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EXPORT DEMAND ELASTICITIES IN PAKISTAN'S JUTE TRADE

K. A. T. M. Hasan Imam*

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Pakistan's reliance on jute export need not be stressed. It is well-known. With the passage of time, however, there has been a gradual erosion of jute's role in Pakistan's export trade. Even so, its position is still too important not to warrant critical attention. The purpose of this paper is to estimate the elasticity of export demand for Pakistan's raw jute and jute goods. Much effort has recently been devoted to specifying the determinants of the world exports demand for jute,^{1/} but all such efforts failed to consider the effect of changes in the price policies of competing exporting countries on their relative export demand. Yet one would expect that any attempt by a country to increase its export volume would induce compensatory changes in the price policies of competing exporting countries. The model underlying this study has been designed to take such reactions into account. This study provides a method on the basis of which an effective price-policy for Pakistan's export trade in jute can be framed. The basis of this study is the earlier work done by Horner [2] and Malach [4].

II. Method

The method of deriving the export demand elasticity involves basically the determination of two elasticities, the price-elasticity of import demand in the importing countries and the elasticity of export supply in competing exporting countries. Given any export price level, p , the amount of a given commodity exported, x , from a given country equals the world export demand (X) for the same commodity net of the amount supplied, s , by the competing exporting countries. Symbolically,

$$\frac{\Delta x}{\Delta p} = \frac{\Delta X}{\Delta p} - \frac{\Delta s}{\Delta p}$$

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^{1/} Meaning both raw jute and jute goods.

or in terms of elasticities,

$$\frac{X}{x} = \frac{S}{x} \cdot W \dots \dots \dots (1), \text{ where}$$

x_p m_p s_p

x_p is the price-elasticity of export demand for a given country's given commodity, m_p is the weighted average of the price-elasticities of import demand in the importing countries for the same commodity, the weights being the respective quantities imported by the importing countries, and s_p is the weighted average of the elasticities of export supply of that commodity in the competing exporting countries. Note that both the m_p and s_p are weighted averages of the elasticities in different countries. This represents the ideal, but such an approach cannot be followed here due to the lack and poor quality of data for most of the countries importing raw jute^{1/} and jute goods. To avoid this obstacle a single-country approach will be followed, the choice of country depending on its being a major importer and having adequate data.

In the equation for raw jute the term m_p refers to that of the U.K. while in the equation for jute goods the term m_p refers to that of the U.S.A. From the figures given in the appendix, table A-1 and table A-3, it appears that from 1956 to 1962, the U.K. imported an average of 26.44 per cent of the world imports of raw jute while the U.S.A. during 1955-62 imported an average of 28.12 per cent of the world imports of jute goods. On the basis of the above evidence it would be improper to consider these two import demand elasticities as the same as the weighted average elasticities of the importing countries for the two commodities in question, but they are the closest approximation that is possible under present circumstances. It is necessary however, to make certain other adjustments to equation (1) before it can be used to derive the necessary elasticities.

^{1/} The term raw jute includes also allied fibres like Kenaf, Mesta, etc.

First, p is the export price level of the exporting country while the price elasticity of import demand for a commodity must be derived as a function of its import price. Let us denote this price by $p + t$, the term t standing for transport costs and tariffs. The elasticity term, η_p then becomes η_{p+t} . However, η_{p+t} may be expressed in terms of p by multiplying it with the elasticity of $p+t$ with respect to p . This can be done because the elasticities are subject to the same function-of-function rule as the derivatives [1, p. 253].

Similarly, the export supply elasticity term also needs to be modified, as it should be derived as a function of the export supply price in the competing exporting country. Let us then write it as $\eta_{p'}$, where p' is the export price of the commodity under question in the competing exporting country. $\eta_{p'}$ can then be expressed in terms of p if we can hold p' as a function of p and then multiply $\eta_{p'}$ by the elasticity of p' with respect to p .

