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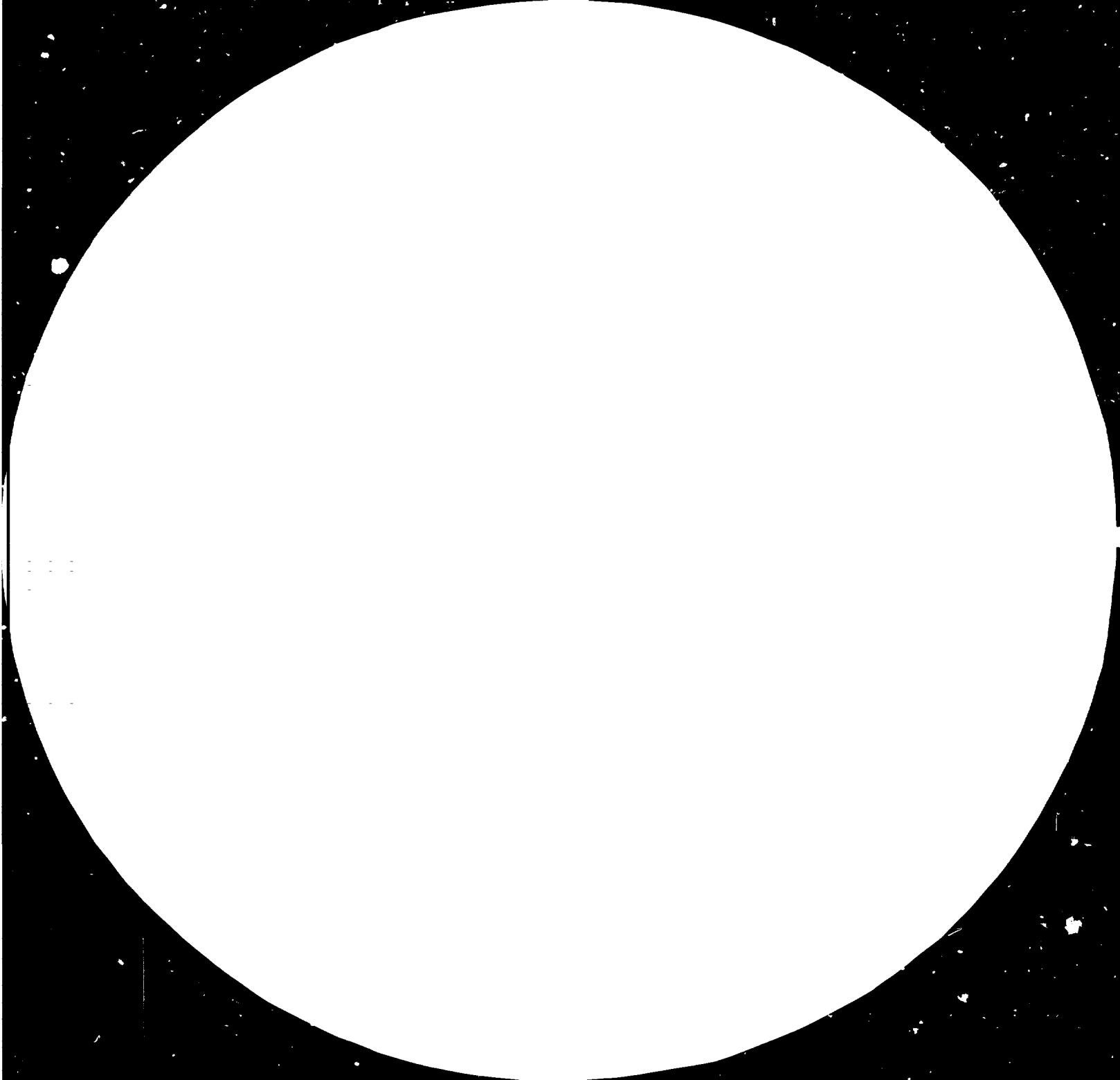
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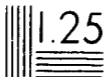
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September 1982

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INTEGRATED PROGRAMME OF TECHNICAL COOPERATION  
IN TRADE PROMOTION WITH THE GOVERNMENT OF INDIA

AR/IND/79/011

INDIA

Technical report: Production of Leather-based Sports Goods in India

Prepared for the Government of India  
by the United Nations Industrial Development Organization,  
executing agency for the United Nations Development Programme

Based on the work of E.C. Newman,  
expert in the manufacture of leather-based sports goods

United Nations Industrial Development Organization, Vienna

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This report has not been cleared with the United Nations Industrial Development Organization which does not, therefore, necessarily share the views presented.

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## I N T R O D U C T I O N

### A. Purpose of the mission

The purpose of the mission was defined by the terms of reference which were as under:-

1. Appraise the present state of production techniques related to selected leather-based sports goods (i.e. leather balls and protective gear).
2. Suggest appropriate measures to improve production techniques with a view to increasing the competitiveness on foreign markets.
3. Advise selected manufacturers on the production of samples.
4. Advise about laminations on leather with nylon/cotton cloth.
5. Advise about production technology and equipment needed for the production of leather balls (soccer, baseballs) and protective equipment used in various sports (ice-hockey, cricket, baseball, etc.)
6. Train Indian counterparts.
7. Carry out other duties as may be required by the secretary of the Sports Goods Export Promotions Council and the International Trade Centre (UNCTAD/Gatt.)

### B. Assignment information

The mission lasted from 20 June to 4 September 1982.

The mission aimed at improving the present level of sports goods exports from India and was part of the technical assistance supplied by UNIDO, the associated agency to ITC/UNCTAD-GATT, the implementing agency (project IND/30/64).

The object of this report is to assist Indian manufacturers of sports goods to make their products international competitive in quality and price. Several experts have already given advice on various sections of the industry. Herr Haecker spent three months from December 1981 advising on the tanning and finishing of leather. This report is the last of the series and concludes the Project which was carried out under the guidance of the Sports Goods Export Promotion Council, itself sponsored by the Ministry of Commerce of the Government of India. Most export manufacturers are members of this Council.

Visits were made to a major tannery, several manufacturers and exporters, The Sports Goods Export Promotion Council, the Central Leather Research Institute (Jalandhar), the Export Promotion Council for Finished Leather and Leather Manufactures, and the EEC Adviser on Leather (Kampur).

Discussion meetings were held with manufacturers representing small

shall/

industries\*\*, the Indian Cricket Control Board, and with players at the International Stadium preparing for the Asian Games.

A timetable of activities is set out in Annex 1.

Names of people and establishments visited and of firms represented at the meeting\*\*noted above are set out in Annexes 2,3,4,5,6 and 7.



## I. FINDINGS

### A. General view of the industry

The present output of sports goods is provided by the small-scale and cottage industry sector. 70% of the total production is exported, the major items being footballs, other leather balls and protective equipment for various games. The Indian industry has been able to enter only the cheap and medium-price markets.

Most manufacturers are sited in Northern India, 60% of them in Jalandhar; many came from Pakistan after partition. The next biggest concentrations of manufacturers are at Meerut (15%) and Delhi (5%). Bombay, Calcutta and other sites account for the remaining 20%.

Jalandhar alone provides about 75% of the total exports. Most of the companies there are very small; there are some 400-500 of them, but 75% of the total production there is in the hands of the leading 20 companies.

Leather goods make up by far the greatest contribution to the total value of sports goods exported. Footballs alone account for 60% of the total, cricket and hockey balls and protective gear for another 15%.

A further 15% of exports are accounted for by articles made of wood, such as hockey sticks, cricket bats, tennis and squash racquets. Problems involved in the manufacture of these articles are similar in some respects to those encountered in the leather-based sector. In this report reference is made to the wood-based industry and some comparisons made where it appears that a common policy for development might profitably be pursued).

