"DO CURRENT INVESTMENT PATTERNS SATISFY FUTURE NEEDS ?"

By

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INTRODUCTION

The annual rubber production in Sri Lanka varied from 146,370 t in 1968 to 137,800 t in 1986. For the primary processing of the rubber production of Sri Lanka, there are 150 rubber factories [1] in the public sector and about 60 factories [2] in the private sector. Apart from these large scale processing units, there is an estimated number of 71,292 rolling units and 132,242 Smokehouses in the private sector for processing of smallholder latex.[3]

Investment in machinery and equipment in the primary processing of rubber has not been very significant during the last 30 years. The average age of the existing machinery in the plantations may be well over 30 years in most cases. According to the records of the Rubber Control Department the investment outlay during the past 10 years was about Rs. 59.1 Mn. [4]

The above investments cannot by any standard, be considered as significant. Therefore, there is certainly a crying need for further investment to upgrade the quality of machinery and equipment installed in the country.

No justification can be made for any investments that do not guarantee adequate returns on investment. To ensure adequate returns, the invesments should be related to the marketability of the final products. The major investments envisaged in Sri Lanka for the processing of raw rubber in the medium terms are indicated under the Fourth Tree Crop Project funded by the World Bank and also under the proposed Fifth Tree Crop Project, ear-marked for the development of smallholder sector.

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1. Census of Rubber Lands (Public Sector) 1984.
2. Rubber Control Department: Inclusive of 23 Latex Crepe and 6 TSR factories.
3. Rubber Master Plan Study.
4. Based on the 1/3 subsidy of Rs. 19.7 Mn. 1977 – 1986.

Review of investment patterns in NR producing countries

Before we make an assessment of the investment outlays envisaged under the above projects, it will be useful to have a quick look at the type of invesments made by other natural rubber (NR) producing countries for the production of various types and grades of rubber to meet the changing demand of the NR consuming industrialized countries from time to time.

Let us, in the first place, attempt to examine how a country like Malaysia, the largest producer of NR in the World, has been shifting investment in machinery and equipment for the production of various types and grades of rubber during the last 20 years. Table 1 below, illustrates the changes in the share of various types of rubber exported from Malaysia from 1968 to 1986.

Table 1. *Changes in the Export Shares (%) of various types of rubber Malaysia 1968–1986*

Type	1968	1971	1974	1977	1980	1983	1986
Sheet	61	56	51	48	46	38	27
SMR	7	17	28	35	37	45	54
Crepe	17	12	7	3	2	2	1
Latex	14	14	13	12	13	13	16
Others	1	1	1	2	2	2	2
Total	100	100	100	100	100	100	100
Total Exports ('000/MT)	1,114	1,390	1,570	1,654	1,525	1,563	1,516

Malaysia's sheet exports declined from 61% in 1968 to 27% in 1986, while the exports of Technically Specified Rubber (SMR) increased from 7% to 54% of the total volume of exports during the same period. It is also significant to note that the exports of all types of crepe rubber from Malaysia declined from 17% in 1968 to 1% of exports by 1986. We cannot forget the fact, that Malaysia's overall exports during the above period increased from 1,114,267 mt. to 1,516,135 mt reflecting an increase of 36%.

The important thing to note is that capital investment made for the processing of the incremental production in Malaysia during the last 20 years has been shifted from sheet rubber and crepe rubber to Technically Specified Rubbers. Obviously Malaysia had valid reasons to shift her capital investment from one type to another. Through such investment it appears that Malaysia has been able to improve its market share in certain industrialized countries (eg. EEC).

The position in Indonesia, the second largest NR producer in the World, also reflects a similar trend as shown in Table 2.

Table 2. *Changes in the export shares (%) of Various types of rubber – Indonesia 1968 – 1986*

Type	1968	1971	1974	1977	1980	1983	1986
Sheet	46	34	24	19	20	19	15
SIR	–	16	45	65	67	75	79
Crepe	9	12	24	11	8	2	1
Latex	5	5	5	5	5	4	5
Others	40	33	2	–	–	–	–
Total	100	100	100	100	100	100	100
Total Exports ('000/MT)	747	757	794	800	976	938	854

Indonesia's sheet exports declined from 46% in 1968 to 15% in 1986, while the exports of Technically Specified Rubber (SIR) improved from less than 1% (0.44%) to 79% in 1986. Exports of crepe (all grades) was cut down from 9% in 1968 to 1% in 1986. The pattern of investment in Indonesia for the production of various types of rubber had been very similar to that of Malaysia, during the last 20 year period. It is also noted that Indonesia was able to improve its market share in certain industrialized countries (eg. U. S. A.) by changing the pattern of production during the last 20 years.