Let us then write equation (1) in its modified form as follows :

$$x_p = \frac{x}{x} \eta_{p+t} \cdot \frac{p}{p+t} \cdot \frac{d(p+t)}{dp} - \frac{x}{x} \eta_{p'} \cdot \frac{p}{p'} \cdot \frac{dp'}{dp} \dots (2)$$

Because the economics of this manipulation with respect to the export supply term is not as obvious as it is with respect to the import demand term a detailed explanation follows. Consider equation (2) as applicable to raw jute only. The competing exporting countries meet only a very small proportion of the world import demand for raw jute: from 1951 to 1962 it averaged 11.21 per cent. Then with an exogenously determined world import demand curve the competing countries will be able to affect little variation in the world price by shifting their export supply curves. On the other hand, shifts in Pakistan's export supply curve will cause definite fluctuations in world prices. At each price a certain quantity will be demanded by the world and the competing exporting countries will supply varying

quantities depending upon their export supply elasticities. These varying quantities, however, will not effect the world price for the reason given above. Thus changes in Pakistan's export supply prices will also cause changes in the export supply prices of the competing countries.

Equation (2) can be conveniently applied to the estimation of Pakistan's export elasticity for raw jute. The export supply elasticity term here is that of Thailand (whose kenaf is a very close substitute for jute fibre) which is the only major competitor for Pakistan in the export market for raw jute and allied fibres. Taking an average of 1960-61 to 1962-63, it appears from the figures in table A-2 that 81.61 per cent of total exports were from Pakistan while 16.96 per cent were exported by Thailand. Hence it would appear to be a plausible assumption to consider Pakistan as the price leader, thus permitting the above functional relationship between Pakistan and Thailand's export prices for raw jute and allied fibres.

It seems, however, that some changes need to be incorporated in the model with respect to the supply side in order to use it to estimate Pakistan's export demand elasticity for jute goods. As evident in table A-4 of the Appendix, India exported during 1959-'62 an average of about four times the quantity of jute goods exported by Pakistan. Leaving aside the question of product differentiation, such a difference in size would seem to indicate that India is in the position of price leader with respect to Pakistan. Moreover, both India and Pakistan export roughly the same kind of hessian and sacking. Product differentiation between these two goods is minimal, as a sacking of a given variety (e.g. B-Twill) is a fairly standardized product. Hence it appears reasonable to assume that Pakistan's export price (p) is a function of India's export price (p').

To express India's price elasticity of export supply in terms of Pakistani prices we have to multiply the former by the

elasticity of Pakistan's export price (p) to India's price (p'). As evident, this is a different situation from the one envisaged for raw jute. In the former, the competitor's export price (p') was taken as a function of Pakistan's export price (p) while in the latter case, Pakistan's export price (p) is taken as a function of the competitor's export price (p').

Let us call it equation (2') and write it as follows :

$$\frac{\partial x_p}{\partial p} = \frac{x}{p} \frac{\partial m_{p+t}}{\partial p} \cdot \frac{p}{p+t} \cdot \frac{\partial(p+t)}{\partial p} = \frac{s}{x} \frac{\partial s_{p'}}{\partial p'} \cdot \frac{p'}{p} \cdot \frac{\partial p}{\partial p'} \dots (2')$$

With respect to the import demand elasticity term $\frac{\partial m_{p+t}}{\partial p}$, it appears from both equation (2) and equation (2') that if the tariff is an ad valorem one and transport costs are negligible, the elasticity of p+t with respect to p is unity and $\frac{\partial m_{p+t}}{\partial p}$ need not be multiplied by this elasticity to express it in terms of p. The same cannot be said of course, if the tariff is specific and the transport costs are substantial, i.e. when the elasticity of p+t with respect to p would appear as a ratio, $\frac{p}{p+t}$. Since the tariff is specific on imports of raw jute in the U.K. (the country whose elasticity of import demand elasticity) and transport costs of importing raw jute in the U.K. from Pakistan also are substantial, we must write the term expressing the elasticity of p+t with respect to p simply as $\frac{p}{p+t}$. Similarly, the term expressing the elasticity of p' with respect to p in equation (2) and the elasticity of p with respect to p' in equation (2') can also be rewritten. It is obvious that if the competing exporting country effects a proportionate change in its export supply price given a change in the export supply price of the price leader, the elasticities of both p' with respect to p in equation (2) and p with respect to p' in equation (2') will be unity and those terms may be omitted. But it is quite likely that changes in the price-leader's export supply price may not lead to a proportionate change in the export supply price of the competing country; the latter are more likely to react by a less than proportionate change in price and thus increase their share of the export market.