### B. The markets: Some recent developments.

Reference to Annex 10 shows that there has been a slight shift in the export market, the United Kingdom being now the largest customer, Germany second and Australia third. These countries have different constructional requirements for the articles they buy but they all buy medium-quality goods only. High-quality goods they either make themselves or import from countries other than India. The great majority of goods are bought by sports houses such as Mitre, Adidas, Glazenger, Dunlop, et al.

Indigenous materials provide for most of the Indian industry (leather 75% and wood 15%) but the range of materials is very limited. New materials are used only when the customer so requests and there is now a growing demand for the use of synthetic materials in footballs. Footballs, the greatest export item, are still sewn together by hand. In such a labour-intensive process, India has an advantage, but in the Far East and in the United Kingdom firms such as AMF

/AMF

are developing the non-stitched laminated ball with the bladder covered in nylon. So far this has not proved a major threat to the Indian industry since the large sports houses prefer the stitched balls.

The market for cricket goods seems fairly secure but is limited by the fact that very few countries play cricket.

Hockey goods also have a secure market; a limited expansion is taking place, especially in the export of protective equipment.

The markets for soft leather goods such as gloves for goal-keepers, golf, riding and ski-ing and for protective equipment are expanding and offer the prospect of big business. These markets can be well served by the types of leather and other materials available in India, but advancement can only come through mechanisation - the largest companies can well afford this and subsequent sub-contracting would help the cottage industries.

### C. Materials and Processing.

By far the greatest problem facing the industry is that of the supply of leather of the right type, although there is plenty of leather available from goat-, cow-, sheep- and buffalo-hides. The most widely used leather in the sports goods industry is that of the cow, but since it is not the normal policy to slaughter this animal the hide is usually past its prime when it becomes available. It is small in size and often widely marked, the animal in most cases having been under-fed and poorly cared for. Thus it provides an unmarked butt area of some 14 square feet compared with the 20 square feet normally obtained from the European animal which has been well confined in safe conditions and slaughtered in its prime. The hide of the Indian animal is very uneven in thickness and has excessive stretch because of the age of the animal.

The choice of tannage seriously affects the stretch of the leather, and chrome vegetable, semi-chrome and alum tanages are all used. One of the most important attributes of leather is that it should be waterproof, particularly for use in footballs and cricket-balls since water absorption affects the flight of the ball. Manufacturers want to keep their own ideas about finishing to themselves so each tends to produce his own leather. As a result there is a wide range of leathers in use. Nearly all water-proofing is done after the article has been made, whereas it should be done during the leather-processing as is the case in all those countries producing the highest grades of leather.

#### Cricket balls.

In the matter of water-proofing, manufacturers have taken advice from their customers with the result that all three tanages are being used for cricket balls. The present suggested tannage is alum, or alum with zinc-chromium but many balls

/balls

are being given full chrome tannage to give better water-proofing.

To prevent undue stretching during the moulding process, only the butt portion of the animal can be used, and only clear, unmarked parts of the butt. This further limits the area available for cutting and results in a high level of wastage.

#### Football.

A large amount of leather is needed to make a football. It would take several hides to provide enough clear leather to make panels of a natural finish as used in the very best balls, so there is little hope at present of getting into this market. Instead, all Indian football-leather has a pigment finish which covers up the marks and helps to make the outside partially waterproof. The panels are pressed out on the reverse side, which gives better indication for stitching, and as a result the more uneven the under-surface the greater the incidence of rejection.

The international ball has only 18 panels, requiring a large area of high-quality leather. As this is not available most companies make the 32-panel ball which is more economical (although one or two firms are making Australian balls which require each panel to be stretched and rolled - a lengthy process). Most companies pigment their own leather by rather crude methods and tend to apply the pigment too thickly so that the surface cracks. The 32-panel ball has panels of different sizes; the smaller ones, being usually of a different colour, are often cut from another part of the hide, of a different thickness. This inequality causes the ball to go out of shape. To prevent this, the better balls have a linen backing. Finally, to give extra water-proofing, a polyurethane spray is used as an outer coating. This lasts for a very short time and the need to waterproof during the tanning process is again made evident.

#### Finishing processes.

Finishing standards are very haphazard; very few manufacturers have any real knowledge of what is involved. There is a clear need for finishing to be put into the hands of specialists at tanneries which can supply the whole of the industry. The tanneries have up-to-date equipment for staking and stretching which enables them to achieve more even results. If they were to supply the whole of the trade they would give a boost to the cottage industry sector where the workers spend the same amount of time making articles out of poor material as they would working with better materials, if they could afford them.

It is on record that the suggestions in the preceding paragraph have been made in the past. The argument is put forward that the tanneries do not like supplying small orders and that they would want export-equivalent prices for all their leather, thus increasing final production costs. The Government could

/could

overcome this objection by placing bulk orders at different times of the year and subsequently selling the accumulated stock in small quantities

Protective equipment.

The leather for cricket leg-guards, gloves and protective equipment normally comes from the sheep or goat, both of which are slaughtered animals. As a consequence, this leather is usually in better condition than that obtained from the cow. Most of the larger tanneries can make the leather soft enough for this range of items, which can be sold in the higher-price markets.

There is an adequate supply of materials but very little is being done to control the cost of cutting. In many cases there is more than 20% excess wastage of leather because the patterns have too large an allowance which is trimmed off afterwards. Patterns used to cut material are not always the same shape as those of the originals and the cutting out is done one item at a time. Thus the quality of fit depends on the pattern rather than on the skill of the worker

Saddlery.

Harness and Saddlery were under the control of the Leather Export Promotion Council until saddlery was transferred to the control of the Sports Goods Export Promotion Council. Saddlery therefore figures in the list of items in Annex 9.

Much progress with fittings and finish has been made over the past few years. Saddlery for the top-price markets cannot be made as only cowhide and pigskin are used for the best quality products. Since, for religious reasons, neither of these is available in India in good condition, ox- and buffalo-hide are used instead.

The industry has organised itself reasonably well and can make a wide range of saddlery and harness items. However, the trees on which the saddles are made are very poor so many people are importing fibre-glass trees. Most fittings are of an acceptable standard.

As saddlery is a craft industry the methods used in India are much the same as those used elsewhere except in the method of cutting and stitching. There is lacking, however, an appreciation of the importance of fit.

There is no trained person available who can give advice of a technical nature throughout the industry. In particular advice is needed about lorry and such safety points as the type of stitching required on girth straps. To provide for this lack, an experienced man would need to be trained overseas.

A few manufacturers still find it difficult to buy the right kind of

/of

leather and fittings. They would benefit from the suggestion made above concerning accumulated stocks.

#### Polyvinylchloride (PVC)

For reasons already noted in this report there is a growing demand in Europe for footballs made partly or entirely of synthetic material, hand-stitched. Nearly all the top-quality 18-panel balls made in the United Kingdom are laminated and retail in that country between £20 and £30. The best Indian leather balls retail there at between £5 and £11.

Many Indian manufacturers are now importing synthetic materials (two manufacturers making their own, one rubber-based, the other PVC-based). The imported materials at present come from a limited number of companies such as Phipps Fayre, Porvair and Clarino. Some manufacturers say that these materials do not satisfy their leading customers. It is therefore necessary to look for more suppliers of synthetic materials in countries noted for these products, such as Japan, West Germany (companies such as Skai Dur and Karl Friendenburg) and United Kingdom (companies such as Story Bros of Lancaster and Wallington Western, a subsidiary of Marley Tile Company). Their materials can be found at international exhibitions.

#### Nylon woven materials.

Whereas most of the protective pads and light-weight gloves used throughout the world use a nylon-based material which is both light and waterproof, in India such material is not available. If it could be made in India, a wider choice of materials than at present could be provided.

#### New products and mechanisation.

It has already been noted that, apart from cricket goods, there are few relatively safe markets. If these markets are not satisfied, the sports goods industry could be devastated. Other reports (from the Sports Goods Export Promotion Council, EEC, STC and UN) have drawn attention to this in the past and recommended diversification, listing specific items. Some companies have taken note of these reports (as witness the production of gloves) but as yet manufacturing is in a limited capacity.

