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# TRENDS AND LABOUR CONTENT OF PAKISTAN'S EXPORTS

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by :

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## INTRODUCTION

Exports play a major role in the development of a country as they not only help in earning foreign exchange but also provide employment opportunities in those sectors, which boom due to exports growth.

For an economy like Pakistan, which has a civilian labour force of 2 crores and an addition of approximately 6 lakh labourers yearly, there is an urgent need to follow such strategies which could generate a high rate of employment growth.

In Pakistan, a number of studies have been done on export promotion versus import substitution, but it is surprising to know that so far no attempt has been made to determine the employment generating effects of the alternate trade strategies.

Thus the aim of the present paper is to analyse and investigate the employment implications of export promotion [i.e. how much employment is generated by an additional Rs. one million worth of exports]. Here one point must be made clear, that in the present paper we are not going to compare the employment generating effects of export promotion versus import substitution, rather, our task is to determine, that within the range of export promotion, which exports should be promoted, so as to increase employment growth.

The paper consist of four sections. The first section explains the changing structure and commodity composition of our exports over a 15 year period. The core of the paper lies in section II, where the methodology to determine labour intensities and the major findings are described. A comparison of our results with earlier findings has been made in section III. While section IV is based on policy implications and conclusions.

## SECTION 1

## STRUCTURE OF PAKISTAN'S EXPORT

To determine the structure, we have compiled data on commodity composition and direction of our export. In case of commodity composition the period covered is 15 years i.e. 1960-61 to 1974-75. All the exports figures are in value term (Rs.000), which are grouped in 6 major sectors i.e. consumer goods, intermediate goods, investment goods, other miscellaneous, agriculture fishery and forestry, and mining [1]. Export to East Pakistan was also classified according to these 6 groups and is shown in table III (here the period covered is from 1960-61 to 1970-71).

[1] Time Series data at a very disaggregate level of these 6 sectors was also compiled which is obtainable from the author. All the concerned data was obtained from various issues of Foreign Trade Statistics, C.S.O.

Table 1 shows how the share of six major groups in total exports to Rest of the World (R.O.W.) has been changing over time. It is seen that for every year, major shares were held by consumer goods and Agriculture fishery and forestry. More over the share of consumer goods in total export has been increasing over time whereas Agriculture's share shows a declining trend. It is a good sign showing that manufactured goods are getting a stronger hold in over all exports.

In table II we have considered only manufacturing sector(excluding Agriculture and Mining from the 6 major groups) and their share in total manufactured export. Here also, on average, 75% of the share was held by consumer goods, which has been constant over time i.e. it shows no significant increasing or declining trend.

To find out the direction of our exports, we have grouped the Rest of the World into three major categories; Developed, Developing and Centrally planned economies. This exercise was done for two years 1960-61 and 1969-70; to see the change in direction of exports over time.

Direction of exports to three country groups is given in table IV and V which shows that in 1960-61 for each country group the major exports were primary goods where as in 1969-70, the major proportion of exports were held by consumer goods.

Table VI shows the proportion, out of total exports of manufactured and primary goods, that is sent to the three country groups. It is apparent in table VI that out of total exports, 18% of manufactured and 36% of primary goods in 1960-61 and 27% manufactured and 13% primary goods were been exported to developed economies. Similarly 17% manufactured

and 22% primary goods in 1960-61 and 27% and 12% respectively in 1969-70 were exported to developing economies. Exports to centrally planned economies were negligible in 1960-61 but in 1969-70 out of total exports, about 14% of manufactured goods were exported to these countries. It shows that we were able to find new markets for our exports.

## SECTION II

## LABOUR CONTENT OF PAKISTAN'S EXPORT

In Pakistan no work has been done to determine the factor content of our trade, though a few studies have been carried out to investigate the factor intensity of our industries. Nurul Islam [11] has followed Lary's [10] approach in ranking industries according to total value added per employee; the higher the total value added per employee, the higher is capital intensity. Based on this criterion, our comparative advantage lies in those sectors where value - added per employee is very low. Another study in this field was done by A.R. Khan [6] who has ranked industries according to their observed capital labour ratios. Following his approach, the comparative advantage for Pakistan would be in those industries where capital labour ratio is very low.

The methodology to estimate the labour content of export in the present paper is taken from A. Kruger's work [9] which is further elaborated in V. Corbo and P. Meller's paper [2] on Chile.