If that is the situation, then an assumption of less than unit elasticities of p' to with respect to p in equation (2) and of p with respect to p' in equation (2') is admissible. Since, however, the time series data for estimating these two elasticities are too short and inadequate to permit the use of least squares technique we must use a cruder measure — such as estimating the average ratios of p to p' in equation (2) and that of p' to p in equation (2'), utilising the data available. The two final estimating equations would then appear as follows:

$$\sum_{p} x_p = \frac{X}{x} \sum_{p+t} m_{p+t} \cdot \frac{p}{p+t} - \frac{s}{x} \sum_{p'} s_{p'} \cdot \frac{p}{p'} \dots\dots (3) \text{ and}$$

$$\sum_{p'} x_{p'} = \frac{X}{x} \sum_{p+t} m_{p+t} \cdot \frac{p}{p+t} - \frac{s}{x} \sum_{p'} s_{p'} \cdot \frac{p'}{p} \dots(3')$$

Equation (3) refers to raw jute and equation (3') to jute goods.

The equations as they have been framed do not consider the problem of market interdependence between raw jute and jute goods. It is conceivable that in a country which imports both raw jute and jute goods a change in the price of raw jute without a compensatory change in the price of the jute goods may lead to a substitution of one by the other. This problem, however, is minimal because the export markets for raw jute and jute goods are sufficiently independent to allow a differential price policy. The major importers of raw jute, such as the U.K., U.S.A., and western European countries, specialize in the production of speciality articles like carpets, carpet-backing cloth, automotive felt, upholstery, etc. [6] and not in ordinary hessian and sacking for which they depend on imports. Ordinary hessian and sacking incidentally, are the mainstay of Pakistan's export trade in jute goods. Furthermore, India is also a major importer of raw jute and allied fibres, but she imports no jute goods and, in fact, has a huge export surplus of the latter. Hence it appears that a change in the export price of raw jute is not very likely to affect the export market of jute goods. The same thing would apply to changes in the export prices of jute goods. Most developed

countries import jute goods of specific varieties independently of their demand for raw jute; the under developed countries as a group are a major importer of jute goods, but they have hardly any plant capacity for jute processing so that a change in the price of jute goods is hardly likely to affect their demand for raw jute.

III. The Measurement of the Elasticities

As is evident from the model presented above, it is necessary to know several things prior to estimating the elasticity of export demand of a given country for a given commodity. First, one must know the proportion of the export market for the commodity occupied by the country. Secondly, one must estimate the elasticity of import demand for the commodity in an importing country whose import demand elasticity is a close approximation to the weighted average of the elasticities of import demand of all the importing countries. Thirdly, one must calculate the ratio of the quantity supplied of that commodity by the competing exporting countries to the quantity supplied by the country whose elasticity of export demand is being calculated. Fourthly, one must estimate the elasticity of export supply of a major exporting country for that commodity which can serve as a close approximation to a weighted average of the elasticities of export supply of all the competing exporting countries. In addition, it is also necessary to derive certain price ratios as noted above.

In the determination of the price elasticity of import demand for raw jute and allied fibres use will be made of an unpublished work by Rabbani [10]. He framed U.K.'s import demand equation for raw jute (1948-62) in the following way:^{1/}

$$\log J_{imp} = m_0 + m_1 \log P_j + m_2 \log I + m_3 \log S_t / C_{t-1} + m_4 T + U_t$$

where J_{imp} - Annual imports of raw jute into U.K. P_j = Import price (c.i.f.) of raw jute (mill firsts), deflated by a weighted index of the prices of competing materials.

^{1/} Slight changes in notation have been made.

I = Index of production in jute consuming industries

S_t/C_{t-1} = Ratio of the stock of raw jute in U.K. in year t to the consumption of raw jute in year t-1.

