



**GOVERNMENT OF INDIA
TARIFF COMMISSION**

**REPORT
ON
THE PRICE STRUCTURE OF
LAMINATED JUTE GOODS**

**BOMBAY
1972**

**PRINTED BY THE MANAGER GOVERNMENT OF INDIA PRESS
NASIK AND PUBLISHED BY THE MANAGER OF PUBLICATIONS
DELHI-6 1974**

Price : (Inland) Rs. 4.20 (Foreign) £ 0.50 or \$ 1 52 Cents.



**India, Tariff (—Commission)
Report on the Price Structure
of Laminated Jute Goods-1972.**



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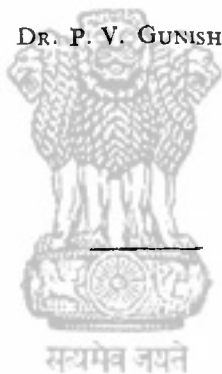
PERSONNEL OF THE COMMISSION

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DR. P. V. GUNISHASTRI



Statement made by the Minister of Commerce while placing the Report of the Tariff Commission on the price structure of Laminated Jute Goods on the Table of Lok Sabha/Rajya

Sabha on 23rd/24th July, 1973.

Statement under Section-16 of the Tariff Commission Act, 1951 (50 of 1951) on action taken by government on the report of the Tariff Commission on the price structure of laminated jute goods.

The report on price structure of laminated jute goods was submitted by the Tariff Commission on the 20th July, 1972. Government have examined the report. The recommendations made by the Commission on the price structure of laminated jute goods have been noted by Government. In accordance with the Government's decision that fixation of prices on statutory basis will be confined to B. Twill bags and D. W. Flour bags, it is not proposed to fix any statutory prices for laminated jute goods.

2. The following recommendations are, however, being brought to the notice of the manufacturers :

- (1) The manufacturers should make all possible efforts to adhere to the use of polythene films of required specification.
- (2) The industry should introduce some system of inspection so that the thickness of bitumen coating conforms to the specifications of the contracts.
- (3) The industry should adopt necessary steps to avoid high wastage in paper whether due to handling or processing.
- (4) The industry should take all possible steps to economise in fuel consumption.

The Commission's recommendations that the capacity of the industry should be assessed on the basis of the lamination process has been referred to the Jute Commissioner who will make such an assessment.

REPORT ON THE PRICE STRUCTURE OF LAMINATED JUTE GOODS

1.1 The Government of India, in the then Ministry of Foreign Trade and Supply, by their letter No. 5(4)-Tex(D)/68, dated 11th July 1969 (Appendix I) requested the Tariff Commission under Section 12(d) of the Tariff Commission Act, 1951 (No. 50 of 1951) to examine the price structure of the following varieties of Jute Goods :—

**1. Reference to the
Commission**

- (i) Carpet Backing Cloth
- (ii) Hessian Cloth
- (iii) Sacking (particularly B Twills) and Specialities such as Cotton Bagging and Laminated Jute Goods.

1.2 The Commission's interim Reports on Carpet Backing Cloth and B Twill & Heavy Cees Bags were submitted to Government in October 1969 and March 1970 respectively. The final Report on the Price Structure of different varieties of Jute Goods was forwarded to Government on 8th April, 1971. Cotton Bagging was dropped from the scope of Inquiry for reasons given in paragraph 1.3 of the final Report. As regards Laminated Jute Goods, the nature of the Industry and problems involved being altogether different from those of the main Jute Industry excepting that Jute product used for its manufacture accounted for about 70% of its cost of production, the Commission decided to undertake the cost study of the former separately. The Commission therefore proposed to submit a supplementary Report on the Laminated Jute Goods Industry.

The scope of the present Inquiry covers Laminated Jute Goods with Polythene lining and Paper lining.

2. Scope of Inquiry

3.1. Questionnaires were issued to producers on 14th July, 1970 and to the consumers, suppliers of raw materials and others concerned with the Inquiry subsequently. Information on the various aspects of the Industry was sought from the following :

- (i) The Jute Commissioner, Calcutta.
- (ii) The Directors of Industries, West Bengal, Maharashtra and Tamil Nadu.
- (iii) The Indian Standards Institution, Calcutta.
- (iv) The Indian Jute Mills' Association, (IJMA). Calcutta.

A list of parties to whom Questionnaires/letters were issued and from whom replies were received is given in Appendix II.

3.2. The Commission and its Officers visited some of the factories at Calcutta and Bombay. Details are given in Appendix III.

3.3. Cost investigation of five selected units was undertaken, particulars of which are stated in Appendix IV. The Commission held discussions on 22nd, 23rd and 24th July, 1971, as detailed in Appendix V-A with the representatives of these units except Guardian Plasticote Ltd., Calcutta who did not attend though invited. Discussions were also held with other interests on 21st August, 1971 as per Appendix V-B.

3.4. In view of the restrictions on disclosure of information imposed under Section 22 of the Tariff Commission Act, 1951, certain details of financial and cost information are being forwarded to Government as confidential Enclosures (Annexures 1 to 12). *These are intended for Government's information and not for publication.*

4.1. Structure of the Industry.—The Laminated Jute Goods factories are concentrated in West Bengal. As far as it could be ascertained, there is only

4. Present Position of the Industry

one unit, namely M/s. Warden & Co., Bombay, in Maharashtra. Five units are stated to be located in Tamil

Nadu but, information regarding them was not available. Three jute mills, M/s. Dalhousie Jute Manufacturing Co. Ltd., M/s. Khardah Co., Ltd., and M/s. Champdany Jute Co., Ltd., are also engaged in the manufacture of Laminated Jute Goods. With effect from 1st April, 1971, the Lamination Division of M/s. India Linoleums Ltd., has been taken over by the Holding Company M/s. Birla Jute Mfg. Co. Ltd. Three producers, namely, M/s. Bharat Laminating Corporation, M/s. Haryana Jute & Laminating Works and M/s. India Burlap and Laminating Works are primarily producing Laminated Jute Goods. The remaining manufacturers have diverse activities such as production of jute goods, jute baling, other types of lamination, glue coating on paper, waxing paper and rubber products. One of the units, namely, M/s. India Water-proofing and Dyeing Works stopped production of Laminated Jute Goods in 1965-66. We also understand that the Lamination plant in the mills of M/s. Kelvin Jute Co. Ltd., Titaghur, with a capacity of 10,000 bags per day has been closed down since 1968.

4.1.1. By his letter dated 21st May 1971, the Jute Commissioner informed the Commission that, with the concurrence of the Ministry of Foreign Trade, action was initiated by him to bring the Laminated Jute Goods manufacturing units within the scope of licensing under Jute Textiles (C) Order, 1956. Licences have since been issued to two units and 12 more applications were received by him for grant of licences. According to the Director of Industries, West Bengal, two prospective producers, M/s. New Central Jute Mills Co. Ltd., and M/s. General Industrial Society Ltd., will start production shortly in that State.

4.2. Capacity and production.—The Industry comprises 16 known units which are at present in production of which 14 have answered the Commission's Questionnaire. There

is as yet no Association formed by the Industry. A statement showing the capacity of these units and their production during the last six years from 1965-66 is given in Appendix VI. It would be noticed therefrom that the production has been progressively increasing during the four years ended 1970-71.

4.2.1. Utilisation of capacity.—Laminated Jute Goods are not produced in anticipation of demand, as these are used only for specific purposes, the main use being for packing of fertilisers. The manufacturers have reported to us that in the absence of adequate orders, the capacity often remains partly idle and this leads to variations in utilisation of capacity. The other contributory factors for non-utilisation of the full capacity advanced by the Industry are:—

- (i) Non-availability of raw materials like Polythene granules and Bitumen,
- (ii) Labour trouble, and
- (iii) Substantial fall in export demand.

5.1. There are two processes by which Laminated Jute Goods are produced in the country. The process generally adopted is the one wherein Hessian is laminated with Polyfilm or Crepe paper using Bitumen as the bonding agent. In the other process, Polyethylene granules after being melted are extruded and directly coated on the Hessian without using a bonding agent. A brief description of each of these processes is given below:—

(a) Lamination of Jute cloth with Polyfilm or Crepe Paper using Bitumen as bonding agent.—The process of laminating Jute Goods is a simple one. The equipment consists of a machine with a metallic tank wide open at the top and narrower at the bottom which contains hot, melted Bitumen. There is a roller of about 10" diameter almost immersed in the tank with another roller of about 12" diameter on the top of it touching uniformly the one underneath. The immersed roller has got the driving motion and

the top roller is driven by friction. The top roller has a thin uniform coating of Bitumen. The Jute cloth is passed over the top roller with proper tension in such a manner that uniform coating of Bitumen is applied on the inner side of the cloth. From another roller the Alkathene (Polythene) in roll or paper roll is released from the bottom in such a manner that the Alkathene comes into contact with the Jute cloth on the coated side and is passed through the pressure rollers. Thereafter, in some plants, the bitumenised Alkathene/paper lined Jute cloth is passed over several rollers fitted with cooling arrangements by fans, so that when the cloth comes out at the other end of the machine it is considerably cooler. To minimise the 'travelling' of the finished cloth, rollers with water cooling system could also be used. In case Polythene film is not available, Polythene granules are converted into Polythene films on plastic extruder machine and these are used for lamination.

(b) *Polyethylene directly coated in Hessian without using a bonding agent.*—Under this process, Polyethylene granules are melted and extruded at high controlled temperature and directly coated on the Hessian which passes through rollers simultaneously. The temperature is neutralised by a cooling plant. When the extruded Polyethylene falls on Hessian, the simultaneous cooling down helps the Polyethylene to adhere to the substrate, without any bonding agent. The Polyethylene laminated material is again automatically rolled up making big reels, which are removed by an electrically operated trolley for making them in rolls or bags according to customer's requirements.

5.2. Cutting, sewing and branding.—The rolls so obtained (by both the above processes) are fed into the Auto Cutting Machine in single, double or triple layer and cut to the length of size required per bag. The cut pieces are then folded for sewing and are arranged into convenient lots. The folded cloth is sewn into bags on sewing machines and these are branded to customer's specifications and colour.

6.1. *The raw materials used in the manufacture of Laminated Jute Goods are Hessian/D. W. Tarpaulin, Kraft/Crepe paper, Alkathene/Polythene granules/film, Bitumen, Rayon tyre cord, Cottin/Flax twine and Ink. All*

6. Raw Materials

these raw materials are available indigenously excepting Polythene granules/film and Kraft/Crepe paper which are partly imported.

6.2. **Hessian/D. W. Tarpaulin.**—This is the main material used in the manufacture of laminated cloth/bags and its price is subject to wide variations depending upon demand and supply. The price aspect has been fully discussed in paragraphs 7 and 9 of the Commission's Report on the Price Structure of Jute Goods. In regard to quality, while one of the producers brought to our notice some weaving defects in Hessian, another stated that the width of the cloth was short but when the matter was taken up with the supplier, corrective action was taken by him. Some of the manufacturers complained that the Tarpaulin cloth did not conform to the standard specifications.

6.3. **Kraft/Crepe paper.**—These are purchased either from paper mills directly or through the distributors. M/s. Dalhousie Jute Mills Co. Ltd., Calcutta have complained that these materials were not readily available at times and that their prices varied widely which affected their final cost. One of the Suppliers, M/s. Star Paper Mills, Saharanpur (U.P.) have informed us that the prices of Kraft paper varied between Rs. 1.87 and Rs. 2.35 per Kg. during 1969-71. It has also been reported to us that, due to rise in the cost of raw materials, chemicals, machinery, railway freight, coal etc. the cost of paper was bound to go up in future. No complaints regarding quality of the product were however received from the Industry.

6.4. **Alkathene/Polythene granules/film.**—Polythene film is supplied by M/s. I.C.I. (India) Pvt. Ltd., and M/s. Union Carbide (India) Ltd., and is also partly imported. M/s. Alkali and Chemical Corporation of India Ltd., supply Polythene

granules to convertors who extrude Polythene film and supply it to laminators. Prices of Polythene film supplied during the last three and a half years have steadily increased as under:

(Rs. per kg.)