Derivations of the formulas for direct as well as total labour requirements is given below:

Direct Labour Requirement (Criterion A): It is based on the labour required to produce Rs. one million of domestic value added i.e.

$$L_j^d = E_j / (DVA)_j$$

where $E_j$ is average number of workers employed, and (DVA) is domestic value added in jth sector for a given year. This information is diredly obtained from census of manufacturing industries. Thus the higher is the direct labour requirement for a given Rs. one million of value added, the greater will be the labour intensity for that sector.

Computation of Direct Labour Requirement for Exports ; Firstly we have calculated the domestic value added content of 20 groups of export industries by using the share of direct domestic value added in output; i.e.

$$\left[ (V/O)_j \; E_j \right]$$

Then we have taken the overall/group wise weights $[ w_1 \; \& \; w_2 ]$ for this value added content of exports. At last the direct labour coefficient $L_j^{d\,;\,s}$ were corrected for these weights which gives us weighted average labour intensity for overall as well as groupwise exports of manufactured goods.

Total Labour Requirement: (Criterion B). The appropriate concept to measure the labour intensity would be to incorporate indirect labour requirement as well. For this we have to take into account the direct labour employed and value added generated in home good sectors. It requires the calculation of employment and value added multipliers.

The value added multiplier to compute direct, plus home goods, indirect value added per unit of output in industry j is given by;

$$s_j = 1 + \frac{\hat{V}_j}{V_j}$$

where $V_j$ is direct value added generated in $j^{th}$ sector and $\hat{V}_j$ in home goods sectors i.e.,

$$\hat{V}_j = V_H \left[ I - A_{HH} \right]^{-1} A_{HT}$$

Similarly the employment multiplier of direct plus indirect home goods requirement per unit of value added in $j^{th}$ sector is given as;

$$m_j = \frac{l_j + \hat{l}_j}{V_j + \hat{V}_j} \Big/ \frac{l_j}{V_j}$$

here also $l_j$ is direct labour employed per unit of output (i.e. $E_j/O_j$) in $j^{th}$ sector and $\hat{l}_j$ in home goods sectors i.e.,

$$\hat{L}_j = L_H \left[ I - A_{HH} \right] - I_{AHT}$$

where

$A_{HH}$ = a square matrix of direct intermediate input coefficients in the home good sectors.

$A_{HT}$ = a rectangular matrix of home good Co-efficients for the input-output sectors.

$V_H$ = a row vector of direct domestic value added per unit of gross output, corresponding to h home goods sectors.

$L_H$ = a row vector of employment per unit of gross output, corresponding to h home goods sectors.

The procedure to compute total labour intensity of export industries is similar to the one for direct labour intensity except that in present case we get weights as ;

$$\hat{W}_j = \frac{s_j \quad (V/O)_j \quad E_j}{\sum_{j=1} s_j \quad (V/O)_j \quad E_j}$$

and direct plus indirect labour CO-efficient as ;

$$L_j^t = m_j \, L_j^d$$

hence multiplication of $\hat{W}_j + L_j^t$ and their addition will give us weighted average labour intensity for over all/group wise exports of manufactured goods.

The manufacturing sector of Pakistan was classified into 20 sub-groups. The four home goods sectors are;

1) Electricity and Gas
2) Transport and Communication
3) Trade (Whole sale and retail)
4) Insurance, Banking and other services.

The data for employment $E_j$, output $O_j$, and value added $V_j$ was taken from CMI (1) number of workers in home good sectors $E_h$ is obtained from labour Force Survey for 1969/70 and for 1960-61 from I. Hussain's [4] study - home goods value added is derived directly from National Accounts i.e. GNP at factor cost for the respective sectors. As National Accounts for 1960/61 does not give the value added in home goods sectors for West Pakistan seperatly, so it was

borrowed from Taufiq's / 11 / work / where figures were in 1959/60 constant prices and were inflated to 1969/70 prices by the author/. For comparison sake, all the value figures for the year 1960/61 (i.e. $O_j$, $V_j$ ) were also inflated to 1969/70 prices. For input - output matrix ( $A_{HH}$ + $A_{HT}$ ) we have made use of Mazahir's (5) work who has inflated Khan & McEwcan's / 7 / input-output table to 1969/70 prices.

To make the intertemporal comparison of labour intensity, two years chosen were 1960/61 and 1969/70 / as all the data required to calculate labour intensities was available for these two years / .

For comparing the inter industry differential in labour intensity, the 20 export industries were lumped together into 3 major groups i.e. Consumer goods, Intermediate goods and Investment Goods.