T = Time trend

U_t = Error term

The least squares fit of the above equation is as follows :

$$\log J_{imp} = 2.3745 - 0.6325 \log P_j + 0.6635 \log I - 0.2262 \log \frac{S_t}{C_{t-1}} + 0.0062 T$$

$$R^2 = .6164; \text{ Durbin-Watson statistic} = 2.8077$$

The price-elasticity coefficient, i.e. the coefficient for $\log P_j$, was found to be significant at one per cent error probability level. A first difference transformation of the above equation also does not substantially alter the price elasticity coefficient as shown below.

$$\Delta \log J_{imp} = 0.0002 - 0.6331 \Delta \log P_j + 0.9551 \Delta \log I - 0.3700$$

-1

$$\Delta \log \frac{S_t}{C_{t-1}} \quad R^2 = .3462; \text{ Durbin-Watson Coefficient} = 2.9711$$

A still earlier work by Rabbani [11] will be used to find the price-elasticity of import demand for jute goods in U.S.A., the country whose price elasticity coefficient for imports of jute goods has been substituted for the weighted average of the price-elasticities of import demand of the different importing countries for that product. Rabbani shows the coefficient as -0.86 in the following equation:

$$\Delta \log Y = .0031 - 0.8632 \Delta \log P_1 + 0.9899 \Delta \log P_2 + 0.8773 \Delta \log I$$

$$(0.2754) \quad (0.4922) \quad (0.6438)$$

$$R^2 = 0.4053; \text{ Durbin - Watson statistic} = 2.28$$

The variables in the above equations were defined as follows:

Y = Quarterly consumption of burlap

P_1 = Average quarterly price of burlap deflated by an index of whole-sale prices

P_2 = Average quarterly price of burlap deflated by an index of whole-sale prices.

I = Index of freight car loading

Notice, however, that the demand equation is not with respect to jute goods as such but with respect to burlap or hessian as

it is called in Pakistan. Since burlap predominates among the various jute products the U.S.A. imports, this price elasticity coefficient may be a close approximation to the over-all price-elasticity coefficient. Secondly, the price elasticity coefficient was estimated not with respect to the quantity imported but the quantity consumed domestically which might include a component domestically produced. It is assumed here, however, that the price reaction is the same with respect to the quantity imported as with respect to the quantity consumed domestically and the price-elasticity for domestic demand may be used to denote the price elasticity for import demand.

The next problem is to find the relevant proportions or 'scale factors' as Malach [4] calls them. We have used an average of the last three years shown in tables A-1, A-2, A-3 A-4 instead of the figures for all the years shown in those tables. The assumption is that the latter years will be more representative of present-day market conditions and will be closer to future market conditions than the figures for the earlier years. This procedure, however, is not essential and the policy maker can easily insert a new set of scale factors in equation (3) and (3') depending upon his particular assumptions. This set of scale factors is shown in table 1.

Table 1. The Scale Factors for Raw Jute and Jute Goods.

Scale Factors	Raw Jute	Jute Products
$\frac{X}{x}$	1.18	5.13
$\frac{s}{x}$	0.22	4.49

Note : The scale factors are based on the average of 1960-1962 (See Appendix)

A similar procedure has been followed for deriving the price ratios as previously defined. These price ratios are presented in Table II. It should be noticed that the ratio $\frac{P}{P'}$ in equation (3) is rather high. This is because Thailand's export price for Kenaf, a very inferior allied fibre, is almost half the price of raw jute of the stated variety.

Table II. The Price Ratios between Pakistan and Importing Countries and between Pakistan and Competing Exporting Countries.

	Raw Jute		Jute Goods
$\frac{p}{p+t}$.8933	$\frac{p}{p+t}$.8333
$\frac{p}{p'}$	1.8566	$\frac{p'}{p}$	1.0005

Note : The price ratio for raw jute between Pakistan and the U.K. refers to the "Mill Farat" variety. The ratio was derived by taking the annual average f.o.b. price in Pakistan and the annual averages c.i.f. price in the U.K. The period of reference is 1960 to 1962 and the source is [7]. The process was different for determining the price ratio between raw jute and Kenaf. Since the i.o.b. price data for Kenaf were available from the Jute Board of the Government of Pakistan for only a few months, a ratio of this average to the annual averages f.o.b. price in Pakistan in 1962 for the particular variety of raw jute was used. As regards the price ratios for jute goods, the particular variety of jute goods considered was hessian of 40" x 10 oz. variety. The average of the annual average f.o.b. prices in Pakistan and India and the "Spot" price in U.S.A. were used in deriving the ratios. The period of reference was the same as above and the source was [7].

