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Demand and Marketing of Gloves and Availability of Concentrated Latex

George Jacob

Background Information

Natural rubber producing countries all over the world are now vying with one another in the race for tapping the world market potential for gloves, significantly examination and surgical gloves. This change is brought about by a growing awareness of the need for precaution and protection against infectious diseases particularly Acquired Immune Deficiency Syndrome commonly known as AIDS, Hepatitis-B and Human Immuno Deficiency Virus. The dreadful, highly contagious, incurable and fatal disease called AIDS has generated a world boom for surgical and examination gloves. This sudden spurt in demand is often characterised as 'Scare Demand' because, it is fuelled by the scare of AIDS. Lately in developed countries a whole set of workers ranging from medical personnel, military staff, prison warders, immigration customs and police officials and even super market workers are habitually using gloves as a protective measure. Once the use of examination gloves in food industry is made compulsory in developed countries, the world demand for gloves will go up still further.

It is interesting to note that this sudden boom could not be suitably matched by additional supplies from the existing sources. The supply from the traditional sources being limited, tha need for creation of fresh capacity in the gloves industry became imperative.

Again on gloves. Now a days people talk much about examination gloves. The demand for this has risen so suddenly and it is very difficult to obtain the realistic production figures now. The dreaded disease AIDS has brought up the demand for this material. Rubber experts all over the world predict 1989 as the 'Year of the gloves'. US imports of examination gloves were 2.00 billion in 1987 and 10.00 billion in 1988. How ever the forecast of 1989 does not augur well. 1989 will see abundant supply resulting in likely low prices. As assessment of the future demand depends on so many factors. Though a lot of articles have already appeared on the subject, the one published here rightfully points out the various aspects of gloves manufacturing and marketing. The author Sri George Jacob is Dy. Director (Marketing) in the Rubber Board.

Against this background major natural rubber producing countries like Malaysia, Indonesia, Thailnad and China responded quickly to this boom and have gone ahead to set up a number of new units to manufacture gloves. So also, countries like South Korea, Taiwan, Singapore and Hongkong have also joined the fray for securing a share of the world market..

The World Scenario : Demand and Production

Recent spurt in the demand for rubber gloves has to a large extent, been generated by optimistic expectation of a world wide boom due to rising fear of AIDS infection particularly in countries in Africa, Latin America, USA, Europe and Asia. It is estimated that the global demand for examination gloves is 6 billion pairs in

1988 and it will be over 35 billiion pairs by 1990–91. In US alone, the total consumption of gloves in 1987 was 2 billion pairs and it is projected to reach over 15 billion pairs by 1990-91. Various East Asian countries like Malaysia, Indonesia, Taiwan and South Korea have put up a number of plants, to secure a major share of the global market for examination gloves. Contributions made by major gloves manufacturing countries will be evident from the details given below:-

World suppy of examination gloves

Country		Percentage of supply
Spain	....	20%
Taiwan	....	20%
Malaysia	....	20%
Other countries	....	40%

A peep into the world consumption of latex concentrate will also be a broad indication of the shift towards the production of gloves signi ficantly surgical and examination gloves in the recent years. These details are given below:

Malaysia, Indonesia, Thailand & South Korea are expanding their existing capacities for the production of gloves with the expectation of a rising world demand. Countries like USA and those in Western Europe which already have an established latex products industry as indicated by their larger consumption of concentrated latex have resorted to import of rubber gloves in order to supplement their domestic production. The countrywise export of gloves to major consumers like USA, West Germany & Italy given below truly reflect the consistent increase in the volume of imports of gloves resorted to by the developed countries.

Major Suppliers

Now, Malaysia is in the forefront in world production of medical examination gloves accounting for 60% of the world market, The country has enjoyed a comparative cost advantage (cost advantage is calculated to be as much as 30%) for the manufacture of gloves due to availability of good quality latex concentrates and other chemicals used for gloves manufacture. Besides, a trained labour force at reasonable wage level, attractive investment climate and favourable incentive schemes introduced by the Malaysian Govt. have given a real impetus to this industry. Production of gloves in Malaysia in 1987 was 396.7 million pairs which has increased to 412 million pairs in the first half of 1988.

