THE NATURAL RUBBER INDUSTRY: SOME KEY ECONOMIC ISSUES

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This article attempts to highlight some of the key economic issues related to the Natural Rubber (NR) industry *viz.* price instability, falling Sri Lanka's market share, stagnation of growth and declining producer margins that need careful attention in policy formulation.

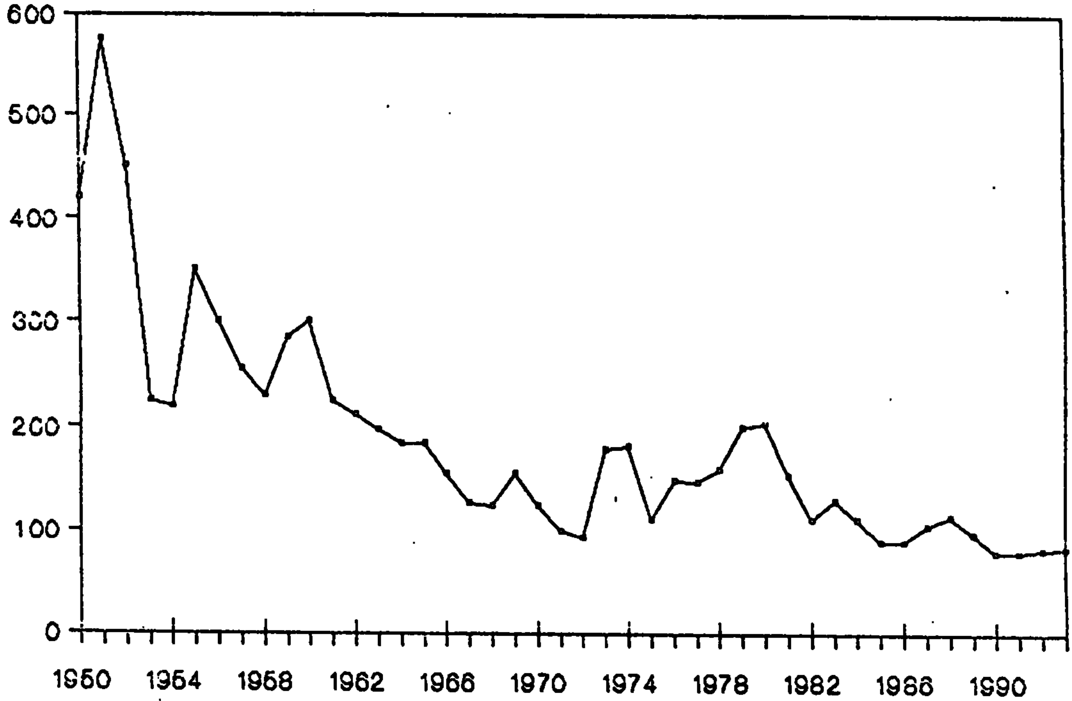
Price Instability

The price instability of primary commodities has occupied economists for a long time. The interest in the problem of commodity market instability is vital important due to the fact that many developing countries are dependent on the export earnings of one or few commodities only. Therefore, the problem of price and export instability is particularly crucial for the major suppliers due to their reliance on commodity exports for foreign exchange earnings.

Generally, two types of problems caused by price and export instability may be identified. Firstly at the macro level, export earnings from primary commodities often form the main source of foreign exchange funds for imports of investment goods required for overall development purposes. Secondly at the micro level, commodity instability affects employment and producers' earnings and investment in the commodity concerned. It has been argued that the micro level problems caused by export instability are in fact greater than those suggested by the direct impact, due to the associated input demand and multiplier effects on the rest of the economy.

The problem of price instability is particularly relevant to NR production which is concentrated in the South-East and South Asian countries of Malaysia, Indonesia, Thailand and Sri Lanka. For all these countries, NR has made a significant contribution to their Gross National Product (GNP) and through taxes and duties makes up a substantial portion of the government revenue. Furthermore, as NR production is particularly labour-intensive, the rubber industry is also an important provider of employment.

The dynamic growth of the Synthetic Rubber (SR) industry since 1955 led to increased competition between natural and synthetic rubber which complicated the NR market instability. This competition between the two types of rubbers was manifested in the decline of the long-run NR price (Fig. 01) and NR share of consumption over time. The psychological element of the diminishing share of NR in the market, has some what adversely affected the NR position. Yet, NR producers should take



--- Deflated by US GNP deflator
Source : World Bank Int. Econ. Dept.

Fig. 01 Rubber Prices (US cts/kg, 1985 constant) encouragement from factors such as; environmental pollution, rising cost of petroleum and poor returns on SR investment to capitalize on the market situation. The NR industry must therefore continue to produce sufficient rubber in the most modern forms backed with proper buffer stock policies to compete on equal terms with SR in a growing world rubber market.

Falling Sri Lanka's NR share of the world market

Sri Lanka was the fourth largest producer of NR for a long time, next to Malaysia, Indonesia and Thailand. In 1970, Sri lanka produced the maximum ever of 159,000 metric tonnes (MT). Production gradually declined thereafter and in 1992, produced little over 100,000 MT while India, China, Philippines and Nigeria with 324,000, 240,000, 168,000 and 141,000 MT respectively pushed Sri Lanka into the eighth place in the world production arena. During the past two decades, countries like Vietnam, virtual new comers to NR has expanded both hectarage and production along with most of the leading rubber producing countries whereas Sri Lanka has continue to loss its' hectarage, production and share in the world market during this period (Table 01).