	1969	1970	1971	1972 (May)
1. M/s I.C.I. (India) Pvt. Ltd.	6.05	7.25	8.30	9.50
	to	to	to	to
	8.00	8.55	9.00	9.75
2. M/s Union Carbide (India) Ltd.	7.25	7.80	8.15	9.00

M/s. I. C. I. (India) Pvt. Ltd., have stated that during 1969 the market was flooded with low cost imported Polythene. This adversely affected the indigenous production and the Company's prices touched uneconomic levels, but with a ban on imports in 1970, the prices started gradually recovering. According to M/s. I.C.I., the market had reached normalcy in 1971. The current price charged by M/s. I.C.I. for Polythene film varies between Rs. 9.50 and Rs. 9.75 per kg. and that charged by M/s. Union Carbide is Rs. 9 per kg. Both M/s. I.C.I. and M/s. Union Carbide have claimed that their products conform to I.S.I. specifications. While the former averred that it had not received any complaints in regard to quality from the Industry, the latter received very rare complaints in regard to blocking of film layers or collapse of cores. However, where complaints were substantiated, the material was either replaced or the customer monetarily compensated by the Company.

6.5. Bitumen.—Bitumen is supplied by M/s. Burmah Shell and M/s. Esso. M/s. Caltex have replied to say that they have not supplied any Bitumen directly to Laminated Jute Goods manufacturers. Generally, blown grades of Bitumen 10/20 × 20/25 corresponding to R 90/15 and R 85/25 of ISI Specification No. 702-1961 as well as another grade R 115/15 are used by manufacturers of Laminated

Jute Goods either singly or in combination of one or more grades according to their choice.

6.5.1. Both M/s. Burmah Shell and M/s. Esso have stated that, barring a few occasions when they could not meet the full requirements of some of their indentors mainly due to railway booking restrictions, they were, by and large, able to satisfy the demand of their customers. The issue is further discussed in paragraph 16.3.

6.5.2. The two suppliers have contended that Bitumen prices had to be often revised by them during the past three or four years owing to the changes in (i) the crude oil prices (which themselves are based on parity prices of crude at Abadan) (ii) Cost of drums for packing Bitumen, (iii) railway freight and (iv) Excise Duty and local levies. The prices of Bitumen for the specifications required by the Laminated Jute Goods manufacturers have progressively increased as follows :

		(Rs. per tonne)				
Name of Supplier	Grade	Prices during				
		1969	1970	1971	1972 (May)	
1. M/s. Burmah Shell	i) R-85/25	Bombay	477	533	590	629.12
	and R-90/15	Calcutta	467	523	584	615.50/ 618.79
		Madras	467	523	580	614.10
	ii) R-115/15	Bombay	543	599	656	695.12
	Calcutta	533	589	647	681.50	
	Madras	533	589	646	680.10	
		Bombay	467	523	580	614.10
2. M/s. Esso	Rs. 85/25 and	Calcutta				
	Rs. 90/15	Madras				

Both Companies have stated that in view of the likely changes in the factors governing the prices, it was extremely difficult for them to forecast the future price trends of various grades of Bitumen supplied by them. M/s. Esso, however, anticipate a continued upward gradient in the future prices.

6.5.3. Both the suppliers of Bitumen have claimed that their products conform to I. S. I. specification and that they have not received any complaints from the manufacturers of Laminated Jute Goods. Some of the producers of Laminated Jute Goods however complained of the inferior quality of Bitumen, but this was refuted by the suppliers at the time of tendering oral evidence before us. During the course of our discussions with Bitumen suppliers, it was brought to our notice that each manufacturer of Laminated Jute Goods had his own preference depending upon the type of Kraft paper/Polythene film used and the specifications given for laminations by the customers. As stated earlier, many of the manufacturers used a mixture of the two grades. It was further explained that variation in the quality of finished goods was not due to the quality of Bitumen as such but due to extraneous factors such as the mode of application of Bitumen to the cloth.

6.6. **Rayon Tyre Cord, Cotton/Flax Twine and Branding Ink.**—The quality of these materials was generally regarded as satisfactory. Branding Ink, however, was not found upto the mark by M/s Dalhousie Jute Mills Co. Ltd.. There were, by and large, no complaints from the Industry either in regard to prices or availability of these items.

7.1. Laminated Jute bags are in wide use for packing fertilisers, cement and chemicals including insecticides and explosives. To make the bags impermeable to water and to prevent deterioration of Jute by chemical reaction of the material packed, the inner side of the bag is lined with Crepe/Kraft paper or Polythene sheets by means of Bitumen or other water resistant adhesives. Bags having the inner surface laminated (by means of extrusion or melt coating with Polyethylene granules) are also used for packing powdery materials i.e. talcum powder so that these may

7. Demand

not come out through the pores of the fabric. Laminated bags without Bitumen could be used for packing provisions and foods. *The rapid growth of the fertiliser industry has greatly contributed to the rise in the internal consumption of Laminated bags.*

7.2. Most of the producers who have replied to our questionnaire refrained from giving any estimate of demand for Laminated Jute Goods in the domestic market on the plea that they had either not conducted any such study/survey or were unable to give any data as they were manufacturing bags exclusively for the FCI. One of them however, stated that there were bright prospects for the Laminated Jute Goods Industry with the installation of several fertiliser plants in the country.

7.3. Four manufacturers have, however, framed estimates of demand and furnished them to us. M/s. Dalhousie Jute Manufacturing Co. Ltd., have placed the domestic requirements for Laminated Jute bags at 60 to 72 thousand tonnes (127.5 to 152.5 million metres) per annum in the three years 1972-74 and the export demand at 6000 tonnes (12.75 million metres) per annum. M/s. National Laminators have assessed home consumption at about 60 million bags in 1971 with an increase of 25 per cent resulting from expansion of the existing fertiliser plants and coming up of new units in 1972 and 1973. As regards export demand, the Company has estimated it at about 40 million bags per year for the conventional type. The estimate given by M/s. India Burlap and Laminating Works, is around 40 million bags per annum. M/s. Diamond Products Ltd. have stated that, having regard to the largest consumption of Laminated bags by the fertiliser units, the total offtake would be of the order of 130 to 150 million bags, by the end of 1974.

7.4. The D.G.S. & D. has informed us that his Directorate seldom receives any demand from the indentors. In 1970, an indent for only 12,000 multi-walled Polythene Laminated Hessian bags was received from the Delhi Milk Scheme for packing butter milk powder and the contract was placed with M/s. National Laminators, which executed it.

7.5. One of the major consumers, namely, the FCI has estimated as follows the requirements of Laminated Jute bags for its current operating plants at Sindri, Nangal, Trombay, Gorakhpur and Namrup and the two new plants at Durgapur and Barauni which are expected to go into production in the near future :—

Year	No. of bags (in millions)
1971-72	17.3
1972-73	22.5
1973-74	27.1

The above estimates relate, however, to such fertilisers as urea calcium ammonium nitrate and complex fertilisers of various grades.

7.5.1. The FCI has stated that one of its main problems is the interruption in regular supply of Laminated Jute bags. The Laminated Jute Goods manufacturers fail to stick to the stipulated time schedule and the Corporation has to resort occasionally to express transport arrangements at extra cost and by keeping higher inventories. In view of these difficulties, the FCI has under consideration production of Jute bags departmentally by buying Jute cloth and Polythene rather than buying finished Laminated bags. The departmental production would, of course, be cheaper but would cover only one-fourth of its total requirements.

7.5.2. M/s. Shriram Chemical Industries, Kota are reported to have been facing difficulty occasionally in obtaining regular supplies consequent upon which they have to maintain high inventory to avoid production losses.

7.5.3. The Director of Industries, West Bengal in his memorandum furnished to us has stated as follows :—

“According to the Fertiliser Association of India, Eastern Region, Calcutta, the estimated demand for jute bags of 50 kg. capacity for packing indigenous fertilisers would be around 165 million bags based on targets of production of nitrogenous and phosphatic fertilisers by the end of 1973-74. The major portion of these jute bags (nearly 80%) i.e.

about 130 million bags would be laminated bags in view of the increasing trend of the use of laminated bags for packing fertilisers. The demand for laminated bags for 1970-71, according to the Association has likewise been estimated at 54/56 million bags (i.e. 80% of 68-70 million jute bags based on production of fertilisers in 1970-71). Imports of fertilisers in bulk will however be bagged in gunny bags at the ports."

7.6. While the tendency abroad is to switch over to Synthetics as they are noticeably cheaper, in India, the FCI claims to have conducted trials and standardised specifications for Plastic bags which can be used to pack fertilisers. We understand that a small beginning in this direction has been made by the Trombay unit of FCI. The main advantages of an all Plastic bag are reported to be (i) lower price (ii) better appearance (iii) better preserving quality because of being moisture proof (iv) more dependable supply unlike Jute bags which are subjected to uncertainties of crop failures, labour unrest in localised area, export etc. (v) low transportation cost because of the lightness and (vi) scope for re-use.

7.6.1. M/s. Shriram Chemical Industries, have stated that synthetic bags are cheaper than Laminated Jute bags and the Company is making trials to substitute Jute bags.

8.1. **Exports.**—The following Table gives the figures of exports of Plastic coated or Paper-cum-Polythene lined bags/sacks from 1965-66 to 1971-72 (April-September). The country-wise exports are given in Appendix VII.

8. Exports and Export
assistance

Year	Quantity Value	
	(Tonnes)	('000 Rs.)
1965-66	3,864	9,438
1966-67	4,682	17,545
1967-68	2,576	9,558
1968-69	3,005	9,819
1969-70	871	2,523

Year	Quantity	Value
	(Tonnes)	('000 Rs.)
1970-71	1,229	4,815
1971-72	195	877
(April-September)		

Source : "Monthly Statistics of the Foreign Trade of India" published by the DGC&S.

8.1.1. It would be observed from the above Table that exports suffered a severe setback in 1969-70 when they amounted to 871 tonnes valued at Rs. 25.23 lakhs representing about 30 per cent of exports in the immediately preceding year. Although exports picked up somewhat in 1970-71 they were substantially below the levels during the four-year period from 1965-66 to 1968-69, when exports ranged from 2576 tonnes valued at Rs. 95.58 lakhs to 4682 tonnes valued at Rs. 175.45 lakhs.

8.2. **Export assistance.**—The export assistance enjoyed by the Industry, as per the Import Trade Control Policy (for Registered Exporters) for the current licensing year, i.e. April 1972 to March 1973 is reproduced below :

Import Trade Control Policy Vol. II, Sec. II

Sl.No.	Export product	Import replenishment percentage	Materials permitted for import
1	2	3	4
C. 34	Polyethylene/Jute Combinations.		
C. 34.1	Direct extrusion coated direct hot melt roller coated Jute Goods.	20%	Extrusion Coating Grade Polyethylene Moulding powder/granules.
C.34.2	Others	10%	Polyethylene Moulding powder/granules.

1	2	3	4
C.34.3	Polythylene lined Jute goods (Polyethylene laminated to Jute with Polyethylene Powder).	20%	Extrusion Coating Grade Polyethylene Moulding Powder/granules.
C.34.4	Polythylene Lined Jute Goods (Polyethylene laminated to Jute with adhesives).	10%	Polyethylene Moulding materials.

8.2.1. M/s. Dalhousie Jute Mills have stated that the drawback of Excise duty is allowed only on the Polythene content of the bags exported which works out to 1/2 to 1 per cent of the value of bags exported.

8.3. **Prospects of Export Promotion.**—M/s. Diamond Products Ltd., have opined that the prospects for promotion of exports of Paper Laminated Jute bags are not at all encouraging. Although the Company had exported to UAR in the early sixties a large quantity of Paper Laminated bags valued at over rupees one crore, it had now lost this business as P.V.C. bags from East European countries had replaced Paper Laminated Jute bags and also because its export prices in the international markets were comparatively higher and uncompetitive. M/s. National Laminators have stated that owing to a switch-over to the modern method of direct Plastic coating on Jute for packing fertilisers and other hygroscopic chemicals especially in the Middle East countries and South America, the demand for conventional type of bags is on the decline.

8.3.1. The Industry has opined that there is export potential for Laminated Jute Goods in the Middle East and East European markets provided raw materials prices are reduced and export assistance is stepped up from the current level. Another suggestion received was that a cash subsidy of 10 per cent of the F.O.B. value should be introduced.

9.1. One of the major consumers, the FCI uses Laminated Jute bags, polyethylene lined (25 micron 100 gauge film), Bitumen-bonded made from D. W. Tarpaulin 15 oz./45" 10 x 10 construction. It has expressed the opinion that the quality of Laminated Jute bags was not at all consistent. In the absence of ISI specifications, the Corporation has developed its own standards which include breaking strengths—warp way, weft way and along the seam. In the past, the Corporation sorted out its difficulties regarding the quality by asking the supplier to replace damaged and rejected bags. In some cases it had even to accept slightly sub-standard bags to meet its requirements at, of course, a reduced price. The inspection methods have, however, now been standardised at the receiving end and plans are under way for setting up testing and in-process inspection facilities at Calcutta. The Corporation feels that a lot more needs to be done by the manufacturers of bags to control their quality and has, therefore, urged that the Laminated Jute Goods Industry should set up adequate testing and inspection facilities to ensure that the bags meet the standards specified by the Corporation.