Labout intensities based on criteria A and B were calculated for Rest of the World (R.O.W.), Former East Pakistan, Developed, Developing and centrally planned economies. Detailed tables are given in Appendix while concise tables giving the intertemporal and inter industry information on labour intensities are included in the text.

Part A of the tables (VII, XII ) is based on direct labour requirement and Part B on total labour requirement.

Table VII Part A shows that if additional goods worth Rs. one million were exported to R.O.W. then on average a potential employment of 267 was generated in over all manufacturing for 1960/61, and 103 for

the year 1969/70. If this additional export was either of consumer goods, or Intermediate goods or Investment goods then employment generated in either of those sectors would have been 268, 217 and 270 ( in 1960/61 ) and 111, 52 and 123 ( in 1969/70) respectively. Similarly part B shows that Rs. one million worth of exports to R.O.W. would generate a total of 377 jobs for overall manufacturing (1960/61) and 131 for 1969/70. An for consumer goods, Intermediate goods and Investment goods, new jobs created would be 377 , 371, 375 for 1960/61, and 137, 96 and 192 for 1969/70 respectively.

On similar pattern as described above, tables VIII, XII were formulated which show that based on criteria A & B, how much employment could be generated if an additional Rs. one million worth of product of either of the three major groups would be exported to Developed or Developing or centrally planned economies or to Former East Pakistan.

Ranking of the Major Groups of Industries: Ranking of the three major industrial sector according to their labour requirements based on criteria A & B for both the years 1960/61 and 1969/70, and for most of the country group came out to be same i.e. Investment goods being most labour intensive and Intermediate goods the least.

In case of East Pakistan we get different results i.e. based on criteria A, (for 1960/61 & 1969/70) and B (for 1960/61 only) consumer goods came out to be most labour intensive and intermediate goods the least; though for 1969/70 criteria B, follow the same pattern i.e. Investment goods are most labour intensive.

Another case where ranking is different from the general pattern

is for R.O.W., year 1960/61, based on criteria B, here consumer goods have become more labour intensive as compared to Investment goods, but the difference in labour intensities for these two group is almost marginal, i.e. creation of 377 (for consumer goods) and 375 jobs (for investment goods).

The two main results which we have obtained so far are:

a) There has been a striking decline in labour intensity over time based on the two criteria and for each country group.

b) Investment goods came out to be most labour intensive in many of the cases.

Let us consider case (a) first. (Case (b) has been taken care of in Section III of this paper).

Decline in Labour Intensity Overtime: As labour Co-efficients were corrected for export weights, so total change in labour intensity could be decomposed into change:

a) due to changing export structure

b) due to change in labour Co-efficient.

$$\triangle WL = (\triangle W)\ \bar{L} + (\triangle L)\ \bar{W}$$

Where

$\triangle (WL)$ = total change in labour intensity.

$(\triangle W)\ \bar{L}$ = change in labour intensity due to change in export composition (i.e. export weights) keeping labour Coefficient constant.

$(\triangle L)\ \bar{W}$ = change in labour intensity due to change in labour coefficient keeping composition of export constant.

We have measured total change in labour intensity only for R.O.W. $\triangle$ WL is shown in column 'C' of table VII. ( $\triangle$ L) $\bar{W}$ was calculated by applying labour Coefficients of 1969/70 with 1960/61 export weights (see table XII), which gives us percentage decline due to change in labour coefficient shown in Column 'f' table VII. Once total change ( $\triangle$ WL) and partial change in labour coefficients ($\triangle$ L) $\bar{W}$ were determined independently; ( $\triangle$ W) $\bar{L}$ (change in export composition) was calculated as the residual (see table VII column 'g'). Comparison of column 'f' & 'g' of table VII shows that decline in labour intensity over time was mainly due to the fact that there has been a sharp decline in labour Coefficient itself (or in other words the export composition has remained constant over time).

What are the implications of this result ? An increase in labour productivity or an increase in capital intensity.

This result is in fact persuasive, as it has been supported by I. Hussain's [4] findings that capital - labour ratios have definately increased over the period 1959/60 to 1967/68.

## SECTION III

### Comparison with Earlier Findings

Our results have shown that a major proportion of our export consist of consumer goods where labour intensity is relatively lower than in investment goods.

The result raises the question, as to why in a labour abundant economy like Pakistan such capital intensive techniques are adopted, and why the investment goods sector is more labour intensive than consumer goods ?