The trend in Thailand appears to have been slightly different when compared to that of Malaysia's and Indonesia's – Vide Table 3.

Table 3. *Changes in the export shares (%) of various types of rubber – Thailand 1968–1986*

Type	1968	1971	1974	1977	1980	1983	1986
Sheet	85	83	84	75	76	81	82
TTR	–	1	2	15	19	14	14
Crepe	15	15	12	8	5	5	4
Latex	–	–	–	–	–	–	–
Others	–	1	2	2	–	–	–
Total	100	100	100	100	100	100	100
Total Exports ('000/MT)	252	[illegible]	365	404	457	552	500

Thailand retained the same share for sheet rubber in her total exports as reflected in her share of 85% in1968 and 82% in 1986. Export of Technically Specified Rubbers (TTR) was totally absent in 1968. Thailand commenced exports of TSR in 1970. Upto 1973 the total TSR exports were below 1%. Exports of TSR increased to reach 14% of the total exports in 1986. Exports of crepe rubber declined from 15% in 1968 to 4% in 1986. The trend in the exports of crepe rubber appears to have been similar in all three countries of Malaysia, Indonesia & Thailand.

Sri Lanka's situation appears to be somewhat unique, compared to other three countries – Vide Tabel 4

Table 4. Changes in the export shares (%) of various types of rubbers Sri Lanka 1968–1986

Type	1968	1971	1974	1977	1980	1983	1986
Sheet	58	55	56	57	50	42	52
SLR	–	–	–	1	7	4	13
Crepe	42	45	44	42	43	54	35
Latex	–	–	–	–	–	–	–
Others	–	–	–	–	–	–	–
Total	100	100	100	100	100	100	100
Total Exports ('000/MT)	142	136	133	132	119	125	110

In regard to exports of Sheet and TSR, Sri Lanka and Thailand seem to have followed the same trend. However, Sri Lanka's unique position, emerges when one looks at the position of exports of crepe rubber. Crepe exports from Sri Lanka, as a share of total exports changed very little from 42% in 1968 to 35 in 1986. Sri Lanka by adopting this unique strategy, did benefit, in terms of export unit values – Vide Table 5.

Table 5. *Unit Values (Us $ of Exports of rubber – 1976 – 1985*

Country	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Malaysia	0.76	0.83	0.96	1.24	1.39	1.08	0.82	1.01	0.98	0.78
Indonesia	0.65	0.73	0.83	1.09	1.10	1.02	0.75	0.90	0.94	0.67
Thailand	0.70	0.75	0.89	1.17	1.32	1.04	0.75	0.95	0.92	0.73
Sri Lanka	0.77	0.78	0.94	1.25	1.30	1.13	0.85	0.97	1.03	0.78

During the 10 year period 1976 – 1985, Sri Lanka earned the highest unit values for its rubber in US $ terms in the years 1976, 1979, 1981, 1982 & 1984. In respect of the other years, Sri Lanka was second only to Malaysia in terms of export unit values in dollar terms. This was made possible through higher unit values fetched by Latex Crepe & Sole Crepes in the overall export product – mix.

It will be interesting to examine why Indonesia and Malaysia followed a similar pattern of investment, while Thailand and Sri Lanka followed a slightly different path. A detailed examination of more compelling reasons in each of these countries, for shifting their investment from one product to another will be beyond the scope of this brief paper. However, in general, I might say that Malaysia and Indonesia attempted to cater to the changing demand from the industrialized countries consequent on the changes in the development of production technology in the manufacturing industries abroad and also to measure up to quality of synthetic substitutes.

In the case of Thailand, their close trade links with Japan and more particularly their links with the tyre industry appears to have determined the types and grades of rubber exported from Thailand. Sri Lanka's long association with the Republic of China under the bi-lateral arrangement determined the export pattern during the last 3 decades. A major change has come-about in Sri Lanka's trading pattern with the removal of the monopoly exercised by the Commissioner of Commodity Purchase in the export of premium grades of sheet rubber and by the liberalization of export trade in 1981.

Sri Lanka's rubber exports, by and large, are now open to the normal market forces, that determine prices. Therefore, future exports will have to be competitive in the World Market, in terms of prices and quality. Consequently, potential investment in the primary processing of rubber will have to take into account the future needs of the industrialized countries and also, the need for down-stream development of the industry within Sri Lanka, itself.