An import–export economy, still largely dependent on primary products for a livelihood, Sri Lanka should be seriously concerned by the alarming drop in rubber production, from a healthy 150,000 MT in the 1970s to a decimal 105,000 MT in 1992.

Stagnation of growth

Since the 1970's the Sri Lankan rubber industry stagnated in terms of national output, unit yields, cultivated area and share of Gross Domestic Product (GDP) (Table 02). Such a decline (except unit yield), in itself, is no cause for concern; indeed, it is to be expected that as economic development proceeds, the role and significance of labour intensive primary product industries would diminish after a certain stage. However, it is difficult to attribute the decline of the Sri Lankan rubber industry to the process of economic growth. A review of the past period suggests that the content and implementation of a series of government policies contributed for more than general economic development to the decline of the industry (Jayasooriya and Barlow, 1985).

The average rubber yield range from 700 kg per hectare in smallholdings to over 900 kg per hectare in estates (Rubber Control Dept., 1991). Nevertheless, some well managed estates achieve yields of over 2470 kg per hectare (Fernando, 1967). The crux of the problem hinges on low incomes – a resultant factor of low productivity. The severity of the burden is felt strongly in the smallholding sector for various reasons (Samarappuli, 1986). Firstly, the inability of the smallholding sector to rapidly adopt technologies has meant that they lag behind the estate sector. Secondly, the smallholders lack of facilities for upgrading their processed rubber or their product which is of poor quality. Thirdly, observations of labour performance in

Table 01. *Rubber Hectarage and Production in Major Rubber Producing Countries, 1970 - 1990*

Country	Area under rubber ('000 hectares)			Production of NR ('000 MT)		
	1970	1980	1990	1970	1980	1990
Malaysia	1952	1997	2160	1275	1252	1292
Indonesia	1987	2327	3110	778	1020	1175
Thailand	735	1404	1750	287	504	1258
Sri Lanka	230	222	199	159	133	114
India	197	236	430	90	155	324
China	N.A	N.A	587	N.A	100	240
Philippines	N.A	N.A	N.A	20	65	168
Nigeria	N.A	200	N.A	65	47	152
Vietnam	100	100	115	28	50	60
Liberia	N.A	106	120	83	70	40

Source: Rubber Statistical Bulletin, various issues
N.A – Not Available

Table 02. *Some Basic Statistics of the Sri Lankan Rubber Industry (1970 - 1990)*

Year	Extent ('000 hectares)	Production ('000 MT)	Share of exports earnings (percentage)	Average yield (kg/ha)
1970	230.1	157	21.6	792
1975	227.6	149	16.5	774
1980	222.4	133	14.7	718
1985	205.4	138	7.1	890
1990	199.0	114	3.9	773

Source: Central Bank of Sri Lanka, Annual Report, various issues.

the smallholder sector is noted to be less productive than in the estates. Fourthly, the shortcomings of the marketing facilities for smallholders rubber are yet to be completely overcome.

About 95 percent of NR produced by smallholders in Sri Lanka reaches the market as Ribbed Smoked Sheets (RSS). The remainder reaches the market in the form of latex, cuplump and scrap. Sheets are graded by visual inspection and hence is subjective in nature. This leads to unhealthy trading practice of down grading. These features have resulted in the smallholding sector being inferior to the estate sector and unorganized smallholders are left behind in the overall development process of the NR industry.

Declining Producer Margins

Producer margins have exhibited a declining trend over the past two decades largely due to rising levels of cost of production and stagnation of rubber prices (Table 03). This has affected both producer and the nation in many ways. The plantation sector finds it difficult to maintain their cash flows. Unorganized smallholders earn hardly enough to support their families and many abandon their holdings for other alternatives, leading to urban centers looking for alternate employment. This has created localized labour shortages which adversely affect activities particularly on smallholdings. A case in point is the inability to complete harvesting in the smallholding sector due to shortage of tappers which has resulted in loss of valuable foreign exchange to the country.

CONCLUSION

A more comprehensive economic investigation of the four key economic issues discussed in this paper *viz.* price instability, falling Sri Lanka's market share, stagnation of growth and declining producer margins is therefore needed to quantify it's short-term and long-term effects on the national economy and to formulate policies accordingly.

Table 03. *Cost of Production, Price and Producer Margins of Rubber in Sri Lanka (1970–1990)*

Year	C.O.P (Rs/Kg)	Colombo Market Price (RSS–1) (Rs/Kg)	Producer Margin (Rs/Kg)
1970	1.52 (1.10)	2.01 (1.45)	0.49 (0.35)
1975	2.44 (1.23)	2.88 (1.45)	0.44 (0.22)
1980	8.20 (2.58)	10.72 (3.37)	2.52 (0.79)
1985	12.51 (2.23)	16.16 (2.87)	3.59 (0.64)
1990	21.39 (2.12)	22.94 (2.27)	1.55 (0.15)

Sources: Central Bank of Sri Lanka, Annual Report, various issues
Note: Figures in parenthesis indicate deflated values; 1952 = 100

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