It is reported that Malaysian Industrial Development Authority (MIDA), the government body, approved over 100 of its 118 glove making ventures since the beginning of 1987 giving the country a total approved capacity of 3781 million pairs per year. Apart from Malaysia, China also enhanced its capacity from the present 800 million pairs to 2250 million pairs following the addition of nearly 80 projects in the last two years, to the existing 200 units. Thailand and Indonesia are also in the race for enhancing their capacities by setting up large export oriented gloves plants with buy back arrangements from developed countries.

World Consumption of Latex Concentrate
1980-1987 (1000 tonnes)

Year	India	USA	USSR	China	Malaysia	South Korea	Rest of World	Total
1980	13.8	49.5	52.5	NA	NA	10.1	NA	300.0
1981	14.2	49.0	48.2	16.0	21.9	12.0	153.7	315.0
1982	17.1	56.0	49.9	19.0	23.7	15.0	169.3	350.0
1983	15.2	51.4	43.4	21.0	24.5	15,0	174.5	345.0
1984	17.5	54.4	28.8	24 0	26.6	17.0	191.7	360.0
1985	20.8	54·4	55.3	24.0	25.4	20.0	205.1	405.0
1986	23 5	63.8	52.5	29·0	27.0	22.0	207.2	425.0
1987	26.5	68 6	49.9	36.0	35 3	27.0	216.7	460.0
	(+12.8)	(+7·5)	(-5.C)	(+24.0)	(+30.7)	(+22.7)	(+4.5)	(+8.2)

(Figures in bracket indicate percentage increase over the previous year)
(Source: Malaysian Rubber Review, February, 1988).

Export of Rubber Gloves to U. S. A., West Germany & Italy in 1986

Sl. No.	Countries	Quantity imported (million pairs)			Total (1)+(2)
		U. S. A (1)	West Germany (2)	(A) Italy (3)	
		(a)	(b)	(c)	
1.	Malaysia	40.5 (0)	25.77 (27.31)	14.19 (0)	66.27
2.	Taiwan	152 96 (27.46)	....	1.14 (0)	152.96
3.	Thailand	9.67 (0)	....	....	9.67
4.	France	8.06 (0)	3.93 (0)	18.27 (54.08	11.99
5.	Belgium	26.50 (0)	12.91 (100)	....	39.51
6.	Japan	1.05 (0)	....	....	1.05
7.	South Korea	900.51 (100)	...	....	900.51
8.	Hong Kong	267.13 100)	....	....	267.13
9.	China	431.77 (100)	22.88 (100)	3.07 (0)	454.65
10.	Spain	....	3.19 (0)	11.82 (0)	3.19
11.	U. S. A	....	54.50 (95.44)	3.39 (100)	54.50
12.	Austria	....	84.87 (100)	2.50 (100)	84.87

(A) Export made in 1984

(a) Percentage of disposable gloves

(b) & (c) Percentage of surgical gloves

(Source: Malaysian Rubber Review, February, 1988)

The estimated production in 1987 is expected to leap to 1300 million pairs. The position is depicted below:

Production of Rubber Gloves in Malaysia

Year	Production (Million pairs)	Percentage change over the previous year	Percentage of total latex consumption for gloves
1982	138.6	138.6	
1983	197.8	197.8	
1984	202.1	202.1	
1985	255.5	255.5	52.3
1986	294.0	294.0	56.6
1987	396.7	396.7	64.7
1888*	138.8	412.0	68.8

*Production & percentage change for the first half of 1988.

(Source: Malaysian Rubber Review, February, 1988 MRRDB)

Demand Projections

Projecting future world demand for gloves is a very difficult task mainly due to the scarcity of comprehensive . reliable and upto date data on various aspects of this industry. Therefore, the only alternative is to estimate realistically the future demand based on available data.

It is known that the present boom for gloves is caused by the threat posed by the dreadful disease 'AIDS'. There are differing views among medical experts about the possibilities of evolving in the near future, effective treatment methods to cure this disease and to prevent the spread of it. So long as effective cure is not found for this disease, the demand for gloves would tend

to increase many fold. Available data on the spread of this disease would therefore give a broad indication of the future demand prospects of gloves. The data monitored by the World Health Organisation (WHO) reproduced below would be an indicator in this regard.