9.2. The Director of Industries, West Bengal has stated that the quality of Laminated Jute Goods is not constant and varies from supplier to supplier. The Director-General of Supplies and Disposals has refrained from giving any comments due to his limited experience. M/s. Andhra Cement Company Ltd., Vijayawada have reported that the quality was generally satisfactory and with the formulation of standard specifications by the I.S.I., the quality would further improve to secure the desired consistency. M/s. Shriram Chemical Industries, have complained about the inconsistent quality in respect of moisture content and texture of Jute cloth.

9.3. **Standards.**—The Indian Standards Institution has informed us that it has not published any specifications for Laminated Jute Goods but the work on preparing Indian Standards for this Industry has been taken up recently. The draft standards for Polythene lined jute bags and B. Twill bags lined with Polythene film for packing sugar were under early stages of preparation.

9.4. Research.—Almost all the producers have stated that there was no separate Research and Development Department attached to their factories. M/s. Diamond Products Ltd., have reported that the Development Manager of their Organisation looked after the Research and Development work. The Company has been spending about Rs. 60,000 annually over this Department. M/s. Khardah Co. Ltd., stated that they did not have a separate Research and Development Department but were obtaining the assistance of the Indian Jute Industries Research Association in this regard. M/s. India Burlap and Laminating Works, have informed us “Although we have no separate Research and Development Department, we are spending about 5 per cent of the labour cost on the Research and Development Programme for getting the developments in process from various agencies from time to time.”

9.4.1. The Indian Jute Industries Research Association (IJIRA) is engaged in Research and Development in the field of Jute and Jute goods. It has undertaken research in connection with the lamination of Jute fabrics with other materials and the development work done by it was as under :

- (a) A method of bonding thin gauge Polythene film to Jute fabric by direct heat and pressure had been developed using ordinary equipments available in Jute mills.
- (b) A process for adhesive bonding for Polythene film using indigenously available adhesives had also been developed. These laminates may be used for a variety of packaging needs where an inert barrier between the Jute fabric and the contents was needed.

10.1. We were informed that, for the supply of bags, two types of contracts were usually entered into with the customers one of which was a fixed price contract for a short term, say, for three to six weeks. During this stipulated period, the manufacturer entered into a contract with Jute mills for supply of cloth

**10. Selling System and
Selling Prices**

at a fixed price. This fixed price was taken into consideration in quoting the price for the Laminated Jute Goods so that the price fluctuation in the Gunny market did not affect the profitability of the supplier. The other form of contract was under an escalation clause in which the price quotation for the Laminated Jute products was fixed in all respects except the price of the Jute fabric which may vary from one delivery to another depending upon the market conditions prevailing then. We were given to understand that the price fluctuations in the Gunny market, might not, by and large, materially affect the profitability of the producers of Laminated Jute Goods, if they judiciously entered into contracts with suitable coverage for the variations in Gunny prices.

10.2. Some of the manufacturers of Laminated Jute bags are registered suppliers to the FCI and the prices quoted by them are inclusive of Excise duty but exclusive of Central and/or local taxes on Jute cloth. Any variation in Excise duty and prices of other raw materials would be on the buyer's account. The selling prices are with or without freight and insurance as per the buyer's requirement. When once the quotations are accepted, the Industry receives the orders directly and supplies the goods in accordance with the terms and conditions accepted by both the parties.

10.3. M/s. Diamond Products Ltd. have stated that their sales of Laminated bags were generally handled through agents and a flat commission of $\frac{3}{4}$ to $1\frac{1}{2}$ per cent on net realised value (excluding freight) was paid to agents. On export orders, the commission paid generally on realised value was at 1 per cent to overseas agents and at $2\frac{1}{2}$ per cent to local agents.

10.3.1. The Director of Industries, West Bengal has informed us that prices for most of the items of Laminated Jute Goods have gone up in the home market during the last few years.

10.4. The FCI has stated that the selling prices of Laminated Jute bags had been consistently rising. The bags were purchased by FCI on the basis of a price which escalated according to the price of the Jute material as per quotations published by the Gunny Trades Association, Calcutta.

These quotations fluctuated significantly from month to month. It has been brought to our notice that the current prices of bags were higher than those in 1968 by about 60 per cent, mainly because of the increase in price of Jute and also to some extent due to the increase in the prices of processing and other materials.

10.4.1. In the opinion of the FCI the prices of Laminated Jute bags were not reasonable and there was scope for substantial reduction both in the prices of Jute cloth as well as the conversion charges of laminators and bag manufacturers. It has made a plea that fixation of prices of Laminated Jute Goods at a reasonable level would be beneficial to consumers like them as the Laminated Jute bags accounted for about 6 per cent of the cost of production of fertilisers and thus constituted a significant element in their cost structure. According to the FCI price fixation was doubly advantageous as (i) the price would be the same all over the year thus enabling better planning of purchases and reduction of inventories and (ii) it would eliminate speculative business by the bag manufacturers.

10.4.2. The FCI has requested the Commission to ensure that the price of the Laminated Jute bags has a reasonable relationship with the price of raw Jute. Also, citing the example of Naphtha used by the fertiliser industry, the FCI has made a request for concessional Excise duty on Jute cloth used for fertiliser bags.

10.4.3. M/s. Shriram Chemical Industries, one of the fertiliser manufacturers in the private sector have stated that the selling prices of Laminated Jute bags, which have gone up considerably, have fluctuated from Rs. 2.20 to Rs. 3.50 per bag within a short span of two years.

11.1. As the Laminated Industry has no central organisation as mentioned in paragraph 4.2. above the views of which could have been sought by the Commission in the matter of selection of units for cost study, names of existing units were obtained through the issue of questionnaires to the Jute Commis-

11. Selection of Units for cost Investigation

sioner and the IJMA. A discussion regarding the selection of units was held with the members of the Technical Committee formed by us in connection with the Inquiry into the Jute Goods Industry. Certain Jute Mills have separate divisions, engaged in the manufacture of Laminated Jute products. To have an idea of the comparative cost structure of the units functioning as separate divisions within Jute Mills, and those working independently, the following units were selected for detailed cost study : --

- (1) M/s. Diamond Products Ltd., Calcutta.
- (2) M/s. National Laminators, Calcutta.
- (3) The Converter division of M/s. Dalhousie Jute Co. Ltd., Calcutta.
- (4) M/s. Guardian Plasticote Ltd., Calcutta.
- (5) M/s. Warden & Co., Bombay.

11.2. M/s. Guardian Plasticote Ltd. produce only extruded products and, therefore, the costs of Laminated Goods and the estimates thereof are based on the activities of the other four companies.

Although a Cost questionnaire was issued to the selected units for submission of reply within a specified time the response was far from satisfactory inasmuch as only two of the units supplied part of the data by the stipulated date. Apart from some statistical records showing the consumption of direct materials none of the selected units has installed any satisfactory costing system which could help in developing cost of conversion. The main processes involved in the manufacture of Laminated bags are laminating, cutting, folding, stitching, branding and packing in trusses or in bales. In the absence of adequate records total conversion charges for each of the processing centres were compiled by our costing team on the basis of actual figures wherever available, or on rational allocation of expenses in consultation with the Company's representatives. Departmental expenses were related to the production expressed in terms of suitable units, viz., yards.

12. Method adopted for Cost Study

number of bags, piece wages, length stitched, etc. as the case may be, for determining the rate of conversion, cost per unit of production in various processing departments. These departmental rates were further applied to the relevant production units for the different types of bags, to work out the total conversion costs.

The significant feature of this Industry is that there is no standard product. The bags manufactured are of numerous specifications which vary according to the

13. Items selected for Costing

following criteria :—

- (a) Size of the bag.
- (b) Construction particulars of the Jute cloth used.
- (c) Gauge or microne of the Polythene film used or the thickness of the Polythene extrusion coated.
- (d) Type of paper used with its weight in terms of gramme per square metre.
- (e) Thickness of Bitumen applied as bonding material.
- (f) Margin left on both sides of cloth from bitumenisation or from extrusion coating.
- (g) Type of sewing as also specification of sewing twine used.

Out of the entire range of bags manufactured by the selected units, no common specification could be found excepting for size $36\frac{1}{2}'' \times 24''$ (Jute cloth bitumenised with Polythene sheet) produced by three units. Even here, although the bag size was the same, specifications of raw materials used e.g. Jute fabrics, Polythene sheets and thickness of Bitumen application differed. In the circumstances no standard or common product could be costed to facilitate comparative study of the selected units.

13.1. Apart from the innumerable bag sizes, the Laminated cloth consists of various types, some of which are mentioned below :—

- (a) Jute Fabric laminated with Polythene bitumen bonded.
- (b) Jute fabric laminated with Paper bitumen bonded.
- (c) Jute fabric laminated with Jute fabric bitumen bonded.
- (d) Jute fabric laminated with Jute fabric interlined with paper, bitumen bonded.

Of these types, production of the first two was predominant. Hence it was decided to study their cost of production. In regard to Polythene extrusion coated bags, those manufactured from Jute cloth coated with Polythene extrusion only were costed. The manufacturing processes adopted by the costed units, being similar, it was decided to make comparative study of the conversion costs, processwise, in addition to the cost of production for bag size $36\frac{1}{2}'' \times 24''$ mentioned earlier. The comparative costs are indicated in Annexure--- I (a, b and c).

We were informed by the costed units that their capacities had not so far been assessed by any Governmental agency. In their replies to our questionnaire, some units have expressed capacity in terms of tonnage and some others in terms of No. of bags, having regard to their sewing capacity. It was observed that, besides selling Laminated bags, considerable quantity of Laminated fabrics in rolls were sold. Hence in determining the capacity of a unit, Lamination only has to be taken into account and the bottleneck condition in the sewing department, if any, should not limit this assessment. The speed of the machines for Lamination varies to a great extent from product to product. The machines have also to be kept unavoidably idle for some time depending on the types of products due to feeding of rolls in the machines, cleaning of machines, preparatory to the switching off from one product to another etc. The same laminating machines are used, whether the Lamination involves purely paper with paper or for other types of Lamination as indicated above where Jute cloth is used.

14. Capacity and Production

14.1. The linear output is highest when paper is laminated with paper and lowest when three layers are laminated e.g. Jute cloth with Jute cloth, interlined with paper. We were told that the linear output per machine shift for a particular type of laminated product say, Jute cloth with Polythene, is not materially affected when Jute cloth and Polythene sheets of varying weights are used except in terms of weight for a given period of lamination depending upon the unit weight of jute cloth and Polythene sheets used. Thus for the same categories of Laminated products, while the machine hours and linear production would be more or less directly proportional, irrespective of the unit weights of cloth or sheet in use, the machine hours and weights of output, would have no direct relation. Hence the weights of production may not be considered as suitable units to define the capacity of the Industry. Similarly the capacity cannot be properly defined in terms of the numbers of bags as (i) the entire cloth laminated may not be converted into bags and (ii) the number of bags may not indicate the length of cloth laminated as bags of small sizes, although larger in number may require less yardage of laminated cloth, than what would be needed by bags of bigger sizes, even though less in numbers.

14.2. After careful consideration we have come to the conclusion that the capacity of the Industry should be assessed on the basis of the Lamination process in relation to a particular class of laminated product. The combination of Jute fabrics and Polythene film being predominant in the Laminated Jute goods production, we think it reasonable to express the capacity of the selected units in terms of metres for that particular type of product. Out of the costed units, two kept records for actual machine hours worked in case of Laminated products. In case of extruded category, similar particulars were available with two units. In the absence of actual recorded machine hours worked, the utilisation of machine capacity for other units could not be determined. The selected units, however, furnished the standard production in terms of yards per gross machine minutes for the different types of Laminated products. To study the installed capacities of the selected units on a comparative basis,

these standards were used to work out the potential production capacities of the various units in terms of a common product, viz., Jute fabric with Polythene film. The entire actual linear production in the lamination department was similarly equated in terms of this common product and the actual equated production was related to the installed capacity, as theoretically calculated, to work out the degree of capacity utilisation. The resultant figures are indicated in Annexure 2.

14.3. It would be observed that the utilisation of capacity during 1968-69 varied between 18.4 and 65.5 per cent while in 1969-70 it ranged between 49.2 and 60.0 per cent. In case of unit A, the capacity utilisation dropped in the later year, but in all others it showed a marked improvement in 1969-70 as compared with the previous year. In case of unit (B) the linear production for paper laminated products was not available but in it the laminating machines were equally utilised between purely Paper based and Jute based laminated products. In this case the over-all machine utilisation has been assumed to be of the same order as for Jute based laminated products. The lamination machines ran intermittently for single shift or for double shift or remained idle in all cases excepting in unit (C) where these worked double shift, but due to lower efficiency the utilisation tended to be less.