Mechanisation is the key to further progress in diversification and some of the obstacles in the way of this are:-

1. Mechanisation involves heavy capital outlay with no guarantee of a return.

/return.

2. The manufacturer has little chance of seeing any new equipment in operation in his own environment and unless he can make visits abroad he must rely on leaflets and customers' recommendations for guidance when he considers buying.

3. Equipment, once installed, must be in constant use and properly maintained to recover its cost. This in turn means that management has to be efficient, manufacturers have to exercise control over production, staff must be properly trained and a move must be made away from piece-work payment to payment by time worked. All this is alien to the present system where factory owners often exercise no control over the work-process. Instead, they usually hand over authority to a manager who acts much more like a sub-contractor. He receives orders to produce a number of items and is then left to his own devices; his decisions about jobs and payments to individual workers are often quite arbitrary and not challenged by the owners of the factory.

#### Related problems in the wood-based industry.

Manufacturers of wood-based sports goods items experience the same kinds of problems as those already referred to in this report, in particular those of supply of good material, wastage of material, and mechanisation.

1. Hockey sticks and cricket bats. Manufacturers need access to adequate supplies of properly seasoned wood. In manufacture, the jointing of the handle is one of the poorest processes. Although the problem could be remedied by the greater use of jigs, most people fail to use these since the wood needs pre-cutting to an exact size beforehand. It is also maintained that the quality of the product depends upon the craftsman's judgment of the density of the wood and the shaping of each individual piece. This argument is not very convincing, since the products are not of the best quality.

Far too much time is spent, particularly in making hockey sticks, in the laborious hand-cutting away of surplus wood, instead of pre-shaping the wood with simple machine cutters and sanding equipment. Much of the finishing could be better done with spray equipment.

2. Tennis and squash racquets. The very large world market is dominated by Far Eastern manufacturers. One or two Indian manufacturers have very good relationships with their overseas buyers who are willing to increase their purchases of racquets, but they need large quantities very quickly. Very few manufacturers have the mechanised equipment to meet this requirement. Laminating, glueing, clamping, hole-drilling and finishing machines are needed.

D. Summary of findings.

1. The industry's greatest problem is the supply of leather of the right type.
2. Pigmentation and finishing are often crudely done and standards are haphazard.
3. There is an adequate supply of leather suitable for protective equipment.
4. There is an excessive level of waste in the manufacture of protective equipment.
5. There is an increasing demand for the use of synthetic materials.
6. There is an urgent need for diversification of products; this can be brought about only by mechanisation.
7. There is a need for a specially-trained technical adviser in the saddlery sector of the industry.

## II. RECOMMENDATIONS

### A. Administration and Organisation.

1. The industry's total leather requirements should be supplied by a small number (two or three) major tanneries which should provide leather to the standards laid down by Herr Haecker in his report. There should be continuous monitoring to maintain these standards, by an independent body such as C.L.R.I.
2. The Government should place with the tanneries, at different times of the year, bulk orders for leather. This leather should then be made available for purchase in small quantities by manufacturers. The price of the leather should be held down by a small subsidy for a time (say, one year) until the manufacturers, through being able to market better products, can obtain higher prices.
3. Since this present Project began, the Government of India has agreed to the setting up of two further Projects. One of these, to be established in Meerut, is to cover both toys and sports goods with UNDP and small-scale industries. The other, in Jalandhar, for sports goods, is a state trading project (STC), and it is envisaged that this <sup>will</sup> have as its object the setting up of a centre with a bonded warehouse to supply materials. This could supply the whole of the trade and also provide for the Meerut project. There should be co-operation between the projects to avoid duplication. Both projects have listed a certain amount of tanning and finishing equipment. This equipment requirement should be discarded and tanning and finishing should be in the hands of the experts in the major tanneries. Instead, each centre (Meerut and Jalandhar) should ideally be provided with the equipment listed in Annex 7. If this is not possible then the listed equipment should be shared between the two centres and be available for use by both. This will enable manufacturers to see the equipment in action. Although much production is labour-intensive, considerable improvements can be made by the introduction of a few simple machines and jigs. Local engineers have no experience in sports goods production so it is essential that an engineer should be present when the experts assigned to the Projects are at work, so that advice may be given on simple jigs and on the installation of the necessary modern equipment.
4. Proper training and testing centres should be set up with such equipment as that listed in Annex 7. Part of this requirement would be met by adopting the recommendations above concerning the equipment for the Meerut and Jalandhar centres.



/centres.

(It is further recommended that for the benefit of the manufacturers of tennis and squash racquets, there should be a similar centre or centres where mechanised laminating, glueing, clamping, hole-drilling and finishing equipment should be available).

5. To improve machine-utilisation and to provide for more realistic costing of manufacture, there should be established as quickly as possible proper courses on work study, activity sampling, costing and quality control. Such courses can be provided, on a part-time basis, by the Sports Goods Export Promotion Council.
6. Provision should be made to overcome the total lack of technically trained managers in the industry, where at present the only means of communicating expertise is from a manufacturer to his son. Young people should be recruited into the industry and have polytechnic or university training. Then they should be sent overseas, possibly on fellowships, for final training. In this way, manufacturing companies can grow in size and meet the technical requirements involved in expansion.
7. An experienced man from the saddlery sector of the industry should be selected and sent overseas for training so that he can become a technical adviser in saddlery. Once fully trained he should be attached at Kanpur to an organisation such as the Sports Goods Export Promotion Council or the Leather Export Promotion Council. He should be available for advice when needed and should run short courses.
8. The present division, whereby saddlery is controlled by the Sports Goods Export Promotion Council while harness is the responsibility of the Leather Export Promotion Council, is artificial and should be ended. Harness should be transferred to the control of the Sports Goods Export Promotion Council.
9. Many small manufacturers do not know where to buy some materials. A full list of materials used in the industry, together with names and addresses of suppliers, both home and overseas, should be drawn up by the Sports Goods Export Promotion Council and be readily accessible to manufacturers.
10. Some leading manufacturers have visited factories overseas and have knowledge of techniques used elsewhere in the industry but many small manufacturers have no idea of these techniques. This lack of knowledge should be made good, and probably the cheapest and most convenient method of doing so is through the medium of video tape recording. The following recommendations are therefore made:
  - a. Overseas suppliers of machinery should be asked to provide VT or films of their machinery.
  - b. Some manufacturers be encouraged to co-operate to show manufacturing processes on video-tape.
  - c. UN should convert any present film relevant to the sports goods industry into VT recordingsA central library of such video recordings and film should be established and be available to the industry

/industry.

11. Steps should be taken to enable small manufacturers to import new materials more easily; whatever may be the present position in theory, in practice such manufacturers find it difficult. New sources of supply should be investigated, particularly in Japan, West Germany and United Kingdom, as already indicated in this report.
12. Other countries should be encouraged to send their own finished leather to India for making up into sports goods for re-export.
13. The present quality-grading system of sports goods should be changed. Five or six grades are recognised, and this is one of the factors which lead to the production of low-quality goods. Most of the lower grades should be abandoned altogether since the differences between these grades of material are often minute. The slight increase in cost in producing higher-grade goods can easily be absorbed by better management and improved costing methods.
14. In the case of the bigger manufacturers, designs for their sports goods come from their customers, the large distributing houses. Smaller manufacturers do not have access to these houses. There should be set up a committee of Indian sports players of international standing and repute to give advice about the use of sports equipment and the modifications needed to make present products better fitted to their purpose. This committee should be accorded such public esteem and prestige that appointment to it should be an honour, and membership should be regarded as an opportunity not for profit or sponsorship but for service in the cause of sport and of the country.

#### B. Processes and Techniques.

##### Football.

By far the most important leather sports-goods export item is the 32-panel football which cannot satisfy the requirements of the highest quality markets. The industry can maintain its share of the higher end of the middle-price market and can capture a growing share of the market for balls of synthetic materials if the following recommendations are followed:

Leather must be provided by specialist tanneries, with proper pigment and finish.

