55 US Dollar per barrel in January to more than 97 Dollar in November 2007. The increase came to more than 76%. The positive influence of oil price on NR market had been quite evident during the entire period under review.

To conclude, the steep increase in NR prices during 2007 was contributed by highly favourable demand-supply fundamentals, appreciation of currencies in Thailand, Malaysia and Singapore and the unprecedented surge in oil price.

#### 3. Supply Outlook for Short and Medium Terms

There are both positive as well as negative factors for NR supply to increase in the short and medium terms. These two are separately discussed in the following sub-sections:

#### (i) Favourable Factors

The following two factors are likely to help the supply to increase in the short and medium terms:

- The large extent of area planted during 1996-1997 (when NR prices were high) should have attained yielding age by 2003. It is after the first 3-4 years of tapping that the yield reaches the maximum. This implies that the yield of this batch of trees would increase from 2008 onwards.
- The slow down or decline in production in Thailand, Indonesia, Malaysia and India during 2007 were mainly due to unfavourable weather conditions. In addition to this factor, the production in India was affected by widespread disease of the tappers. Production could revive under normal conditions.

#### (ii) Unfavourable Factors

There are at least ten factors which have the potential to exert downward pressure on supply of NR in the short and medium terms. There are summarised below:

- The rubber trees attaining tapping age in the next three years are those planted during 2001-2003. As this was a period in which rubber prices plummeted, planting tempo had been considerably low during the three years. This implies that the addition to tappable area would be only marginal in the next three years.
- Although a large extent of area have been newly planted in all producing countries after the revival of NR price in 2004, they will not attain the yielding girth until 2011.
- In the backdrop of attractive prices realised during the last four consecutive years, farmers have already exploited all possible opportunities for improving the yield from their existing yielding area, leaving limited scope for further improvement.
- The ten-year period from the late 1970s was a boom phase of planting in some of the major producing countries. Large extent of area planted during those years should have now become aged. This is expected to exert downward pressure on the yield for the next few years. Subsequently, when this large batch of trees is replanted, the yielding area would come down substantially.
- Under an Agricultural Revitalization programme, Indonesia has drawn up a scheme to replant 50,000 ha. per annum for the period up to 2010. This will bring down yielding area in the country by 150,000 ha.
- As per report from the Indonesian Rubber Research Institute, a climatic change characterised by longer dry season in the southern part of the equator and longer rainy season in the northern part of the equator is anticipated during 2008. This can affect tapping frequency.
- In Malaysia, mature area is anticipated to come down from 1.114 million hectare in 2006 to 1.018 million hectare in 2010, showing a whopping decline of 96,000 ha in just four years.

- In India, a large extent of the area newly attaining tapping age in the next few years is from non-traditional region where the yield is relatively lower.
- The problem of shortage of skilled tappers is worsening in Malaysia, Thailand and India.
- The present high price of crude palm oil (CPO) is likely to affect further investment in NR production sector.

The above assessment of various factors affecting NR supply, clearly brings out the constraints for NR supply to increase. Although there are factors in favour of increase in NR supply, there are well-defined limits for the supply to increase in the short and medium terms.

.....