14.4. Three of the five selected units possess machines for extrusion coating. Annexure 3 indicates the utilisation of capacities of these machines during the costed periods. The units B and C shown in the Annexure also manufacture Laminated goods and compared to the output of these products, the production volume of the extruded quality was much lower. In unit C the same extrusion machine is used for the manufacture of Polythene films for self-consumption, which was entirely used during the costed period. Unit E utilised its machines for the manufacture of only extruded products. We understand that this machine can also be used to manufacture Polythene Films, but it was not so used and was utilised in the production of extruded quality products only. It would be observed from the Annexure that

machine utilisation was very poor in case of units B and E and in case of unit C also, much of the capacity remained unutilised. It is worth mentioning here that as in the case of Lamination machines, the installed capacity of the extrusion machine can also be expressed in terms of a particular type of substrate, the speed being highest when paper is coated with Polythene extrusion and lowest when Jute fabric is used. If the guage of coating is desired to be quite thick the speed of the machine has to be lowered. Data regarding linear output of all extrusion coated products were not available in most of the units, which could be used to equate the entire production in terms of a common item for the purposes of assessing capacity utilisation and hence capacity utilisation has been assessed with reference to machine hour working only. Unit B manufactured only extruded quality paper products while units C and E utilised capacity for the Jute extruded products to the extent of 29 and 22 per cent respectively during 1968-69 but these further dropped to 1.95 and 10.8 per cent in 1969-70. This would indicate that the demand for the extruded quality Jute products, has been progressively dwindling. Whereas during 1968-69 there was some demand for the extruded quality Jute bags from overseas market, this has shrunk practically to nil in the later year. The manufacturers do not see any encouraging prospect of a revival of demand in the near future due to partly the high price of Indian product and partly on account of the progressive substitution of the extruded quality Jute bags by woven Polythene bags. The demand for extruded quality bags in the internal market appears to be poor. The FCI chooses to use Laminated Jute bags instead of the extruded quality bags from consideration of comparative cheapness. As the demand for the extruded quality Jute products is not likely to pick up in the near future, the use of the extrusion machine would perhaps have to be mainly diverted to the production of extruded quality paper products or to the manufacture of high density Polythene films (where technically possible) which may be eventually required for the manufacture of woven Polythene bags. *We do not therefore think that any useful purpose would be served by determining a fair cost structure for extruded products.*

14.5. In regard to the workable machine speed, the unit C stated it to be 110 ft. per minute for extrusion on Jute cloth according to which the machine efficiency of this unit worked out to 60.6 per cent during 1968-69, which increased to 86 per cent in 1969-70. The machine in unit E was a sophisticated high speed one and its rated speed was stated to be 500 ft. per minute for any substrate against which the average actual working speed for coating on Jute cloth, was given by the Company as only 100 ft. per minute. The actual performance was far lower than the rated capacity. The extrusion machines are all imported, which obviously involved the allocation of good amount of foreign exchange. Although initially these units were able to sell their products in the export market, the present position may be considered as one of stagnation and it is unfortunate that expensive machinery should remain unproductive, unless they can be put to the alternative uses referred to in paragraph 14.4 above. We would also invite the attention of Government to the suggestions made by the Industry and referred to in paragraph 8.3.1.

15. **Period selected for Cost Study.**—Two latest financial years, viz., 1968-69 or 1969 and 1969-70 or 1970, as the case may be, were adopted for cost investigation, so that the costs of production would reflect the latest trend of expenses and the impact of actual utilisation of capacity.

16.1. **Jute Fabric.**—The Jute fabric accounts for 60 to 75 per cent of the total cost of production of bags depending upon the quality of the cloth used.

16. **Cost of Production** The construction particulars of the fabric used are numerous in the same unit as also amongst different units, depending upon the specifications of the customers. As stated in paragraph 13, the comparative cost of Jute fabric used in the manufacture of a common size bag by different units is indicated in Annexure 1(c). It would be observed that the construction particulars of cloth used by two units are the same, whereas in the case of the others there is a slight difference. The purchases at different periods gave rise to variation in the ex-factory delivered cost of Jute cloth. This also accounts for the difference in the cost of Jute fabric

between units A and C. In the case of unit (B) the cloth used is lighter resulting in higher cost. The cost shown under unit (D) is a theoretical cost with its actual departmental rates for conversion, as the bag of this size was not manufactured by it.

16.2. Polythene films.—Two of the costed units manufacturing Laminated goods, have facilities to manufacture Polythene films. One of them manufactured its entire requirement, whilst the other did so partially and procured the balance from the open market. The other costed units had to purchase fully from outside. In certain cases the Polythene granules were supplied to outside parties and a conversion charge at Re. 0.75 per kg. was paid for making films out of them. Annexure 4 indicates the cost of production and market prices for the two most used gauges of Polythene films. It would be observed that the cost of production of films even without the element of return is in some cases higher than the market prices. One of the reasons for this high cost is under-utilisation of capacity. The market price for the indigenous granules is much higher than that of the imported ones. Since, as mentioned in paragraph 8.2, replenishment licences are issued against exports of Laminated products, in the determination of the actual costs of production for the films manufactured by the units themselves, the rate for the indigenous granules was considered.

16.2.1. The production of Polythene films is not necessarily a captive production and also Government sanction for the installation of Polythene film manufacturing plant, is not connected in any way with the setting up of Lamination project. The majority of the Laminating units do not possess the machinery for manufacture of Polythene sheets and have to procure them from market. Considering these aspects *we have come to the conclusion that in our estimates of costs the market prices of Polythene films should be adopted in all cases, although in the cost calculation for the costed years the actual costs of production of films have been considered in the case of those units which manufactured the films.*

16.2.2. Our study shows that the films actually used in the Lamination process, varied to a great extent from the contracted specifications. In respect of two units, adequate data were available from which it was observed that in one of them, the weight of actual usage was about 8 per cent less in 1968-69 than the specified requirement in the contracts whereas in the following year actual consumption was higher by about 3.5 per cent. In another unit the overall percentages for the corresponding years were 3 per cent less and 1.34 per cent higher in relation to the customers' requirements. It was represented by the manufacturers that strict adherence to the specification was not possible owing to uneven thickness of the films themselves. There is some force in this plea in view of provision of yield tolerance in the I.S.I. standards @ ± 5 per cent in case of lots of films over 230 kgs. but upto 1150 kgs. and @ ± 3 per cent in case of lots over 1150 kgs. However in the calculations of costs during the actual period, the average percentages of variation have been applied to the specified weight, wherever available. In the estimates of costs we have adopted the weight of Polythene as per particular specifications. *The manufacturers should make all possible efforts to adhere to the use of films of required specifications.*

16.3. **Bitumen.**—The bonding material used in Lamination is Bitumen. The degree of thickness of Bitumen on the Jute cloth depends upon the specification in the orders. Several units complained that the quality of Bitumen supplied on many occasions, was not of I.S.I. specification. One unit represented that the required industrial grades of Bitumen for blending or the grade required by it were not supplied by the Refineries. This has however been refuted by the suppliers. The application of Bitumen in some cases, was observed to be below the specified requirement. One unit stated that the thickness of Bitumen application was not usually tested by it and it was satisfied if the bonding strength was adequate. *As in the case of Polythene films we consider that the Industry should introduce some system of inspection so that the thickness of the Bitumen coating conforms to the specifications of the contracts.*

16.3.1. Regarding the availability of Industrial grade Bitumen in adequate quantity, one of the main suppliers informed us that it was operating the plant to the maximum capacity. The Company added that it was converting some of the Asphalt grades of Bitumen to the Industrial grade by Air blowing and thus utilising its conversion capacity fully. It expressed its inability to raise supply even if it received more crude, because of processing limitations. We are not aware of the position of conversion capacity of the other main suppliers. If however their capacity to manufacture Industrial grade Bitumen was also utilised to the maximum extent, the problem would be how to arrange for the required supply of Industrial grade Bitumen when the demand for such grade increases in the near future. *We bring this to the notice of Government to devise such measures as deemed proper to increase the capacity for manufacture of Industrial grade Bitumen as and when this becomes necessary.*

16.4. **Paper.**—For Lamination with Jute cloth sometimes Paper is used in place of Polythene films. The paper was mostly of indigenous manufacture and was either Kraft/Crepe or clubback. As to its quality generally there was no complaint. We noticed that the wastages were on the high side. This was attributed mainly to handling, usage of paper with greater width than the required size and process wastage. In case of certain units the over-all wastage varied between 4 and 19 per cent in 1968-69 and between 10 and 13 per cent in 1969-70. In case of certain units handling and process wastages could not be separately determined and only an *ad hoc* allowance had to be provided for. *The Industry should adopt necessary steps to avoid high wastage whether due to handling or processing.*

16.5. **Wastage of Laminated Cloth.**—Annexure 5 shows the average wastage of Laminated Cloth for Bag making. During the costed period the wastages as worked out were allowed in cost calculations. It will be seen from Annexure 5 that the wastage percentage varies widely from unit to unit. In case of unit D, it is certainly abnormally high. *We feel that the provision for wastage at one per cent should be adequate and accordingly this figure has been adopted for future estimates.*

16.6. **Coal.**—Coal or Furnace oil is used for melting Bitumen. Annexure 9 shows the consumption of Coal for melting Bitumen in three out of the four costed units using Lamination processes. The fourth unit uses Furnace Oil and hence for comparison its figures have been left out. It would be observed that the consumption of Coal has greatly varied not only from unit to unit but also from year to year in the same unit. Uneconomic volume of melting, *inter alia*, gives rise to great disparities in Coal consumption. The volume of melting in Units B and C increased three fold in 1969-70 over the previous years, resulting in appreciable economy in Coal consumption. In case of unit A however the consumption had increased in 1969-70 compared with that of the previous year on account of the decrease in the volume of melting arising out of fall in the volume of production. Besides the economic load, the other factors that affect Coal consumption are the number of melting boilers in use, the ambient temperature at the time of heating, thermal efficiency of the equipment in use, variations in outside temperature, e.g. between hot and cold seasons as also between days and nights, grade of Coal used and its ash content and fuel efficiency.

16.6.1. The quality of Bitumen in respect of its softening temperature plays an important part in the fuel consumption. In course of our discussion one of the major suppliers averred that the quality of Bitumen supplied always conformed to the I.S.I. specifications and wherever any dispute arose in this connection they were able to prove that the complaint was ill-founded. With regard to the quality for softening point we did not receive any complaint. As already explained, there are several factors which cause variation in Coal consumption. The incidence of coal cost is comparatively insignificant in the total cost of production of Laminated goods. *However we would like to draw the attention of the Industry to the need of taking all possible steps to economise in Fuel consumption.* For the purpose of estimates we have adopted a reasonable norm which has been discussed later in the Report.

The conversion cost forms only a small portion of about 10 per cent of the total cost of production. The manufacturers stated that the scope for control over the cost of direct materials

17. Conversion Cost.

was very much limited, as the material specifications entirely depended upon customers' requirements and the rates thereof were governed by market conditions. The wastage of materials to some extent however is controllable by producers. Thus the area of competition according to the producers, is narrowed down only to conversion cost. *For the same reasons our recommendation for a fair cost structure could cover only the conversion cost.*

17.1. Labour.—There is no similarity of wage structure amongst the costed units. When the Lamination department functioned as a separate division within a manufacturing concern, its wage structure followed the pattern prevailing in the main works. Thus the Lamination divisions attached to the Jute mills follow the Wage Board Awards of the Jute Industry, as modified in individual cases. Where the Lamination division it attached to a cigarette factory, the pay structure of the latter was followed. In case of independent units, separate wage structure has to be taken into account. The labour complement in most of the units was permanent. In certain units piece rate payments were in vogue in respect of certain processes, e.g., cutting, sewing, folding, packing and baling. In two cases contract labour was employed on piece rates for such processes. It was observed that in the fixation of piece rates, whether for departmental or contract labour, no scientific method, based on work and motion study was followed excepting in one unit. The rates were fixed more or less on negotiation with the result that in many cases the same piece rates were paid for different bag sizes. This meant that the same rate was paid for different length stitched. The rates however varied according to the types of stitching, e.g. for double lock, single lock, heracle, or for hemming or for other special requirement in sewing. The extent of variation in stitching charges for a bag of the same size is shown in Annexure 6. Since the bag sizes are numerous it was necessary to prepare a general schedule of stitching charges per unit length, say per 1000 inches, so that such rate could be applied to the

stitchable length for a particular bag size, in the determination of its stitching charge. Annexure 1(a) and (b) indicate the labour charges per unit of production for various processes. The different forms of wage structure and varying percentages of capacity utilisation have accounted for the disparities in the incidence of labour charges.