Incidence of AIDS reported to WHO, May 1988

Country	Cases reported in May 1988	Increase over one month earlier
U. S. A	61580	4005
Haiti	1374	462
France	3628	555
West Germany	1973	67
Italy	1865	246
U.K.	1429	Nil
Spain	1126	337
Rest of Europe	2472	369
Kenya	1497	533
Zambia	754	218
Zimbabave	119	N.A
Rest of Africa	9104	140
Rest of the World	9512	1420
World Total:	96433	8352

(Source: Malaysian Rubber Review, February. 1988)

The figures areself-explanatory. WHO contends that even the figures reproduced above do not give the complete picture, since it is only a staggering figure, covering only about a fraction of the actual position. They estimate that about 2,50,000 people are suffering from 'AIDS' all over the world and about 5 to 10 million people are carrying Aids' Virus.

Yet another aspect which will push up the demand for gloves is the increased insistence on the use of gloves by workers engaged in the food processing industry. Many advanced countries like USA, Japan and Canada have already laid down stringent standards in this regard. Many other countries are also following this lead by making suitable legislations to make the use of gloves by people handling food materials mandatory.

In developling countries like India, the demand for gloves is poised for big increase, due to various contributing factors such as increased awareness on the spread of 'AIDS' extension of medical facilities, increased use of gloves by workers in the food processing industries and similar other factors. It is however to be admitted that the impact of all these factors in pushing up the internal demand will be felt only slowly unlike the sudden boom seen in developed countries.

Indian Scene

India is a late comer in the glove industry. Eventhough there are 143 small scale units manufacturing gloves, none of them had the facility till recently for the manufacture of disposable latex gloves which can match the rigid specifications of developed countries such as USA and West Europe. However, recently few units started production of examination gloves using automatic dipping machines, imported from Taiwan/Malaysia. Sensing the exciting prospects of gloves in the world market a number of new applicants including those from big industrial houses have drawn up proposals forstartinggloves factories. However the progress in this regard has been poor and it appears that only a few of these proposals may materialise by 1989-90.

Similarly since 1988, several units have drawn up schemes to set up automatic plants in the Free Trade Zones (FTZ) or as 100% Export Orinated Units (EOUs) to secure a share of the world export market. Existing units also have shown interest to modernise their production facilities. Considering all these developments, the Chemicals & Ailied Products Export Promotion Council has made an estimate of production of examination gloves in the country in the coming years. They estimate a production of 110 million pieces in 1988-89 and 220 million pieces and 330 million Pieces by 1989-90 and 1990-91 respectively.

This appears to be a little ambitious. However, such an ambitious target would be essential to meet its export target for rubber products. New projects for examination/surgical gloves are also coming up as 100% export oriented units. Gloves industry sources predicted that it could increase the export of examination/surgical gloves to the value of 30 to 40 crores per annum within the next three to four years, on the condition that 70% of the proposed installed capacity will be commissioned. Proposed

projects with installed capabity at the three major Export Processing Zones (EPZ) are given below :

Projects for examination/surgical gloves at the Export Processing Zones, December 1988

Zone	No. of projects	Total installed capacity (Million pcs/year)	Installed capacity for surgical gloves alone
MEPZ	30	1865.52	378.60
CEPZ	22	1353.52	3.20
FEPZ	12	678.51	99.00
Total :	64	3897.55	480.80

Availability of latex concentrate

The basic raw material required for the production of surgical and examination gloves is 60% concentrated latex. Other raw materials are comparatively of lesser significance in terms of cost. A few of the prospective Indian manufacturers have voiced doubts about the availability of latex concentrate (60%) matching international specifications within the country. Therefore, a brief review of the present capacities of the latex centrifuging industry in the country is necessary to dispel such doubts.

First, let us look into the the capacity within the country to produce latex concentrate (60%). The rated capacity of the centrifuging machine commonly used in indla is 1000 M. tonnes drc latex per annum. Allowing a discount for non-availubility of field latex during lean production periods and factors such as power failure, labour unrest, loss of mandays on account of national and festival holidays, leave and weekly off etc. it is estimated that one machine can achieve a capacity of 750 M. tonnes.

In 1985-86, there were 28 latex centrifuging units in the country spread out in the public, private and co-operative sectors with 72 latex seperators possessing an installed capacity of 72000 M. tonnes and achievable capacity of 52500 M. tonnes. Against this, the actual production was only 25, 204 M. tonnes which works out to only 47% of the achievable capacity. Since then there has been steady increase in the capacity due to the commissioning of three new units and installation of additional/new machines by the existing units. As a result of this, the available achievable capacity at present is estimated around 61,500 M. tonnes.