Bigger and better presses should be used to reduce the present high level of wastage by cutting out several more panels simultaneously. Cutting should be done from the grain side. In the case of synthetic materials, these should be pre-cut into strips where necessary to enable the presses to cut more accurately.

All the panels of a ball should be of even thickness. This should be achieved by splitting where necessary. The panels should be backed with linen materials.

/materials.

Embossing and silk-screening should be done on the flat rather than on the finished ball. This would not apply where the labelling process is used (on a special - German - machine).

Proper gauges should be put on the rounding machines to ensure that correct pressures are observed.

A better system of in-plant transport of balls, either with storage racks or with trolleys, should be employed.

Quality control should be exercised by activity sampling with each batch, including those produced outdoors (i.e. in workers' homes)

Costs must be checked more often to give an actual rather than an estimated figure, taking overheads into account, and break-even points should be determined for mechanisation.

#### Cricket balls.

Leather must be provided by specialist tanneries, with proper pigment and finish.

Cutting should be by press knife only. Panels should be smaller than is customary at present to avoid too much waste in the trimming-off process.

Panels should be checked for thickness and surplus removed by splitting, to give a more evenly-weighted ball.

Inserts should be pre-cut and split on a profile-splitting machine to obtain the correct weight. In the United Kingdom and Australia, leather-based boards are used, but the Indian industry would probably do better to continue to use leather scraps which are cheap.

An air-assisted method of blocking should be used.

The means of trimming moulds shapes should be more accurate.

Marks for stitching should be placed in the mould or a wheel stitch marker should be used.

Accurate trimming up to shape for moulds is most important in the pressing out process for two-piece (as opposed to four-piece) balls, because the two-piece ball is now dummy-stitched by a twin-needle machine and the edge of the material must be accurate to follow the guide.

Each firm prepares its own quilts, with resulting great differences in quality. It is important that correct drying times are observed. The use of cork cups should be investigated, to give a better displacement of cork. Australian balls now use a slightly softer thread on the outer surface, and manufacturers should investigate this use also.

/also.

Cricket leg-guards and soft goods.

To reduce the present excessive waste of material, patterns should not have such a large allowance, which is afterwards trimmed off. Patterns used to cut materials must be the same shape as the originals. They should not be cut one at a time but several should be cut in one operation. More time must be given to ensuring that pattern-shapes are correct, so that the quality of fit will depend on the pattern rather than on the individual worker's skill. To achieve this accuracy, it is essential to introduce proper press cutting and laying-up of materials.

Rivets should be put on with proper hand tools. It would be better still to put on bifurcated rivets, using a foot-treadle machine, with the caps on the reverse side.

The metal prongs of buckles should be shaped at the tips to prevent damage to the hands.

The long stretches of stitching in leg-guards should be done by electric machines with needle feeds. This would allow bumps to be machined with a tighter stitch, lines of machining would be straighter and reverse stitching would be better finished.

Sports goods other than leather-based.

Adequate supplies of properly-seasoned wood must be made available.

There should be a greater use of jigs in the making of cricket bats. The wood should be pre-cut to an exact size before going into the jig.

The laborious, time-consuming method of cutting away surplus wood by hand ~~in the making of hockey-sticks~~ should be abandoned in favour of pre-shaping by simple cutting and sanding machines. Spraying equipment is recommended for finishing.

To be able to supply the very large potential orders for tennis and squash racquets, manufacturers should use mechanised laminating, glueing, clamping, hole-drilling and finishing equipment.

ANNEX I

Programme for E.C. Neuman Adviser for  
Leather Based Sports Goods (88/IND/79/001/2)

June

- 25 Introduction to Sports Promotion Council  
28 Visit Meerut to look at present position  
29 Visit manufacturers in Delhi  
30 Visit manufacturers in Delhi.

July

- 1 Visit manufacturers in Delhi  
2-16 Fact finding mission to Jullundur  
18-26 Visit factories and exporters in Delhi  
27-29 Visit Meerut to give help to factories  
Also have a special forum meeting at the small  
industries with all the manufacturers to discuss  
their views and problems  
30 Special meeting at the Ministry of Commerce with  
The Indian Cricket Board and Manufacturers.  
31 Visit manufacturers also visit International Stadium  
Interview players preparing for Asian Games as to  
quality of Sports Goods.

August.

- 2 New Delhi  
3-6 Visit manufacturers in Agra making sports goods  
footwear  
7-9 New Delhi  
10-13 Visit Kanpur to assist saddlery industry  
14-31 Visit manufacturers in New Delhi with one  
further visit to Meerut.

ANNEX - 2

Names of companies and persons visited in New Delhi and Meerut.

Mr. B.N. Bajaj,  
Bajaj & Co., New Delhi.

Mr. R.P. Anuja,  
Crown Exports P.Ltd., New Delhi

Mr. B.P.N. Sethia,  
Eastern Traders, New Delhi.

Mr. H.S. Shogal,  
Bhogals, Faridabad.

Mr. R.K. Jahl,  
Holix Latex Industries, New Delhi.

Kimati Lal,  
Kimati Sports Works (Regd), Delhi.

Mr. Daljit Singh,  
Pioneer Sports Co., New Delhi.

Mr. S.K. Chhabra,  
Ruralcrafts, New Delhi.

Mr. N.S. Sarna,  
Sarna Web Equipment Mfg. Co.,  
New Delhi.

Mr. Subhash Mahta,  
Sports Equipment P.Ltd., New Delhi.

Mr. V.C. Kaura,  
United Overseas Trading Corporation, New Delhi.

MEERUT.

Mr. Kuldip Mahajan,  
Hind Sports P.Ltd., Meerut.

Mr. K.L. Khanna,  
Khanna Sports Industries, Meerut.

K.B. Gupta,  
Maxwel Exporters, Meerut.

K.L. Kwatra,  
Meerut Sports Syndicate, Meerut.

MEERUT

1. Mr. N.K. Sareen,  
M/s Sareen Sports Industries,  
Meerut.
2. Mr. S.S. Gujral,  
M/s Gujral Industries,  
Meerut.
3. Capt. D.P. Aggarwal,  
M/s Deepeeka Exports Pvt.Ltd.,  
Meerut.
4. Mr. A.B. Anand,  
Mr. K. Anand,  
Mr. T. Anand,  
M/s Sansparils Greenlands Pvt.Ltd.,  
Meerut.

DELHI

1. Mr. Jung B. Anand,  
M/s J. Shanti Nath & Co.,  
New Delhi.
2. Mr. C.L. Bahri,  
M/s Uberoi Limited,  
New Delhi.
3. Mr. Vinod Khosla,  
M/s Khosla Sports Industries (Regd),  
New Delhi.
4. Mr. P.K. Anand,  
M/s Anand International,  
New Delhi.
5. Mr. Narang,  
M/s Apothecaries'z Sundries Mfg.Co.,  
New Delhi.
6. Mr. J.C. Gupta,  
M/s Gupta Rubber Factory,  
New Delhi.
7. Mr. C.Singh,  
M/s Pioneer Sports Co.,  
New Delhi.



ANNEX. 3.

Nama of People visited in Jalandhar.