17.2. Salaries.—As in labour the salary structures of the costed units were also dissimilar for reasons given in the preceding paragraph. This item covers the salaries relating to head office and sales staff also. It was stated by all units that their entire sales were effected through Commission Agents and that the sales staff salaries under head office did not form any significant amount. This item is more or less of fixed nature. The varying percentages of capacity utilisation and different salary structures have led to differences in the incidence in the departmental rates shown in Annexures 1(a) and (b).

17.3. Power.—The actual consumption of power for the Lamination division registered through meter was not available with any of the selected units not to speak of the specific consumption at various processing centres in the Lamination departments. In the absence of such data, the power as allocated by the Companies on a technical basis was adopted to work out costs. The different ages of the machines, various systems of power transmission, varying average rates of electricity, and the unavoidable approximation in technical allocation have inevitably caused variations in the incidence of power as shown in Annexures 1(a) and 1(b).

17.4. Consumable and Repairs Stores.—Annexures 1(a) and 1(b) indicate the incidence of costs of consumable and repair stores for different processing centres in respect of different units. Although the consumption for the Lamination division as a whole was available with some units, further break-up for different processing centres within the division was not maintained by any of these. Here also technical assessment had to be done in apportionment of total consumption to the various processing centres. The different levels of capacity utilisation, the varying ages of machines and unavoidable approximation in the apportionment

of amounts to the different process centres accounted for the variations in the incidence of cost from unit to unit.

17.5. Overheads.—This includes all the items of overheads relating to factory and head office. In cases where the Lamination division formed only a small part of the main concern, the general factory and head office overheads were apportioned by adopting suitable norms. The quantum of expenses relating to the Lamination activities may not be of similar magnitude when compared with the respective volume of production as certain amount of overlapping of expenses between Lamination activities and other main activities was unavoidable. This together with the variation in the utilisation of capacity has led to divergence in the incidence of overhead charges as shown in Annexures 1(a) and 1(b).

17.6. Depreciation.—Necessary records for machinery and other capital assets relating to Lamination or extrusion activities were available only with two units. In the case of the other two, depreciation was reasonably assessed with the help of records made available to the investigating officers. In the case of one unit in the absence of relevant information, only a national amount was adopted by the Company. Under-utilisation of capacities in all cases has led to high incidence of depreciation.

17.7. Packing Materials.—The standard requirement of packing materials was related to the average purchase prices in the determination of their cost.

17.8. Comparative Costs.—As discussed in paragraph 13, the comparative rates of conversion cost processwise have been shown in Annexures 1(a) and 1(b) for 1968-69 and 1969-70 respectively. The sizes of bags selected for costing in each unit covered the major portion of their respective production but since the specifications of bags were dissimilar amongst the costed units, cost comparison has been difficult. One size ($36\frac{1}{2}'' \times 24''$) which was common to three costed units has been shown in Annexure 1(c). The process-wise conversion costs for the extruded quality have been indicated

in Annexure 1(d) for two units. Here also the bags manufactured by those two units were different. Unit B shown in Annexure 3 did not manufacture extruded quality jute cloth during the costed periods. Hence for the purpose of comparison of the conversion costs, the available figures in respect of the two other units, e.g. C and E have been considered. Annexure 1(d) shows great disparities in the conversion costs between the two units and also in their figures between earlier and later years. In unit C the conversion costs in all the processes were lower, due to the higher utilisation of capacity and machine efficiency and volume of production of extrusion machine being higher in 1969-70 than in the previous year. Excepting the extrusion Department, the other processing centres, viz., cutting, folding, sewing, branding, baling and packing are common to Laminated goods manufacture. In case of unit E although the utilisation of capacity in terms of machine hours slightly improved in 1969-70 over 1968-69, the production efficiency seriously fell in that year, which caused increase in conversion cost in the extrusion department. The manufacturing processes, e.g., cutting, folding, sewing, branding, packing and baling were all performed by contract labour in this unit in both the years. Here the contract labour charges which varied due to different contractors being employed, included the charges for supply of sewing machines also. Owing to irregular production and fixation of varying contract rates, the costs of conversion at the other processing centres were not comparable with those for the other unit. The rates of contract labour were higher in 1969-70 than those for the previous year, which have caused higher conversion costs in the various departments in the subsequent year. The two major causes for disparities in the conversion costs of the two units are the relative degree of capacity utilisation and organisational difference. Whereas in the case of unit C the capacity utilisation of the extrusion machine varied between 67 and 72 per cent in the two years, that for unit E was between 27 and 29 per cent only during those years. The higher capacity utilisation in unit C resulted in lower cost of conversion compared with unit E. In case of unit C again the extrusion and Lamination processes formed an insignificant portion of its entire manufacturing activities with the result

that common expenses of Head office and factory were distributed over a large number of products. In case of unit E however the head office and factory general expenses had to be absorbed by the extruded products only.

We have observed in paragraph 14 that on account of the interchangeability of the lamination machines for manufacture of different types of laminated products, the capacity of the Industry needs to be assessed in terms of length of a particular type of Laminated product, viz., Jute (Poly.) but in the absence of a central organisation for this Industry, the total production of the Industry in terms of length of laminated jute cloth could not be ascertained. Nor, for similar reasons could we properly assess the demand in future for the jute-based laminated products, both for internal consumption and for export market. Certain units gave their estimates of the total demand for laminated bags as discussed in paragraph 7 but these widely differed and no reasonable conclusion could be drawn from them.

18.1. The factories manufacturing jute-based laminated bags, are mostly concentrated in the Greater Calcutta Industrial area. The Director of Industries, West Bengal submitted to Commission the names of 17 units located in West Bengal, which manufacture such bags, with details of their installed capacities and production, during the last three years. Out of these, one unit was closed, the production in another was in the developmental stage, and one other unit produced only extruded quality bags. The statistics of production, capacity etc. of the 14 factories were not expressed in identical terms. While the figures of certain units were in terms of number of bags produced, some others gave their figures in tonnes, yards or metres. To utilise the data so differently presented, attempts have been made to reduce all figures to one common unit, viz., bags which are indicated in Annexure 7. We have already discussed in paragraph 14 the difficulties involved in defining capacities in terms of bags but for the limited purpose of approximately assessing the capacity utilisation of the West Bengal factories which are the main source of supplies of fertiliser bags we have

adopted the figures as furnished to us by the Director of Industries, West Bengal. Depending upon the orders placed with them, the units work intermittently—single, double or treble shift—and sometimes they remain idle. The figures in Annexure 7 show the total production and these have been compared with single shift capacity.

18.2. The FCI, which is the largest single consumer of laminated bags, procured its entire requirement from the factories in and around Calcutta area. We have, therefore, taken the view that the performance of Calcutta units, by and large, can be reasonably taken as reflecting the position of the Laminated Jute Goods Industry. For reasons discussed in the earlier paragraphs the prospects of increasing the sales of conventional types of Laminated Jute bags in the export market in the near future are not very encouraging. The future utilisation of the capacity of the Industry, has therefore, to be assessed in the light of expected growth of the demand within the country. For a short term period of our estimate, viz., for the years 1972 to 1974, the growth in demand of the Laminated Jute bags, will mostly be dependent on the prospective offtake of the bags by the FCI. The table given below, shows the purchases of laminated bags by FCI during 1968 and 1969 and the proportion represented by such purchases in relation to total manufacture as indicated in Annexure 7.

FCI Purchases Year	Bags. (Millions)	Production (Annexure 7) Year	Bags. (Millions)	Percentage of Col. (2) over Col. (4)
(1)	(2)	(3)	(4)	(5)
1968 . . .	11.85	1968-69 . . .	32.77	36.2%
1969 . . .	13.13	1969-70 . . .	40.20	32.7%
Average of two years		..	..	34.2%

It will be observed from above that the supplies of Laminated bags to FCI out of the total production in the Calcutta area amounted to about 36% and 33% respectively during 1968

and 1969, the balance quantity being issued, either to fertiliser factories in the private sector, or for other uses. It will also be observed from Annexure 7 that the total production represented 61.5% and 75.4% of the single shift installed capacity. The installed capacity on single shift basis in terms of bags during 1970-71 was of the order of 59.04 million bags. This together with the capacity for the costed Bombay unit would amount to 63.70 million bags. We have also been informed by the Jute Commissioner that certain units indicated in the Table below have applied for licences for capacities shown against each.

(Per annum)

Units	Yards/Metres (Million)	Bags (Million)
1. M/s Industrial Laminators (Licence already issued)	1.06 Yds.	*0.83
2. M/s Ganges Water Proof (P) Ltd.	..	1.20
3. M/s Globe Rope Works	..	6.00
4. M/s Runkola Proofing Corp. (P) Ltd.	500 Rolls	2.40
5. M/s National Laminators	7908 tonnes	..
6. M/s Laminating & Packing Industry	..	2.70
7. M/s Orient Laminating Co.	..	2.40
8. M/s Bharat Laminating Corp. Less included in Annexure No. 7	12.0 Bags 4.8 Bags	} 7.20
9. M/s Lohia Jute Press (P) Ltd. Less included in Annexure No. 7	6.0 ,, 1.5 ,,	} 4.50
10. M/s Laxmi Wax Corp.	3.6 meters	*3.03
11. M/s Ancillary Industries	3.2	2.78
12. M/s Lamination Corp.	..	1.50
TOTAL		34.54

*Approximate nos. of bags have been worked out from length.

Out of these, units at S. Nos. 5, 8 and 9 are already in production and their capacities have been included in Annexure 7.

In regard to others we are not aware when they will commence production. At any rate if at least 75% of these units go into stream during 1972, the known available capacity will be of the order of 89.6 million bags.

18.3. We have been informed by the FCI that their requirement during 1972-73 and 1973-74 would be 22.5 million and 27.1 million bags, respectively or in other words the average annual requirement during 1972 and 1973 would be 24.8 million bags. Assuming the supplies to the FCI form about one third of the total output, the probable average annual turnover of Jute laminated bags is expected to be 74.4 millions during 1972 and 1973 or in other words it would mean, that the Industry would have to work at about 80% of its installed capacity for effectively meeting the future demand of its consumers.

18.4. Since the lamination machines are used both for Jute/Polv./Paper lamination, and paper/paper lamination the question may naturally arise, whether the growth rate for paper/paper laminated products will correspond to the growth rate of the Jute Laminated products, so as to make it necessary for the Industry to work its lamination machines at 80% of the installed capacity. The increase in demand for paper packaging in future, would directly influence the production of paper/paper laminated rolls. In this context the article published in the Financial Express, dated 1st November 1971 about the estimated volume of production for wrapping paper and boards is relevant. In this article "Hard wood for Paper" Shri Bhandari, Vice President and Manager, M/s. Sirpur Paper Mills Ltd. has stated quoting the authority of the Planning Commission, that the estimated production of wrapping paper and boards by 1975 was likely to be 0.65 million tonnes. The actual production for wrapping paper and boards was 0.29 million tonnes during 1970 as discussed in his article, "Paper Industry takes a big stride" by Shri M. L. Zutshi, Chairman, Indian Paper Makers' Association. These two figures would indicate that the cumulative average growth rate of these items in future would be $17\frac{1}{2}\%$ per annum and on this basis the average annual production during 1972 and 1973 would work out to 0.44 million tonnes, which would mean an increase of

50% over the actual production level during 1970. We are not aware of the utilisation of lamination capacity mainly for paper/paper laminated products for the Industry as a whole, but with the limited information available in respect of the four costed units, it was observed that on an overall basis the utilisation of the laminating machinery, between jute-based and paper-based laminated products, was more or less of equal proportion, and the effective utilisation of the lamination capacity for both the products, was 54.6%. To meet the increased demand of laminated paper products the effective utilisation of machinery for paper products has also to be increased to at least upto 80%. So the adoption of an estimated over-all utilisation of the laminating capacity at 80% would not be unrealistic.