The remaining problem concerns the export supply elasticities of the competing exporting countries, Thailand for raw jute and India for jute goods. There is hardly any published source to draw upon for these export supply elasticities. Yet some approximations can be made. As regards Thailand's Kenaf, agricultural supply elasticities are observed to be less than unity and are generally quite low [8, chapters III and VII] even in advanced countries like the U.S.A. Moreover there is no a priori reason for Thailand's Kenaf being an exception, especially since Thailand is an under-developed country where production is often not market oriented and methods are primitive. The assumed low domestic supply response is taken to apply also to export supply. That is, we are assuming that exporters behave in the same way as the farmers with respect to prices. Actually, the exporter's supply elasticity may be slightly larger, since being a larger operator he might follow a more rational stocks policy than the farmer. We work with an assumed export supply elasticity at three different levels, ranging

from 0 to +.5. These alternative export supply elasticity assumptions have the virtue of showing the sensitivity of the export demand elasticity to the alternative figures for the export supply elasticity term.

Consider now the export supply elasticity term for jute goods (equation 3') India. Although no export supply elasticity for Indian jute goods is known to have been computed a reasonable guess can be made. As has been stated by Mallon, [5] the production policy followed by India ensures a fairly high elasticity of export supply. The production policy of the Indian jute Mills Association, which covers about 98% of the Indian Jute Industry, is to maintain a Minimum spread between the price of the raw material and the price of the final product and thus prevent even marginal firms from going broke. Looms are sealed when this spread narrows and they are descaled when it widens. Production and sales of Indian jute goods are thus quite sensitive to price fluctuations. Mallon's evidence however, is rather inconclusive with respect to the magnitude of the export supply elasticity. We will work with assumed elasticity of three different values, starting from a low of +0.5 going to a high of +1.5. We suspect, however, that the true value will be close to the upper limit. The export demand elasticities have been calculated accordingly.

Table III contains Pakistan's export demand elasticities for both jute and jute goods.

Table III. Export Demand Elasticity for Pakistan's Raw Jute and Jute Goods.

No	Raw Jute	
I	- .66	-5.93
II	- .76	-8.18
III	- .86	-10.43

Note : The computed export demand elasticities are at three different export supply elasticities. The levels for raw jute are 0, +0.25 and +0.5 respectively while the levels for jute goods are +0.5, +1.0, and +1.5 respectively.

There are, however, two notes of caution about these export demand elasticities. Evidently, the import demand elasticities used in the calculation relate to the short-term and these may not remain the same in the long run. Secondly, the computed export demand elasticities were shown to be extremely sensitive to alternative assumptions about export supply elasticities. One can, therefore, postulate a certain reaction function between s_p and x_p , the latter being a positive function of the former. Evidently, this reaction function for raw jute is considerably steeper than that of jute goods indicating higher x_p for the latter at similar assumptions about s_p in both the cases. The two reaction functions are shown in the diagram that follows :

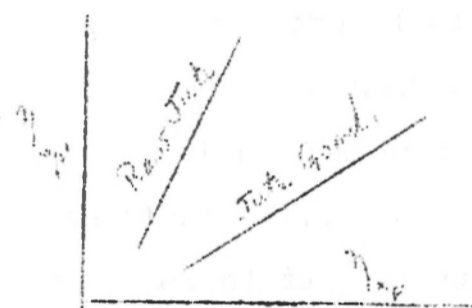


Diagram I

Considering raw jute, if the lower level export supply elasticity, i.e., zero, is taken to be of short term and the higher level export supply elasticity, i.e., +0.5 as relative to the long-term then, as shown in table III, export demand elasticities will be larger in the long-term.

The export demand elasticities are also sensitive to changes in the scale factors (i.e. K/x , s/x). They will be in the same direction as the scale factors. To illustrate, both scale factors at the level of 2.5 in equation (3') and the elasticities of import demand and export supply as well as the necessary price ratios remain the same as before, the elasticity of export demand for jute goods will then be lower, ceteris paribus, than it would be were the scale factors larger.

IV. Policy Considerations

The computed export demand elasticities confirm Mallon's hypothesis of a low export demand elasticity for Pakistan's raw jute and a high export demand elasticity for her jute goods [5]. As evident from table III, if the export supply elasticity from

competing exporting countries remains within the stated range then a unit decrease in the export price of raw jute will cause a less than proportionate increase in the quantity demanded abroad, while a similar change in the export price of jute goods will cause a more than proportionate increase in the quantity demanded abroad. One of the policy implications of this is that any suggestion of increasing the export earnings through reductions in the export earnings through reductions in the export prices of raw jute should be rejected. A rise in the export price also is not a cause of very great alarm if it does not lead to import substitution in favour of Thailand's Kenaf. If however, such import substitution takes place, the two scale factors, K/x and s/x , will increase and this will lead to an increase in the export demand elasticity to such an extent that a price increase can no longer be viewed with indifference.