All this is not an unusual phenomenon for Pakistan as earlier studies show parallel results. As in the present study investment goods came out to be most labour intensive similarly Islam /12/ following Lary's approach /10/ found that capital goods industries as a group in Pakistan has lower value added per employee than the national average; further more it has less than average non-wage value added per employee and in both cases it is significantly lower than national average -- while consumer good industries when taken separately for West Pakistan have value -- added per employee just below the average, showing a bias towards labour intensity.

The intermediate goods in West Pakistan came out to be the most capital intensive, in Islam's study. Thus, in short, our results are exactly parallel to Islam's, (based on our criteria A & B). Capital goods are not particularly capital intensive; rather they are the most labour intensive, consumer goods have average labour intensity and Intermediate goods are the least labour intensive. While describing inter temporal variation in factor intensities, Islam doesn't mention whether labour intensities have increased or declined over time -- he just discusses the changes in ranking of industries whereas our results have further indicated, an overall decline in labour intensities over time.

Sectoral capital intensities obtained by A.R. Khan / 6 / also supports our results. He has measured capital intensities based on the ratio of observed physical capital to labour and concluded that the three sectors which have got unusually high capital intensities are Fertilizer Paper and Petroleum products, / all these three industries belong to the intermediate goods sector; in our findings also, based on criteria A and B, this sector came out to be most capital intensive/.

The other sectors which are second highest in capital intensity ordering are Sugar, Cigarettes and Edible oils / they belong to consumer goods sector -- in our case too, this sector has the second highest capital intensity/ .

Khan's study shows that the least capital intensive sectors are leather and its products, metal products and wood cork & furniture. Concerning the capital intensity of investment good sector, Khan also concludes "It may be noted that capital intensity of capital supplying sector is not particularly high--"-- This view supports our result too The reason underlying this finding could be that our investment goods sector mainly consists of those industries / e.g. metal and metal products, non electrical machinery/ which are quite highly labour intensive.

The reasons underlying that consumer goods are relatively more capital intensive than the socially desirable could be due to the fact that most of the industries belonging to this sector e.g. sugar, cigarettes, food manufacturing and edible oils etc. are the products of

the era of import substitution, when capital was under priced, which led to the selection of a degree of capital intensity higher than xocially desirable. It also created the incentive to build up greater capacity than can be used at any given time period to insure against the difficulties of getting Licences for expanding the capacity in future. G. Winston [13] and A.R. Kemal [8] have shown in their study that for the year 1965 only 33% [Winston] and for 1967/68 only 55% [Kemal] of the industrial capacity was being utilized--hence underutilization of capital stock in large scale manufacturing reduced the potential level of employment and increased the observed capital intensities in the underutilized sectors.

Moreover the existence of demand of consumer goods, resulting in high profitability rates in these sectors, gives incentives to foreign investors to invest in consumer goods . They adopt the capital intensive technologies prevailing in their own countries. This fact is applicable to our consumer good sector also, and explains the cause of high capital intensities adopted for this sector.

A. R. Khan [6] has extensively argued, that in Pakistan's economy, capital has been heavily underpriced (due to different government policies e.g. over valuation of exchange rate, low interest rates and other different incentives for import of capital) while price of labour has been higher than it's efficiency value.

Another element causing the adoption of capital intensity more than socially desirable, is the tied foreign aid; e.g. if a factory is being set up in Pakistan against a U.S. tied credit, Pakistan will

necessarily be limited to the plants available in U.S., which would be appropriate to the factor endowment of U.S., and would be highly capital intensive.

## SECTION IV

### Conclusion

As mentioned in the introduction of the paper our task was to determine the employment generating effect of alternate export sectors.

A country like ours, where the needs are endless and means are limited, appropriate choice of one instrument (i.e. export policies) can help in meeting two ends (i.e. earning foreign exchange and employment generation).

From the time series analysis of our export structure we found out that consumer goods constitute a major part of our export, and its share in total export has been increasing over time. Are we in a position to believe from this result that consumer goods are most labour abundant economy, should export labour intensive goods. The answer is negative. As in Part II of the paper we have shown that consumer goods are relatively less labour intensive as compared to investment goods.

Based on the two criteria, we attempted to explore how much employment should be generated in consumer, intermediate and investment good sectors if an additional Rs. one million worth of products of either of these sectors were exported to developed or developing or

centrally planned economies or to former East Pakistan. For most of the cases we found that Investment goods are most labour intensive. Does this imply that we should start concentrating more on the promotion of Investment goods export!