	<u>Sr.No.</u>	<u>Name of the person.</u>	<u>Name of the firm.</u>
Mon.	1	Shri K.R. Mahajan, Partner	Ishardass Mahajan & Sons, Basti Nau, Jullundur-144002
Mon	2	S.S. Jolly, Partner	Robinson Sports, 82-Basti Nau, Jullundur.
Mon.	3	R.D. Sharma Export Manager	F.C. Sondhi & Co.(India) P.Ltd Basti Sheikh Road, Jalandhar.
Mon.	4	Mr. B.K. Kohli, Partner.	Sports Specialists, BastiSheikh Road, Jullundur.
Tuesday	5	Mr. Satish Mahajan, ExportDirector	Hans Raj Mahajan & Sons P.Ltd G.T. Road, Jalandhar.
Tuesday	6	Mr. N. Mayor, Partner	M/s. Mayor & Co., Basti /Road, Jullundur.
Wednesday	7.	Shri P.N. Gupta Director,	Soccer International, Basti Sheikh Road, Jalandhar
Thursday	8.	Shri Akshay Masand Export Director	MasandSports Industry, Basti Sheikh Road, Balandhar.
Friday	9.	Mr. Chander Mohan Singh Director (Tennis Rackets)	Pioneer Sports Works P.Ltd., Nakodar Road, Jalandhar 144001
Friday	10	Shri Ajit Chadha Partner	National Legguard Works, 30 Adarsh Nagar, Jalandhar
Tuesday	11	Shri Anand Sarangal	Balwant Brothers, Basti Nau, Jallandhar
Thursday	12	Shri A.N. Chadha	Universal Sports Industries, Basti Sheikh Road, Jalandhar
	13	Shri Ramesh Chander Kohli	Beat All Sports, S/114-115 Sports Town, Jalandh.
	14	A.K. Madan	Sarve Parkash & Co., Basti Nau, Jalandhar
	15	Shri Anil D. Mehta	D.D. Mehta & Co., Basti Nau, Jalahdhar
	16	Shri S.P. Gosh Scientist Incharge	Central Leather Research Inst -tute, Nakodar Road, Jalandha
	17	D.P. Singh.	Machine Engineer, Basti Nau, Jalahdhar.

ANNEXURE 4

<u>NAME OF THE PERSON VISITED AT KANPUR.</u>	<u>Name of the firm.</u>
1. Mr. H.L. Bajaj	Loathermann, 105/696 Kalpi Road, Shannana Purwa, Kanpur-208003
2. Mr. Lari	Rukoh International, 97/154 Kallomal Street, Kanpur
3. M.R. Shamsi	Talet (International), Trading Co., 40/120 Hospital Road Estate, Kanpur-208001
4. Mr. L.N. Handa	Exportsco India, 87/180 Acharya Nagar, Kanpur.
5. Mr. Z.A. Khan	Aera Enterprises, <del>120/122A Acharya Nagar, Kanpur</del> 39/19 Haston Road, Kanpur.
6. Mr. Rajiv Juri, Managing Partner	Lex International, 113/36-A Swaroop Nagar, Kanpur.
7. Anwarul Haq Director & Partner of	The Constructions & Industries Ltd., P.O. Shewan Tannery, Jaunpur, Kanpur. Haqsons Ehasen Manzil, Majeed Ahmad Road, Kanpur.
8. Mr. Zulfiqar Hussain Nadri	Zaz Tannery, Jaunpur Kanpur-20810. D. Hussain & Company, 97/152 A Talaq Mahal, Kanpur.
9.	Oranco Corporation, Hawab Ganj, Kanpur.
10	Taj Alam, Sakina Hanar, 133/243 D Transport- Nagar, Kanpur-23.
11 Mr. A.S. Sharma Administrator Mr. G. Roy Choudhari Secretary.	Export Promotion Council for Finished Leather & Leather Manufac- -turers, 15/46 Civil Line, Kanpur.
12 Mr. J. Alan Mr. P.N. Gafsi	I/S. Research Coll, EPC, Kanpur. - do -
12 Mr. Guha	Advisor Leather for SEC Brussels.

People Visited in Agra:

1. Mr. S. Nehta, (Director)
2. Mr. J.K. Seth (Production Manager)
3. Mr. Rastogi, (Engineer),  
M/s Sports Equipment Company Ltd.,  
Agra.
4. Mr. J.S. Walia,  
M/s S.B. Sports.,  
Agra.
5. Mr. D.K. Mahajan,  
M/s Darshan Kumar Mahajan & Co.,  
Agra.
6. Mr. Hari Krishan,  
M/s Vijay Industries,  
Agra.
7. M/s Royal Shoes,  
Agra.
8. Mr. C.K. Mahajan,  
M/s Fatch Chand Mahajan & sons,  
Agra.

Firms attending the Open-house Discussions at Meerut on 29.7.1982.

1. M/s Mercantile Agency Syndicate, Meerut & Calcutta.
2. M/s Prudent Sports Industries, S.K. Road, Meerut.
3. M/s Oriental Sports, S.K. Road, Meerut.
4. M/s Meerut Sports Syndicate, Victoria Park, Meerut.
5. M/s Ashoka Legguards, S.K. Road, Meerut.
6. M/s Jandial & Co., Meerut.
7. M/s Sareen Sports Industries, Victoria Park S.Colony, Meerut.
8. M/s S.C. Mathur - Suptd. Quality Marking Scheme, Meerut.
9. M/s S.K. Chopra, Suraj Kund Road, Meerut.
10. M/s Khanna Sports Industries, Victoria Park, Meerut.
11. M/s Vinod Sports, Suraj Kund Road, Meerut.
12. M/s Vijay Traders, Suraj Kund Road, Meerut.
13. M/s Cottage Industries, Suraj Kund Road, Meerut.
14. M/s Lalman Sports, Meerut.
15. M/s Playfield Sports, Suraj Kund Road, Meerut.
16. M/s Sanspareils Greenlands Pvt.Ltd., Victoria Park, Meerut.
17. M/s Victory Sports, Victoria Park, Meerut.
18. M/s Premier Legguards Works, Sports Goods Complex, Meerut.
19. M/s Kumar Leather Udyog, S.K. Road, Meerut.
20. M/s Wisdom & Company, Victoria Park, Meerut.
21. M/s Palma Industries, Victoria Park, Meerut.

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EQUIPMENT TO BE INCLUDED IN U.N.D.P. (MERENT) PROJECT, S.T.C. (JALMIBAR) PROJECT, AND OTHER CENTRES AS INDICATED IN RECOMMENDATIONS Nos. 3 AND 4.

Leather-based goods.

a. Hytronic clicking press.

This type of press controls the pressure applied to the knife, thus ensuring that damage to the knife is prevented and that the cutting surface is preserved. It also allows the use of double-edged knives so that patterns can be cut out in obverse and reverse as required, for, example, for right- and left-hand gloves.

Recommended supplier: British United Shoe Machinery Company,  
Belgrave Road, Leicester, U.K.

b. Leather splitting machine with profile attachment.

This machine allows splitting and skiving to be done simultaneously.

Recommended supplier: Fortune Machine Company, West Germany.

c. Sewing machines.

(i) Double needle machine for stitching cricket balls.

(ii) Machine for elasticating gloves and other equipment.

(iii) Needle feed arm machines with trimming and binding attachments.

Recommended supplier: Adley Sewing Machine Co.,  
D 4800 Bielefeld 17, West Germany.

d. Seam beating machine.

This machine hammers out the seams of footballs.

Recommended supplier: Mulla Kurf, West Germany.

e. Hole punching machine with dies.

This machine will punch holes in leg-guards straps and, with the proper dies can punch special patterns on the handle grips of racquets. The grips can then be split with a profile splitting machine as recommended (b) above.

Recommended supplier: British United Shoe Machinery Company,  
as above (a).

Wood-based goods.

- i. Profile copying lathe .  
For copying cricket bats and hockey sticks.  
Normal sources of supply are Austria, Germany and Sweden.
- ii. Wood router or other mechanical cutter, with blades of various shapes.  
To cut away surplus wood before finally shaping
- iii. Wood glueing machine
- iv. Flat and circular sanding machine with extractor
- v. Wood laminating machine for racquets
- vi. Multiple hole drilling machine for racquets.

Background paper for meeting of Sports manufacturers with Cricket Ball officials under the Presidentship of Mr. C. Venkataraman, Additional Secretary (Commerce) on 30th July, 1982 at 4.00 P.M. at Udyog Bhavan, New Delhi.