The World consumption of NR increased by over 50% during the last 20 years. The consumption of various types of dry rubbers and latex are indicated in the Table 6 below.

Table 6. *World consumption of NR ('000 MT)*

Year	Dry Rubber	Latex	World Total Consumption	Latex Rubber as a % of Total	Malaysia's % share
1968	2537	243	2780	8.7	65.4
1971	2815	277	3092	9.0	68.6
1974	3255	262	3517	7.4	80.8
1977	3427	288	3715	7.8	70.8
1980	3490	295	3785	7.8	67.8
1983	3680	315	3995	7.9	64.1
1986	3970	415	4385	9.5	60.0

It is clear from the above table that both the dry rubber consumption and latex rubber consumption grew at a similar rate. A larger share of the latex market, accounting for over 60% is held by Malaysia.

The needs of the industry in the industrialized countries will depend to a greater extent on the developments taking place in automobile industry, more particularly the tyre industry. In the non-tyre sector, the needs of food and pharmaceutical industries which are well regulated by the legislations of the respective countries, also occupy an important place. The technological innovations in these areas will make new demands from the suppliers for specialised types of rubber for specific uses.

The rubber industries in most European countries are highly automated and computer controlled. Rubber of stabilized viscosity that are processable in the computer controlled

automated systems are likely to be very much in demand. In the automobile industry it is said that there will be more heat generated "under the bonnet" and "under the chassis." Such technological innovations will require high heat-resistant rubbers. Various engineering components will require oil resistant rubber that can withstand liquid and gas permeability. The recent progress in these areas of research and development have made it possible for the manufacture of such specialized rubbers that are required by the industries abroad. The development of rubber-based industries in the producing countries themselves will require concentrated latex of high quality. The future investments in the rubber industry will have to take into consideration the above demands of the industrialized countries.

Change in buying policy of the USSR and the East European Block and their implications for Sri Lanka

The development of the Synthetic Rubber (SR) industry in the USSR and the other East European Countries and their buying policies for NR in the coming years may have some adverse implications on the Sri Lanka's rubber industry, in the long term. There is the possibility that the USSR and the other East European countries may switch over to SR by the year 2000 and beyond. This is the view presented at the 30th assembly of the International Rubber Study Group in Hamburg by Dr. Alexey Nikandrov, Director of the Moscow Research Institute of the SR industry.

The Soviet Union's SR industry is opening its doors to Western investments and is actively searching partners to help to develop the country's SR plants.

In an interview, with the European Rubber Journal, Dr. Nikandrove said that a recent change in policy by the present administration, had opened up the way for foreign investment. He further, said that the Soviets were looking to speed-up the modernization of the SR industry and that Western aid and know-how would quicken the process.

The Soviet Union is willing to supply technical help to developing countries wanting to start up SR plants. So far technical aid has been given to other Comecon members, notably helping for putting up two plants in Romania, and the "renting" of aid to Czechoslovakia. Between 1976 and 1985, Soviet SR production has shown a steady annual growth rate of about 3.4%.

The total output from all Soviet plants in 1986 was 2.23 M tons. Of the rubber produced, polyisoprene accounted for 1 M tons. A key domestic development, meanwhile concerns the recent introduction of a new grade of polyisoprene that is in great demand in tyre industry. Dr. Nikandrov said that he hoped that Western firms will show interest in this new grade. The emphasis in coming years will be on developments of speciality grades of SR as well as

thermoplastic rubbers. Thus the Soviet Union intends to further reduce it's imports of natural rubber while boosting the quality of all of its rubber products. The USSR also wants to reduce the quantity of raw material now in use.

The third era of synthetic rubber development began after 1964 when both IR and BR were developed, followed by over 200 different grades in the 1970's. Many of these recent SRs come close to mirroring NR, Dr Nikandrov claimed.

In the years to come Dr. Nikandrove said he was looking for a quicker phase of development than shown over the last fifty years, hence the Soviet Union is looking to the West for assistance. "Our main task", Dr. Nikandrov concluded, "is to make the Soviet industry the most advanced in the world." (European Rubber Journal – November 1987).

In my view, the policy statement of the USSR vis-a-vis their future NR purchases bears a lot of significance particularly in view of the future availability of NR supplies from Vietnam and Cambodia, from which countries the replanting & production statistics were made known recently. Following quotation from The European Rubber Journal of October 1987, gives the current position of the NR industry of Vietnam & Cambodia, which are relevant to the subject under discusssion.