This would not be a correct choice of policies as the structure of export shows that consumer goods have always been a major part of our manufactured exports, showing that world demand for our exports is concentrated in consumer goods. In fact less labour intensity as compared to investment goods could be attributed to domestic factor market distortions and under-utilization of industrial capacity; hence for obtaining a true labour intensity of this sector, we must increase the capacity utilization by removing the deficiency of demand through promoting exports.

Our next exercise was to determine the labour requirements based on direction of export, or in other words to which country group these exports should be diverted to get a high growth of total labour employed. We saw that if an additional Rs. one million worth of products (irrespective of industrial group) were exported to developed or developing or centrally planned economies or to former East Pakistan, then total employment generated (based on criteria B for all industries in general) for 1969/70 would have been 132, 149, 150 and 146 respectively. It shows that exports promoted to centrally planned and developing countries would be most favourable for employment creation.

It is interesting to note that our results for determining the labour intensities for different sectors follow the same pattern as obtained in the studies done earlier.

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TABLE (I)

Structure of Pakistan's Export (Total)

(in 000 Rs.)

| P.S.I.C. P.S.T.C. Commodity | | 1960-61 | 1961-62 | 1962-63 | 1963-64 | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (A) | Grand Total | 523825 | 529586 | 972015 | 1035684 | 1111916 | 1156268 | 1262534 | 1536676 | 1576422 | 1521242 | 1948212 | 3550624 | 8409858 | 9324581 | 9348105 |
| (B) | Consumer Goods. | 146101 | 83580 | 150027 | 296887 | 392073 | 382838 | 441809 | 582448 | 665757 | 758272 | 1041762 | 1371695 | 4133556 | 4583067 | 3775452 |
| | (B) as percentage(A) | 27.89 | 15.78 | 15.43 | 28.67 | 35.26 | 33.11 | 34.99 | 37.90 | 42.23 | 49.85 | 53.47 | 42.20 | 19.16 | 49.15 | 39.1[illegible] |
| (C) | Intermediate Goods. | 8205 | 16156 | 21.25 | 51698 | 85423 | 109146 | 101642 | 139173 | 183698 | 174171 | 161869 | 252393 | 833176 | 714062 | 570599 |
| | (C) as percentage(A) | 1.57 | 3.05 | 2.16 | 4.99 | 7.68 | 9.44 | 8.05 | 9.07 | 11.65 | 11.45 | 8.31 | 7.76 | 9.91 | 7.66 | 5.9[illegible] |
| (D) | Investment Goods, | 19071 | 30790 | 33827 | 38951 | 33424 | 46506 | 83890 | 42892 | 39031 | 66061 | 7035 | 94650 | 324427 | 461334 | 548938 |
| | (D) as percentage of (A) | 3.64 | 5.81 | 3.48 | 3.76 | 3.01 | 4.02 | 6.64 | 2.79 | 2.48 | 4.34 | 3.59 | 2.91 | 3.86 | 4.95 | 5.69 |
| (E) | Other as percentage | 15095 | 18039 | 22781 | 7913 | 10004 | 9578 | 9911 | 18297 | 22036 | 25035 | 39003 | 45956 | 134658 | 167799 | 13569[illegible] |
| | (E) as percemtage of (A) | 2.88 | 3.41 | 2.34 | 0.75 | 0.99 | 0.83 | 0.79 | 1.19 | 1.40 | 1.65 | 2.00 | 1.41 | 1.07 | 1.80 | 1.[illegible] |
| (F) | Agriculture & Fisheries | 334615 | 375404 | 742865 | 634116 | 580011 | 599012 | 614956 | 745795 | 658643 | 473157 | 616049 | 1427603 | 2934702 | 3306550 | 4495483 |
| | (F) as percentage of (A) | 63.88 | 70.89 | 76.43 | 61.23 | 52.16 | 51.81 | 48.71 | 48.53 | 41.78 | 31.10 | 31.62 | 43.92 | 34.89 | 35.46 | 46.59 |
| (G) | Mining | 738 | 5617 | 1490 | 6119 | 10981 | 9188 | 10326 | 7870 | 7357 | 24546 | 19494 | 58427 | 48834 | 91769 | 211936 |
| | (G) as percentage of (A) | 0.14 | 1.06 | 0.15 | 0.59 | 0.99 | 0.79 | 0.84 | 0.51 | 0.47 | 1.61 | 1.00 | 1.80 | 0.58 | 0.98 | 1.26 |