In recent years, there have been controversial comments in the press on the performance of Cricket Balls used in the Tests and Ranjit trophy matches. As the Indian Sports Industry manufacture and exports considerable quantities of Cricket and Hockey Balls valued over Rs.1.00 crore per annum, the bad reputation earned through such adverse press reports impairs the country's image.

To mitigate the situation and also to explore in the process that Cricket Balls for use in Test matches in India be produced, a dialogue was initiated by Indian Cricket Control Board. The Board officials have extended their cooperation in agreeing to meet the Sports manufacturers under the aegis of the Sports Goods Export Promotion Council.

The occasion would offer opportunity to the Sports manufacturers and Board officials to exchange information to convey the respective points of view, and to find solution to the likely embarrassment faced by the Indian industry as producer and exporters of cricket balls.

To This meeting have also been invited officials of the Ministry of Commerce and Industry, Committee of Administration members as well the technical officers of Small Scale Industry organisation as also officers at Quality-marking centres in Jalandhar and Meerut, and officers of Indian Standard Institution and National Institute of sports. Mr. Edward C. Newman UNIDP expert on fabrication of leather based sports goods, currently in India, has also been invited to participate.

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GOODS OFFICIALLY RECOGNISED AS COMING UNDER THE AUTHORITY OF  
THE SPORTS GOODS EXPORT PROMOTION COUNCIL.

Athletic Supporters

Air guns  
Air pistols  
Air Rifles  
All other sports goods not specified hereunder

Ankle guards  
Archery sets  
Badminton racket frames with or without gut  
Badminton nets  
Badminton posts (wooden) including collapsible posts  
Badminton presses  
Badminton sets (to include rackets, nets and accessories in carton)  
Baseballs  
Baseball gloves  
Baseball masks  
Base bats

Basket ball nets  
Basket ball rings  
Basket balls (cases of, complete with bladders other than valve type bladders)  
Basket balls fitted with valve type bladders  
Billiard cues and accessories  
Billiard nets  
Bladders rubber for basketballs, footballs and other leather balls  
Bows and arrows  
Boxing boots  
Boxing gloves  
Boxing gumshields in plastic boxes  
Bull whips  
Carrom boards  
Carrom men  
Carrom pockets  
Carrom strikers  
Chessmen



Chessmen boards  
Chest expanders  
Cricket abdominal pads  
Cricket batting gloves  
Cricket wicket-keeping gloves  
Cricket ball inner cases  
Cricket bats  
Cricket balls  
Cricket bat handles  
Cricket bags  
Cricket county caps  
Cricket grips (Rubber)  
Cricket leggu-ards  
Cricket nets  
Cricket sets  
Cricket sets (to include bats, ball,  
stumps etc. in bag or carton).  
Cricket boots  
- Cricket stumps and . bails  
Deck tennis rings nets  
Discus  
Draughtsmen  
Draughtsmen boards  
Dumbbells-assorted weights  
Elastic anklets  
Elastic elbow caps  
Elastic Knee caps  
Elastic wristlets  
Elbow guards  
Fancy rubber balls  
Fishing baskets  
Fishing flies  
Fishing hooks  
Fishing landing nets  
Fishing lines  
Fishing poles  
Fishing reels  
Fishing rods all types  
Fives gloves  
Flying kits and accessories  
Football awls

--Croquet sets  
Dart boards and darts

Football boots  
Football boot studs  
Football cases  
Football complete with bladders  
(other than valve type bladders)  
Football laces  
Football goal nets  
Football goaikkeeper's gloves  
Football inflators  
Football inner guards  
Football boot laces(cotton) with  
length 120 cm. to 240 cm. width  
7.5 mm to 16 mm.  
Football laces of leather and  
cotton  
Football leather panels  
Footballs (Rubber)  
Football Shin guards  
Footballs, volleyballs, and other  
leather balls fitted with valve  
type bladders).  
Golf bags  
Golf balls  
Golf Tees  
Golf grips (Rubber)  
Golf Sticks  
Gun Shields  
Guts for tennis badminton and  
squash rackets including nylon  
guts.  
Gymnastic playground apparatus  
Hand ball cases only  
Handball complete with bladders  
Handball (Rubber)  
Hockey abdominal pads  
Hockey balls  
Hockey boots  
Hockey Chest protectors  
Hockey gloves  
Hockey galliemasks (Steel wire  
coupled with leather and pad).  
Hockey kickers  
Hockey legguards  
Hockey nets

Contd..

Hockey gubber grips  
Hockey shin guards  
Hockey sticks  
Hockey stick handles  
Hockey stick blades  
Ice Hockey gloves  
Ice hockey balls  
Ice Hockey pucks rubber  
Ice hockey sticks  
Indian clubs  
Indoor games including magic  
games.  
Javelline  
Jumping shoes  
Jumping stands  
Lace tightners and pushers.  
Laceless footballs and laceless  
Volleyballs, basketballs, handballs,  
water polo balls fitted with  
bladders.  
Lacrose sticks  
Lacrose gloves and gentlets  
Leather grips (spare ) for tennis  
and badminton rackets.  
Laziums for drill  
Lot-to-games  
Ludo  
. Medicine balls  
Monopoly  
Net ball cases  
Ney balls  
Net balls fitted with bladders  
(valve bladders).  
Net balls without bladders  
Nozzles and washers for inflators.  
Padder tennis rackets  
Parchment for cricket bats and  
hockey sticks.  
Ping Pong rubber sheetings cut  
to size.  
Plastic discs(for games).  
Plates for weight lifting.  
Polo Canes  
Polo Cross nets.

Contd..

Polo crpsr rackets  
Polo hats  
Polo heads  
Polo sticks and balls  
Polo vaulting poles  
Polo whips  
Prize cups sports  
Punch balls (Rubber)  
Punching balls  
Punching ball fitted with  
bladders.  
Punching gloves  
Punching mitts  
Rings and ring boards  
Roller Skates  
Roller skate straps and  
accessories  
Rounder balls  
Rounder bats  
Rubber Balloons  
Rubber covers for rackets  
Rubber composition balls for  
hockey and cricket.  
Rubber foam filled fabric  
balls  
Rubber grips for tennis/badminton  
rackets and cricket bats  
Rubber Play balls  
Rubber swimming caps  
Rubber tees golf  
Rugby boots  
Rugby cases  
Rugby play ball (with bladder)  
Rugby playball (without bladder)  
Rugby volleyballs (rubber)  
Scout belts and cords  
Scout knives and sheaths  
Scout barrets  
Scout bugles  
Scoring books and charts

Contd...

Scrum caps  
Seat Sticks (Empire Stocks)  
Shin pads  
Shuttle cocks  
Shuttle caps  
Shuttle cocks(feathers)  
Ski boots and shoes  
Ski gloves  
Ski sticks and poles  
Skipping rops  
Skis  
Slimmer (mechnical contrivance  
for physical exercise).  
Snakes and ladders  
Spiked shoes for running  
Spong rubber balls  
Sporting rifle butts  
Sports Cups and medals  
Sporting goods made of rubber  
namely the following :-  
Bladders for basket balls, footballs,  
net balls, handballs, punch balls,  
rugby balls, volleyballs, water  
polo balls, hockey rubber grips,  
ping pong rubber sheeting cut to  
size rubber covers for rackets, rubber  
grips for tennis/badminton rackets,  
and cricket bats, rubber playballs,  
tenniquit rings, spong rubber balls,  
composition balls.  
  
Sports badges and insignias  
Sports banners and flags.  
Sports protective gloves  
Sports shields  
Sports Shoe Uppers  
Squash frames with/without guts  
Swimming finns  
Swimming tanks collaspsible  
Table tennis balls  
Table tennis bats  
Table tennis nets andposts  
Table tennis sets  
Table tennis tables

Contd..