"Vietnam with massive support from the Soviet Union expects to begin tapping this year (1987) or next, first of 50,000 hectares of rubber trees planted in 1980 – 1981 ..... Vietnam's new NR industry dates back to 1978 following North Vietnam's occupation of South Vietnam. At that time, the Soviet Union and Vietnam agreed to re-develop an NR industry that in its heyday covered 142,000 hectares ; in 1978 rubber trees covered only 70,000 hectares an annual production was about 24,000 MT. A similar agreement was reached with Cambodia, for planting rubber trees in the $10-13^0$ N latitude zone. In Vietnam, the plan calls for an additional 110,000 hectares to be planted during the 1986 to 1990 period and upto 300,000 hectares by the year 2000. In return for it's financial assistance in setting up the plantations, the Soviet Union is to receive natural rubber. The USSR already has reduced its planned purchases on the open market, in anticipation of the plantations coming on stream." Therefore, the rational for the new buying policies of the USSR becomes very clear when one considers the development of the SR industry on the one hand and the development of the NR industry in Vietnam & Cambodia on the other.

The USSR and the East European Block of countries purchased about 27% of total exports of Sri Lanka in 1986. They accounted for 35% of latex crepe, 17% of Sole Crepe, 23% of Sheet Rubber, 86% of Scrap Crepe and 13% of TSR exports in the same year – Vide Table 7.

Table 7 *NR imports (MT) from Sri Lanka by USSR & other East European countries 1980 – 1987*

Type	1980	1981	1982	1983	1984	1985	1986	1987 (Up to Oct.)
Latex Crepe	14307	9007	10014	25473	18766	11245	11135	5357
	(37)	(26)	(28)	(41)	(36)	(33)	(35)	(20)
Sole Crepe	382	336	476	455	187	788	517	468
	(8)	(8)	(12)	(16)	(7)	(18)	(17)	(18)
RSS	7804	14424	27305	22547	29231	18801	13316	11270
	(13)	(20)	(40)	(43)	(48)	(30)	(23)	(25)
TSR	868	4208	3322	2430	2222	1035	1920	5753
	(10)	(29)	(31)	(44)	(27)	(9)	(13)	(59)
Scrap Crepe	2008	3712	6110	1381	553	1812	3226	1458
	(22)	(44)	(76)	(55)	(43)	(61)	(86)	(69)
(1) Total USSR & East European Block	25369	31687	47227	52286	50959	33681	30114	24306
(2) Total NR Exports	120943	132523	131301	125230	126212	12448	110038	85847
(1) as a % of (2)	21	24	36	42	40	28	27	28

(Percentage of the total exports of respective types are given in brackets)

It is noted that the East European Block of Countries have scaled-down their purchases of Latex Crepe from Sri Lanka gradually during the last five year period as shown in Table 8.

Table 8 *Latex crepe imports (MT) from Sri Lanka by USSR & other East European Countries 1980 – 1987*

Country	1980	1981	1982	1983	1984	1985	1986	1987 (Up to Oct.)
USSR	10673	6243	6460	16981	9432	6388	7132	3080
Poland	3130	971	1043	2535	5508	1965	850	918
Romania	–	–	505	452	500	884	1800	622
Bulgaria	–	–	–	–	340	320	100	199
Yougoslavia	381	650	640	3763	1530	100	767	96
Czechoslovakia	123	483	356	1637	1306	348	466	392
GDR	–	759	–	5	150	275	–	–
Hungary	–	1	–	–	–	64	–	50
Total	14307	5007	10014	25473	18766	11245	11135	5357
Total Latex Crepe Exports	38253	34307	35851	62013	52463	33928	31626	26559
%	37	26	28	41	36	33	35	20

The purchases of latex crepe by the East European Block in 1986 represented 34% of the total latex crepe production of 32630 MT of the two state-owned organizations, of Sri Lanka State Plantation Corporation and the Janatha Estates, Development Board.

While the new policies of the USSR and the East European countries can affect Sri Lanka's exports in the long term, in general, it can have adverse effect on the two organizations in particular since a larger percentage share, nearly 80%, of their total production, is in the form of latex crepe.

