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GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY

REPORT
OF THE
WORKING GROUP
FOR THE
HOSIERY, KNITTING AND
EMBROIDERY INDUSTRIES



1962

PRINTED AT THE GOVERNMENT CENTRAL PRESS
BOMBAY



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PRINTED IN INDIA BY THE MANAGER, GOVERNMENT CENTRAL PRESS, BOMBAY

COPIES AVAILABLE FROM THE MANAGER OF PUBLICATIONS, DELHI, 8.

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CHAPTER I

INTRODUCTION

The Government of India appointed a Working Group to study the various aspects and problems of the Hosiery, Knitting and Embroidery Industries particularly modernisation of the Industries. Appointment
of working
Group.

The Working Group consists of the following:—

- | | | |
|---------------------------|-----|-------------------|
| 1. Shri I. B. Dutt | ... | Chairman. |
| 2. Shri A. K. Choudhari | ... | Member. |
| 3. Shri M. Yusuf | ... | Member. |
| 4. Shri S. Arunachalam | ... | Member. |
| 5. Shri H. K. Jain | ... | Member. |
| 6. Shri K. K. Adya | ... | Member. |
| 7. Shri Otto Oelwein | ... | Member. |
| 8. Shri B. H. Gujar | ... | Member. |
| 9. Shri Rishi Ram Agarwal | ... | Member. |
| 10. Shri G. R. Joshi | ... | Member. |
| 11. Shri R. R. Prasad | ... | Member-Secretary. |

2. The terms of reference are as under:—

(i) to survey the existing conditions and magnitude of the hosiery, knitting and embroidery industries in the country ; Terms of
Reference.

(ii) to assess the broad targets of these industries in the Third and Fourth Plan periods for domestic consumption and for providing employment potential which is of very great importance as plan objective ;

(iii) to recommend the manufacturing programme for the machinery plant and equipment for these industries ;

(iv) to recommend a phased programme of modernisation and diversification of the hosiery, knitting and embroidery industries ;

(v) to survey the existing facilities of the production of necessary raw materials for these industries and to suggest new programmes for providing raw materials and stores for these industries including setting up of special cotton and synthetic yarn mills specially for the purpose of producing knitting yarns, etc. required for these industries ;

(vi) to recommend special schemes for export promotion for the products of these industries ; and

(vii) to revive and expand these industries as far as possible in the small scale sector and co-operative sector so as to maximise employment and rejuvenate the old and

traditional craftsmanship along with introduction of modern trends and tools in these industries. In order to achieve this, the Study Group may recommend the technical, organisational and financial assistance that the Government should extend to these industries for these purposes.

Method of Enquiry.

3. The Group held in all 8 meetings in Bombay, Calcutta, Coimbatore and Delhi. The Group also visited several representative factories in the country at Bombay, Calcutta, Tirupur, Belgaum, Amritsar, Ludhiana, Chandigarh and Delhi so as to have the benefit of the views of the Industry and to make on the spot examination of the machinery installed and its general conditions. At the various centres, the Group had discussions with the representatives of the Industries, Associations and the management of the factories visited.

4. The Group issued Questionnaires in November 1961 to the following :—

- (i) Hosiery Manufacturers' Associations.
- (ii) Spinning and Composite Mills having Hosiery/ Knitting Machines.
- (iii) Individual Needle Manufacturers.
- (iv) Individual Hosiery Machine Manufacturers and their Association.
- (v) Individual Mechanised Embroidery Factories.
- (vi) Directors of Industries of all States.
- (vii) The concerned Chambers of Commerce.

The questionnaires are at Annexure I.

5. It will not be out of place to mention that though the information received from Embroidery, Hosiery Machine Building and Hosiery Needle Manufacturing Sectors was satisfactory, the response from the Hosiery Manufacturing Sector was rather poor. In the absence of adequate information from many State Authorities and some organisations to whom the Questionnaires with regard to the Hosiery Manufacturing Industry were sent, the Working Group had to depend on the information collected on-the-spot and information and memoranda supplied by some of the organisations and State Authorities. Due to the above limitations, the Group could not assess the regional requirements of the Industry.

6. The Report has been divided broadly into two sections, viz. Embroidery Industry and Hosiery/Knitting Industry. While making recommendations, due consideration has been given to the present difficult foreign exchange position.

PART I

EMBROIDERY INDUSTRY

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EMBROIDERY INDUSTRY

CHAPTER II

HISTORICAL BACKGROUND—PRESENT SET UP AND REQUIREMENT OF MAINTENANCE, REHABILITATION AND MODERNISATION

7. Embroidery is the art of decorating the textile fabrics with designs formed with thread by the help of needles.

There are two ways of making embroidery :—

(i) by hand,

(ii) by machine,—

(a) foot operated or power operated small sewing type machine ;

(b) power operated automatic jacquard sewing type machine either single or multiple head ;

(c) power operated big, automatic, jacquard embroidery machine.

In the first method, needle, thread and cloth are all controlled by the hand.

In the second (a) method, the needle and the shuttle containing the bobbin thread are moved mechanically and the cloth by hand. In second (b) method, the movement of the cloth also is controlled mechanically and when multiple heads are used same design of embroidery is done at a number of places simultaneously according to the number of heads employed. Sewing machines are suitable for small embroidery on pieces of cloth.

In the second (c) method, the movement of needles, shuttle and cloth are all controlled mechanically as in second (b) method, but instead of using a few separate complete sewing machine heads, a very large number of needles and corresponding number of shuttles are put side by side in one single big machine for simultaneous operation.

This type of big modern machine is suitable for embroidering long lengths of cloth.

8. Embroidery has caught the imagination of the fair sex from time immemorial. Hand embroidery is a very popular handicraft of this country and is being carried out on a very large scale. Embroidery with the help of big modern machines was, however, introduced into this country only recently. In the year 1934 one Italian Gentleman Mr. R. Watson who came to India as a representative of some Textile Mills in Europe decided to bring this industry to India. New India

Historical
Background.

Embroidery Mills was started in Amritsar. At that time, there was a big slump in the Embroidery Industry in Europe and some of the Embroidery Mills went into liquidation. Mr. Watson managed to purchase one of the liquidated mills and the second-hand embroidery machines were brought to India. In the year 1936, the erstwhile Messrs. Narain Swadeshi Mills now known as Hindusthan Embroidery Mills also imported some second-hand embroidery machines. This industry suffered heavy losses during the initial years due to lack of technical 'know-how', non-availability of skilled labour and absence of proper protection from the Government. Messrs New India Embroidery Mills had to write off 25 per cent. of their paid-up capital in order to wipe out the losses. During the Second World War, the industry could stand on its own legs. Recently, a few more embroidery units have been set up at Bombay and Ahmedabad.

Cottage
Sector.

9. It has been reported to the Working Group by the All India Handicrafts Board that there are 7,779 units in the Cottage Sector engaged in the manufacture of embroidery and lace materials. The main items of embroidery manufactured are :—

- (a) Kasida work and Ruffugiri—Kashmir.
- (b) Chikankari—U. P.
- (c) Kasooti—Mysore.
- (d) Applique work—Bihar.
- (e) Kantha work—West Bengal.
- (f) Laces—Andhra Pradesh and Kerala.
- (g) Phulkari—Punjab.
- (h) Kutch and Kathiwar types of embroidery including bead-work—Gujarat and Maharashtra.
- (i) Zardozi—Maharashtra and Madhya Pradesh.

The above types of embroidery and lace work are utilised for the production of shawls, bed-sheets, luncheon sets, leather embroidered products, odhanis, handkerchiefs, cushion covers, purses, etc.

The All India Handicrafts Board has suggested that the above types of embroidery and lace work should be reserved for the cottage embroidery industry.

The Working Group has been informed that the following types of embroidery cannot be done on automatic shuttle embroidery machines and hence the question of their reservation for cottage embroidery industry does not arise :

Kasooti, Applique and Kantha work, laces,
Kutch and Kathiwar type of embroidery and
Zardozi.

The following types of embroidery can be done on modern automatic shuttle embroidery machines :—

Kasida work, Ruffugiri, Chikankari, and Phulkari.

The representatives of the machine embroidery industry have no objection if these items are reserved for cottage embroidery industry.

Embroidery on shawls etc. is being done on a large scale by the mechanised embroidery industry and as such the Group is of the opinion that this work should not be reserved for the cottage sector.

The value of annual production is approximately Rs. 5 crores. The All India Handicrafts Board has also reported that the number of hands employed in the lace industry in the Cottage Sector is 6,887. The figures for embroidery are not available. The details with regard to the capital invested, average earning per worker per month etc. are not available. No specific survey has been undertaken in this regard. The All India Handicrafts Board is making efforts to organise craftsmanship in groups, co-operative societies and associations. It has been reported that all possible assistance is being rendered to this industry by the Board.

The Cottage embroidery work carried out in the State of Jammu and Kashmir is of particular interest from the point of view of export but the Working Group is not in a position to make specific recommendations in this regard as no statistical data could be obtained. It is recommended that the embroidery industry of this State should be organised on proper lines so that the proper assessment could be made with regard to its needs and the assistance required by it for rejuvenation of the old and traditional craftsmanship for boosting up export.

10. In the absence of statistical data and details of the embroidery industry in cottage sector, the Working Group has mainly confined itself to the study of mechanised sector of the industry. Scope of Enquiry.

11. There are 5 mechanised embroidery units in the country which are as follows :— Present set up of the Mechanised Industry.

(1) New India Embroidery Mills Private Ltd., Chheharta (N. Rly.), District Amritsar.

(2) Hindustan Embroidery Mills Private Ltd.,

(a) Chheharta (N. Rly.), District Amritsar.

(b) Mathura Road, Hemla Nagar, P. O. Faridabad.

(3) Sarangpur Cotton Mfg. Co. Ltd., Near Jagnath Mahadev, Amraiwadi Road, Post Box No. 19, Ahmedabad 8.

(4) Jasmine Mills Private Ltd., Dharavi, Bombay-17.

(5) Fancy Corporation Ltd., Bombay Cotton Mills Estate, Kalachowki Road, Bombay-12.

Items manufactured. 12. Embroidered textile goods such as embroidered chickens, cut cambrics, petticoats, founcings, wool merino, art silk tafetta, laces of various descriptions, bed-covers, table cloth, pillow cases, handkerchiefs, blouses, under-garments, labels, badges etc., are being manufactured.

Existing Capacity. 13. The details of number of embroidery machines installed, actual production, average number of workers employed per day, number of shifts worked and number of machine shifts per day during 1960-61 are indicated below :—

Name of the Unit.	No. of Embroidery Machines installed.		Actual production. Quantity in yards	Average No. of Workers employed per day.	No. of shifts worked.		No. of Machine shifts per day.	
	10 yards.	15 yards.			10 yards.	15 yards.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
New India Embroidery Mills Private Ltd.	9+1	9	11,94,190	295	2	20	18	
Hindustan Embroidery Mills Private Ltd.	11	2	14,70,943	273	3	33	6	
Sarangpur Cotton Manufacturing Co.	2	..	1,60,820	40	3	6	..	
Jasmine Mills	..	2	2,07,210	70	3	..	6	
Fancy Corporation	..	4	19,44,192	332	3	6	12	
Total	..	25	....	..	..	..	..	..
Grand Total	..	42	49,77,355	1,010	..	65	42	

14. Capital employed in the above factories is given below :— Capital employed.

Name of the Unit.	Fixed Capital		Working Capital.	Total.
	Land and Buildings.	Machinery and Equipments.		
	(1)	(2)			(3)	(4)
	Rs.	Rs.	Rs.	Rs.
New India Embroidery Mills, Pvt. Ltd.	2,90,235	5,14,264	15,90,000	23,94,499
Hindustan Embroidery Mills, Pvt. Ltd.	93,335	6,22,852	11,78,000	18,94,187
Sarangpur Cotton Manufacturing Co. Ltd.	....	4,00,000	....	4,00,000
Jasmine Mills	6,32,724	7,29,673	15,00,000	28,62,397
Fancy Corporation ..	94,973	19,92,000	32,50,000	53,36,973
Grand Total ..	11,11,267	42,58,789	75,18,000	1,28,88,056

15. Out of the 42 machines installed in the country, 28 machines of New India Embroidery Mills Private Ltd., and Hindusthan Embroidery Mills, Private Ltd., are very old, years of make varying from 1901 to 1921. It has been reported to the Working Group that the factor of obsolescence in the embroidery machines is not very significant as the modern machines have higher productive capacity to the extent of 30 per cent. The number of hands required per modern machine is more or less the same as compared to the number of hands employed per old machine. It is understood that the old embroidery machines in the industrially developed countries are generally not scrapped but are renovated and modernised to increase the productive capacity. It is, therefore, recommended that in view of foreign exchange stringency, uncertainty of internal demand and the present low export possibility, the old embroidery machines may not be replaced by new machines but all assistance should be given for their rehabilitation and modernisation. It is estimated that the requirements of foreign exchange for these 28 old machines would be about Rs. 17 lakhs.

Requirements
of Rehabili-
tation and
modernisa-
tion.

It may be difficult to spare the above amount in face of foreign exchange stringency. It is, therefore, recommended that advance licences for spare parts, components and auxiliary machines be granted for modernisation and renovation against

the undertaking of export of embroidered goods. It may be noted that the present delivery position of spares, etc., is about one year from the date of placement of the order.