Table tennis table top  
Tennis gut (superchampionship spider  
special blue spiral etc.)  
Tenniquit nets  
Tenniquite rings (Rubber)  
Tennis and badminton gut other nylon  
gut  
Tennis and badminton strings  
including nylon strings (gut)  
Tennis and badminton tapes  
Tennis and badminton stringing awls  
Tennis, badminton and squash rackets/  
frames with or without guts.  
Tennis balls  
Tennis covers  
Tennis net adjustors  
Tennis nets  
Tennis post rackets  
Tennis presses  
Tennis shoes  
Totopoly  
Trebling gut  
Volleyball cases only  
Volleyballs nets  
Volleyballs complete with bladders.  
(other than valve type bladders).  
Volleyballs poles (wooden)  
Volleyballs (Rubber)  
Walking sticks  
Water polo ball with or without  
bladders.  
Water Polo ball (Rubber)  
Weight lifting barbell sets with  
revolving sleeves  
Whistles other than plastic and  
wooden toy whistles  
Wooden dumbbells  
Woollen badminton balls.

SPORTS GOODS ITEMS VIDE REP CIRCULAR No.13/81  
DATED 13/8/1981.

1. Boxing Bags
2. Backgammon Sets
3. Wooden posts and Sets/Wooden stakes sets complete with two ropes.
4. Bullworker, Tringo, Torsomed Karatok Gripper Bullhyt, Sauna Belt, Bynaro and Bunny Bust.
5. Heavy Punching bags in full chrome leather.
6. Small punching bags (speed bags) in full chrome leather.
7. Swivels: A two ball bearing action item for handling speed bags.
8. Chains: A set of four chains with spring action hooks for heavy punching bags.
9. Fishing Floats.
10. Boxing Speed Bags.
11. Cricket pads, batting.
12. Wicket Keeping Gauntlet.
13. Slip in Shield with padding.
14. Thigh Guards.
15. Cloth cover with or without leather beltings made of cotton cloth/raxing used as covers to hockey sticks, cricket bats and rackets(provided the covers are made of appropriate specifications, shape of the sports goods items.
16. Leather spare kickets.

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NEW ITEMS OF SPORTS GOODS AS PER REP CIRCULAR  
No.16/82 DATED 25.6.1982.

1. Boxing Head guard/Head Protecto#s in various sizes.
2. Boxing Head warps in cotton 2" x 108" for use in inner wra pping on hand.
3. Punching balls spring action stands, complete or only rod(Punchy Boy).
4. Karate Gloves with cut ~~gins~~ finers(Leather or foam leather).
5. Karate Chest Protector Jacket(Canvas or foam Leather).

Contd..9/-

6. Barbell Bars 14" in steel and chrome etc. (for weight lifting etc.).
7. Catapult pullers with balls.
8. Fishing Forceps.
9. Gun-racks.
10. Reel/Rod racks.
11. Fishing Scissors.
12. Wooden bases for Sports cups, shields and trophies.
13. Sports Trophies.
14. Ball Inflating Needles.
15. Football Adaptors (Nozzles).
16. Cricket bats rubber strips (injection sheets).
17. Weight Lifting belts.
18. Camping & Hiking Bags.

All types of camping and sports bags, made of cotton, cotton web, cotton canvas or water proof laminated canvas, with or without straps, with or without leather reinforcement on seams or straps.

19. Double Clamping Fishing Artery Forceps.
20. Hockey Carrying Bags made of foam Raxine.
21. Fly Vallets.
22. Reel Cases and other accessories..
23. Boxing tights and trunks.
24. Track/exercising suits.
25. Fencing jackets.
26. Garden Swings.
27. Go-Kart.
28. Hammocks.
29. Hockey and Cricket Inner Gloves.
30. Ski Diving Suits.
31. Swim Suits and Costumes.
32. Camping tents with/or without fittings.
33. Saddle harness.
34. Wrestling tights and trunks.



List of items of sports goods , the exporters of which can register themselves with Sports Goods Export Promotion Council, even though these items are classified under other Product Groups for the purpose of grant of IMPORT REPLENISHMENT.

1. Athletic Sweaters.
2. Athletic Vests.
3. Athletic tights and trunks.
4. Award Jackets and Sweaters.
5. Base ball Jackets.
6. Basket Ball vests.
7. Beach Chairs.
8. Blazers.
9. Boxing vests.
10. Breaches sports.
11. Camping chairs and Tables foldings.
12. Camping gas/Kerosene stoves.
13. Camping cooking utensils.
14. Canvas Coats.
15. Class Coats and Jackets.
16. Coduroy coats and jackets.
17. Coveralls including insulated one.
18. Club Jackets.
19. Cricket shirts and trousers.
20. Cricket coir mattings.
21. Football jerseys.
22. Football Goal keepers jerseys.
23. Football stockings and houses.
24. Fleece jackets.
25. Gabardine jackets.
26. Garden umbrellas.
27. Golf Coats and Jackets.
28. Golf Suits
29. Gymnasium Mattresses.
30. Gymanasium Trunks.

Contd.

31. Haver sacks.
32. Hockey shirts and shorts.
33. Hanour jackets.
34. Hunting jackets and oots.
35. Insulated coats and jackets.
36. Javenile jackets.
37. Knitted jackets.
38. Leather jackets.
39. Leather sleeve jackets.
40. Patromax lamps.
41. Picnic Lamps.
42. Picnic sets.
43. Plastic sports bags.
44. Racing trucks.
45. Rugby jerseys and shorts.
46. Scout shirts and shorts.
47. Scrum Caps.
48. Skiing jackets.
49. Sports coats and jackets, shirts and shorts.
50. Sportsbags, suitcases, including Rucksacks.
52. Sports hosiery.
52. Sports pants and underwears of all types.
53. Sportsshoes all sorts made of leather not elsewhere specified.
54. Swede jackets.
55. Fur coats.
56. Table tennis shirts and shorts.
57. Tank suits.
58. Tennis shirts and shorts.
59. Tennis socks.
60. Tennis sweaters.
61. Water proof coats and jackets.
62. Women's sports jackets.
63. Women Sports clothings.
64. Volley ball vests.
65. Base Ball Vests.

