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**A Measure of Inflation In Pakistan  
1951-60**

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**THE INSTITUTE OF DEVELOPMENT ECONOMICS**  
Old Sind Assembly Building  
Bunder Road, Karachi  
(Pakistan)

INSTITUTE

**THE INSTITUTE OF DEVELOPMENT ECONOMICS**

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(Pakistan)**

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# A Measure of Inflation in Pakistan 1951-60

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## P R E F A C E

Almost every member of the Institute's Monetary and Fiscal Section has been involved, at some time, in the collection and processing of data for this monograph. The need for a wholesale price index was recognized, and the project initiated, by Dr. Mahbubul Haq. The final checks and revisions of the manuscript were done while Dr. Richard C. Porter was in charge of the Section.

The work on Section II has been done primarily by Mr. Azizur Rahman Khan; that of Section III by Mr. S. U. Khan; and that of Section IV and the Appendix on Methodology by Dr. Porter. The basic ideas for the index, however, are mainly those of Dr. Haq.

Others who have participated in the project are : Mr. M. A. Janjua, Mr. Nuruddin Chowdhury, Mr. Abdul Majid Khan and Mrs. Masuda Pirzada.

Many organizations have been helpful in providing us with unpublished data. We are particularly grateful to the Central Statistical Office, the Planning Commission, the Ministry of Food & Agriculture, the Department of Fisheries, and the Central Board of Revenue. The finished work has also benefited from the comments and criticism of Dr. Fred Shorter, Mr. Parvez Hasan, Mr. Richard Mallon, and Dr. Irving Brecher. The non-Institute contributors are, of course, in no way responsible for the errors that undoubtedly remain.

As time passes, more and better data become available; even as this monograph is printed, many ways to improve it can be found. Nevertheless, it is hoped that our price index, in both concept and calculation, is sufficiently accurate to prove useful. More important is the possibility that it will spur others on to greater efforts in the field of price and income measurement.

*Joint Director  
Institute of Development Economics*

March, 1961.

## INTRODUCTION

There is need today in Pakistan for a general, reliable price index. Without it, our knowledge of past inflation, and hence our analysis of its causes, is less accurate. In an economy where heavy demand pressures are applied in order to accelerate growth, it is essential to discover, as exactly as possible, the extent to which these pressures have been and are being converted into rises in prices. It is the purpose of this monograph to present such a measure of annual price changes for the East and West Wings of Pakistan from 1951-52 to 1959-60.

All price indices (composed of more than one commodity) presently constructed in Pakistan are cost-of-living indices and thus are insensitive to price changes of goods not included in the market-basket upon which they are based.<sup>1</sup> The construction of a general price index is, however, not obviated by any shortage of price information; the C.S.O. publishes an excellent collection of wholesale (by market centres) and retail (by locale) price series,<sup>2</sup> and, where these series are not presented throughout the 1950s, other sources are often available. The lack of a general price index is, therefore, serious and capable of remedy.

Inflation and deflation are ubiquitous forces which manifest themselves in many ways. Any effort to summarize these forces in a single numerical measure necessarily invites argument. Even the centering of attention upon prices may be misleading; deflation generally appears in movements other than prices and inflationary pressures may dissipate themselves in queues or exchange and price controls. Nevertheless, prices are important and it is prices that will concern us here.

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<sup>1</sup>. These six cost-of-living (or consumers' price) indices (published by the Central Statistical Office) are for "government and commercial employees (clerical) in Karachi" and for "industrial workers", in (each of) Karachi, Lahore, Sialkot, Khewra and Narayangani. The C.S.O. also calculated, up to 1954, an *implicit* National Income price deflator; the reasons why this index was not published explicitly and why it was discontinued after 1954 are unknown. These indices are discussed further and compared to our index in Section III.

<sup>2</sup>. Published, with about two month's lag, in the C.S.O. *Statistical Bulletin*.

There are many accepted ways of combining dissimilar price movements into a single index. The index presented in this monograph is merely one of these ways, but it is believed to be a good measure of the changes in prices paid for goods by Pakistanis. More technically, it is an index of wholesale prices of commodities absorbed into final, domestic uses, weighted by the amounts so absorbed. The index is annual for 1951-52 through 1959-60 (July to June) with 1951-52 as the base year.

## SECTION I

### METHODOLOGY

Implicit in the definition of the index are answers to the basic questions which the construction of any price index faces: what prices? of what goods? with what weights? over what time period? and with which year as the base? Each of these decisions are discussed very briefly below (and at great length in the Appendix on Methodology).

#### 1. *Wholesale prices*

In an economy without imperfect markets, vagaries of transportation, temporary local shortages and fluctuating channels of distribution, one could reasonably expect a consistent relationship between retail and wholesale prices (and between prices in different areas). Since such an expectation would, in Pakistan, court certain disappointment, the choice of which price series to use is not trivial. But these very factors which make the difference between wholesale and retail prices so significant simultaneously render the calculation of an appropriate retail price series nearly impossible. The great number of different retail markets leads us to prefer consideration of the relatively few wholesale price quotations for each commodity.

#### 2. *Commodities absorbed into final, domestic uses*

The basic choice between goods entering a market and goods entering their final use is settled in favour of the latter, because their composition is less sensitive to changes in institutional factors (as, for example, the degree of vertical integration of firms). For a general price index, it would be difficult to defend a system of weights not

based upon either quantity produced in the economy or quantity absorbed by (or available to) the economy. If a national income deflator is desired, the former is the obvious choice; but, for a measure of inflation, the latter is to be preferred. The reason for this preference is seen by considering a good produced solely for export. If the price of such a good rises, the price rise is "exported"—that is, the price change has no direct effects upon prices paid by Pakistani users. Indirect effects there certainly will be, through the impact of the price change on incomes and profits, but this does not affect the measurement of inflation. Similarly, an appropriate index of prices in Pakistan must give weight to goods traded, though not currently produced, in Pakistan—*i.e.*, imported goods and goods released from stocks.