Financial Assistance.

16. The existing units can finance their rehabilitation and modernisation programmes to the extent of 50 per cent. from their resources and the balance from outside resources other than the Government sources.

Maintenance.

17. It is estimated that the annual requirements of spare parts are Rs. 5,000 and Rs. 7,000 per 15 yard new and old machines respectively. On the above basis, the total annual requirements of spare parts of the existing machines are to the tune of Rs. 2 lakhs.

Indigenous production of Machines.

18. Due to the complexity and limited demand for the numerous types of spare parts, it may not be possible to manufacture all of them economically consistent with requisite quality. It is also not an economical proposition to undertake the manufacture of embroidery machines in this country with the limited internal demand, unless the avenues for sale of such machines are successfully explored in foreign markets. The foreign collaboration for the manufacture of embroidery machine is very essential.

CHAPTER III

EXPANSION OF PRODUCTIVE CAPACITY

19. The Industry being of recent origin and limited size, there is a very acute shortage of technicians and skilled workers in this country. The existing factories had to incur initially a considerable expenditure for utilising the services of foreign technicians. The Working Group is informed that the services of foreign experts will be essentially required for further installation of new machines in the existing units. Therefore, the new undertakings will have to employ foreign experts for installation, initial operation of the plant and training of personnel. Technical know-how.

20. It takes a long time to train up operatives due to intricate nature of embroidery machines. There is a dearth of skilled operatives in spite of better emoluments offered by the industry, as compared to those paid to other categories of skilled textile workers. Availability of skilled labour.

21. It may be a profitable proposition to work two machines unit under present day market conditions but the desirability of fuller utilisation of auxiliary machines, installation of air conditioning equipments, the necessity of employment of foreign technicians for installation and operation of plant during initial periods and the obvious economic reasons arising out of recommended expansion of the industry would tend to make the unit of at least four machines more viable. Minimum economic size.

22. Machine embroidered goods are generally non-essential and luxury items. They are mostly used by people of higher income groups. The demand for embroidered goods is related to fashion in vogue. People with an eye on novelties or something unusual generally go in for embroidery. People of modest means cannot afford embroidered goods and have to be satisfied with home-made embroideries or go without them. The replacement being costly, the demand is also limited. Demand.

Any correlation between the standard of living, the rate of increase in population and the demand for non-essential fancy items like embroidered goods cannot be established with reasonable degree of accuracy.

All the embroidery units except one are working three shifts. The two shifts working being normal and desirable for better quality work and technical performance, it may be concluded

that the embroidery machines are being worked three shifts to meet the growing demand in the internal market as the export is practically nil. Such working is neither conducive to quality work nor proper maintenance of machinery. Analysis of the available balance-sheets shows high return on embroidered goods. Therefore, keeping in view the above aspects, the anticipated rise in the standard of living of fast growing population and the present need for exploring the export markets, a limited expansion of the industry is recommended.

Expansion during Third Plan period.

23. As stated in paragraph 13, there are forty-two 10-yards and 15-yards embroidery machines in the country which are equivalent to about thirty-four 15-yard machines. It is recommended that during the Third Plan Period the number of machines may be increased by twenty-six, 15-yard machines. In terms of productive capacity, this will mean about cent per cent. increase. The above increase is based on the assumptions that all the existing and new embroidery units would work on an average two shifts per day and all new machines would be of 15 yards type due to obvious economic reasons. The modern practice all over the World is to instal 15-yard machines only. It is anticipated that the increase in the production of embroidered goods will bring down their prices to a reasonable level. The two shifts working of the existing units working three-shifts will no doubt result in redundancy of labour but it can be readily absorbed by the additional capacity which will need skilled operatives whose availability is very limited.

Expansion during Fourth Plan Period.

24. In view of uncertainty of demand both in the internal and external markets, it is rather difficult to estimate the expansion during the 4th Plan period. The position may be reviewed after the end of third plan period.

Employment potential.

25. Assuming the envisaged expansion takes place in the third plan period, the employment potential will not increase by more than 600 workers on two shifts working basis.

Allocation of capacity.

26. In keeping with the policy of encouraging new entrepreneurs in the fields of industry, the new units may be established, provided the management has some experience in running industrial undertaking, marketing of the products and also the requisite financial resources. A balance may be struck between certain advantages of expansion within the existing undertakings which may have surplus land, built-up area, auxiliary machines and existing service facilities and also trained personnel and the disadvantages of new undertakings which will have to start right from the scratch.

CHAPTER IV

RAW MATERIAL, EXPORT AND EXPORT INCENTIVES

27. The following raw materials are required for embroidery :— Requirement
of Raw
materials.

(i) Fine and superfine basic cotton cloth and also art silk cloth to some extent.

(ii) Cotton threads and art silk yarn mostly of 150 denier.

It is observed that during 1960-61 the mechanised embroidery industry has consumed about 2.3 lakhs lbs of art silk yarn and 68,000 lbs. of cotton thread. On the basis of actual consumption per machine shift worked, it is observed that the requirement of art silk yarn per shift per 15-yard machine is 9 lbs. It is recommended that art silk yarn may be made available to this industry to the extent possible on the basis of machine-shifts worked in the preceding period. Low consumption of art silk yarn of any unit during basic period due to 'force majeure' should be considered while allocating it. The quantity of art silk yarn made available to the industry through controlled channel is inadequate and the industry has to depend mainly on open market. It may be noted that the efficiency and quality of product of a modern machine are very adversely affected if the quality of art silk yarn is not of requisite standard. There are over 1,000 needles working simultaneously on a 15-yard machine. If any single thread breaks, the machine comes to a stop. Therefore, it is recommended that the best quality of indigenous yarn should be made available to this industry.

28. The Working Group has been informed that many foreign countries have got embroidery machines which are under-utilised. According to the same source of information, the following list shows the number of machines in other countries :— Export.

Switzerland	..	...	1,200
Austria	...	...	800
France	..	..	600
Italy	...	...	300
Australia	...	...	10 to 15
U. S. A.	...	...	1,700
Korea	...	...	20
Japan	...	...	300
England	...	...	250
Germany West	...	...	150
Germany East	...	...	800

29. The export potentiality of cotton embroidered goods to the industrially developed countries is limited for the following reasons :—

(i) The high price of basic cloth due to the dependence of the Indian Textile Industry for cotton on foreign countries for the manufacture of fine and superfine varieties which are generally used for embroidery.

(ii) Inability of the Indian Embroidery Industry to produce very high quality of cotton embroidery for catering to the needs of foreign-markets which are fastidious.

(iii) Old and worn out condition of more than 50 per cent. of the installed machines.

(iv) Lack of technical know-how of requisite standard.

(v) Inadequate availability of requisite types of embroidery thread.

(vi) High cost of raw materials.

(vii) High internal demand.

(viii) Absence of incentive scheme for cotton embroidered goods.

(ix) Existence of a large number of embroidery machines in foreign countries which are not utilised fully.

30. There is a scope for export of embroidered goods of comparatively poor quality to Asian and African countries but the industry will have to compete with Japan and Italy which have already established their markets in those countries.

31. For the reasons stated above, the exports in the past were next to nothing. Jasmine Mills have exported about Rs. 1.2 lakhs and Rs. 3 lakhs worth of embroidered art silk fabrics in 1960 and 1961 respectively. The Fancy Corporation has exported cotton embroidered goods to the extent of Rs. 4 lakhs up to May, 1962.

**Export
Incentive
for automatic
Shuttle
Embroidery
Machine.**

32. The Indian Embroidery Industry has to make a foothold in the foreign markets. The Industry is not in a position to export embroidered goods without suitable export incentives. The following suggestions are made for such incentives.

**Suggestions
for incentive
for automatic
Shuttle
Machine
Embroidery.**

33. *Cotton*.—It is estimated that on an average, the loss incurred by an exporting unit would be to the extent of 60 per cent. of the f.o.b. prices realised in the export markets exclusive of the rebate on excise duty. As an illustration, the f.o.b. realisation of a particular cotton sort per yard is Rs. 1.80, the local selling price of which is Rs. 2.93. Extra expenditure for special packing for export is Rs. 0.04 and, therefore, the loss is Rs. 1.17. If the rebate on excise duty is granted, the net loss would be Rs. 1.02. The 50 per cent. of the f.o.b. realisation or

50 per cent. of the international price of the embroidered goods whichever is less may be taken as cotton entitlement which may be surrendered to the Indian Cotton Mills Federation. The Federation may give the manufacturer-exporter/exporter, cash benefit to the extent of 21 per cent. of the surrendered value.

The import of art silk yarn may also be allowed to the extent of 25 per cent. of the f.o.b. price of the exported goods or 25 per cent. of the international price of such goods whichever is lower. The manufacturer-exporter should have the option either to surrender it to a central body approved by the Government at a premium fixed by the Government or utilise the yarn in his own factory. If he so desires, he may import within the above art silk yarn entitlement permissible items of spare-parts, auxiliary and processing machines required by the embroidery industry. The exporter will have to surrender the art silk yarn entitlement to the central body as mentioned above. To avoid any malpractice, it is recommended that the cotton goods embroidered with minimum number of stitches of 12,000 per square meter should qualify for incentive.

Art Silk.—In the case of art silk embroidered goods, it is recommended that 75 per cent. of the f.o.b. price realised or 75 per cent. of the international price whichever is lower may be allowed to manufacturer-exporter as incentive for the import of permissible items of art silk/synthetic yarn, spare parts, auxiliary and processing machines required by the embroidery industry. The minimum number of stitches should be as mentioned above.

Cottage embroidered goods.—The incentive scheme for cottage embroidered goods may be formulated in consultation with the All India Handicrafts Board.

The drawback on excise duty should be allowed on the export of embroidered goods.

CHAPTER V

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

(1) The Industry suffered heavy losses during the initial years due to lack of technical "know-how", non-availability of skilled labour and absence of proper protection from the Government. (Paragraph 8)

(2) The following types of embroidery should be reserved for the Cottage sector :—

(i) Kasida work and Ruffugiri.

(ii) Chikankari.

(iii) Phulkari.

Embroidery on shawls, etc., should not be restricted to the Cottage sector only as such embroidery is also being carried out on a large scale by the automatic shuttle embroidery machines. (Paragraph 9)

(3) The embroidery Industry in the State of Jammu and Kashmir should be organised on proper lines, so that the proper assessment could be made with regard to its needs and the assistance required by it for rejuvenation of the old and traditional craftsmanship for boosting up export. (Paragraph 9)

(4) In view of foreign exchange stringency, uncertainty of internal demand, insignificant factor of obsolescence and low export potentiality, the old embroidery machines need not be replaced by new machines. All assistance should be given for their rehabilitation and modernisation. The requirements of foreign exchange for rehabilitation and modernisation of the old machines are estimated at Rs. 17 lakhs. Advance licences for spare parts, components and auxiliary machines may be granted for modernisation and renovation against export undertaking. (Paragraph 15)

(5) The modernisation and rehabilitation requirements can be financed to the extent of 50 per cent. from the resources of the Industry and the balance from outside resources other than Government resources. (Paragraph 16)

(6) The total annual requirements of spare parts of the existing machines would be about Rs. 2 lakhs. (Paragraph 17)

(7) It may not be possible to manufacture all spare parts economically, consistent with requisite quality, nor it would be economical to manufacture embroidery machines due to limited internal demand, unless avenues for sale of such machines are

successfully explored in the foreign markets. Foreign collaboration for the manufacture of embroidery machine is essential.
(Paragraph 18)

(8) Due to lack of adequate technical "know-how", the services of foreign experts are necessary for further installation of new machines.
(Paragraph 19)

(9) There is a dearth of skilled operatives, in spite of better emoluments offered by the Industry.
(Paragraph 20)

(10) A unit of minimum economic size would have 4 machines.
(Paragraph 21)

(11) Any correlation between the standard of living, the rate of increase in population and the demand for non-essential fancy items like embroidered goods cannot be established with reasonable degree of accuracy. Having regard to the anticipated rise in the standard of living of fast growing population and the imperative need for exploring the export markets, it is recommended that during the Third Plan period, the number of machines may be increased by twenty-six 15 yard machines. In terms of productive capacity, the increase would be about cent. percent.
(Paragraphs 22 and 23)

(12) The employment potential will not increase by more than 600 workers on the basis of two shifts working.
(Paragraph 25)

(13) A balance may be struck between certain advantages of expansion within the existing undertakings and the disadvantages of new undertakings which will have to start right from the scratch.
(Paragraph 26)

(14) It is recommended that the best quality of indigenous art silk yarn should be made available to this industry to the extent possible on the basis of machine shifts worked in the preceding period, taking into consideration any inevitable low consumption due to *force majeure*.
(Paragraph 27)

(15) The export potentiality of cotton embroidered goods to the industrially developed countries is limited by various factors.
(Paragraph 29)

(16) There is a scope for export of embroidered goods of comparatively poor quality to Asian and African markets.
(Paragraph 30)

(17) There is a need for Export Incentive Scheme for cotton embroidered goods manufactured by Automatic Shuttle Embroidery machines and also for cottage embroidered goods. The Export Incentive Scheme for art silk embroidered goods requires revision.
(Paragraphs 32 and 33)

(18) The Indian Embroidery Industry has to make a foot-hold in the foreign markets.
(Paragraph 32)

PART II
HOSIERY & KNITTING INDUSTRY

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PART II

HOSIERY INDUSTRY

CHAPTER I

BRIEF HISTORY AND PRESENT SET-UP

The term hosiery generally applies to all types of knitted articles, knitted fabrics and goods made up therefrom. Knitting is a process which involves interlooping of thread with the aid of needles. Knitted fabrics are made with only one series of yarns instead of two as in woven cloths. We have interpreted the term 'Hosiery' to include all types of knitted goods. Definition.