The above analysis would unmistakably show that there is enough achievable capacity for the production of latex concentrate (60%) within the country. The Rubber Board is fully aware of the need for making enough latex concentrate available to meet the growing requirements of the latex based units which also includes the needs of the proposed new gloves units as well. In order to ward off any difficulty in the availability of centrifuged latex, the Board has drawn up a two pronged strategy. This strategy aims at improving the utilisation of the available capacity to the extent possible by opening up new channels for boosting up the supply of field latex from the small holding sector, which has not been fully tapped as yet. Simultaneously, a liberal licensing policy is also followed which also ensures entry of new units into the production of latex concentrates. Therefore, there is no room for any complacency or doubt about availability of latex concentrate within the country to meet the growing needs of the latex gloves units.

The second aspect about which many eye brows were raised is the quality of latex concentrate (60%) available within the country vis-a-vis the latex available in international market. The anxiety and concern expressed by the prospective gloves manufacturing units in India in this regard are quite understandable, considering the fact that the quality of latex is the essential pre-requisite for maintaining rigid international quality standards for gloves. Here it may be noted that it is mandatory on the part of the centrifuging units in the country to market their latex adopting BIS specifications. It is common knowledge that these specifications are drawn up in tune with international specifications in this regard. It is however true that some of the centrifuging units are yet to adopt these specifications. The Rubber Board is closely following this aspect and as a result there is a growing awareness among latex producers on this. Further, the Board in close liaison with Bureau of Indian Standards are making all out efforts to ensure that the latex concentrate available in the country meets the specifications laid down.

Prospects of Indian Units

After having gone into the global potential and prospects of gloves and the progress achieved so far in our country in setting up new units, it will be wothwhile to critically evaluate India's capabilities and potential in this field. The country possesses certain built in advantages which are listed below:

1) Sufficient availability of latex concentrate
2) Cheap labour
3) Availability of technical expertise and personnel within the country
4) Package of government incentives for exports
5) Export institutions with enough expertise and experience to undertake export operations
6) A vast domestic market

At the sametime the country has also some disadvantages as indicated below:

1) Non-availability of plant and machinery within the country
2) Inordinate delay and rigorous procedures for import of machinery/raw materials
3) Higher cost for inputs particularly concentrated latex vis-a-vis international prices
4) Unsuitability of the machinery for producing other products
5) Disadvantage of entering the world market last.

A critical evaluation of the plus and minus points detailed above would show that despite some of the disadvantages India could still emerge as one of the major suppliers of gloves in the world market. However, it is to be emphasised that the prospects in this field are totally different from one or two years back. The advantages enjoyed by the producers of gloves in the initial days of the world boom, due to supply falling far short of demand, may not be available to the units entering the field late. With the supply position improving considerably the importing countries like USA have on the one hand laid down more stringent and rigid specifications and standards and on the other reduced the price for the gloves. The price of a piece of examination glove which was in the range of Rs. 0.80 to 1.20 sometime back has now come down to Rs. 0.50 to 0.60. In brief the Indian units may have to prepare themselves to face a world market with very rigid quality standards, a highly competitive price structures and stringent supply schedules. The future prospects of the Indian units therefore depend on how far they are able to meet this challenge. □

INTERNATIONAL NATURAL RUBBER COUNCIL MEETING

The International Natural Rubber Agreement 1987 came into force provisionally on 29th December, 1988, according to the Press Communique issued by the International Natural Rubber Council after its 19th session held in Kuala Lumpur from 3rd to 7th April, 1989. As on 3rd April, 1989, 3 countries representing 88.977 per cent of exports and 20 countries representing 82.199 per cent of imports had ratified, accepted, provisionally accepted or aceeded to INRA 1987 and became members of the Council. In order to enable members who made provisional application to ratify the Agreement, the Council extended the time for deposit of instruments of ratification, acceptance and approval to 28th December, 1989. The Council revised the reference price of rubber upward by 8 per cent to 218.10 Malaysian/Singapore Cents per kg. Mr. Pong Sono of Thailand was appointed as Executive Director of the 'International Natural Rubber Organisation, which implements the Agreement.

The Council adopted the rules of procedure for the administration and operation of the buffer stock. It also decided to include RSS-1, RSS-2, RSS-3, TSR-10 and TSR-20 in the buffer stock operations.