18.5. In framing the estimates of costs of conversion for future we have considered the actual volume of production of the costed units for the latest financial years 1971-72 or 1971 as the case may be. Our study shows that the total utilisation of capacity of the lamination machines as also the use of the machines *inter se* for the Jute laminated products and paper to paper lamination varied widely from unit to unit. In estimating the costs, the production estimates as submitted by the costed units have been considered subject to the minimum of capacity utilisation at 80% on single shift basis. Thus in case of two units 80% capacity utilisation on single shift basis has been adopted. In case of one unit 80% capacity utilisation of three shifts working, as proposed by the Company and nearly achieved by it in 1971-72 was taken into account. In case of fourth unit the actual production for 1971-72 with a cumulative average increase by 16% per annum as indicated by the unit was adopted which would need the working of machine approximately $1\frac{1}{2}$ shifts at 80% capacity utilisation. A large capacity exists in the Industry and due to the un-utilised capacity the conversion costs are high. Further, cost reduction is possible when the utilisation of capacity increases. The required laminated cloth for the projected output of bags could be obtained by these units from their lamination plant working with standard production timings, given by individual units with the assumed programme of capacity utilisation and working days mentioned above. The following

estimates of average production per annum during 1972 and 1973 have been adopted for our cost estimates :

Units	Laminated cloth in Metres (000)		Bags (000)
	Total length	Equated length in terms of produc- tion time for Jute/ Poly.	
A	4,610	4,598	3,870
B	6,057	6,057	4,900
C	14,582	14,723	12,000
D	4,040	3,636	4,278
		29,014	25,048

The product pattern in regard to the sizes of bags differed amongst the costed units. Besides, some units sell considerable quantities of laminated cloth as well. On account of this, the ratio between the production of laminated cloth and the production of bags, is not of the same order amongst the units. The product mix for the individual units in future has been assumed to be of the same order as during costed period.

18.6. For reasons already explained in paragraph 18 it has not been possible for us to make any realistic estimate of demand for the extruded quality products either in the export market or for internal consumption. *In the face of uncertain prospects of sale of such products, we have refrained from making any estimates of conversion costs for extruded quality jute products.*

In course of cost discussion, the representatives of the costed units were requested to submit their estimates of future costs in respect of popular types of Laminated Jute bags manufactured by them as also the estimates of departmental rates for conversion costs for various process centres, mentioned in para-

19. Estimates of Expenses

graph 17.8 ante. Since all the relevant data were not available, we had to work out the estimates on the basis of such materials as were available with us and prepared the estimates for the period ending December 1974.

19.1. There being no standard product, the estimates for the various departmental rates have been calculated. These have been indicated in Annexure 8. With their help, the estimated fair ex-factory selling prices have been worked out for the following known types of fertilizer bags now standardised by the FCI:—

Product	Size of bags	
	Length between seams	Width between seams
1. Urea	915 mm. (36")	610 mm. (24")
2. Suphala	851 mm. (33½")	533 mm. (21")
3. Suphala	876 mm. (34½")	508 mm. (20")
4. C. A. N.	889 mm. (35")	533 mm. (21")
5. Double Salt	889 mm. (35")	610 mm. (24")
6. Double Salt	889 mm. (35")	559 mm. (22")

19.2. Estimates of raw materials for Fertiliser bags.—

In paragraph 10.1 we have indicated the types of contracts with varying conditions that are usually entered into for the supply of Laminated Jute goods. With gunny prices always fluctuating, no norm can be recommended for their prices for developing future estimates. Therefore in calculating the cost of Jute cloth for the fertiliser bags, a notional rate has been adopted. For determining the fair prices for such bags at a particular time, the price of Jute cloth prevailing during that period has to be substituted for the national rate. In the contracts, usually the payment for Jute cloth is kept flexible while the other rates are deemed as fixed. How the adjustable portion of the contract amount, representing the value of Jute cloth is to be settled, depends upon specific terms in the contract. In framing our estimates of costs for different fertiliser bags, all elements of costs excepting the cost for jute cloth are deemed as fixed.

19.3. In the determination of the quanta of raw materials for the fertiliser bags, the specifications as furnished by the FCI and other aspects have been considered. These, in brief, are mentioned below :—

- (a) Polythene sheet used for lining has been taken as that of 100 gauge.
- (b) Polythene lining has been assumed to the entire area leaving a margin of 25 mm.
- (c) The average bitumen content has been assumed to be 50 gms. per sq. metre.
- (d) About 25 mm. of the lining at the open end of the bag has been assumed to be left non-bonded.
- (e) The length of the bag will correspond to the width of cloth and in the determination of the width of the cloth, to be used for a particular type of bag, a provision of $1\frac{1}{2}$ " has been made over the finished length of bag between seams for stitching.
- (f) The width of the bag will correspond to the length of cloth and in the determination of the length of cloth required for cut size of a bag, provision of 3" has been made over twice the finished width of bag between seams.
- (g) The overall wastage of direct materials has been taken at 1% and a reasonable provision has been made for loss in handling of bitumen.
- (h) The consumption of coal for melting bitumen has been adopted at 14.5% of the weight of bitumen. Since for melting bitumen, coal is, by and large, used, the use of other fuels, viz., furnace oil even if it is used by some unit has not been considered.

The norms mentioned from (e) to (h) have been assumed after careful consideration of the factual data of the costed units.

19.4. In working out costs of fertiliser bags the latest known rates for polythene films, bitumen, coal, and packing materials have been adopted.

The weighted average departmental rates shown in Annexure 8 were arrived at after developing the departmental rates for individual units. It would be observed that the major portion of the conversion cost relates to labour charges. There being no uniform pay structure in the Industry, the latest known pay structure of individuals units was considered in estimating labour charges. The latest rates of D.A. for individual units, have also been taken into account. In one unit for some manufacturing operations, contract workers on piece rates were employed during the costed period. These were subsequently absorbed as departmental workers with the corresponding piece rates revised upwards. Such revised piece rates with all the fringe benefits applicable to the departmental labour have been taken into consideration. In respect of the salaried staff necessary provision has been made for annual increments. For the assumed increase in the volume of production, appropriate provision has been made for extra labour and staff after due scrutiny. In respect of electricity the latest available rates have been adopted. Reasonable provision has been made for probable increase in prices during the period of estimates, in respect of consumable and repair stores. As stated in paragraph 17.6., in case of one unit, the actual depreciation could not be calculated in the absence of requisite data and only a notional amount of depreciation has been adopted. Since this incidence was comparatively very low we have excluded it from our estimate. The depreciation for another unit which was very high was similarly excluded. The depreciation for other two units was considered to be reasonable and therefore was adopted as norm for the Industry. Some reasonable allowance was made on account of probable increase under other items of overhead expenses. A provision for gratuity at 2% on salary and wages has been included under overheads and minimum bonus at 4% has been shown separately under cost structure.

20.1. The estimates were developed on the basis of expenses for the latest costed period, viz., 1969-70. It would be observed that the estimated conversion cost has been lower even after providing for the increases in expenses as mentioned in the foregoing paragraphs. This reduction is on account of reduced incidence of fixed expenses consequent upon the assumed higher volume of production. In one unit special screen printing is done in place of ordinary branding. Since this is not a normal practice, by and large, with the manufacturers of Laminated Jute goods, its higher cost has not been considered in the estimate. For indicating the total variation between the actuals and estimates in conversion costs for a particular size of bag, the detailed working is exhibited in Annexure 10.

All the units selected for cost study were not exclusively engaged in the manufacture of Laminated Jute goods but were composite units, manufacturing various other products. Separately compiled figures were not available with these units for computation of employed capital specifically for the Laminated Jute products. However, depending upon the available data in each unit an attempt has been made to assess the capital employed for the Laminated Jute products and other allied products, viz., paper laminated products, extruded quality products, polythene films, gum tape etc., but its further apportionment to Laminated Jute products only was not possible. The activities in connection with the manufacture of Laminated Jute goods being fairly high *vis-a-vis* other allied products, we are of the view that the adoption of capital employed so computed for the Laminated Jute goods Industry would not be unrealistic.

21.1. Annexure 12 indicates the computation of fair return required to enable the Industry to pay a reasonable dividend on the equity shares after meeting the other commitments. In this exercise the figures of only three units are considered. In case of unit A shown in Annexures 1(a) and 1(b), the sales turnover for laminated products represented only 3 to 4% of the total sales, and no specific data were available to approximately work out the capital employed for laminated products. Hence for the purpose of consideration of return to be provided for Laminated Jute products

this unit could not be taken into consideration. The figures of unit E mentioned in Annexure 1(d) were not taken into account for the reasons explained in paragraph 14.4. It would be observed from Annexure 12 that, to enable the units to declare a dividend at 8.5% on equity shares and specific dividend on preference shares, to provide a return at 6% on reserves and to pay interest at 10.5% on working capital, the minimum requirement of gross profit on capital employed varied between 12.4% and 13%. *We consider that return at 13% on the capital employed would be fair and reasonable.* The working capital component in the capital employed varied between 1.71 and 3.05 months' cost of production resulting in an average requirement of 2.38 months. We consider that a provision for working capital at 2½ months' cost of production less depreciation would be adequate for the Industry.

22.1. *A summary of the fair ex-factory prices for the period ending 31st December 1974 for different types of fertiliser bags (vide paragraph 19.1) calculated on the basis explained in the foregoing paragraphs subject to adjustments for variations in prices of Jute fabrics is given below :—*

Sl. No.	Size of bag	Fair ex-factory price (Rs./100 bags)
1 . .	36" × 24"	251.40
2 . .	33½" × 21"	210.99
3 . .	34½" × 20"	207.70
4 . .	35" × 21"	219.09
5 . .	35" × 24"	245.32
6 . .	35" × 22"	227.77

The break-up of the prices by different cost elements is contained in Annexure 11.

22.2. Further, in Appendix VIII we have indicated the estimates of fair conversion cost along with return for various processes in respect of important types of Laminated Jute products. *These estimates may be used to develop the fair*

conversion cost with return for any size of bag, falling within these categories. It may be mentioned in this connection that the stitching and folding included in the Appendix indicate normal type of stitching, viz., $2\frac{3}{4}$ to 3 stitches per inch and folding, but if the specification for a particular type of bag stipulates special type of stitches or special type of folding, the resulting extra charges may be negotiated between the manufacturer and consumers. To work out the fair price, the cost of direct materials according to individual specification or bags, has to be calculated and a return on direct materials provided for as indicated in paragraph 21. If the material cost for the size of the bag excluding provision for wastage is Rs. M, the final price for the material portion (including return thereof) will be Rs. 1.0347 M. This, added to the respective conversion costs and packing materials with return will give the fair ex-factory price for the particular size of the bag.

Our conclusions and recommendations may be summarised as under:—

23. Summary of the Conclusions and Recommendations

(i) The scope of the present Inquiry covers Laminated Jute Goods with Polythene lining and Paper lining.

(Paragraph 2)

(ii) The fair ex-factory prices, subject to adjustments for variations in prices of Jute fabrics recommended for six types of fertiliser bags for the period ending 31st December, 1974 are as under:—

Sl. No.	Size of bag	Fair ex-factory price (Rs./100 bags)
1 . .	36" × 24"	251.40
2 . .	33½" × 21"	210.99
3 . .	34½" × 20"	207.70
4 . .	35" × 21"	219.09
5 . .	35" × 24"	245.32
6 . .	35" × 22"	227.77

(Paragraph 22.1)

(iii) The fair ex-factory prices of any other sizes of bags but falling within the categories mentioned in Appendix VIII can be developed on the lines indicated in paragraph 22.2.

(Paragraph 22.2)

(iv) A return at 13 per cent on the capital employed would be fair and reasonable.

(Paragraph 21.1)

(v) In the face of uncertain prospects of sale of extruded products, we have refrained from making any estimates of conversion costs for extruded quality jute products.

(Paragraph 18.6)

(vi) The capacity of the Industry should be assessed on the basis of the lamination process in relation to a particular class of laminated product. It would be reasonable to express the capacity in terms of metres.

(Paragraph 14.2)

(vii) The manufacturers should make all possible efforts to adhere to the use of Polythene films of required specification.

(Paragraph 16.2.2.)

(viii) The Industry should introduce some system of inspection so that the thickness of Bitumen coating conforms to the specification of the contracts.

(Paragraph 16.3.)

(ix) Since the capacity of the industrial grade Bitumen is limited, Government should devise such measures as deemed proper to increase the capacity as and when it becomes necessary.

(Paragraph 16.3.1.)

(x) The Industry should adopt necessary steps to avoid high wastage in paper whether due to handling or processing.

(Paragraph 16.4.)

(xi) The Industry should take all possible steps to economise in Fuel consumption.

(Paragraph 16.6.1.)

24.1. We wish to express our thanks to the producers of Laminated Jute Goods, consumers, suppliers of raw materials and various Central and State

24. Acknowledgements. Government Departments who furnished us with valuable information in connection with the Inquiry.

24.2. We are also highly indebted to Shri B. N. Banerji who was Chairman of the Commission till he relinquished charge on 2nd September 1971 and Shri F. H. Vallibhoy, who was a Member till he passed away on 2nd March 1972, both of whom were closely associated with this Inquiry.