2. *Cotton Hosiery*.—The first organised cotton hosiery unit dates back to 1893 which was set up in Bengal. The enterprise experienced difficulty in marketing its products due to the apathy of buyers towards indigenous goods which could not stand in competition with the imported products particularly from Japan. The Swadeshi movement launched in 1905 gave a fillip to the indigenous industry. Subsequently, during the wake of the first World War, like all other industries, the Hosiery Industry enjoyed a prosperous period. However, immediately after the War, due to the resumption of foreign competition, the industry once again suffered a set-back and, therefore, had to approach the Government for tariff protection against the foreign competition. The industry once again enjoyed prosperity during the second World War, with the result that a large number of new units were set up in different parts of the country. Brief History.

3. *Woollen Hosiery*.—The first woollen hosiery unit was set up in Dhariwal in the year 1902 under the name of Egerton Woollen Mills. There were a few hosiery units in and around Ludhiana engaged in the manufacture of cotton hosiery. These manufacturers switched over to the production of woollen hosiery during the first World War to cater to the demands of the Defence Services. From the year 1928 onwards, there was a further expansion of this industry at this centre. Similarly, some units for the manufacture of woollen hosiery were set up in Bombay and Ahmedabad during this period. It was, however, during the second World War that a rapid expansion took place in the woollen hosiery industry especially at Ludhiana centre.

4. *Art Silk and Synthetic Hosiery.*—The art silk hosiery industry dates back a few decades, while the manufacture of synthetic hosiery is of recent origin. The industry is catering to the growing domestic demand for various synthetic hosiery articles.

Method of Enquiry.

5. The first report regarding the growth of this industry was submitted by the Small Scale Industries Department of the Government of India in the year 1957. We have referred to some of the salient statistical data contained in this report for assessing the existing condition of this industry.

As indicated in the paragraph 4 of the introductory chapter, the questionnaires were sent to a number of organisations. The list of bodies to whom the questionnaires were sent and those who were requested to submit Memoranda is indicated in Annexure II. The data so collected were examined and reviewed in the light of the spot inspection at various centres and the evidence that the industry gave before us.

Installed capacity.

6. The response to the questionnaires issued to the various bodies had not been very encouraging and in spite of the repeated reminders, we received replies from only half the number of bodies to whom we had addressed the questionnaire. Based on the replies received and the evidence given before us, our estimate has been that the installed capacity has increased by about 8.5 per cent. since 1957.

7. It was also observed that the industry had grown in haphazard manner without any regard to the total demand and consumers' preference for finer and better quality. The replies to the questionnaire also indicated poor statistical data available with most of the Associations which indicate that the hosiery units are not organised on proper lines.

8. The Working Group had to depend on the information collected by way of replies to the questionnaire, memoranda and the information collected during the visits to the various centres.

The replies received from 13 Hosiery Manufacturers' Associations regarding the machines installed are consolidated below :—

	Indigenous.	Imported.	Total.	Working.	Idle.
	1	2	3	4	5
A. Hand-driven Machines—					
(a) Flat Knitting Machines.	125	1,982	2,107	1,727	380
(b) Hand-driven socks machines ..	4,038	78	4,116	3,434	682
(c) Hand-driven circular machines ..	8,819	..	8,819	6,179	2,640

	Indigenous.	Imported.	Total.	Working.	Idle.
	1	2	3	4	5
B. Power Driven Machines—					
(a) Power driven socks machines. ..	..	203	203	146	57
(b) Bearded needle warp knitting looms ..	..	24	24	17	7
(c) Latch needle warp knitting looms (Raschel) ..	..	68	68	51	17
(d) Loop wheel machines ..	*60	583	643	489	154
(e) Interlock knitting machines	191	535	726	598	128
(f) Sinker circular knitting machines ..	182	2,113	2,295	1,758	537
(g) Non-sinker circular knitting machines ..	78	334	412	310	102
(h) Eyelet machines ..	..	431	431	317	114
(i) Other power driven circular knitting machines.	85	156	241	138	103
(j) Full fashioned machines.	*20	1	21	17	4
(k) Any other knitting machines.	97	26	123	11	112

* unreliable (No indigenous angle).

9. In order to assess the idle capacity, we have converted the above different items of machines in terms of one standard type of machines on the basis of the productivity of different types of machines *vis-a-vis* productivity of the standard machine. The results after such conversions are indicated below:—

Particulars.	Total number of machines.	Working.	Idle.	Percentage of idle machines.
Hand-driven machines ..	30,182	22,700	7,482	24·8
Power driven machines ..	75,023	55,744	19,279	25·7

The percentages of idle capacity in manually operated and power-driven machines are 24·8 and 25·7 respectively. It is, therefore, concluded that the existing idle capacity is to the extent of 25 per cent. as against 45 per cent. reported in the year 1957.

10. The major items of hosiery that are being manufactured in the country out of cotton, woollen and art-silk/synthetic yarn are Vests, Socks and stockings, under-wears, 'T' Shirts, sports hosiery, jerseys, scarves, sweaters, swimming trunks, gloves, Ladies' cardigans, Children's fancy wears, etc. The new items of manufacture also include the items which have industrial use such as stockinets, wiping cloth, wrappers for dyeing cones and cakes, hosiery fabrics for vulcanization, woollen muffs, etc.

CHAPTER II

TARGETS OF PRODUCTION AND SUPPLY OF
RAW MATERIALCotton
Hosiery.

11. The demand for hosiery goods depends on population, standard of living and the realistic estimate of exports. We have been informed that the consumption of hosiery yarn in the country during the last three years had been as under :—

Year.	Estimated consumption of cotton hosiery yarn (in million lbs.).		
1959.	36.00.
1960.	37.00.
1961.	38.00.

(Source: Office of the Textile Commissioner, Bombay).

Having regard to the trend in the consumption of hosiery yarn, we estimate that the annual increase in consumption of hosiery goods may be 2.5 per cent. during the Third Plan period. Similarly, the estimated increase in the demand for hosiery goods during the 4th Plan period would be of the order of 3 per cent. annually. Such an estimate is based on the higher standard of living likely to be achieved, the envisaged rate of increase in the population, stabilisation of prices of other commodities by holding the price line effectively and also higher exports of hosiery goods which are expected to be materialised by adopting measures recommended elsewhere in this report. We have also taken into account the factors such as comparatively low consumption of hosiery goods by women-folk and children.

12. Based on the above estimate, the annual demand for cotton hosiery goods at the end of the Third and Fourth Plan periods, is assessed at 42 million and 48 million lbs. respectively

Art-silk
Hosiery.

13. The estimated consumption of art silk hosiery yarn during the last three years had been as under :—

Year.	Estimated consumption of art-silk hosiery yarn (in million lbs.)		
1959	4.15.
1960	4.64.
1961	5.37.

(Source: Office of the Textile Commissioner, Bombay)

The estimated current rate of consumption of art silk hosiery as distinct from other synthetic hosiery is of the order of about 5 million lbs. per year. We have been informed that there exists a large unsatisfied demand for art silk hosiery goods. From the trend of consumers' demand for art silk hosiery goods, we estimate that the requirement of art silk hosiery may be of the order of 7 million lbs. per year by the end of Third Plan period. It is rather difficult to assess the demand by the end of the 4th Plan period in view of the fact that various types of man-made fibres are competing with the art silk yarn. We, therefore, feel that the assessment of demand of art silk hosiery during the 4th Plan period may be deferred.

14. Synthetic hosiery goods mainly consist of socks and knitted fabrics produced on flat knitting machines, special circular machines such as loop-wheels and warp knitting looms. The existing installed capacity in the country is in a position to consume about 6 million lbs. of synthetic yarn on the basis of two shifts working. As against this, the actual allocation of synthetic yarn is of the order of about 0.9 million lbs. per year. Cotton socks and some types of outer wears are being gradually replaced by synthetic substitutes. On the basis of the installed capacity and the actual production, it is very difficult to estimate the demand of the country, specially when the capacity is being starved of adequate supplies of synthetic yarn. We are, however, of the view that the current realistic demand for synthetic hosiery in the country could be easily placed at 3 million lbs. per year. On the basis of the current growing demand and consumers' preference for synthetic hosiery, our estimate regarding the annual demand of synthetic hosiery by the end of the Third and Fourth Plan periods are of the order of 4 million and 5 million lbs. respectively.

15. The Hosiery Industry Federation of India have informed us that the consumption of woollen hosiery yarn during 1957/1958 was of the order of 3.5 million lbs. As per the statistical information available with the Office of the Textile Commissioner, the production of woollen hosiery yarn for 1961 was of the order of 4.34 million lbs. out of which the Federation had distributed 2.2 million lbs. to the Hosiery Manufacturing units other than the composite and the spinning mills which have their own hosiery machines. In the light of the evidence given before us, we have concluded that there is a considerable unsatisfied demand for the woollen hosiery goods and it is in the interest of the consumers that the Government has to control the prices of hosiery yarn and hosiery goods. As against the consumption of 3.2 million lbs. of woollen hosiery yarn in the year 1956/57, the consumption was 3.5 million lbs.

in the year 1957-58. Thus the annual increase in the consumption of woollen hosiery goods had been of the order of 10 per cent. It had not been possible for us to assess the exact increase in the consumption during the next few years. We are, however, of the view that such a rate of increase viz. 10 per cent. would not be a continuous one after the basic demand is fully satisfied. Having regard to these factors, we estimate that the increase in the consumption of woollen hosiery goods, would, on an average, be of the order of about 6 per cent. per year. Thus, the estimated demand of woollen hosiery goods by the end of the Third Plan period would be of the order of 5 million lbs. per year.

16. By the end of the Fourth Plan period, we estimate that the consumption of woollen hosiery goods would be at the rate of 6 million lbs. per year. Such an estimate has been arrived at after taking into consideration the fact that having fulfilled the unsatisfied demand, the increase in the consumption would be considerably less and that there would be other items of hosiery manufactured out of admixture of man-made fibres/natural fibres (such as ramie) and wool.

COTTON YARN

Supply of
raw material:

17. The requirement of yarn for the cotton hosiery industry is at present fully met by the cotton mills in the country. The import of cotton yarn is very negligible. On the question of supply of right type of cotton yarn, we had considerable discussions with the industry at various centres. While it was agreed that the supply position was easy, the main complaint was for quality and price. We have been told that yarn with correct hosiery twist is difficult to obtain and that the prices charged are on the higher side especially in respect of finer counts. We have noted that 30 lakhs spindles have been sanctioned by the Government of India which are to be installed during the Third Plan period. With the addition of such a large capacity in the cotton spinning sector, we feel confident that the supply position of cotton hosiery yarn would be very satisfactory. We are also of the view that with the increased internal competition in the cotton spinning industry, the prices of yarn are likely to come down. The industry is, however, not quite sure about the quality of hosiery yarn. The hosiery industry needs yarn with special hosiery twist manufactured out of better cotton mixing. While we are informed that there is a voluntary price control for cotton yarn up to 40s count but there is no appropriate price differential for the yarn manufactured specifically for hosiery industry. If a suitable price differential is provided, we are confident that the spinners, would spin more of quality hosiery yarn. We, therefore, recommend that a suitable price differential for

the hosiery yarn be formulated at an early date with appropriate safeguard to avoid *malpractice* of stamping the ordinary yarn as 'Hosiery yarn'. We also recommend that wherever practicable, the cotton hosiery units be encouraged to set up co-operative spinning mills purely for the purpose of spinning hosiery yarn.

We have been informed that the Government is devising a procedure whereby cotton spinning mills would be linked with Apex Weavers' Society for the supply of yarn to handloom weavers. Similar arrangement, viz. linking particular mills with the hosiery industry for the supply of hosiery yarn may be considered especially where there exists a large concentration of cotton hosiery industry.

ART SILK YARN

18. The supply of art silk yarn to the hosiery industry is partly made out of indigenous production and partly out of imported yarn. We have been informed that the indigenous productive capacity is being increased considerably and as such, the demand for art silk yarn required by the hosiery industry would soon be met satisfactorily from the indigenous sources. The prices of the art silk yarn have been fixed voluntarily. We have been told that the Textile Commissioner is taking suitable steps to improve the quality of the artsilk yarn and the artsilk yarn manufacturing industry has been advised to attain the standard of quality as specified by the Indian Standards institution within the prescribed time

SYNTHETIC YARN

19. The various Hosiery Manufacturers' Association and the management of factories with whom the Working Group had discussions, have brought out that there exists an acute shortage of synthetic yarn in the country and the prices of such yarn are exorbitant. Under the circumstances, the claims of Synthetic Hosiery Industry for higher allocations are fully justified. We have, however, been informed that with the existing stringency in foreign exchange, immediate relief is not possible and the industry would have to wait till the indigenous capacity for the manufacture of such yarn is developed. In this respect, the Office of the Textile Commissioner informed us that a total capacity of 14 million lbs. of nylon filament yarn has been recently licensed. While we agree that the demand for the synthetic yarn could be met quantitatively when licensed capacity goes into full production, we recommend that the licensees for the manufacture of synthetic yarn should be persuaded to produce synthetic yarn of the type as required by the hosiery industry. The Government

may also consider setting up of new capacity solely for the manufacture of synthetic yarn required by the hosiery industry. The Government may further consider establishment of capacities for the manufacture of new man-made synthetic fibres in such cases where the requisite Plants could be established on self-financing basis.