Sri Lanka's current investment programmes

The fourth Tree Crop Project funded by the World Bank has ear-maked an investment of Rs. 118 Mn. for the Rubber Factory Development Programme of the two organizations. The Project Report goes on to say that the new investments will be directed towards "a major reduction in the number of rubber processing units and production would be concentrated on enlarged factories. Technical assistance would be provided for the rationalisation exercise. Latex concentrate facilities would be constructed at centrally located estates..... No Factory would be rehabilitated unless its annual production would be more than 300 MT of Sole Crepe or 450 MT of Pale Crepe or 600 MT of latex Concentrate ..... .Effluent disposal would be carefully controlled at each factory ....." (Page 27).

The proposed investment in Centrifuged Latex (CL) production may be considered, as a step in the right direction, judging by the new demand pattern for this raw material, in the World Market. It is the policy of the Government to promote the production of C. L. for purpose of the further downstream development of the rubber products industry in Sri Lanka and also for export. A subsidy of 1/3 the cost of machinery and equipment installed for the production of C . L. is made available, both for the private and the public sector organizations. An investment of Rs. 50 Mn is expected to be made initially installing these facilities, of which about Rs. 16.5 Mn will be subsidised by the Government. The objective would be to create a production capacity for another 5000 MT of C. L.

In regard to crepe rubber, the Country presently has a capacity for the production of about 43680 MT of Pale Crepe and 5,236 MT of Sole Crepe, both in the private and the public sector.[1]

An assessment of investment and future needs

It will be prudent to take into consideration the likely changes in the buying policies of the USSR and other East European countries in the coming years when making further investment in the latex crepe production. It will also be appropriate to mention here that while TSR "L" grades and Air Dried Sheets could substitute latex crepe in certain applications, some specialized products may still require latex crepe for such applications.

Therefore, the options available in future will broadly fall into the following categories :–

(i) Search for new markets for latex crepe ;

(ii) Diversification of a certain percentage of latex crepe into other substitute products like TSR "L" and Air Dried Sheets ;

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1. A Study of the Latex Crepe Rubber Industry in Sri Lanka by Dr. M. C. S. Perera

(iii) Divert a part of Latex into other new products like Centrifuged Latex and other speciality rubbers (e.g. DPNR ; CV Rubbers) ;

(iv) Install facilities to switchover to Sheet Rubber, depending on market situations and improve presentation of Sheet rubber ;

(v) Expand rubber products industry and increase local consumption of rubber.

(i) Search for new markets particularly for latex crepe

The Latex Crepe rubber is presently exported to the other countries in addition to the USSR & other Eastern European Countries. Certain countries like Mexico, Greece, Italy & Pakistan that used to import Latex Crepe from Sri Lanka has either scaled down or totally given up their imports of Latex Crepe from Sri Lanka. It will be useful to examine why such a situation arose in those countries in respect of Latex Crepe imports. An attempt should be made to revive those markets, if the conditions in those markets permit such revival. In the alternative, a dynamic effort should be directed, in the search for fresh markets, for their product, which may not be an easy task.

Similarly, Sri Lanka has lost certain markets for her Sole Crepe. The possibility of producing Thin Crepe and Industrial Sole Crepe for certain specialized markets on a long term basis should be explored.

(ii) Diversification of certain % of latex crepe into other substitute products

Certain amount of latex, presently used for production of Latex Crepe, should be diversified to produce TSR "L" grades and Air Dried Sheets. The installed capacity for the production of TSR "L" grade in the country is presently underutilized. It will be to the country's advantage to utilize fully this installed capacity. Part of the latex that is presently used for Crepe manufacture in Kegalle District could be diverted for this purpose, if the economics of such diversion justify it. The feasibility of having one factory for the production of TSR "L" & CV Grades in the Public Sector should be examined.

(iii) Diversion of a part of latex into new products

The MTIP for the public sector envisages the construction of CL latex factory in order to gain advantage of the emerging demand for gloves & other prophylactics, consequent on AIDS scare. The production of CL could herald the further development of the rubber product industry by attracting local and foreign investment. Prospects exist for such collaboration in the area of dipped products.

The demand for heat-resistant rubbers for special applicatons in the industrial sectors in Europe is increasing. The possibility of promoting new rubbers as DPNR in Western European Countries should be pursued. It is understood that the production of DPNR is possible without effecting radical changes in the plant & machinery of the existing crepe factories.

The new products, that call for the least capital outlay, would provide the impetus for the diversification process.

(iv) Increase sheet rubber production

Depending on the market situation from time to time, sheet rubber production itself could be increased, to gain advantage of the emerging market situations. The increased diversion of latex for the production of CL in countries like Malaysia could create an additional demand for better quality sheet rubber. It is prudent to retain and improve and expand the facilities available for sheet rubber manufacture to provide the much needed flexibility, to switch over from crepe to sheet.