24.3. We also wish to place on record our appreciation of the hard work put in by the Officers and staff of the Commission engaged on this Inquiry.

D. P. ANAND
CHAIRMAN

PRAMOD SINGH
MEMBER

P. V. GUNISHASTRI
SECRETARY.

Bombay,
20th July, 1972.

APPENDIX I

(Vide paragraph 1.1)

GOVERNMENT OF INDIA
MINISTRY OF FOREIGN TRADE & SUPPLY
No. 5(4)-Tex(D)/68

New Delhi-2, the 11th July, 1969.

To

The Secretary,
Tariff Commission,
Bombay-1.

Sub.: *Inquiry into the price structure of different varieties of jute goods—Reference to Tariff Commission regarding.*

Sir,

I am directed to state that the question of fair prices which should be charged by the manufacturers of different varieties of jute goods, namely, carpet backing cloth, hessian, sackings and specialities has assumed considerable importance in recent months in view of the jute industry's pre-eminent place in the economy of the country as an export-oriented industry. The prices of different varieties of jute goods other than sackings (B. Twills) are governed by the normal conditions of supply and demand. In the case of B.Twills, however, the statutory maximum prices were fixed under the Jute Textiles (Licensing and Control) Order, 1961, at Rs. 200/- for 100 bags with effect from the 22nd October, 1968.

The Indian Jute Mills Association which is representative body of the Jute Industry has urged that an agreement about conversion costs from raw jute to manufactured goods would be valuable for costs from raw jute to manufactured goods would be valuable for consider that an authoritative assessment of the actual costs of conversion of raw jute into jute goods will be of considerable assistance to them in framing their policies in relation to jute industry. I am

accordingly to request the Tariff Commission under Section 12(d) of the Tariff Commission Act, 1951 (50 of 1951) to examine the price structure of the following varieties of jute goods—

- (i) Carpet Backing Cloth.
- (ii) Hessian Cloth.
- (iii) Sacking (particularly B. Twills) and Specialities such as Cotton Bagging, laminated jute goods.

and furnish its report containing its recommendations to Government. I am also to request that the report of the Commission in regard to carpet backing cloth, which is exported entirely, may be furnished to Government within a month and the report on other items of jute manufactures as early as possible.



Yours faithfully,

Sd/-

(DEVINDAR NATH)

Joint Secretary to the Govt. of India.

APPENDIX II

(Vide paragraph 3.1)

List of persons/bodies to whom the Commission's Questionnaires/
Letters were issued and from whom replies were received.

* Those who replied.

@ Those who were not interested.

A. PRODUCERS

- *1. India Burlap & Laminating Works,
8, Lyons Range,
Calcutta.
- *2. Bharat Laminating Corporation,
3, Cossipore Road,
Calcutta.
- *3. Haryana Jute & Laminating Works,
68, Cotton Street,
Calcutta.
- *4. Diamond Products Ltd.,
4, Clive Row,
Calcutta.
- *5. India Linoleums Ltd.,
P.O. Birlapur,
Dist. 24 Parganas,
West Bengal.
- *6. Guardian Plasticote Ltd.,
13, Camac Street,
Calcutta.
- *7. Lohia Jute Press (Pvt.) Ltd.,
112, Chittaranjan Avenue,
Calcutta-7.
- *8. Water Proof Industries,
7, Swallow Lane,
Calcutta-1.
- *9. India Waterproofing & Dyeing Works,
13, Brabourne Road,
Calcutta-1.

- *10. National Laminators,
National Tobacco Buildings,
1 & 2 Old Court House Corner,
Calcutta.
- @11. Orient Laminating Co.,
12, Old Court House Street,
Calcutta-1.
- *12. Warden & Co. (P) Ltd.,
340, J. J. Road, Byculia,
Bombay-8 BC.
- 13. Chinnaya Industries,
Chingleput District,
(Tamil Nadu).
- 14. Plasticote Industries,
Ambattur, Chingleput Dist.
(Tamil Nadu).
- 15. Anwar Industries,
Sriperumbudur,
Madras.
- 16. H.B. Industries,
140, Annapillai Street,
Madras.
- 17. Amic Ebrahim Co.,
125, Angappa Naicken Street,
Madras.
- @18. S. I. Industries,
3, Tippu Sahab Street,
Madras.
- @19. Devi Commercial Company,
48, Jitendra Mohan Avenue,
Calcutta-6.
- *20. Dalhousie Jute Manufacturing Co. Ltd.,
Chartered Bank Buildings,
Calcutta-1.
- *21. Khardah Co. Ltd.,
7, Wellesley Place,
Calcutta-1.
- 22. Industrial Laminators,
288/2, Acharya Prafulla Chandra Road,
Calcutta-9.

23. Champdany Jute Co. Ltd.,
Rishra,
Hooghly.
24. The General Industrial Society Ltd.,
Gondalpara,
Hooghly.
25. Calcutta Laminators,
51, J. N. Mookerji Road,
Salkia,
Howrah.
- *26. Hindustan Laminators,
3. Cossipore Road,
Calcutta-2.

B. PROSPECTIVE PRODUCERS

- *1. Lamination Corporation,
M.A. Building,
Dr. Motibai Road,
Ahmedabad-2.
- @2. Lamiwax Corporation,
A, 15-16, Industrial Estate,
Madras.
3. Laminating and Packaging Corporation,
New Alipore.
4. Rourkela Proofing Corporation,
132, Cotton Street,
Calcutta-32.
5. Globe Rope Works (Pvt.) Ltd.,
P-9, New C.I.T. Road,
Calcutta-12.
6. Ganges Waterproof (Pvt.) Ltd.,
14, Bachulal Road,
Calcutta-14.
- *7. New Central Jute Mills Co. Ltd.,
P.O. Budge Budge,
Dist., 24 Parganas,
8. General Industrial Society Ltd.,
Gondalpara,
Dist. Hooghly.

C. PRODUCERS' ASSOCIATION

- @1. Indian Jute Mills' Association,
6, Netaji Subhas Road,
Calcutta-1.

D. CONSUMERS.

- @1. Amar Dye-chem Ltd.,
Rang Udyan,
Sitladevi Temple Road,
Mahim, Bombay-16.
2. Atul Products Ltd.,
Post. Atul, W. Rly.,
Dist. Bulsar.
- @3. Aniline Dyestuffs & Pharmaceuticals Pvt. Ltd.,
Mahalaxmi Chambers, 2nd Floor,
22, Bhulabhai Desai Road,
Bombay-26 (W.B.).
- @4. India Dye-chem Industries Pvt. Ltd.,
Katra Tobacco, Khari Baoli,
Delhi-6.
- @5. IDCO Dyestuffs Pvt. Ltd.,
189-90, Lawrence Road,
P.O. Ganeshpura,
Delhi-35.
- @6. Sahyadri Dyestuffs & Chemicals Pvt. Ltd.,
117, Parvati-Vithalwadi Road,
Poona-30.
7. Universal Dyestuffs Industries Ltd.,
Sakarda, Railway Station Ranoli (W. Rly.),
Dist. Baroda.
- *8. Fertiliser Corporation of India Ltd.,
F-43, South Extension area,
Part 1, Ring Road,
New Delhi-49.
- *9. Andhra Cement Co. Ltd.,
Gandhinagar, P.O. Vijaywada-3.
- @10. Ashoka Cement Ltd.,
Dalmianagar.
- @11. Associated Cement Co. Ltd.,
121, M.K. Road,
Bombay-20.

12. Dalmia Cement (Bharat) Ltd.,
P.O. Box No. 364,
Scindia House,
New Delhi.
- @13. India Cements Ltd.,
"Dhun Buildings" (4th Floor),
175/1, Mount Road,
Madras-2.
- @14. Shree Digvijay Cement Co. Ltd.,
Shree Niwas House,
Waudby Road,
Bombay-1.
- @15. The Manager (Storage),
Food Corporation of India,
Bahadurshah Zafar Marg,
New Delhi.
- @16. Consumer Guidance Society,
Oceana,
214, Marine Drive,
Bombay-1.
- *17. Director General of Supplies and Disposals,
Jeevan Tara Building,
Parliament Street,
New Delhi.
- @18. Fair Trade Practices Association,
C/o Indian Merchants Chamber,
76, Veer Nariman Road,
Churchgate, Bombay-20.
- @19. The Commissioner of Civil Supplies,
Ministry of Industrial Development,
Shastri Bhuvan, New Delhi.
- *20. Director of Supplies and Disposals,
6, Esplanade East,
Calcutta-1.
21. Chairman,
Delhi Milk Scheme,
West Patel Nagar,
Delhi-8.
22. Indian Explosive Ltd.,
Rosberry Road,
Sewri,
Bombay-33.

23. M/s. Pest-chemco,
395, Bhandarkar Marg,
Bombay-4.
- @24. M/s. Pest Control (India) Pvt. Ltd.,
Yusuf Building, M.G. Marg,
Bombay-1.
25. The Pest Control Corporation,
86, Dr. Annie Besant Road,
Worli,
Bombay-18.
26. The Fertiliser Association of India,
(Eastern Region),
10-A, Harrington Street,
Calcutta-16.
27. The Fertiliser Association of India,
85, Sunder Nagar,
New Delhi.
28. The Fertiliser Association of India,
Room No. 305,
Neelkanth,
Marine Drive,
Bombay-2.
- *29. Shriram Chemical Industries,
Naaz Building,
Jhandewalan Estate,
New Delhi-55.

E. SUPPLIERS OF RAW MATERIALS

- *1. I.C.I. (India) Pvt. Ltd.,
Crescent House,
18, Wittet Road,
Ballard Estate,
Bombay-1.
- *2. I.C.I. (India) Pvt. Ltd.,
18, Strand Road,
Calcutta-1.
- *3. Union Carbide India Ltd.,
Lakshmi Building,
Sir P.M. Road,
Bombay-1.
4. Union Carbide India Ltd.,
Jeevan-Deep,
Middleton,
Calcutta-16.

5. J.P. Coats India Ltd.,
81, Palton Road,
Bombay-1.
- *6. Star Paper Mills,
Saharanpur, (U.P.).
- *7. Burmah Shell,
Burmah Shell House,
Ballard Estate,
Bombay-1.
- 8 Burmah Shell,
India Exchange Place,
Calcutta.
- @9. Caltex India Ltd.,
Caltex House,
Ballard Estate,
Bombay-1.
- @10. Caltex India Ltd.,
Camac Street,
Calcutta-17.
- *11. Esso Standard Eastern Incorporated,
India Division,
17, J. Tata Road,
Bombay-20.
12. Indian Oil Corporation,
Shivsagar Estate,
Worli,
Bombay-18.
- @15. Fibre Processers' Private Ltd.,
38, Netaji Subhas Road,
Calcutta-1.
14. India Jute Fibre Co.,
Patel Marg, Old Meerut Road,
Ghaziabad, (U.P.).
- @15. Arun General Industries,
15, India Exchange Place,
Calcutta-1.
16. East Coast Commercial Co. Ltd.,
25-D, Shakespeare Sarani,
Calcutta-16
- *17. The Alkali and Chemical Corporation of India Ltd.,
18, Strand Road,
Calcutta-1.

F. GOVERNMENT DEPARTMENTS

- *1. Indian Standards Institution,
5, Chowringhee Approach,
Calcutta-13.
- *2. Director of Industries,
Government of W. Bengal,
1, Kiron Shankar Roy Road,
Calcutta-1.
- 3. Director of Industries,
Government of Tamil Nadu,
Madras.
- @4. Director of Industries,
Government of Maharashtra,
Bombay.
- *5. Jute Commissioner,
20, British Indian Street,
Calcutta-1.
- @6. Director General of Technical Development,
Udyog Bhavan, Maulana Azad Road,
New Delhi.
- 7. The Development Commissioner of Small Scale Industries,
Nirman Bhawan, A Wing, 7th Floor, New Delhi.