COVERED RUBBER-THREAD YARN

20. As regards covered rubber-thread yarn, we understand that there are about 9 units which are in a position to supply elastic yarn to the Hosiery Manufacturers. As per the import policy, covered rubber-thread of over 60s gauge is allowed. It had not been possible for us to assess the claims of the covered rubber-thread manufacturers in meeting the demands of the hosiery industry. We recommend that the requirement of foreign exchange on this account being small, if necessary, the Government should allow the import of such covered rubber-thread which has no indigenous angle. The import licences on this account may be given to the actual users only.

WOOLLEN YARN

21. Since the woollen industry depends mainly on the yarn manufactured out of imported wool-tops and imported raw wool, it is rather difficult to suggest an easy solution to augment the supply of woollen hosiery yarn. There is an acute shortage of woollen hosiery yarn in the country. We have been informed that the efforts are being made to utilise more of Indian wool in admixture with nylon for the production of certain items of fabrics required by the Defence and other Government Departments. We recommend that an all out effort should be made not only to improve the breed of the Indian Sheep but also to grade the Indian wool properly so that more Indian wool could be utilised for the production of woollen hosiery yarn. The necessary assistance could also be given to the licensed combers to produce wool top from Indian wool. We also recommend that in case the existing spinners are not willing to spin hosiery yarn out of Indian wool tops, to the extent it can be consumed, the Government may consider allowing spindleage to the hosiery sector solely for the purpose of spinning woollen hosiery yarn from Indian wool-tops. We also recommend that the Government should explore the possibility of exporting more of Indian wool and importing the equivalent quantity of foreign wool whereby there would be a net earning of foreign exchange by such transaction. A portion of the earning may be diverted for the import of wool-tops required for the manufacture of hosiery yarn.

22. We have been given to understand that the admixture of 10 per cent. nylon and Indian wool can be used for the manufacture of hosiery yarn which gives reasonable wearing properties as

compared to those of the goods manufactured out of hosiery yarn produced from imported wool-tops. It would, however, be necessary to ensure that adequate supply of nylon-fibre/nylon-tops, is made available for blending with Indian wool/wool-tops. We recommend that the import of adequate quantity of nylon-fibre/nylon-tops (the prices of which are more-or-less the same as imported wool/wool-tops) may be allowed. This would augment the supply of woollen hosiery yarn as the foreign exchange component of such mixed yarn would be very small.

23. Apart from the short supply of woollen hosiery yarn, we have received complaints regarding the poor quality of woollen hosiery yarn manufactured by the spinners who are reported to be deliberately lowering the quality. In this respect, we were informed that the Government is proposing to enforce compulsory stamping of the specifications of woollen yarn sold in the market. While we appreciate the measures proposed to be taken by the Government regarding the enforcement of compulsory stamping of specifications of woollen yarn, it is recommended that deterrent penalties should be imposed on the defaulters.

CHAPTER III

EXPANSION, REHABILITATION AND MODERNISATION**Expansion.**

24. It is observed that the industry has grown in a haphazard manner and that there still exists an idle capacity to the extent of about 25 per cent. Under the circumstances, we recommend that immediate steps be taken to check such haphazard growth. We are of the view that the following measures may be taken :—

(a) As in the case of powerlooms, replacement of hosiery machines should require permission of the Government.

(b) The acquisition/installation and sale of hosiery machines should be controlled by the Government whereby it would be necessary to obtain permission for the sale as well as the acquisition/installation of hosiery machines.

(c) The Directors of Industries of the State Governments should ensure that the replaced hosiery machines are put out of commission, viz. such machines are either scrapped or sealed.

(d) Import of hosiery machinery should be allowed to hosiery manufacturers only against valid replacement and installation permits.

(e) Import of important components such as cylinders should be permitted only to the hosiery manufacturers for replacement purpose and to hosiery machine manufacturers for the manufacture of complete machine.

(f) Due to dispersed nature of the industry, the State Directors of Industries, should undertake periodical survey to check unauthorised installations of hosiery machinery.

25. Limited expansion by way of installation of a few modern units may be allowed which should be export oriented.

Rehabilitation.

26. It is observed that a large number of machines installed in the industry are not only old and obsolete but are also uneconomical to operate. A considerable number of obsolete machines has in fact, contributed mainly to the existence of such large idle capacity.

27. The total number of knitting machines installed in the country is estimated at about 30,000 comprising of both the hand-driven and the power-driven machines. Excluding the hand-driven machines (other than flat-knitting machines) the capacity may be reckoned at about 17,000 machines. We estimate

that half the idle capacity consisting of obsolete machines requires replacement during the Third Plan period. In other words, the requirement of machinery on this account could be placed at 2,000 machines to 2,100 machines as the idle capacity is about 25 per cent.

28. While it is true that 75 per cent. of the capacity is being utilised, it cannot be said that the condition of the same is satisfactory. During the course of our visits to various centres, the need for replacement of the working machines by modern machines, was stressed. Having regard to the latest developments in the hosiery machines, the modernisation of the working capacity has also become inescapable. The hosiery and knitted goods manufacturing industry has made great strides in other countries. Numerous types of modern power-driven, jacquard hosiery and knitting machines with automatic devices have now been introduced. Such machines are capable of manufacturing a variety of garments with fancy stitches. Apart from the diversification of the products, these machines are capable of running at a much higher speed than the conventional machines used in the country. Despite foreign exchange stringency, limited installation of such machines by way of replacement of conventional types of working machines has to be allowed, if necessary against guaranteed export performance. Otherwise the Indian Hosiery Industry will not be able to play its role in the economic development of the country. Our estimate for this purpose is about 1,000 machines. Thus, the total requirement of machinery on account of replacement of obsolete idle capacity as well as modernisation of the working capacity would amount to about 3,000 machines valued at Rs. 2.25 crores. Modernisation.

29. Apart from the knitting machines which are installed in the industry, there are ancillary equipments such as Industrial Sewing Machines, tailoring machines, cutting machines, button-holing and stitching machines, hosiery processing and finishing machinery which are required for the production of hosiery goods. Such equipments also need introduction/replacement by way of modernisation and the requirement is estimated at Rs. 0.25 crores (about 10 per cent. of machinery requirement).

30. The total cost of rehabilitation is thus estimated at Rs. 2.5 crores.

31. We had tried to assess the requirement of rehabilitation and modernisation during the 4th Plan period but we feel that the quantum of such rehabilitation and modernisation could be better assessed only after the industry is organised on proper lines and put on a sound footing. We are, therefore, of the opinion that such assessment should be deferred for the time being.

**Financing
Rehabilita-
tion and
Modernisa-
tion.**

32. We had attempted to assess the industry's ability to finance the rehabilitation and the modernisation cost. From the replies received on this point and the evidence that the industry gave before us, our estimate regarding the extent to which the industry would be able to finance from their own resources, is Rs. 50 lakhs. It is, therefore, concluded that external finance to the extent of Rs. 2 crores would be necessary to rehabilitate and modernise the industry, as recommended by us.

33. We have been given to understand that there are a number of schemes for the grant of financial assistance to the Small Scale Industries including hosiery industry. Some of them are as under :—

(a) Hire Purchase scheme of National Small Industries Corporation, New Delhi.

(b) Schemes of the State Governments to finance the small scale industries.

(c) Assistance from the State Finance Corporations.

(d) Schemes of the State Bank and Reserve Bank of India.

The majority of the hosiery units being financially weak have to depend on intermediary financiers and are in turn, exploited.

We, therefore, recommend the following measures :—

(1) The Hire Purchase Scheme of N. S. I. C. for supply of hosiery and knitting machines which has been discontinued should be revived.

(2) The loans currently rejected by some of the State Governments should receive favourable consideration.

(3) The long-drawn procedure for procuring financial assistance from the State Bank and Reserve Bank of India should be simplified and the terms and conditions for such assistance should be liberalised.

Taxation.

34. It has been complained that the existing disparity in the incidence of commercial taxes in Hosiery Industry, particularly Sales Tax, is proving a hurdle for the uniform progress and development of the industry which tends to move to those areas where taxes are the least. We recommend that such disparity should be removed. It is also recommended that in lieu of commercial taxes imposed by the State Authorities on the finished hosiery goods, there may be an additional levy on the basic raw materials, viz., yarns.

**Provision of
Foreign
Exchange.**

35. Against the requirement of machinery worth of Rs. 2.5 crores during the Third Five-Year Plan period, the indigenous availability is estimated at Rs. 75 lakhs. Thus the gap between the estimated demand and the indigenous supply would be

of the order of Rs. 1.75 crores which would, therefore, have to be provided for the rehabilitation and modernisation of the industry. Against this estimate of foreign exchange, it is estimated that Rs. 50 lakhs would be earned by the industry by way of machinery entitlement under the Export Promotion Scheme (on the subject of export promotion, we have made our recommendations separately in Chapter IV). Therefore, the annual requirement of foreign exchange over and above the estimated machinery entitlements during the next four years of the Third Plan period would be Rs. 30 lakhs. We, therefore, recommend that a provision of Rs. 30 lakhs annually may be made and earmarked for the hosiery industry out of which the requirement of each region should be met.

36. We are required to assess the employment potential on account of the expansion, rehabilitation and modernisation of the industry. As stated in paragraph 25, there is no scope for the industry to expand except in respect of a few special cases where such expansion could be considered under export-oriented schemes. Thus, the potentiality of significant increase in employment in the industry is ruled out. **Employment Potential.**

Since, however, the rehabilitation programme, as has been suggested above, envisages further reduction in the idle capacity at least to the extent of 12 per cent. to 15 per cent. resulting in increased production which is necessary to achieve the planned targets, we are of the view that the scope to absorb additional labour by this industry by the end of the Third Plan period through rehabilitation and modernisation, may be placed at 9,000 workers.

CHAPTER IV

EXPORTS

Exports.

37. The following table gives the statistics of exports of hosiery and knitted goods from this country, effected by Sea, Air and Post-parcel classified according to different types of hosiery.

(Figures in million Rupees).

Item	1959	1960	1961
Cotton	3.11	2.15	1.44
Silk	0.27	0.26	0.27
Art silk	0.30	0.01	0.04
Woollen	3.19	4.12	1.61
Unspecified	0.45	0.77	0.41
Total	7.32	7.31	3.77
Post Parcel	3.13	1.89	1.25
Grand Total	10.45	9.20	5.02

(Source : Cotton Textile Export Promotion Council, Bombay).

There has been a sharp decline in the exports of hosiery goods, especially during the year 1961 as compared with the exports effected in 1960. The reasons for deterioration in export performance have been discussed with the representatives of the industry at various centres and we have observed that the following are the main causes:—

(a) Incompetitiveness of the Indian hosiery goods both in terms of prices and quality due to :

(i) High prices of raw materials.

(ii) Poor quality of yarn.

(iii) Lack of modern and up-to-date machinery.

(iv) Lack of modern processing and finishing facilities.

(b) Non-adherence to the declared specifications which is responsible for the loss of *sizable* markets abroad.

(c) High profit margins in the domestic market.

(d) Lack of knowledge of export market.

(e) The existence of a large number of disorganised small units in the industry.

(f) Procedural delay in the issuance of export incentives.

(g) Lack of facilities to import samples of hosiery goods in demand in the overseas market.

(h) Import restrictions on hosiery goods by the developing countries to protect their own industries.

(i) Inadequacy of finance with majority of the hosiery manufacturing units.

38. Our recommendations for adequate supply of raw materials of right types and for modernisation and rehabilitation have already been made in the previous chapter.

Recommendations for Remedial Measures.

39. With a view to regaining confidence in the quality of Indian hosiery goods, we recommend that Government should introduce compulsory pre-shipment inspection and stamping of specifications correctly. This inspection work may be entrusted to the Cotton Textile Fund Committee. Minimum specifications should be evolved for hosiery goods meant for export and these should be insisted upon unless the contract stipulates specifications lower than the minimum.

40. On the question of assessing export potentialities of the Indian hosiery goods, we recommend that market surveys in the foreign countries may be carried out by sending delegations which should consist of prominent exporters and manufacturers. In this respect, we also recommend that the Indian Embassies and Trade Commissions should study the local conditions and demand for hosiery goods and the reports of the Market Surveys may be made available to the Industry and Trade. The industry may examine the possibility of fixing compulsory export obligation for the hosiery manufacturing units which are registered under the Industries (Development and Regulation) Act on the same lines as those of the Cotton Textile Industry. The Government may consider grant of additional facilities by way of import of machinery, ancillary equipments, etc. to those who fulfil such export obligations.