TABLE (II )

Structure of Pakistan's Export (Manufactured)

( in 000 Rs.)

| | 1960-61 | 1961-62 | 1962-63 | 1963-64 | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (A) Grand Total | 188472 | 142465 | 227660 | 395449 | 520924 | 548068 | 637252 | 783011 | 910422 | 1023539 | 1312669 | 1764594 | 542617 | 5926262 | 5030686 |
| (B) Consumer Goods, | 146101 | 83580 | 150027 | 296887 | 302073 | 382838 | 441809 | 852448 | 665657 | 758272 | 1041762 | 1371995 | 4124556 | 4583067 | 3775452 |
| (B) as % age of (A) | 77.52 | 56.26 | 65.90 | 75.08 | 75.26 | 69.85 | 69.33 | 74.39 | 73.12 | 74.08 | 79.36 | 77.73 | 76.19 | 77.33 | 75.05 |
| (C) Intermediate Goods, | 8205 | 16156 | 21025 | 51698 | 85423 | 109146 | 101642 | 139374 | 183698 | 174171 | 161869 | 252393 | 833176 | 714062 | 570598 |
| (D) Investment Goods, | 19071 | 30790 | 33827 | 38951 | 33424 | 46506 | 83890 | 42892 | 39031 | 66061 | 70035 | 94650 | 324427 | 461334 | 548938 |
| (D) as % age of (A) | 12.12 | 20.72 | 14.86 | 9.85 | 6.42 | 8.49 | 13.16 | 5.48 | 0.04 | 6.45 | 5.34 | 5.36 | 5.98 | 7.78 | |
| (E) Other Miscelleneous | 15095 | 18039 | 22782 | 7913 | 10004 | 9578 | 9911 | 18297 | 22036 | 25035 | 39003 | 45856 | 13658 | 167799 | 135698 |
| (E) as % age of (A) | 8.01 | 12.14 | 10.01 | 2.00 | 1.92 | 1.75 | 1.56 | 2.34 | 2.42 | 2.45 | 2.97 | 2.60 | 2.48 | 2.83 | |

ort to East Pakistan

(Value in thousand Rupees.)

| | 1960-61 | 1961-62 | 1962-63 | 1963-64 | 64-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 | 1969-70 | 1970-71 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (A) Grand Total | 797553 | 829356 | 975733 | 844167 | 7201 | 1185573 | 1304617 | 1206429 | 1250542 | 1155316 | 1372247 |
| (B) Consumer Goods. | 506121 | 462200 | 376410 | 366660 | 9658 | 469825 | 535595 | 434016 | 468499 | 550193 | 480894 |
| (B) as percentage of (A) | 63.46 | 55.73 | 38.58 | 43.43 | 5.85 | 39.63 | 41.05 | 35.98 | 37.46 | 47.62 | 35.04 |
| (C) Intermediate Goods. | 23524 | 39996 | 18464 | 24282 | 6757 | 47219 | 70690 | 68702 | 100378 | 204402 | 189294 |
| (C) as percentage of (A) | 2.95 | 4.82 | 1.89 | 2.88 | 4.67 | 3.98 | 5.42 | 5.69 | 8.03 | 17.69 | 13.79 |
| (D) Investment Goods. | 19318 | 48131 | 49829 | 61992 | 1156 | 77577 | 114961 | 133869 | 143166 | 120043 | 96881 |
| (D) as percentage of | 2.42 | 5.80 | 5.10 | 7.34 | 6.50 | 6.54 | 8.81 | 11.09 | 11.45 | 10.39 | 7.06 |
| (E) Other miscellenous. | 71720 | 43594 | 171817 | 80689 | 9702 | 56328 | 124361 | 115098 | 135289 | 150836 | 103844 |
| (E) as percentage of(A) | 8.99 | 5.26 | 17.61 | 9.56 | 0.12 | 4.75 | 9.53 | 9.54 | 10.82 | 13.05 | 7.57 |
| (F) Agriculture of fisheries. | 169237 | 216711 | 341900 | 308463 | 7822 | 506734 | 455752 | 448888 | 400437 | 621087 | 497969 |
| (F) as percentage of(A) | 21.22 | 26.13 | 35.04 | 36.54 | 2.58 | 42.74 | 34.93 | 37.21 | 32.02 | 53.76 | 36.29 |
| (G) Mining. | 7633 | 18724 | 17259 | 2081 | 2106 | 27890 | 3258 | 5856 | 2773 | 3929 | 3365 |
| (G) as percentage of A | 0.95 | 2.26 | 1.77 | 0.25 | 0.26 | 2.35 | 0.25 | 0.48 | 0.22 | 0.34 | 0.24 |

TABLE IV

DIRECTION OF EXPORTS :1960/61 Value (000' Rs.)