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APPENDIX III
(Vide Paragraph 3·2)

Details of visits of the Commission and its Officers

Sl. No.	Name of the factory	By whom visited	Date of visit
1.	Diamond Products Ltd., Calcutta	Shri B. N. Banerji, Chairman	22-4-1971
2.	Wardon & Co. Pvt. Ltd., Thana (Bombay).	1. Shri F. H. Vallibhoy, Member. 2. Shri Pramod Singh, Member. 3. Dr. P. V. Gunishastri, Secretary. 4. Shri S. N. Misra, Assistant Cost Accounts Officer.	} 26-7-1971
3.	Ditto	1. Shri U. V. Shenoy, Director (Investigation). 2. Shri U. K. Keswani, Asstt. Director.	
			} 23-4-1971

APPENDIX IV

(Vide Paragraph 3.3)

Details of Cost Investigations of five selected units

Sl. No.	Name of the costed unit	Name and designation of the officer who costed the unit	Dates of cost investigation
1	National Lamina-tors, Calcutta.	Shri A. K. Banerji, Cost Ac- counts Officer.	25-4-1971 to 23-5-1971
2	Guardian Plasticote Ltd., Calcutta.		
3	Diamond Products Ltd., Calcutta.	Shri G. Suryanarayanan, Assistant Cost Accounts Officer, (Ministry of Fi- nance), New Delhi.	25-4-1971 to 21-5-1971
4	Dalhousie Jute Co. Ltd., Calcutta		
5	Warden & Co. (P) Ltd., Bombay.	Shri S. N. Misra, Assistant Cost Accounts Officer.	23-4-1971 to 14-5-1971

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APPENDIX V-A

(Vide Paragraph 3.3)

Details of cost discussions with the costed units

Sl. No.	Date and day	Name of the Company and Representative(s)
1	22-7-1971 (Thursday)	Dalhousie Jute Co. Ltd., Calcutta. 1. Shri S. C. Ghosh, Chief Executive. 2. Shri P. R. Rao, Cost Accountant.
2	23-7-1971 (Friday)	Diamond Products Ltd., Calcutta. Shri S. H. Nathani, Divisional Manager
3	23-7-1971 (Friday)	National Laminators, Calcutta. Shri K. B. Krishna, Factory Accountant.
4	24-7-1971 (Saturday)	Warden & Co. (P) Ltd., Bombay. 1. Shri E. R. Viccajee, Director. 2. Shri B. S. Sanwal, Cost Consultant. 3. Shri J. C. Shah, Chief Accountant. 4. Shri P. S. Dalal, Factory Accountant.

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APPENDIX V-B
(Vide paragraph 3.3)

*List of persons who attended the Commissions discussions held on
21st August, 1971*

Sl. No.	Name of the party	Name of the representative(s)
1	Fertiliser Corporation of India Ltd., Bombay.	Shri S. K. Patankar, Packaging Officer.
2	M/s I.C.I. (India) Pvt. Ltd., Bombay.	Shri A. Banerji, Sales Manager.
3	M/s Union Carbide India Ltd., Bombay.	Shri C. H. Purohit, Products Manager and Shri N. J. Brahmabhatt.
4	M/s Esso Standard Eastern Incorporated, Bombay.	Shri A. Y. Gupte, Senior Road Engineer.

APPENDIX
(Vide paragraph
Statement sawing capacity & production

Sl. No.	Name of the unit	Annual Capacity in		PRODUCTION					
		Bags (Single shift)	Metres (Single shift)	1965-66		1966-67		1967-68	
				Bags	Metres	Bags	Metres	Bags	
1	2	3	4	5	6	7	8	9	
1	Dalhousie Jute Co. Ltd., Calcutta.	5,000	17,800	..	..	8,437	7,000	8,541	
2	Diamond Products Ltd., Calcutta.	3,600	4,800	2,345	4,456	2,362	2,677	2,870	
3	Guardian Plastics Ltd., Calcutta.	..	13,000	..	..	..	..	..
4	National Laminators, Calcutta.	4,600	..	..	..	..	..	..
5	Bharat Laminating Corporation, Calcutta.	4,800	5,550	1,524	1,759	3,062	3,533	3,510	
@6	Warden & Co. Pvt. Ltd., Bombay.	4,680	17,556	1,945	300	1,748	200	1,944	
7	Haryana Jute and Laminating Works, Calcutta.	4,320	..	..	..	..	..	518	
8	Khaddah Co. Ltd., Calcutta.	..	2,780	543	658	280	368	1,861	
9	Lohia Jute Press (Pvt.) Ltd., Calcutta.	..	1,800	..	..	..	..	750	
10	India Burlap and Laminating Works, Calcutta.	350	4,000	6,500	6,949	6,500	7,224	6,50	
11	Water-proof Industries, Calcutta.	4,000	..	..	2,821	..	1,622	..	
*12	Chandany Jute Co. Ltd. Rishra.	..	..	..	..	..	..	..
@*13	Hindustan Laminators, Calcutta.	1,200	2,160	..	..	..	..	..
14	Calcutta Laminators, Howrah.	6,000	..	..	..	..	..	3,968	
15	India Linoleums Ltd., Birlapur. (Birla Jute Mfg. Co. Ltd.).	..	10,973	..	3,083	..	2,847	..	
TOTAL		38,550	80,419	12,857	20,026	22,389	25,471	30,462	

@Production of these units consists of bags plus lengths in metres..

*Data furnished by the Director of Industries, Government of West Bengal, Calcutta.

VI

4.2)

of Laminated Jute goods Manufacturers

(Units :-Metres and
Bags in '000).

DURING										Remarks
1967-68		1968-69		1969-70		1970-71		1971-72@@		
Metres	Bags	Metres	Bags	Metres	Bags	Metres	Bags	Metres		
10	11	12	13	14	15	16	17	18	19	
7,100	3,662	4,600	8,360	6,200	10,610	11,700	11,156	14,024		
5,129	1,745	1,642	3,097	3,496	3,922	4,855	3,596	..		
..	..	2,308	..	4,679	..	5,340	..	7,826	Commenced production in Feb., 1968.	
..	2,768	..	3,460	..	2,139	..	2,270	..		
4,050	2,127	2,454	3,628	4,186	..	3,118	3,978	5,100		
75	2,200	86	2,276	79	3,300	..	3,415	120		
..	4,547	..	5,048	..	..	..	..	..	Commenced production in 1968.
2,279	959	1,141	907	1,285	594	841	362	..	—	
938	1,200	1,500	750	938	Nil	Nil	..	1,587	Commenced production in Sept., 1968.	
8,138	6,500	8,778	6,500	9,784	..	7,407	..	..
2,371	..	1,549	..	1,885	..	..	..	..
..	..	..	..	..	..	..	..	..	Capacity: 224 ⁶ Tonnes. Commenced production in Oct., 1970. Production for 1970-71: 850 Tonnes.
..	786	645	1,341	695	2,362	857	..	..
..	2,250	..	350	..	775	..	..	..	Figures of production for calendar years.
5,319	4,134	5,269	7,318	9,234	7,570	9,965	..	5,134	Production in bags is exclusive of hessian/paper sold in rolls.	
35,399	32,878	29,972	43,035	42,461	31,272	44,083	24,777	33,791		

@@Data incomplete.

APPENDIX
(Vide paragraph
Country-wise exports of plastic coated or paper-cum-polythene

Name of the Country	1965-66		1966-67		1967-68	
	Qty.	Value	Qty.	Value	Qty.	Value
1	2	3	4	5	6	7
1. Seychelles	4	6.93	..	..	..	..
2. Tanganyika	1	3.42	..	..	..	..
3. U.A. Republic	3,300	8313.11	3,677	1,3739.85	1,146	6,166.2
4. Bolivia	114	207.76	179	509.30	..	..
5. Malaysia	7	16.86	..	..	..	..
6. Nepal	2	2.50	..	..	..	..
7. Philippines	84	174.15	..	..	..	..
8. Czechoslovakia	22	52.23	..	..	..	..
9. U.S.S.R.	320	643.00	..	..	..	..
10. Italy	2	7.22	..	..	..	..
11. U.K.	8	11.13	143	498.98	149	426.26
12. Afghanistan . . . . .	..	..	..	0.76	..	0.76
13. Kuwait . . . . .	..	..	670	2,754.17	638	2,879.84
14. Sudan . . . . .	..	..	9	26.43	9	26.43
15. Uganda . . . . .	..	..	..	1.80	..	2.96
16. Ceylon . . . . .	..	..	4	13.15	..	..
17. Kenya . . . . .	..	..	..	0.48	..	0.20
18. Canada . . . . .	..	..	..	..	..	1.90
19. Netherlands . . . . .	..	..	..	..	34	103.68
20. Australia . . . . .	..	..	..	..	..	..
21. Bahrain Island . . . . .	..	..	..	..	..	..
22. Bulgaria . . . . .	..	..	..	..	..	..
23. Peru . . . . .	..	..	..	..	..	..
24. Qatar . . . . .	..	..	..	..	..	..
25. Muscat . . . . .	..	..	..	..	..	..
26. Saudi Arabia . . . . .	..	..	..	..	..	..
27. France . . . . .	..	..	..	..	..	..
28. German D. Republic . . . . .	..	..	..	..	..	..
29. Dubai . . . . .	..	..	..	..	..	..
30. German F. Republic . . . . .	..	..	..	..	..	..
31. Mauritius . . . . .	..	..	..	..	..	..
TOTAL	3,864	9,438.36	4,682	17,544.92	2,576	9,558.26

Source :—Monthly Statistics of the Foreign Trade of India.

VII

8.1)

lined bags/sacks from 1965-66 to 1971-72 (April-Sept.)

(Quantity-Tonnes
Value—Rs. in thousands)

1968—69		1969—70		1970—71		1971—72	
Qty.	Value	Qty.	Value	Qty.	Value	(April—Sept.) Qty.	Value
8	9	10	11	12	13	14	
..
2,578	8,360.25	..	..	258	1,143.58	66	24
10	41.43	22	90.58	53	172.41	40	80
1	2.86	..	..	..	..	..	..
..
..
..
..	..	37	107.50	..	..	..	..
362	1,231.88	239	805.80	434	1,896.00	50	190.62
..	..	252	472.94	..	..	..	..
..	..	..	..	7	19.92	..	..
..
..
..
6	13.23	..	..	4	13.00	..	..
..	1.40	..	..	..	..	..	..
16	34.20	..	..	..	..	..	..
30	126.10	..	..	..	..	..	..
2	8.00	2	10.21	..	0.89	..	..
..	..	3	7.90	..	..	..	..
..	..	316	1,027.90	..	1.80	..	156.21
..	..	..	..	1	1.72	..	..
..	..	..	..	459	1,521.00	..	..
..	..	..	..	..	0.62	..	..
..	..	..	..	12	39.85	..	..
..	..	..	..	1	4.50	1	6.75
3,005	9,819.35	871	2,522.84	1,229	4,815.29	195	876.62

APPENDIX VIII

(Vide paragraph 22.2)

Statement showing fair conversion prices process-wise for important Laminated cloth for period during 31-12-74

Particulars	Hessian Sacking D.W.T. Cloth, Canvas/Polythene lined				Hessian Sacking, D.W.T. Cloth, Canvas/Paper lined				Double Hessian			
	Conver- sion cost Rs.	Mini- mum Bonus Rs.	Return Rs.	Total Rs.	Conver- sion cost Rs.	Mini- mum Bonus Rs.	Return Rs.	Total Rs.	Conver- sion cost Rs.	Mini- mum Bonus Rs.	Return Rs.	Total Rs.
A. Lamination including wastage provision for 100 meters.	3.24	0.07	0.18	3.49	2.94	0.06	0.15	3.16	4.50	0.10	0.25	4.85
Cutting & Folding (per 100 bags)	3.40	0.08	0.13	3.61	3.78	0.09	0.14	4.01	3.40	0.08	0.13	3.61
Sewing Rate per 1000 inches without tape bordering:												
1. Double Lock	1.34	0.03	0.06	1.43 (0.56)	1.60	0.04	0.07	1.71 (0.67)	0.96	0.02	0.04	1.02 (0.40)
2. Single Lock	0.64	0.01	0.03	0.68 (0.27)	0.96	0.02	0.04	1.02 (0.40)	0.51	0.01	0.02	0.54 (0.21)
3. Hemming	0.57	0.01	0.03	0.61 (0.24)	0.59	0.01	0.03	0.63 (0.25)	0.51	0.01	0.02	0.54 (0.21)
4. Heracle	0.45	0.01	0.02	0.48 (0.19)	0.45	0.01	0.02	0.48 (0.19)	0.45	0.01	0.02	0.48 (0.19)
D. Branding (excluding Ink) per 100 bags:												
1. Single colour outside	2.64	0.07	0.13	2.84	2.64	0.07	0.13	2.84	2.64	0.07	0.13	2.84
2. Double colour one side	3.44	0.09	0.17	3.70	3.44	0.09	0.17	3.70	3.44	0.09	0.17	3.70
E. Packing:												
1. 50 Bags truss	0.53	0.01	0.03	0.57	0.53	0.01	0.03	0.57	0.53	0.01	0.03	0.57
2. 100 Bags truss	0.80	0.02	0.04	0.86	0.80	0.02	0.04	0.86	0.80	0.02	0.04	0.86

Note: Figures in the bracket indicate rates per 1000 centimetres.

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