41. The lack of organisational facilities makes it difficult to disseminate trade enquiries from foreign countries. The formation of a federal body as suggested in chapter VI will help percolate such enquiries to all hosiery units.

42. It is understood that Government is taking necessary steps to simplify the procedure for the grant of export incentive. We recommend that the procedural amendment may be finalised at an early date so as to minimise the delay in the payment of incentives. We understand that the existing procedure of

getting the benefit of drawback on the Excise Duty on the export of hosiery goods is rather cumbersome. We recommend that the procedure for obtaining the drawback on the Excise Duty also may be simplified.

43. We have been told that, if the samples of hosiery goods which have substantial demand in the overseas markets are made available to the industry, it would be possible for them to manufacture such goods. We recommend that the import of such samples may be allowed against the import entitlements under the Export Promotion Scheme.

44. In addition to the above remedial measures, we recommend that Barter Deals and Trade Agreements which are entered into by the Government should also include Indian hosiery goods. Similarly, the question of setting up of Export Houses in places where the industry is concentrated may be examined by the industry. We are of the view that Government should also consider the establishment of a few export-oriented self-contained hosiery units equipped with modern hosiery machines.

**Export
Incentive
Schemes.**

45. There are three Export Promotion Schemes for hosiery and knitted goods as shown below :—

- (a) Scheme for cotton hosiery goods.
- (b) Scheme for woollen hosiery goods.
- (c) Scheme for mixed hosiery goods.

The industry has informed us that but for the export incentive schemes, the exports would not have been materialised even to the existing level.

Incentive Scheme—Cotton Hosiery Goods

46. Under this scheme, a total import incentive of 15 per cent. is given on the F. O. B. value of the Cotton hosiery goods exported. There is a general complaint that this incentive is not adequate. We recommend the enhancement of the incentive from 15 per cent. to 40 per cent. which will result in larger net earning of foreign exchange. At present, the foreign exchange component of the Indian hosiery goods is small. We also recommend that within the value of the entitlements, Manufacturer—Exporter/Exporter may be allowed to import permissible items of dyes and chemicals, textile accessories, embellishments, machinery by way of replacement and ancillary equipments which have no indigenous angle.

Incentive Scheme—Woollen Hosiery Goods

47. Against export of Woollen Hosiery Goods, incentive to the extent of 85 per cent. of the f. o. b. value is given for import of raw materials, embellishments (1 per cent. max.) machinery

(20 per cent. max.) and dyes and chemicals (10 per cent. max.). It is understood that the Government is considering the increase of incentives under this scheme from 85 per cent. to 95 per cent. We are informed that such an increase will enable the Indian Woollen Hosiery goods to complete successfully in foreign markets.

Incentive Scheme—Mixed Hosiery goods

48. In view of the suggested rates of incentives for hosiery goods, the Incentive Scheme for mixed hosiery goods should also be suitably revised. The definition of mixed fabrics should be amended so as to expand the scope of diversification of products. Proper safeguards should, however, be devised against malpractices of claiming higher incentive.

Incentive Scheme—Art silk and Synthetic Hosiery goods

49. There is no Incentive Scheme for the export of art silk and synthetic hosiery goods though the Export Incentive Scheme is operative for art silk/synthetic fabrics for a few years. We recommend that the Government should formulate a similar scheme at an early date for art silk/synthetic hosiery. The rate of incentive in the case of art silk and synthetic hosiery may be the same as applicable to art silk/synthetic fabrics.

Incentive Scheme—Silk Hosiery goods

50. The export potential of silk hosiery is rather limited and it may be possible to promote exports of such hosiery goods provided a suitable Incentive Scheme is formulated. The Government may consider this suggestion.

51. We recommend the following targets for the export of hosiery goods :—

Targets of Exports,

(In million rupees)

Items	Years			
	1962	1963	1964	1965
Cotton Hosiery	3	4	5	6.5
Woollen Hosiery	4	5	6	6.5
Art silk/Synthetic Hosiery	1	2	2.5	3
Others	3	3	3	3.5
Total	11	14	16.5	19.5

We are confident that given the necessary incentives and facilities which have been recommended above, the Indian Hosiery Industry should be in a position to achieve the export targets.

CHAPTER V

MANUFACTURE OF HOSIERY MACHINES, HOSIERY NEEDLES AND OTHER ANCILLARY EQUIPMENTS

Hosiery
Machines.

52. The items of hosiery machines manufactured indigenously are more-or-less of conventional types. The prominent manufacturers of indigenous knitting machines are seven in number and the items of machinery manufactured are indicated below :—

Names of Manufacturers 1	Items of machinery manufactured 2
1. M/s. Subhas Machinery and Industries (Private) Ltd., Calcutta. 2. M/s. Kalsi Mechanical Works, Nandpur, Ludhiana. 3. M/s. Punjab Machinery Works Ltd., Ludhiana. 4. M/s. Bharat Machinery Works, Ludhiana. 5. M/s. Raj Mechanical Industries, Ludhiana. 6. M/s. Red Star Machinery Works, Ludhiana. 7. M/s. Sartaj Machinery Works, Ludhiana.	Power driven, big Circular Knitting machines such as Sinker machine, Non-sinker machine, Rib machine, Pattern Wheel Rib machine, Interlock machine, Eyelet machine, Kneecap machine, etc. (Annexure III).

53. The statistical data submitted regarding the production of the hosiery machinery during the last two years, the average number of labour employed, investments, etc. are given below :—

	Installed Firm. capacity per year per shift.	Actual production (Nos.)		Average number of workers per day per shift	Total Investment (in Rs.)		
		1959-60.	1960-61.		Land and Building.	Machinery and Equipment.	Working Capital.
1	2	3	4	5	6	7	8
1. Subash ..	144	71	98	45	45,000	85,000	5,00,000
2. Kalsi ..	150	110	104	58	70,000	1,25,000	1,20,000
3. Punjab ..	144	107	76	52	47,587	21,493	1,22,060
4. Bharat ..	72	27	29	26	33,009	16,512	83,840
5. Raj ..	125	33	33	12	10,000	40,000	75,000
6. Red Star.	72	11	15	17	Nil.	30,000	20,000
7. Sartaj ..	72	Nil.	15	25	30,000	30,000	40,000
Total ..	779	359	370	235	2,35,596	3,48,005	9,60,900

54. In addition to the above major hosiery machinery manufacturers, there are a number of small firms who manufacture items such as hand-driven socks machines, small circular knitting machines, etc.. Amongst these manufacturers special mention may be made of M/s. Jagdev Engineering Works, Ludhiana who manufacture Flat Knitting Machine.

55. The manufacture of Modern knitting machines has not been developed as yet. Initiative taken by M/s. Subhash Machinery and Industries Private Ltd., Calcutta, to manufacture Loop-Wheel Machines is worth mentioning. In this case, the Working Group, however, has observed that this firm is importing major components for building machine. We are of the opinion that all the above firms should be encouraged to develop the manufacture of modern types of hosiery/knitting machines provided the suitable phased production programmes have been drawn up by them wherein a substantial portion of the machine is manufactured indigenously at early phases.

56. We have visited the various machinery manufacturers and heard the evidence of the industry regarding the performance of indigenous machine and have come to the conclusion that the quality and the performance of the indigenous machines are satisfactory especially in respect of conventional types. Quality of
Indigenous
Machine.

57. The various difficulties that have been confronted by the hosiery machinery manufacturers are summarised below:—

- (a) Inadequate supply of requisite types of raw materials.
- (b) Inadequate facilities for the import of proto-type machines.
- (c) The difficulties in obtaining the requisite machine tools.
- (d) Lack of expert technical assistance.
- (e) Insufficient financial resources.

58. Having regard to the difficulties of the hosiery machinery manufacturers, we recommend that suitable measures may be taken to ensure:—

- (a) Supply of right types of raw materials both indigenous and imported,
- (b) Supply of requisite types of machine tools on priority basis,
- (c) Facilities to import modern proto-type machines to the deserving entrepreneurs,
- (d) Engaging foreign technical expert(s) for the guidance of indigenous hosiery machine manufacturers under the foreign Technical Aid Programmes,
- (e) The necessary financial assistance under the National Small Scale Industries Loan Scheme for the purchase of machine tools, and
- (f) Encouragement to enter into suitable foreign collaboration for the manufacture of latest types of hosiery machinery on acceptable terms.

59. We are of the opinion that having provided the facilities suggested above, the indigenous hosiery machine building industry would make a good head-way towards manufacturing the modern hosiery machines required by the industry. It is also expected that with the assistance of the Government, it should be possible for the indigenous industry to fulfil the annual target of production of indigenous machinery to the extent of Rs. 75 lakhs by the end of Third Plan period. The question of creating additional capacity for the manufacture of conventional types of machines does not arise in view of the limited realistic demand for such types of machines.

60. There had been a suggestion regarding the setting up of a hosiery machinery demonstration centre in the country. Having examined the scope and utility of the same, we agree with the suggestion. Such centre should demonstrate the working not only of the indigenous hosiery machines but also of the latest models of hosiery machines manufactured abroad.

Manufacture
of Hosiery
Needles.

61. The importance of the quality of hosiery needles for the production of quality knitted fabrics needs no emphasis. The hosiery needle is the main item of accessory required by the industry in large quantities. It is, therefore, essential to ensure adequate supplies of quality needles. We have been informed that there are about 30,000 different types of hosiery needles. However, as far as India is concerned, the demand is restricted to about 150 types. We have also been informed that self-sufficiency in the supplies of hosiery needles is being gradually attained.

Manufacture
of Latch
Needles.

62. There are three firms who are manufacturing wire and plate latch needles in the country. Apart from that, two more firms have also been licensed to manufacture hosiery needles. The details of the licensed capacity of all the firms with other particulars are shown below :—

Firm.	Annual licensed capacity in Million pcs.	Actual production in Million pcs. 1959/60-1960/61.	Capital Investment (Rs. in lakhs)	
			Fixed.	Working.
1. M/s. Groz-Beckert ..	6	*Not in production	20.55	5.45
2. M/s. Knitting Machineries	3	2.25 2.25 (Value Rs. 2.25—Rs. 2.25 lakhs).	5.00	2.00
3. M/s. Excelsior Needle Industries.	12 double- shift.	N. A. 1.00 (estimated)	1.00	1.00
4. M/s. Rajen Santosh ..	3	Not in production	8.00	3.00 (proposed)
5. M/s. Miyake-Choudhury	3	Not in production	N. A.	
Total licensed capacity ..	27	million needles annually.		

(N. A. Not available).

*M/s. Groz-Beckert have gone into production in late 1961 and is reported to be manufacturing needles to full licensed capacity according to phased programme.

63. Since there have been a number of complaints about the quality of indigenous needles, we have visited the above mentioned three factories with a view to assess the standards of precision and quality maintained by the indigenous manufacturers. It has been observed that while M/s. Groz-Beckert Saboo Ltd. have attained high standard by strict control and inspection at each stage of manufacture, such is not the case with M/s. Excelsior Needle Industries (Private) Ltd. and M/s. Knitting Machinery Syndicate (India) Private Ltd. who have not got suitable equipments. We recommend that these two manufacturers should take steps to introduce modern methods of production and quality control for improving their products within a stipulated time. In case of failure, the licensed capacity sanctioned to them should be reduced to their present quantum of production. We are told that as against the assessed annual demand of 18 million needles, the licensed capacity sanctioned is of the order of 27 million pieces per year, while the actual production is in the region of 9.25 million pieces. The production of M/s. Excelsior Needle Industries (Pvt.) Ltd. is reported to be negligible as against their large licensed capacity of 12 million needles per annum.

We have also noted that two other Licensees viz. M/s. Rajen Santosh (Private) Ltd. and M/s. Miyake Choudhury have yet to go into production. In the case of later, it is reported that despite their best efforts, the capital equipment could not be procured. If the implementation of these capacities is not forthcoming due to inaction on the part of licensees, it would be advisable to revoke such capacities after giving reasonable time-limit (considering dates of issue of licences) and re-allocate the same to the more deserving entrepreneurs. The precision and standard of product demand active foreign collaboration/employment of foreign experts.

64. We have also observed that semi-finished hosiery needles are being allowed to be imported by the manufacturers who are already in the line for a number of years. Such facilities should only be restricted to the new-comers in the field and that too for a limited quantity and period. The value of semi-finished needles should not exceed Rs. 50 per 1,000 pieces in case of imported needles of German origin and Rs. 30 per 1,000 pieces in case of imported needles of Japanese origin.

65. The quality of hosiery needles depends to a very large extent on the quality of the raw materials. We are told that the requisite types of raw materials are not yet available indigenously. The cost of raw material being comparatively small as compared to the value of the finished product, we recommend that adequate imports should be permitted to the needle manufacturing industry.

66. There are some special types of hosiery needles such as bearded needle for which the demand is very limited. The manufacture of such needles for internal market will not be economical. Under the circumstances, we recommend that a limited quantity of import of such needles may be continued until export markets are explored.