On the other hand, the very high export demand elasticity for jute goods justifies the present policy of reducing export prices of jute goods through the export bonus scheme. There are however, three notes of caution regarding such a policy. As the proportion of the world demand for jute goods met by Pakistan exports increases the scale factors, K/x and s/x , will decrease and this might lead to such a decrease in the export demand elasticity that the policy no longer can be pursued. Secondly if the scale factor, s/x , decreases so much that the Indian exporters can no longer remain oblivious to Pakistan's position in the export market for jute goods, they will also react by a price cut. Such a dual price-cut would result in lowering or restoring the price ratio p'/p as compared to an increase in the ratio which a unilateral cut in p would achieve. This would then reduce or stabilize the export demand elasticity. Even here, however, there is a saving grace. Such a price reduction or stabilization would at least have the effect of restricting the observed drift in the importing countries towards the use of bulk handling, paper, and chemical substitutes in so far as such a drift is the result of an increase in prices rather than

technological change in the distributive trade. The final note of caution relates to the probable reactions of the importing countries in their tariff policies vis-a-vis the above export price policy for jute goods to be pursued by Pakistan. Some of the major importing countries e.g. the West European countries, U.S.A. and U.K. also have plant capacity in jute goods. These countries may react by raising the tariff wall against the proposed price reductions. Such fears, however, can be discounted since there is a trend in these countries towards the manufacture of specialities and a growing reliance on imports for ordinary hessian and sacking.

An important consideration in such a policy is whether price reductions will be possible. If the export bonus scheme is not going to be continued indefinitely then alternatives must be found. The export bonus scheme is not an unmixed blessing, as Mallon demonstrated. He showed that with sharp increases in raw jute prices in 1960-61 the subsidy system implicit in the export bonus scheme permitted jute goods to be sold at prices which earned less foreign exchange than if the jute content of those goods were exported in raw form. In addition, this ad valorem subsidy makes it less attractive for the jute goods exporters to expand exports at lower prices. This creates a less elastic export demand than it would otherwise be. To offset this lowering of the export demand elasticity he recommends a specific subsidy which will be based on the value added in domestic currency, and thus relates the subsidy to the net foreign exchange benefit and not to the price of the raw material. Apart from effecting price reductions through a subsidy, the question of price reductions should also be examined with respect to reducing costs of production. The justification of the export bonus scheme to-day is, it was in 1959, that it permits Pakistani exporters to compete with the prices set by Indian exporters. To compensate for apparent production cost differential, the exports of jute goods in Pakistan are exempted from the 12.5 per cent sales tax and Rs.70.00 per ton of excise duty on their domestic sales. Given

the availability of relatively low cost raw materials and the exemption from the sales tax and excise duty, the factors which explain the production cost differential are, as indicated in the jute Enquiry Commission Report [9] mainly excessive depreciation costs, low labour efficiency, and import duties and sales tax on machinery, spares, batching oil, high power charges, etc. It is difficult to say anything about the appropriateness of the depreciation reserves. It is possible, however, to increase the low productive efficiency through in-service training and incentives. Such measures of course, have costs but the gains in productivity will in all likelihood offset that. Similarly, the question of a reduction of power rates as well as a reduction or abolition of the import duties and sales taxes on the items listed above should also be considered.

The final policy consideration concerns the usefulness of these export demand elasticities in the pursuit of a policy of stabilization of export prices. The government can smooth out fluctuation in export prices through a judicious use of taxation. Since the export demand elasticities are known, tax measures appropriate for counteracting any given magnitude of price fluctuation can be devised.

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Table A-1; Importing Raw Jute & Allied Fibres in Chief
Importing Countries.