COUNTRIES

| | | Developed | Developing | Centrally Planned |
|---|---|---|---|---|
| (A) | Total Exports : | 278562 | 79733 | 101 |
| (B) | As page of (A) | 27 | 39 | 0.2 |
| (C) | Intermediate Goods | 5465 | 2742 | - |
| (C) | as percentage of:(A) | 2 | 1.3 | |
| (D) | Investment Goods: | 9652 | 6302 | 24 |
| (D) | as percentage of (A) | 3 | 3.1 | 0.05 |
| (E) | Agriculture Fishery and Forestry: | 184477 | 1115439 | 41228 |
| (E) | as percentage of (A) | 66 | 56.5 | 99.7 |
| (F) | Minning | 2305 | - | - |
| (F) | as percentage of (A) | 0.8 | - | - |

TABLE V

DIRECTION OF EXPORTS: (1969-70) Value in (000' Rs.)

| | | COUNTRIES | | |
|---|---|---|---|---|
| | | Developed | Developing | Centrally Planned |
| (A) | Total Exports | 594993 | 575497 | 319295 |
| (B) | Consumer Goods. | 277737 | 315201 | 185607 |
| (B) | as percentage of (A) | 47 | 55 | 58 |
| (C) | Intermediate Goods | 104903 | 40481 | 27489 |
| (C) | as percentage of (A) | 18 | 7 | 9 |
| (D) | Investment Goods. | 15144 | 42131 | 1701 |
| (D) | as percentage of (A) | 25 | 7 | 5 |
| (E) | Agriculture Fishery and Forestry | 180024 | 173691 | 101062 |
| (E) | as percentage of (A) | 30 | 30 | 32 |
| (F) | Minning | 17185 | 3993 | 3436 |
| (F) | as percentage of (A) | 29 | 00.7 | 1 |

TABLE VI

Proportion of manufactured/non-manufactured exports in total exports for three country groups.

| Total Exports | Countries | | |
|---|---|---|---|
| 1489785 | Developed | Developing | Centrally Planned |
| | 1969 - 70 | | |
| Manufactured Export : | 397784 | 397813 | 214797 |
| Percentage of manufactured exports in total exports: | 27 | 27 | 14 |
| Agriculture, fishry and forestory: | 197209 | 177684 | 104498 |
| Percentage of Agricultural exports in total exports | 13 | 12 | 7 |
| | 1960 - 61 | | |
| Manufactured Exports | 91780 | 88777 | 125 |
| Percentage of manufactured exports in total exports | 18 | 17 | .02 |
| Agriculture, fishry and forestory: | 186782 | 115439 | 41228 |
| Percentage of Agricultured exports in total exports: | 36 | 22 | 8 |

Table VII

Labour intensities for Exports to the Rest of the World

| | 1960 - 61 | | 1969 - 7[illegible] | | | | |
|---|---|---|---|---|---|---|---|
| | Labour intensity (a) | Ranking (b) | Labour intensity (a) | Ranking (b) | Percentage decline(Total) | Percentage decline due to change in Labour Coefficient (f) | Percentage decline due to change in Composition of Export (g) |
| (A) Direct Labour requirement per million Rs. of value added: | | | | | | | |
| All industries | 267 | 2 | 103 | | 61 | 56 | 5 |
| (a) Consumer Goods | 268 | 2 | 111 | 2 | 59 | 58 | 1 |
| (b) Intermediate Goods | 217 | 3 | 52 | 3 | 76 | 74 | 2 |
| (c) Investment Goods | 270 | 1 | 123 | 1 | 54 | 33 | 21 |
| (B) Direct & Indirect Labour requirements per million Rs. of value added: | | | | | | | |
| All industries | 377 | | 131 | | 65 | 57 | 8 |
| (a) Consumer Goods | 377 | 1 | 137 | 2 | 64 | 60 | 4 |
| (b) Intermediate Goods | 371 | 3 | 96 | 3 | 74 | 74 | 0 |
| (c) Investment Goods | 375 | 2 | 192 | 1 | 49 | 36 | 13 |