*Sinkers, Sliders, Jacks, Transfer Points and other
knitting elements*

67. A large variety of these items are required by the Hosiery Industry. Our estimate regarding the requirements of these items is about 2 million pieces per year. We understand that a few types of these knitting elements are being manufactured in the country by two firms viz. (1) M/s. Knitting Machinery Syndicate, Ludhiana. (2) M/s. Excelsior Needle Ltd., Ludhiana. We have observed the reluctance of the Industry to use these indigenous products because of their poor quality. We recommend that all reasonable assistance may be given to enable the indigenous manufacturers to improve the quality of these items produced by them failing which new capacities may be developed.

**Industrial
Sewing
Machines.**

68. These machines are required for making up ready-made hosiery garments by a large number of hosiery manufacturers who have their own tailoring establishments. Such machines are also required by tailoring firms who make up hosiery garments out of knitted fabrics. Apart from the domestic types of Lock Stitch Machines, the other common types of Industrial Sewing Machines required by the Hosiery Industry are: Overlock Machines, Chain Stitch Machine, Flat-lock Machine, Linking Machine, Button-holing machine and Button Sewing Machine. While the domestic type of Lock Stitch Sewing Machine is being manufactured in the country and the quality of the same is well-established, the manufacturing capacity of Industrial Sewing Machines requires to be developed in the country. At present, there is only one firm viz. M/s. Swaroop Mechanical Works, Ludhiana who are in a position to supply Overlock Sewing Machines. The Working Group had visited this firm with a view to ascertain the quality of machine that the firm is capable of manufacturing, the standards of precision maintained and the annual capacity. Our findings are that this firm is capable of manufacturing 60 machines per month. Their actual production had, however, been of the order of 40 machines. On the question of quality of the indigenous Overlock Sewing Machine, the Industry in their evidence given before us complained about its quality and performance. The main complaint was in respect of excessive wear-and-tear of vital components, disturbance in the setting of different parts and the need for constant attention for rectifying minor but irritating defects. We were also

informed that this type of machine is outmoded as compared to the latest types of high speed machines.

69. While we appreciate the efforts made by M/s. Swaroop Mechanical Works for improving the overlock sewing machines, we are of the view that there exists a considerable scope for further improvement of the indigenous machine by employing foreign expert(s) or through technical collaboration with a reputed foreign manufacturer. A time limit may be given to the firm to bring up the efficiency of the machine reasonably comparable with that of its foreign counterpart. If they fail to do so, the Government should consider encouraging a new entrepreneur who would be prepared to undertake the manufacture of such machines in collaboration with reputed foreign firm. Till such time this capacity is developed, we recommend that the Government should consider restricted/linked import of overlock sewing machine in the general interest of the hosiery industry.

70. As has been pointed out earlier, the Hosiery Industry needs various other types of sewing and ancillary machines for which there is no indigenous angle. It had not been possible for us to assess the demand for various types of such machines. We would, however, recommend that such an assessment be made at an early date so as to determine whether manufacture of such machines could be undertaken economically. If it is found that the demand justifies economical manufacture of such machines, the development of such capacity may be also coupled with the manufacture of overlock machines as an alternative to the suggestion made in paragraph 69.

71. We have received representations regarding the non-availability of spares required for overlock sewing machines of types other than the one manufactured by M/s. Swaroop Mechanical Works. We recommend that the existing import policy may be suitably amended so as to allow the imports of such spares required by the Hosiery Industry.

72. We have observed that the country is in a position to export the domestic lock-stitch sewing machines. We are, therefore, of the view that, given the necessary facilities and encouragement for the manufacture of Industrial Sewing Machine, there is no reason why the exports of such machines also could not be effected in near future.

73. We have been informed that while the indigenous needles are available for ordinary domestic lock-stitch sewing machines, there is no indigenous angle to the needles required for modern industrial sewing machines. We consider that there is a scope for the development of indigenous capacity for such types of sewing needles.

Needles for
Industrial
Sewing
Machines.

CHAPTER VI

ORGANISATION AND TRAINING

Present
set up of
the Industry.

74. The Hosiery Industry in India consists of a large number of units scattered all over the country. The majority of these units are very small and it is very difficult to collect statistical data pertaining to the industry because of its dispersed nature. The hosiery units, by and large, were found to be ignorant of the latest development of the industry, formalities to be complied with for obtaining governmental assistance, importance of co-operation and sharing of knowledge, etc. No doubt, there are many hosiery associations located in various centres, but, barring a few, the majority of them do not seem to be serving much purpose. We have also come across two or more associations in the same centre having divergent views on the common problems and their solutions. The existence of numerous associations without any common objective indicates the inherent weakness in the organisational set up of the Hosiery Industry. We understand that the Office of the Textile Commissioner is trying to persuade various associations for the last two or three years to federate into one body. We have also been told by one of the Members of our Group that under his own initiative, all cotton hosiery associations excepting two have now agreed in writing to federate into one organisation. We recommend that the industry should be persuaded to form such a Federation at a very early date. With the formation of such a federation, the governmental assistance for the planned development of the industry can be facilitated.

75. The different spokesmen of the Industry have brought to our notice that the Hosiery Industry in the country had been neglected in the past and that it was difficult to obtain assistance for rehabilitation and development. The industry has very much welcomed the appointment of the Working Group to analyse their problems and suggest remedial measures. It is looking forward to the establishment of a governmental agency which would look after their interests continuously. As a result of the discussions we had with the industry at various centres, we are of the view that there is a need for setting up of a permanent central organisation to look into the problems of the industry and provide suitable assistance to it. We recommend that such an organisation may be set up on the lines of the All India Handloom Board. Such a body which could perhaps be called as "The Hosiery and Knitwear Board" should have the following main functions:—

- (a) To act as an advisory body for the matters of broad policy.

(b) To serve as a channel of communication and recognised means of consultation between the Government and the industry.

(c) To evolve schemes of assistance for the Hosiery Industry in the light of the problems of the industry.

(d) To promote and develop the manufacture of hosiery machinery and other ancillary equipments required by the industry.

(e) To promote the use of hosiery goods and to safeguard the consumers' interest by suitable publicity.

(f) To co-operate with the Export Promotion Panel in formulating Incentive Schemes.

We recommend that such a Board may be set up at an early date under the Chairmanship of the Textile Commissioner.

76. We have been informed that there is a dearth of highly qualified technical personnel in the country. At present, there is only one Training Institute viz. Government Hosiery Training Institute, Ludhiana run by the Government of Punjab for training the Hosiery technicians. This Institute runs two courses of training viz. the Diploma Course of two years (which is going to be of three years from the year 1962) and a Certificate Course of one year duration. We had visited this Institute and have also heard evidence regarding the training facilities which the Institute provides. Our conclusion is that there exists a large scope for improving the facilities for practical training as well as for imparting technical knowledge. While such an Institution should possess the latest and up-to-date hosiery machinery, we observed that most of the knitting machinery installed in this Institution are of old and out-moded types. We recommend that the Government of Punjab be requested to take suitable steps to improve the training facilities in this Institution. Training.

77. There are a number of Textile Institutes in the country. These Institutes do not impart training in Hosiery Technology. We recommend that the textile syllabus of these Institutes should also include Hosiery Technology so that the students, after completing their course in the Institutes, may also serve the Hosiery Industry.

78. Advance training in Hosiery Technology, manufacture of hosiery machinery, etc. could be availed of by the industry as well as by the concerned Government Departments under Foreign Technical Aid Programmes e.g. Colombo Plan, etc. We, therefore, recommend that Government should sponsor suitable technicians for advance training abroad.

79. The small hosiery units require the services and advice of highly qualified hosiery technicians but cannot afford them. It is recommended that a number of such units may join together for availing the services and advice of experts and consultants.

CHAPTER VII

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

- (1) The term hosiery has been interpreted to include all types of knitted goods. (Paragraph 1)
- (2) It has been estimated that the installed capacity has increased by about 8.50 per cent. since 1957. (Paragraph 6)
- (3) It has been observed that the Industry has grown in a haphazard manner. (Paragraph 7)
- (4) It has been estimated that the idle capacity existing in the industry is to the extent of 25 per cent. as against 45 per cent. in 1957. (Paragraph 9)
- (5) The annual demand for cotton hosiery goods at the end of the Third and Fourth Plan periods has been assessed at 42 million and 43 million lbs. respectively. (Paragraph 12)
- (6) The demand for artsilk hosiery goods has been estimated at 7 million lbs. per year by the end of Third Plan period. (Paragraph 13)
- (7) The annual demand for synthetic hosiery by the end of Third and Fourth Plan periods has been assessed at 4 million and 5 million lbs. respectively. (Paragraph 14)
- (8) The annual demand for woollen hosiery goods at the end of Third and Fourth Plan periods has been estimated at 5 million and 6 million lbs. respectively. (Paragraphs 15 and 16)
- (9) In order to make available adequate quantity of cotton hosiery yarn, a suitable price differential of hosiery yarn would provide an incentive to the existing spinning units to manufacture right type of hosiery yarn in sufficient quantities. (Paragraph 17)
- (10) Wherever practicable, the cotton hosiery units may be encouraged to set up co-operative spinning mills solely for the purpose of spinning hosiery yarn (Paragraph 17)
- (11) In areas where there is large concentration of units, cotton spinning mills may be linked with the hosiery units for the supply of adequate quantity of hosiery yarn. (Paragraph 17)
- (12) Licensees for the manufacture of synthetic yarn should be persuaded to produce the requisite quality of synthetic yarn required by the hosiery industry. (Paragraph 19)
- (13) Licences to import covered rubber thread yarn, having no indigenous angle may be given to the actual users only. (Paragraph 20)

(14) An all out effort should be made not only to improve the breed of Indian sheep but also to grade Indian wool properly so that more Indian wool could be utilised for the production of woollen hosiery yarn. (Paragraph 21)

(15) The possibility of exporting more of Indian wool should be explored in order to import equivalent quantity of foreign wool whereby there would be net earning of foreign exchange by such transaction. A portion of this earning may be diverted for the import of wool-tops required for the manufacture of hosiery yarn. (Paragraph 21)

(16) It would be necessary to allow import of adequate quantity of Nylon fibre/Nylon-tops for blending with the Indian wool/wool-tops to produce woollen hosiery yarn of good quality from Indian wool. (Paragraph 22)

(17) In order to ensure the quality of the woollen yarn, a compulsory stamping of specifications of woollen yarn should be enforced and deterrent penalty should be imposed on the defaulters. (Paragraph 23)

(18) The haphazard growth of the industry should be immediately checked. (Paragraph 24)

(19) Limited expansion by way of installation of a few modern units may be allowed which should be export-oriented. (Paragraph 25)

(20) A considerable number of obsolete machines has mainly contributed to the existence of a large idle capacity. (Paragraph 26)

(21) The requirement of machinery by way of replacement during the Third Plan period is about 2,000 machines. (Paragraph 27)

(22) The requirement of machines for modernisation is estimated at 1,000 machines during the current plan period. (Paragraph 28)

(23) The requirement of ancillary equipments is placed at Rs. 0.25 crores during the Third Plan period. (Paragraph 29)

(24) The total cost of rehabilitation is assessed at Rs. 2.5 crores during the Third Plan period. (Paragraph 30)

(25) The industry would be able to finance Rs. 50 lakhs towards modernisation and rehabilitation requirements out of its own resources. (Paragraph 32)

(26) It would be necessary to provide external assistance of the order of Rs. 2 crores to rehabilitate and modernise the industry. (Paragraph 32)

(27) The Hire-purchase Scheme of N. S. I. C. should be revived. The procedure for granting financial assistance under various existing schemes of the Central Government as well as State Governments may be simplified, and conditions of loans relaxed. (Paragraph 33)

(28) The procedure to tax the raw materials rather than the finished hosiery goods by a Central Authority on uniform basis all over the country may be devised. (Paragraph 34)

(29) An annual provision of Rs. 30 lakhs of foreign exchange may be ear-marked for the hosiery industry for the import of machines, spares and ancillary equipments. (Paragraph 35)

(30) In view of limited expansion, the employment potential will not exceed 9,000 workers during the Third Plan period. (Paragraph 36)

(31) There has been a sharp decline in the export of hosiery goods during the year 1961. (Paragraph 37)

(32) The incentive for the export of cotton hosiery goods is not sufficient. There is no incentive scheme for the export of artsilk, synthetic and silk hosiery goods which should be formulated to increase export. (Paragraphs 45 to 50)

(33) The quality and performance of the conventional types of indigenous hosiery/knitting machines have been found to be satisfactory. (Paragraph 56)

(34) A number of factors has contributed to the slow development of the hosiery machine building industry. (Paragraph 57)

(35) It is expected that the indigenous hosiery machine building industry would be able to manufacture machinery worth Rs. 75 lakhs by the end of the Third Plan period. (Paragraph 59)

(36) In view of the limited demand for the conventional types of machines, additional capacity to manufacture such machines should not be created. (Paragraph 59)

(37) The setting up of a Hosiery Machinery Demonstration Centre to demonstrate the indigenous hosiery machines along with the latest models of hosiery machines of foreign make, would be beneficial to the industry. (Paragraph 60)

(38) There are three firms which are at present manufacturing wire and plate latch needles in the country to the extent of 9.25 million pieces against the total annual licensed capacity of 27 million needles. (Paragraph 62)

(39) Out of the three manufacturers of hosiery needles, only one firm has attained high standard of quality. The progress and quality of products of the other two manufacturers are unsatisfactory. (Paragraph 63)

(40) Two other firms who have also been granted licences for the manufacture of hosiery needles, have not yet gone into production. If they fail to go into production within a reasonable time-limit, their licensed capacity may be re-allocated to more deserving entrepreneurs. (Paragraph 63).