(In '000 tons)

Years	U.K.	U.S.A.	France	W. Germany	India	Others	World Total
Av.1946-50	88	65	64	27	a	169	413a
Av.1951-55	129	70	91	82	275	297	944
1956	124	75	94	92	183	352	920
1957	150	60	99	91	116	364	880
1958	133	37	98	73	74	361	776
1959	150	69	70	67	37	387	780
1960	138	55	84	57	133	370	837
1961	100	22	64	44	80	373	683
1962	153	79	98	48	63	448	889

Source: Commonwealth Economic Committee, Industrial Fibres,
1962 and 1964

a. Indian imports were excluded in this period.

Table A-2; Exports from the Chief Exporting Countries

(In '000 tons)

Years	Pakistan	Thailand	Others	Total
Av. 1951-55	931	-	33	964
1958	891	27	15	933
1959	797	38	43	878
1960	758	62	12	832
1961	599	126	8	733
1962	686	213	12	911

Source : Commonwealth Economic Committee; Industrial Fibres 1964.

Table A-3. World Imports of Jute Goods
(in '000 tons)

Years	U.S.A.	U.K.	Australia	Others	World Total
1955	249.0	70.3	115.7	579.6	1014.6
1956	277.3	59.9	117.3	521.7	976.2
1957	263.1	48.9	103.3	548.7	964.0
1958	245.6	53.5	87.6	540.3	927.0
1959	306.8	63.4	107.3	589.9	1067.4
1960	297.3	66.3	85.0	552.8	1001.4
1961	298.3	46.4	107.5	624.2	1076.4
1962	353.1	51.0	83.6	593.7	1081.4

Source: Commonwealth Economic Committee; Industrial Fibres, 1962 and 1964

Note:(a)The totals for 1961 and 1962 as shown in the above table are not the same as the totals shown in table 123 of the 1964 issue of the above source. The reason is that unlike the earlier issues, the 1964 issue shows the total of only certain countries and not a world total. It was found from the 1962 issue that countries which have been omitted from the 1964 issue comprise, on the average, some 11.44 per cent of the world total. The world totals for 1961 and 1962 were then obtained on that basis.

Table A-4; Exports of Jute Manufactures from Chief Importing Countries.

(In '000 tons)

Years	India	Pakistan	Others	World Total
Av. 1947-50 ^a	823	-	70	893
Av. 1951-55	796	13	121	930
1956	870	75	119	1064
1957	867	71	108	1046
1958	778	86	112	976
1959	860	190	113	1163
1960	848	188	122	1158
1961	719	202	103	1024
1962	858	229	114	1201

Source : Commonwealth Economic Committees; Industrial Fibres 1962 and 1964

Note: (a) or the years available

Table A-5; Quarterly Exports of Jute Goods from India and the Quarterly Average Export Prices of Hessian, July '58 to June '62.

Quarters	(a) Quantities Exported (in '000 tons)	(b) Av. Hessian prices (in Rs)	(c) Index of (a)	(d) Index of (b)
1 July-September 1958	246.2	41.69	100.00	100.00
2 Oct-December 1958	207.5	41.96	84.28	100.64
3 January-March 1959	192.5	40.14	78.18	96.28
4 April-June 1959	208.7	40.30	84.76	96.66
5 July-September 1959	241.9	40.75	98.25	97.74
6 Oct-December 1959	221.2	40.71	89.84	97.64
7 January-March 1960	171.2	41.29	69.54	99.04
8 April-June 1960	199.2	47.88	80.90	114.84
9 July-September 1960	220.0	46.86	89.36	112.40
10 Oct-December 1960	181.1	55.64	73.56	133.46
11 January-March 1961	164.9	65.07	66.98	138.86
12 April-June 1961	164.6	54.60	66.86	130.96
13 July-Sept. 1961	184.3	51.24	74.86	122.90
14 Oct-December 1961	188.0	53.20	76.36	127.60
15 January-March 1962	189.1	54.88	76.80	131.64
16 April-June 1962	198.7	56.04	80.70	134.08
17 July-Sept 1962	225.5	55.43	91.59	133.08
18 Oct-December 1962	221.6	54.79	90.00	131.42
19 January-March 1963	191.7	49.67	77.86	119.14
20 April-June 1963	223.2	49.60	90.66	118.97

Source :Monthly Summary of Jute Statistics, July 1959 to December 1963 (Dacca:Jute Board).

Note :(1) The Hessian price quoted per 100 yards is about the 40"xl0 oz variety.

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