Further investments could be made to improve the presentation of sheet rubber from the conventional forms, to technical specifications to facilitate palletization and containerisation.

(v) Increase of local consumption of rubber

Local Rubber industries consume only 10 – 11% of rubber produced in Sri Lanka, while 89 – 90% is exported in raw form. Although the growth in the local rubber industries during the last 10 years has registered a satisfactory level, it is still far below the average growth rates prevailing in the other NR producing countries, as seen in the Table 9.

Sri Lanka's growth rate in the consumption of rubber locally is less than 1% compared to an average of 4.34% of all NR producing countries. This only points to the scope available for further expansion of the rubber product sector in Sri Lanka.

The import of tyres & tubes and other rubber products into Sri Lanka in 1986, consumed Rs. 391 Mn in foreign exchange. Of this amount, Rs. 229 Mn, or 59% was spent for the import of tyres & tubes, alone, into Sri Lanka – Table 10. The NR equivalent of the amount of tyres & tubes imported is estimated to be around 3000 MT, which could easily be produced in another tyre factory. It will be interesting to note that 71% of the total quantity of rubber consumed in Sri Lanka in 1986 was consumed by 6 industries, while the balance 29% was consumed by other 54 industrialists. This indicate the scope available for further investment in the rubber products industries in Sri Lanka.

Table 9 NR consumption in producing countries ('000 tonnes)

Country	1980	1981	1982	1983	1984	1985	1986	Annual Average Change %
India	170.8	181.9	197.0	205.4	212.5	232.7	251.7	6.70
Indonesia	46.0	59.0	66.0	68.0	74.0	80.0	70.8	7.20
Malaysia	45.4	47.4	59.2	64.9	63.5	69.3	70.8	8.00
Singapore	3.2	1.8	1.6	1.3	2.1	1.8	1.6	–7.10
Sri Lanka	14.9	16.2	16.4	16.4	15.1	15.1	10.19[a]	0.22
Thailand	28.1	28.9	29.0	32.1	32.7	32.7	33.0	2.71
China	340.0	275.0	305.0	365.0	402.0	415.0	350.0[b]	3.68
Brazil	81.1	74.4	67.8	70.2	88.7	97.6	n.a.	3.39
Philippines	62.6	64.6	64.6	68.0	71.0	70.0	n.a.	1.91
Nigeria	22.0	25.0	20.0	22.9	22.0	20.0	n.a.	–1.51
Other Africa	12.0	11.0	9.0	8.5	9.0	9.0	n.a.	–4.15
„ Latin America	13.0	13.0	13.0	14.0	14.0	14.0	n.a.	1.28
Vietnam	12.5	11.6	12.6	12.2	12.0	14.0	n.a.	2.00
Burma	5.7	3.1	4.1	6.4	7.3	7.2	n.a.	4.38
Kampuchea	n.a.	1.0	1.5	2.0	1.5	2.0	n.a.	10.00
Total Consump.	867.3	813.9	866.8	957.3	1026.4	1080.4		– 4.34–
World Total of NR Prod.	3,850.0	3,705.0	3,750.0	40.25	4260.0	4340.0		2.12
% of Consumption by the Producing Countries	22.4	21.9	23.1	23.8	24.1	24.9		

Source : ANRPC, Quarterly NR Statistical Bulletin
TRSG – Rubber Statistical Bulletin
} various issues

Note : [a] as at September, 1986
[b] as at October. 1986

Table 10 *Value (Mn. Rs.) of imported rubber goods 1976 – 1986*

	1976	1980	1984	1985	1986
Rubber thread	0.1	1.2	5.2	5.0	10.4
Unhardened rubber	0.1	0.9	2.6	3.0	3.6
Hose	3.0	22.6	32.7	29.2	30.4
Belt	3.6	14.9	21.3	24.3	26.3
Tyre & Tube	20.0	101.9	214.1	240.0	2288
Hygenic & pharmaceutical products	1.5	11.8	12.2	8.6	16.5
Apparel & clothing accessories	0.3	0.8	1.4	1.8	1.9
Articles of unhardened rubber	4.5	28.9	55.0	59.9	65.5
Hardned rubber	–	2.7	0.6	0.5	0.6
Rubberised textiles	–	0.2	1.4	0.9	0.8
Footwear	0	0.3	2.0	2.6	7.2
Total	33.1	186.2	348.5	375.8	391.8

Source : Customs Returns