(41) The facility to import semi-finished needles should only be restricted to the new comers in this field and that too, for a limited quantity. (Paragraph 64).

(42) The hosiery needles manufacturers should be permitted to import requisite quality of raw materials in adequate quantities. (Paragraph 65).

(43) Some special types of hosiery needles, such as, bearded needles having limited internal consumption, may be continued to be imported, as the manufacture of such needles only for the consumption in the internal market would not be economical. (Paragraph 66).

(44) The annual requirements of other knitting elements such as, Sinkers, Sliders, Jacks, etc. have been estimated at 2 million pieces. The quality of the indigenous product of these items is not upto the mark. (Paragraph 67).

(45) There is at present one manufacturer of Overlock Sewing Machines. The quality of the indigenous machine is not what it should be. If the quality of the indigenous product is not improved within a reasonable time, restricted import of Overlock Sewing Machines may be allowed in the general interest of the hosiery industry. (Paragraphs 68 to 69).

(46) An assessment of the requirements of other types of ancillary machines may be made at an early date with a view to find out whether they can be manufactured economically. (Paragraph 70).

(47) The existing import policy may be suitably amended so as to allow import of spare parts of the types of Overlock machines which have no indigenous angle. (Paragraph 71).

(48) The hosiery industry should be persuaded to form a Federation at a very early date which would help planned development of the industry. (Paragraph 74).

(49) A permanent Central Organisation under the name of "The Hosiery and Knit-Wear Board" on the lines of the All-India Handloom Board, may be set up at an early date under the Chairmanship of the Textile Commissioner. (Paragraph 75).

(50) The Government of Punjab may be requested to take suitable steps to improve the training facilities in the Government Hosiery Training Institute at Ludhiana and to equip the Institute with modern hosiery machines. (Paragraph 76).

(51) The syllabus of all the Textile Institutes in the country should include hosiery technology as one of the subjects. (Paragraph 77).

(52) Suitable technicians for advance training abroad should be sponsored by the Government under various Foreign Technical Aid Programmes. e.g., Colombo Plan, etc. (Paragraph 78).

CHAPTER VIII

CONCLUDING REMARKS

80. We wish to record our high appreciation to the Textile Commissioner for according to us all possible assistance. Our task has been made lighter by the assistance of Shri A. K. Mallik, Assistant Director; we were also assisted by Sarvashree L. A. Sahasrabudhe, V. L. Subramanian, C. R. P. Nayar, A. P. Ramanathan, L. Narayan and D. N. Khopkar of the Textile Commissioner's Office.

81. We also wish to record our appreciation of the work done by our Member-Secretary, Shri R. R. Prasad, on whom devolved the task of scrutinising and collecting the returns received from the various organisations.

82. We further wish to express our gratefulness for the kind co-operation extended to us by the various Associations, Factory Managements and the State Government Authorities who willingly gave us whatever information they had.

83. We are pleased to present a unanimous Report.

(Signed) I. B. DUTT,
Chairman.

(Signed) A. K. CHOUDHURI,
Member.

(Signed) M. YUSUF,
Member.

(Signed) S. ARUNACHALAM,
Member.

(Signed) H. K. JAIN,
Member.

(Signed) K. K. ADYA,
Member.

(Signed) B. H. GUJAR,
Member.

(Signed) RISHI RAM AGARWAL,
Member.

(Signed) G. R. JOSHI,
Member.

(Signed) OTTO OELWEIN,
Member.

(Signed) R. R. PRASAD,
Member-Secretary,

ANNEXURES

ANNEXURE I

WORKING GROUP ON HOSIERY AND EMBROIDERY INDUSTRIES

Questionnaire

For Embroidery Manufacturers

1. Name of the Unit
2. Address
3. Number of machines installed with details.
4. Items manufactured ¹
5. Production of embroidery goods during April 1960 to March, 1961.
6. Yearly expected output of the installed capacity per shift of 8 hours both in quantity and value.
7. (a) Average number of workers employed per day in all shifts during April 1960—March 1961.
(b) Number of shifts worked ...
8. Total investment :
(i) Fixed capital—
 (a) Land and Building,
 (b) Machinery and Equipment.
(ii) Working Capital
9. -What are your views on expansion? Please give details with justifications.
10. Please indicate the additional employment expected during Third and Fourth Plan periods.
11. What raw materials are used by you? Give typewise consumption of raw materials during April 1960 to March 1961, both in quantity and value.
12. How do you procure the raw materials? Do you experience any difficulty in procuring the same? If in affirmative, please suggest remedial measures.
13. Have you been exporting your product? If yes, please indicate quantity and value. If not, give reasons.

14. Do you expect to increase your export during the Third and Fourth Plan periods? If yes, give your estimate of quantity and value.
15. Have you got any suggestion for the promotion of export during the Third and Fourth Plan periods? If so, please give details.
16. Do you require any assistance from the Government to help you to increase export? If so, in what way? Please give details.
17. Please give the details of your requirements for modernisation and rehabilitation and extent to which you can meet the expenditure on this account.
18. Please give your views on the minimum economic size of a purely embroidery unit indicating reasons thereof.

WORKING GROUP ON HOSIERY AND EMBROIDERY INDUSTRIES

Questionnaire

For Cottage Embroidery/Lace Industry.

1. Total Number of Units
2. Types of equipments generally used and number of each type if readily available.
3. Items manufactured
4. Volume of production, in quantity and value from April, 1960 to March 1961.
5. Number of full time and seasonal hands employed and the average earning per worker per month separately.
6. State the items, if any which should be reserved for Cottage Industry Sector.
7. Is there any marketing difficulty? If so, please give details.
8. Is any assistance required from the Government for the development of the Industry? If so, please give details.
9. Details of export potentialities and assistance, if any, required for this purpose may please be stated.
10. What are the possibilities of importing special types of cloth for the purpose of re-exporting the same after embroidering them. Please suggest procedural details.
11. Amount of capital invested in the Industry.
12. Are there any difficulties in procuring the raw materials? If so, suggest remedial measure indicating the requirements.

	Number of Machines		
	Indigenous	Imported	Working Idle
(h) Interlock knitting machine ...			
(i) Sinker circular knitting machine.			
(j) Non sinker circular knitting machine.			
(k) Eyelet machine ...			
(l) Other power driven circular knitting machine.			
(m) Full fashioned m/c. ...			
(n) Any other knitting m/c. ...			
(o) Linking machine ...			
(p) Chain Stitch sewing machine ...			
(q) Overlock sewing m/c. ...			
(r) Flat lock sewing machine ...			
(s) Domestic type lock stitch sewing m/c.			
(t) Embroidery sewing machine ...			
(u) Any other sewing m/c. ...			
(v) Calendering machine ...			
(w) Bleaching, dying, finishing and Nylon Crimping machine, etc.			

N.B.—Under the column IDLE above please indicate in appropriate sub-columns the number of machines idle due to :—

- (i) Shortage of raw materials.
- (ii) Shortage of labour ...
- (iii) Shortage of Finance ...
- (iv) Shortage of Components.
- (v) Slackness in demand and,
- (vi) Any other reason ...

Separately for each type of machine.

6. Total annual expected output of the installed capacity of the units both in—

- (a) Quantity and
- (b) Value ...

Separately showing for the different types of yarn used ...

7. Average number of workers employed by the units per day in shifts during April 1960 to March 1961 showing separately—
- (i) Average number of permanent workers per day.
 - (ii) Average number of temporary (seasonal) workers per day during season.
8. Average earnings per worker per month for—
- (i) Permanent workers ...
 - (ii) Seasonal workers during the season ...
9. Total Investment of the units—
- (a) fixed capital (in Rs.)—
 - (i) Land and building ...
 - (ii) Machinery and Equipment ...
 - (b) Working capital (in Rs.) ...
10. Please indicate the source of finance whether—
- (a) Own resources or ...
 - (b) Institutional resources—
 - (i) From Banks ...
 - (ii) From Co-operative Societies ...
 - (iii) From Creditors ...
- also indicate the rate of interest charged by each one separately.
11. Value of stock of raw material required to be carried forward and generally carried forward by the units and maximum value of stocks of finished products held by the units any time during April 1960 to March 1961.
12. Indicate the number of units falling under each of the following categories—
- Total capital employed in rupees.*
- (i) Up to 10,000 ...
 - (ii) Above 10,000 up to 25,000 ...
 - (iii) Above 25,000 up to 50,000 ...
 - (iv) Above 50,000 up to 100,000 ...
 - (v) Above 1,00,000 ...

13. Do you expect any expansion and/or modernisation in your units/area during the 3rd and 4th Plan periods? If so, please indicate how you foresee such expansion or modernisation to take shape year by year furnishing types and approximate value of machines that would be required for this purpose in each year during the 3rd and 4th Plan periods.
14. Please indicate the extent to which the expenditure of rehabilitation can be met by the units themselves from their own resources.
15. Taking items 13 and 14 above into consideration, please indicate the targets of production during 3rd and 4th Plan periods by your unit/area.
16. Also please indicate the increase in employment expected during 3rd and 4th Plan periods to achieve the targets.
17. Indicate the consumption in lbs. and value of the following raw materials for Hosiery industry in your units/area separately for different counts of yarn used for April 1960—March 1961 :—
- | | | |
|-------------------------------|-----|-----|
| (i) Cotton Yarn | ... | ... |
| (ii) Woollen Yarn | ... | ... |
| (iii) Artsilk Yarn | ... | .. |
| (iv) Nylon and Synthetic yarn | ... | |
- Also indicate the sources of procurement of each type of yarn.
18. Is there any difficulty of procuring raw material in your region? If your answer is yes, then please indicate your suggestions as to how these difficulties could be overcome.
19. Please give details of the principal types of hosiery goods such as jerseys, mufflers gloves, socks and stocking, vests and underwear, tie, stockinet etc., exported, showing the value of exports for each type during April 1960 to March 1961.

20. If there was no or insignificant export please give reasons.
21. Do you expect to export in near future ?
Is so, give details.
22. Do the Units export themselves or through any agency ? Please give addresses of Agencies, if any.
23. Have you got any suggestion by which exports can be promoted ? Please give suggestion, if any, for improving the present export promotion incentive scheme, (i) Woollen Hosiery, (ii) Cotton Hosiery, (iii) Artsilk and Synthetic hosiery and (iv) Mixed hosiery.
24. Are the units financially sound ? If not, please state the difficulties in details indicating whether any Government help is required and if so of what type and to what extent ?
25. Please give tailoring charges of the main items of hosiery goods when—
- (i) Tailored within the factory ...
- (ii) Tailored by others
26. Please state the percentage of total production of the units—
- (i) Tailored by the units themselves in their own factories.
- (ii) Sold as unfinished goods to be tailored by others.
27. Give particulars of Tailoring equipment used—
- (i) Indigenous
- (ii) Imported
28. What are the additional requirements of tailoring equipment—
- (i) Indigenous
- (ii) Imported

29. Please indicate the incidence of various taxes :—

- (i) Purchase Tax
- (ii) Sales Tax (Central and State) ...
- (iii) Excise Duty

30. What were the annual requirements of the following for the year April 1960 to March 1961 :—

In quantity and value.

- (i) Needles (each type separately) ...
- (ii) Sinkers, Sliders, Jacks, Transfer points, etc. (Each type separately).
- (iii) Other spare parts
- (iv) Stores

11. Give your concrete suggestions for the manufacture of new and modern hosiery machines which are currently not manufactured and your requirements (in terms of value) of imported and indigenous raw materials and capital equipments for the same.
12. What assistance in your opinion should Government extend to your industry ?
13. The current availability of technical know-how for the production of current types of machines and new types of machines which you propose to manufacture in future.
14. Do you require any Government assistance for Technical know-how ?

WORKING GROUP ON HOSIERY AND EMBROIDERY INDUSTRY

Questionnaire for Hosiery Needle Manufacturers

1. Name of the Hosiery Needle Manufacturer.
2. Indicate the various types and gauges (thickness) of needles and other knitting elements manufactured under each of the following categories : (Please also mention the code of needles and also attach sample of each type made by you) :
 - (i) Plate latch Needle ; (ii) Wire latch Needle ; (iii) Bearded Needles ; (iv) Sinkers ; (v) Sliders ; (vi) Jacks . (vii) Transfer points, and (viii) any other knitting elements.
3. Production of hosiery needles during the last two years both in quantity and value :
4. Licensed capacity : (Please indicate shift also) and approximate date of going into production indicating the phased production programme.
5. Average number of workers employed per day in all shifts during April 1960—March 1961.
6. Total investment—
 - (1) Fixed capital—
 - (a) Land and Building,
 - (b) Machinery and Equipment.
 - (2) Working Capital.
7. What is the raw material required for the manufacture of quality hosiery needles ? Give details.
8. What are the difficulties which you are experiencing in procuring raw material and suggestions to remove them ?
9. Give concrete suggestions for the development and modernisation of the hosiery needle manufacturing industry to enable it to manufacture quality needles.