ANNEX 10

COUNTRY WISE EXPORTS OF SPORTS GOODS FROM INDIA FOR THE YEAR 1960-69 TO 1980-81	(VALUE IN LAKHS OF Rs.)												
of the Country	60-69	69-70	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80	80-81
Australia	9.50	8.67	10.70	18.17	27.14	57.33	92.92	96.21	172.86	257.65	354.52	307.44	456.55
Bangladesh	-	-	-	-	0.96	9.17	7.44	5.28	10.08	16.09	17.07	11.25	17.45
Bulgaria	-	-	-	0.32	0.56	2.65	6.30	0.03	0.84	1.06	0.06	-	-
Czechoslovakia	0.50	-	0.36	0.29	0.05	0.76	6.35	0.56	7.79	11.00	17.46	9.07	7.76
Ceylong	3.61	2.25	1.78	0.66	1.02	1.71	1.29	1.35	1.76	4.57	6.10	7.90	10.20
Canada	1.41	2.09	3.93	5.42	11.29	6.25	20.19	19.43	23.03	23.93	26.31	51.51	58.69
France	1.21	1.30	2.02	7.76	20.06	17.90	19.50	28.26	62.07	52.19	72.75	66.54	52.39
Ghana	1.41	1.99	0.25	2.03	0.59	0.96	1.24	1.45	1.83	0.95	3.27	2.75	0.42
Guyana	1.15	0.86	0.95	1.64	1.10	1.59	1.90	1.68	2.49	0.05	0.89	2.51	5.91
Hongkong	0.57	1.31	1.70	1.55	1.39	2.93	1.07	1.86	4.02	3.77	4.83	11.10	6.71
Holland	2.68	4.79	5.36	5.58	7.28	11.56	26.93	35.03	44.44	50.61	86.07	96.42	112.01
Iraq	0.95	0.53	0.37	0.10	0.15	0.01	-	-	-	0.16	3.73	4.81	4.89
Israel	1.40	3.75	5.39	6.18	11.77	13.10	22.49	22.62	37.63	27.14	34.14	29.45	31.53
Italy	1.63	2.72	3.54	3.25	4.16	5.60	9.27	19.23	14.13	17.46	22.36	39.02	9.40
Jamaica	1.02	0.85	0.85	1.17	0.95	1.51	2.71	2.42	3.12	1.92	3.88	0.23	4.36
Kenya	6.42	6.95	6.31	7.98	8.83	9.23	10.28	11.31	11.18	14.29	11.39	17.58	15.19
Kuwait	1.56	1.71	1.64	0.93	1.56	2.94	2.42	4.45	13.94	16.66	16.79	17.59	30.29
Malaysia & Singapore	17.27	16.40	19.63	16.79	18.24	28.30	44.75	46.79	35.21	54.32	44.80	47.48	50.71
Newzealand	1.51	1.42	3.03	3.81	2.65	5.61	15.41	12.89	17.96	17.73	12.74	18.34	15.84
Nigeria	6.25	4.10	5.52	10.89	10.96	15.61	18.38	19.36	35.58	66.82	18.37	41.99	99.76
Poland	-	-	-	0.01	19.35	20.04	16.07	11.88	30.78	2.14	-	0.14	-
Rwanda & Malawi	2.22	2.35	3.55	4.81	8.90	8.73	8.53	8.44	10.55	8.51	9.76	6.90	7.96
Saudi Arabia	-	-	-	1.00	2.64	3.72	5.58	8.13	10.06	16.58	24.53	44.90	29.61
Sudan	2.57	2.76	7.54	5.72	3.93	-	3.10	4.43	0.69	3.62	0.55	1.61	5.12
Sweden	0.70	0.99	0.84	0.49	3.48	10.04	39.75	36.22	43.56	26.79	28.21	35.19	46.97
Thailand	3.96	3.48	5.35	4.98	4.38	5.43	5.98	7.09	8.92	9.79	10.40	12.67	14.44
Tanzania	2.20	1.56	1.07	1.85	0.15	2.10	0.63	0.16	0.27	1.49	0.93	0.34	2.64
Trinidad	3.59	3.62	2.80	4.49	3.84	6.66	7.51	8.01	10.44	15.60	16.61	14.32	20.29
U.K.	23.06	28.05	44.83	79.00	96.88	181.56	286.91	294.09	336.74	427.63	502.38	544.72	678.67
J.S.A.	2.49	5.22	5.68	10.21	27.51	37.39	47.25	59.60	168.14	156.62	156.06	128.93	122.02
Uganda	2.14	1.76	1.60	2.03	0.32	0.65	-	-	-	-	-	-	-
J.S.S.R.	-	-	-	-	0.12	-	-	-	4.58	-	0.31	-	226.19
West Germany	3.39	7.87	11.05	26.41	32.35	83.61	199.44	280.91	334.94	300.33	550.67	451.61	406.04
Yugoslavia	1.93	0.80	0.03	-	0.72	1.38	1.66	-	18.91	35.85	40.81	40.88	4.49
Others.	10.71	15.28	18.29	19.48	24.13	43.10	72.67	92.72	125.61	166.67	248.32	291.12	286.39
<b>Total:</b>	<b>119.97</b>	<b>135.63</b>	<b>175.96</b>	<b>255.00</b>	<b>360.21</b>	<b>599.21</b>	<b>1006.72</b>	<b>1105.09</b>	<b>1621.75</b>	<b>1810.79</b>	<b>2347.07</b>	<b>2437.91</b>	<b>2849.02</b>

ITEMWISE EXPORTS OF SPORTS GOODS FROM INDIA

FOR THE YEAR 1968-69 TO 1980-81

(VALUE IN LAKHS OF Ru.)

S.NO.	Items	68-69	69-70	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80	80-81
1.	F' Balls, leather balls & req.	35.64	37.39	58.31	96.81	142.98	232.36	448.98	503.81	864.31	886.74	1374.10	1316.43	1587.94
2.	Sports Hosiery.	1.20	1.48	1.09	0.28	0.51	0.45	0.49	0.11	0.41	1.53	1.05	1.43	0.33
3.	E.P.N.S. Sportsware	23.04	22.53	22.59	28.06	38.45	63.20	85.13	54.79	57.09	70.73	70.51	101.20	91.11
4.	Bladders.	4.63	7.11	6.27	5.84	9.10	10.58	13.01	16.59	19.74	19.93	26.58	24.71	35.55
5.	Hockey & Cricket balls	12.28	13.60	10.77	11.55	14.89	28.37	48.88	58.65	77.92	85.47	101.33	89.90	109.03
6.	Badminton, Tennis, Squash Rackets & req.	9.95	13.18	18.77	37.60	54.15	82.49	131.45	153.57	127.80	118.87	112.98	104.16	117.50
7.	Hockey Sticks & req.	15.33	17.70	16.50	22.06	24.19	40.39	74.53	83.00	99.04	129.24	137.19	159.08	191.42
8.	Nets.	2.74	3.57	5.96	4.37	5.51	6.34	9.75	17.55	7.53	9.84	8.81	13.56	13.88
9.	Fishing Rods & Flies.	0.33	0.13	0.81	1.22	1.65	2.69	4.18	5.57	7.04	7.65	9.96	11.48	14.75
10.	Cricket bats & req.	7.93	11.07	22.26	33.97	35.06	64.58	100.56	117.38	197.61	249.83	285.50	323.09	380.49
11.	Carron, Chess Board, Indoor games & req.	3.00	3.70	4.35	3.97	9.56	12.65	22.37	29.08	31.55	42.33	60.71	87.27	63.71
12.	Sp. Shoes & Shoe Uppers	0.67	0.52	0.56	1.41	3.43	15.63	13.20	4.55	4.30	5.42	4.08	1.50	5.90
13.	Gymnastic Goods.	0.54	0.26	3.31	1.38	1.57	6.74	9.28	11.17	15.89	18.17	29.82	72.98	53.04
14.	T.T. Bats & req.	0.42	0.12	0.24	0.32	0.34	0.27	0.53	1.52	2.22	8.95	9.35	15.18	11.09
15.	Polo Sticks & req.	0.36	2.00	0.90	0.89	0.45	0.68	1.27	0.45	1.39	0.74	1.85	4.93	6.80
16.	Soft Leather Goods.	-	-	0.90	3.24	6.00	9.69	13.27	14.19	20.11	49.77	31.21	34.21	43.71
17.	Rubber balls, Rubber Balls & tennis racket ring.	1.41	0.68	2.37	1.68	10.56	15.49	14.74	9.30	25.97	28.71	16.93	12.03	15.05
18.	Billiard Cues.	-	-	-	0.21	0.11	1.49	2.59	3.46	4.03	2.07	4.01	3.54	6.18
19.	Air Rifles & Blanks.	-	-	-	-	0.83	-	0.28	-	-	-	-	1.97	1.35
20.	Walking Sticks.	-	-	-	-	-	0.09	0.39	1.05	4.21	1.99	2.34	0.73	0.57
21.	Sports Bags.	-	-	-	-	-	2.40	2.78	2.79	9.05	6.27	5.65	8.60	11.96
22.	Sports Badges & Insignias	-	-	-	-	-	-	-	21.29	29.45	27.31	33.01	39.10	63.80
23.	Scouting Articles.	-	-	-	-	-	-	-	-	11.06	29.97	6.52	4.15	17.09
24.	Flying Kites.	-	-	-	-	-	-	-	-	1.77	5.36	6.84	4.05	3.36
25.	Unclassified exports.	0.50	0.59	-	0.14	0.87	2.64	9.06	6.02	1.46	3.90	6.74	2.73	3.91
Total:		119.97	135.63	175.96	255.00	360.21	599.21	1006.72	1105.89	1621.75	1810.79	2347.07	2437.91	2849.02