TABLE XII

Decline in Labour Intensities due to Change in Labour Coefficient over 1960 - 61 to 1969-70

| | Labour intensity based on 1960-61 Exports weights and 1960-61 labour co-efficient. | Labour intensity based on 1960-61 exports weights and 1969-70 labour coefficients | Percentage decline in labour intensity. |
|---|---|---|---|
| Criteria (A) | | | |
| All industries | 267 | 118 | 56 |
| Consumer goods | 268 | 113 | 58 |
| Intermediate Goods | 217 | 56 | 74 |
| Investment goods | 270 | 181 | 33 |
| Criteria (B) | | | |
| All industries | 377 | 164 | 57 |
| Consumer goods | 377 | 151 | 60 |
| Intermediate goods | 371 | 98 | 74 |
| Investment goods | 375 | 241 | 36 |

Table XI

Labour Intensities for Exports to Farmer East Pakistan

| | 1960 - 61 | | 1969 - 70 | |
|---|---|---|---|---|
| | Labour Intensity | Ranking | Labour Intensity | Ranking |
| (A) | Direct Labour requirement per million Rs. of value added: | | | |
| All industries | 249 | | 91 | |
| a. Consumer goods | 257 | 1 | 101 | 1 |
| b. Intermediate goods | 162 | 3 | 54 | 3 |
| c. Investment goods | 174 | 2 | 96 | 2 |
| (B) | Direct and indirect labour requirement per million Rs. of value added. | | | |
| All industries | 367 | | 146 | |
| a. Consumer goods | 374 | 1 | 150 | 2 |
| b. Intermediate goods | 343 | 2 | 116 | 3 |
| c. Investment goods | 306 | 3 | 172 | 1 |

Table X

Labour Intensities for Exports to Centrally Planned Economics

| | 1960 - 61 | | 1969 - 70 | |
|---|---|---|---|---|
| | Labour Intensity | Ranking | Labour Intensity | Ranking |
| (A) | Direct Labour requirement per million Rs. of Value added: | | | |
| All industries | - | | 115 | |
| a. Consumer goods | - | | 120 | 2 |
| b. Intermediate goods | - | | 55 | 3 |
| c. Investment goods | - | | 221 | 1 |
| (B) | Direct and indirect labour requirement per million Rs. of value added: | | | |
| All industries | - | | 150 | |
| a. Consumer goods | - | | 154 | 2 |
| b. Intermediate goods | - | | 88 | 3 |
| c. Investment goods | - | | 269 | 1 |

TABLE IX

Labour Intensities for Exports to Developing Economics

| | | 1960 - 61 | | 1969 - 70 | |
|---|---|---|---|---|---|
| | | Labour Intensity | Ranking | Labour Intensity | Ranking |
| (A) | Direct Labour requirement per million Rs. of Value added: | | | | |
| | All industries | 266 | | 106 | |
| (a) | Consumer Goods | 266 | 2 | 112 | 2 |
| (b) | Intermediate Goods | 207 | 3 | 48 | 3 |
| (c) | Investment Goods | 283 | 1 | 119 | 1 |
| (B) | Direct and Indirect Labour requirement per million Rs. of Value added: | | | | |
| | All Industries | 378 | | 149 | |
| (a) | Consumer goods | 377 | 2 | 150 | 2 |
| (b) | Intermediate Goods | 371 | 3 | 107 | 3 |
| (c) | Investment Goods | 380 | 1 | 185 | 1 |

Table VIII

Labour intensities for Exports to the Developed Economics

| | 1960 - 61 | | 1969 - 70 | |
|---|---|---|---|---|
| | Labour intensity | Ranking | Labour intensity | Ranking |
| (A) | Direct Labour requirement per million Rs. of value added: | | | |
| All industries | 274 | | 89 | |
| (a)Consumer goods | 274 | 2 | 99 | 2 |
| (b)Intermediate goods | 223 | 3 | 53 | 3 |
| (c)Investment goods | 287 | 1 | 177 | 1 |
| (B) | Direct and indirect Labour requirement per million Rs. of value added: | | | |
| All industries | 377 | | 132 | |
| (a)Consumer goods | 382 | 2 | 143 | 2 |
| (b)Intermediate goods | 360 | 3 | 90 | 3 |
| (c)Investment goods | 392 | 1 | 232 | 1 |

Appendix Tables

(not attached)