10. What assistance the Government should extend to the industry for the above purpose ?
11. Give your future production programme for increasing the production of the types of needles which are being currently manufactured inadequately and your programme for manufacturing needles which are not being manufactured at present.
12. Quality control methods adopted, if any, for—
 - (i) Raw materials, ...
 - (ii) Dimensional tolerances, ...
 - (iii) Performances/Specifications. . .

ANNEXURE II

LIST OF NAMES AND ADDRESSES OF THE HOSIERY ASSOCIATIONS TO WHOM THE QUESTIONNAIRE WAS ADDRESSED BY THE WORKING GROUP

1. Messrs. Bengal Hosiery Manufacturers Association, 219, Bowbazar Street, Calcutta-12.
2. Messrs. West Bengal Hosiery Association, 195, Mahatma Gandhi Road, Calcutta-7.
3. Messrs. South India Hosiery Manufacturers Association, 68/12, Kumaran Road, Tirupur.
4. The Hosiery (Socks) Manufacturers Association, 10944/5, Dorivalan, Delhi.
5. Messrs. Delhi Hosiery Manufacturers Association, 16/2699, Deshbundhu Gupta Road, New Delhi.
6. Messrs. U. P. Hosiery Manufacturers and Merchants Association, 84/24, Industrial Area, Kanpur.
7. Messrs. Meerut Hosiery Manufacturers Association, 216, Lala-ka-Bazar, Meerut City.
8. Messrs. Hand Knitting Hosiery Manufacturers Association, Saharanpur.
9. Messrs. Agra Hosiery Manufacturers Association, Freeganj, Agra.
10. Messrs. Ahmedabad Hosiery Factory Owner's Association, C/o. Ladhwalā Hosiery Factory, 449, Kankaria Road, Ahmedabad.
11. All Mysore Small Scale Industries Association, 5th Main Road, Prasad Mansion Gandhinagar, Bangalore-9.
12. Messrs. Delhi State Nylon Hosiery Manufacturers Association, 5509, Basti Harphool Singh, Delhi-6.
13. Messrs. Belgaum District Hosiery Manufacturers Association, Shahpur (Belgaum).
14. Messrs. Karnatak Hosiery Sahakari Utpadak Sangh Limited, Shahpur (Belgaum).
15. Messrs. Hosiery Industries Welfare Board, Phalai Bazar, Ludhiana.
16. Messrs. Hosiery Manufacturers Association, Bazar Kharadian, Ludhiana.
17. Messrs. Northern India Hosiery Manufacturers Corporation, C/o. Swadeshi Manufacturing Syndicate, Civil Lines, Ludhiana.
18. Messrs. Bharat Hosiery Manufacturers Association, Chowk Saidan, Ludhiana.
19. Messrs. Amritsar Knitters Association, Bazar Kathian, Amritsar.
20. Messrs. Amritsar Socks Manufacturers Association, Darshani Deori, Amritsar.
21. Messrs. Home Hosiery Manufacturers Union (Registered) Chawal Bazar, Ludhiana.
22. Messrs. Interlock Cloth Manufacturers Association, Opposite Punjab National Bank, Chaura Bazar, Ludhiana.
23. Messrs. Bombay State Hosiery Manufacturers Association, 30, Old Hanuman Lane, Bombay-2.
24. Messrs. Rajasthan Hosiery Manufacturers Association, C/o. Vijai Hosiery, Ambar Road, near Raja Maiko Talao, Jaipur City.
25. Messrs. Silk and Artsilk Mills Association Limited, Resham Bhavan, 78-Veer Nariman Road, Bombay-1.

Machine Embroidery Manufacturers

1. "Niemia" New India Embroidery Mills, Chheharta (N. R.), Amritsar.
2. "Hemla" Hindustan Embroidary Mills, Chheharta (N. R.), Amritsar.
3. Fancy Corporation Limited, Bombay Cotton Mills Estate, Kalachowki Road, Bombay-12.
4. Sarangpur Cotton Manufacturing Co. Limited, M. Jaganath Mahadev Keshav Road, Ahmedabad.
5. Jesmine Mills Private Limited, Dharavi, Bombay-17.
6. Rama Krishna Mills, Ahmedabad.

(1) Cottage Embroidery Manufacturers

1. All India Handicraft Board, Taj Barracks, Janpath, New Delhi.

Hosiery Needle Manufacturers

1. Messrs. Groz-Beckert Saboo Limited, 133-134, Industrial Area, Chandigarh, (Punjab).
2. Messrs. Rajen and Santosh (Private) Limited, Industrial Area-A, Ludhiana.
3. Messrs. Knitting Machinery Syndicate (India) Private, Limited, Nehru Market, Ludhiana.
4. Messrs. Miake-Chowdhury Needle Manufacturing Co., C/o. Kusum Hosiery Mills Limited, 74, Beliaghata Main Road, Calcutta-10.
5. Messrs. Excelsior Needles Industries (Private) Limited, Gool Mansion, 5th floor, Homji Street, Fort, G. P. O. Box No. 1469, Bombay-1.

Hosiery and Industrial Sewing Machinery Manufacturers

1. Messrs. Kalsi Mechanical Works, Nandpur, Ludhiana.
2. Messrs. Punjab Machinery Works, Millerganj, G. T. Road, Ludhiana.
3. Messrs. Bharat Machinery Works, Industrial Area-B, Ludhiana.
4. Messrs. Raj Mechanical Industries, Madhopuri, Ludhiana.
5. Messrs. Subhas Machinery Works, 4, Bibi Rozio Lane, Calcutta.
6. Messrs. Swarup Mechanical Works, Industrial Area "B", Ludhiana.
7. Messrs. Jagdev Engineering Works, (Hosiery Machinery Manufacturers) Katra Nauhrian, Ludhiana.
8. Messrs. Hosiery Mchinery Manufacturers' Association, C/o. Messrs. Bharat Machinery Works, Industrial Area 'B', Ludhiana.
9. Messrs. Jai Engineering Works, (Manufacturers of Usha Sewing Machines), Calcutta.

Composite Spinning/Hosiery Mills

1. Fine knitting Co. Ltd., Naroda Road, Railway Pura, near Station, Asarwa, Ahmedabad-1.
2. Dawn Mills Co. Ltd., State Bank Buildings, Bank Street, Fort, Bombay-1.
3. Prakash Cotton Mills Ltd., Delisle Road, Lower Parel, Bombay-13.
4. Shri Krishna Rajendra Mills Ltd., Bangalore (S. and W. H. O.).
5. Coimbatore Spinning and Weaving Mills Co. Ltd., Palmgrove Road, P. B. No. 24, Coimbatore.
6. Vasant Mills Ltd., Singanallur, (Coimbatore District).
7. Dhanlaxmi Knitting Co., 110/8, Kumaran Road, P. B. No. 13, Tirupur (Madras).
8. Radhakrishnan Mills Ltd., P. B. No. 1, Peelamedu (Coimbatore).
9. Kanpur Textiles Ltd., Cooperganj, Kanpur.
10. Modi Spinning and Weaving Mills, Modi Nagar, District Meerut.
11. Kesoram Cotton Mills Ltd., 8-India Exchange Place, Calcutta-1.
12. Vikram Cotton Mills, Lucknow.
13. Bangeswari Cotton Mills Ltd., Serampur, District, Hooghly.
14. Southern Knitting Works Ltd., 250, Shanwar Peth, Poona.
15. India Hosiery Factory, Bombay Cotton Mill Estate, Kalachowki Road, Bombay-12.
16. Borivil Hosiery Mills, Off 63, Champa Gali, Bombay-2.
17. Birla Hosiery Factory, Birla Nagar, Gwalior.
18. Commonwealth Hosiery Factory, Balamatta Mangalore, Mysore State.
19. Madurai Knitting Co., Ramnad Road, Madurai-1.
20. The Fine Hosiery Mills Ltd., Industrial Area, Azamabad, Hyderabad.
21. Regal Hosiery Mills, Kumarpara Lilovah, Howrah.
22. Kalighat Hosiery Factory, 231, Rash Behari Avenue, Calcutta-19.
23. Golden Hosiery and Cotton Mills, Kumarpara, Lake Road, Lilovah, Howrah.
24. Gopal Hosiery Mills, P. O., Jadavpore Colony, Calcutta-32.
25. India Hosiery Mills, 223/A, Jadav Manicktala Main Road, Calcutta-11.
26. Model Knitting Industries Ltd., 8-Exchange Place, Calcutta-1.
27. Deshbandhu Hosiery Factory, 100/A, Garpar Road, Calcutta.
28. Ramakrishna Hosiery Factory, 21, Sukiaslane, Calcutta.
29. Kusum Hosiery Mills, Jormandir Balghat, Calcutta.
30. Hind Hosiery Mills Ltd., 161/A, Mahatma Gandhi Road, Calcutta-7.
31. Raja Textile Mills, Rampur (U. P.).
32. Kamal Hosiery Mills, P. B. No. 25, Kamala Tower, Kanpur (U. P.).
33. Calico Dyeing Mills, Kanpur.
34. New Egerton Woollen Mills, Dhariwal (District Gurdaspur).
35. Kanpur Woollen Mills (British India Corporation Ltd.), P. B. No. 5, Kanpur (U. P.).
36. Raymond Woollen Mills, Thana, Bombay.
37. Mahalaxmi Woollen Mills Ltd., Haines Road, Mahalaxmi, Bombay-11.
38. Panipat Woollen and General Mills, Kharar (near Chandigarh).
39. Mewar Textile Mills, Bhilwara (Rajasthan).
40. Ramkrishna Mills, Ahmedabad.

List of Directors of Industries of State

1. The Deputy Director of Industries, Rajkot Region, Rajkot.
2. Director of Industries and Commerce, Chirag Ali Lane, Hyderabad.
3. Deputy Director of Industries, Koti Building, 2nd floor, Baroda.
4. Director of Industries and Supplies, Rajasthan, Jaipur.
5. Director of Industries, (Punjab), Chandigarh.
6. Deputy Director of Industries, Government of Maharashtra, Vidarbha Region, Nagpur.
7. Director of Industries and Commerce, Government of Kerala, Trivandrum.
8. Director of Industries, Sachivalaya Annexe, 2nd floor, Bombay.
9. Director of Industries and Commerce, Government of Madhya Pradesh, Indore.
10. Director of Industries, Government of Bengal, New Secretariat Building, 1, Hastings Street, Calcutta.
11. Director of Industries, Government of Uttar Pradesh, Kanpur.
12. Director of Industries, 352, Mount Road, Madras.
13. Deputy Director of Industries and Labour, No. 1 Rajpur Road, Delhi.
14. Director of Industries, Government of Mysore, Bangalore.
15. Director of Industries, Orissa, Cuttack.
16. Director of Industries, Government of Bihar, Patna.
17. Director of Industries, Jammu and Kashmir, Srinagar.

List of Chambers of Commerce and Industry

1. Delhi Chamber of Commerce, Dilbar Buildings, Deshbandhu Gupta Road, Paharganj, New Delhi.
2. Bihar Chamber of Commerce, Judges Court Road, P. O. Bag No. 71, Patna-1.
3. Madhya Pradesh Chamber of Commerce and Industry, Dharam Mandir Road, Lashkar (Gwalior, M. P.).
4. Mysore Chamber of Commerce, The Kempe Gowda Road, Bangalore-9.
5. Upper India Chamber of Commerce, P. B. No. 63, Kanpur (U. P.).
6. Bengal Chamber of Commerce and Industry, India Exchange, 5, Netaji Subhash Road, P. B. No. 280, Calcutta-1.
7. Bengal National Chamber of Commerce and Industry, P-11, Mission Row, Extension, (1st and 2nd floor), Calcutta-1.
8. Indian Chamber of Commerce, India Exchange, India Exchange Place, Calcutta-1.
9. Bharat Chamber of Commerce, State Bank Building (Bara Bazar Branch), 195, Mahatma Gandhi Road, Calcutta-7.
10. Bombay Chamber of Commerce, Mackinnon Mackenzie Building, Ballard Estate, Bombay-1.
11. Madras Chamber of Commerce, Dare House, First Line Beach, P. B. No. 35, Madras-1.
12. Punjab Federation of Industry and Commerce, Amritsar.
13. Northern India Chamber of Commerce, Ambala Cantonment.
14. Punjab and Delhi Chamber of Commerce, Scindia House, Curzon Road, P. B. No. 130, New Delhi.
15. Indian Merchants Chamber, Lalji Maranji Memorial Indian Merchant Chamber Buildings, Back Bay Reclamation, Churchgate Street, Fort, Bombay-1.
16. Indian Chamber of Commerce, P. B. No. 200, Coimbatore (South India).

ANNEXURE III

LIST OF HOSIERY AND KNITTING MACHINES WHICH ARE
MADE INDIGENOUSLY.

1. Hand driven plain flat machine up to 12 N.P.I.
2. Sinker plain circular machine up to 22 N.P.I.
3. Non-sinker plain circular machine.
4. Plain circular Rib machine.
5. Circular Rib machine up to 12 pattern wheels and up to 14 N.P.I.
6. Plain Interlock machine up to 24 N. P. I.
7. Plain and Rib eyelet circular machine without patterning mechanism up to 12 N. P. I.
8. Knee Cap circular machine.
9. Hand driven circular machine.
10. Hand driven socks machine.

—*—