### 3. *Annual from 1951-52 to 1959-60*

No effort is made to construct the index for periods of less than a year in order to avoid the many problems of seasonal price movements. It is doubtful whether a quarterly (or monthly) price index could be given meaningful interpretation until greater knowledge of, and experience with, seasonal influences on prices has been accumulated in Pakistan. Thirteen years is not enough. The index has not been carried back to partition, but only to 1951-52, because in the first years after independence, the establishment of adequate data sources was just beginning. A price index for 1947-48 through 1951-52 would necessarily have such limited coverage as to be of questionable value.

### 4. *With 1951-52 as the base year*

While a normal, typical year is essential for the base of any fixed-weight index, the search for one in Pakistan's brief history is futile. If the Korean boom, its aftermath and the Plan period are to be avoided, 1951-52 emerges as the best choice.

The above paragraphs describe what the price index is; if the index is not to be misused, it is perhaps equally important to specify what it is not. It would be noted that the index is :

(1) *not a cost-of-living index*.—First, the prices used here are wholesale prices, whereas retail prices are clearly more appropriate to

the cost-of-living. (The previously mentioned problems in the use of retail prices would obviate any attempt to construct a meaningful cost-of-living index for all of East or West Pakistan). Second, many of the goods considered by our index are investment goods. Third, even for the consumer goods in this index, the weights have not been derived from consumer budgets and hence would only coincidentally be appropriate to a cost-of-living index.

(2) *not a national income price index*.—First, production is here explicitly rejected as a weighting system, although it would be appropriate to a national income price index, or deflator. Second, a deflator must either use retail prices or explicitly consider the value added by the retailing sector of the economy; neither has been done here. Third, there are several non-production sectors of the economy whose services are included in national income (*e.g.*, government, banking and insurance, transport and communications, etc.); they are here neglected, something a national income deflator cannot properly do. An effort is made in Section IV to estimate national income in current prices (over 1954-55 to 1959-60). The purpose of that effort (which is of quite uncertain accuracy) is chiefly to forestall the illegitimate use of the wholesale price index in this respect.

Three price indices are computed: (1) the Laspeyre, where the price movement of each commodity is weighted by the domestically absorbed value of that item in 1951-52; (2) the Paasche, where the price movement is weighted by the value in the current year; and (3) the Fisher, which is the geometric mean of the other two indices. Only this latter is given in the text of the monograph.

The remainder of this monograph presents and describes this index. Section II offers a description (with proximate causes) of the movements of the index over the past decade. In Section III, the index is compared to other price indicators. And, in Section IV, an attempt is made to estimate national income in current prices and a national income price deflator. Details on the procedures followed in the construction of the index are given in the Appendix on Methodology.



## SECTION II

### ANALYSIS OF THE INDEX

An attempt is here made to analyse the immediate, or proximate, causes of movements in the index for each wing. A general explanation would necessarily involve the money supply, foreign trade controls, success of crops, etc. This is not done here where the purpose is more modest—namely, to point out some salient features of the indices and to indicate the extent various prices move with the index of all prices.

The East Pakistan price index experienced more violent fluctuation during this period than West Pakistan. Whereas in West Pakistan the general price index (Fisher) fell from 100.00 in 1951-52 to 81.7 in 1954-55 and rose to 119.9 in 1959-60, in East Pakistan it declined from 100.00 in 1951-52 to 58.7 in 1954-55 and rose to 123.7 in 1959-60 (Table 1).

TABLE 1

| Year        | East Pakistan<br>Price Index | West Pakistan<br>Price Index | All Pakistan<br>Price Index |
|-------------|------------------------------|------------------------------|-----------------------------|
|             | (1)                          | (2)                          | (3)                         |
| 1951-52 ... | 100.0                        | 100.0                        | 100.0                       |
| 1952-53 ... | 96.4                         | 114.2                        | 105.3                       |
| 1953-54 ... | 76.1                         | 98.8                         | 87.5                        |
| 1954-55 ... | 58.7                         | 81.7                         | 70.2                        |
| 1955-56 ... | 83.4                         | 93.2                         | 88.3                        |
| 1956-57 ... | 118.2                        | 112.0                        | 115.1                       |
| 1957-58 ... | 113.4                        | 109.4                        | 111.4                       |
| 1958-59 ... | 117.6                        | 113.2                        | 115.4                       |
| 1959-60 ... | 123.7                        | 119.9                        | 121.8                       |

There are two chief reasons for the more violent fluctuation of the general price index of East Pakistan than of West Pakistan. First, the price of rice in East Pakistan was subject to a greater fluctuation (from a low of Rs. 13.25 per maund in 1954-55 to a high of Rs. 32.02 in 1959-60) than the price of wheat in West Pakistan (from a low of Rs. 8.94 per maund in 1954-55 to a high of Rs. 15.31 in 1952-53). Secondly, any fluctuation in the price of rice in East Pakistan induces a greater change in the price index than does an equal fluctuation in the price of wheat in West Pakistan (other things being equal) simply because of the heavier weight of rice in East Pakistan index.

TABLE 2

| Year        | Percentage Change in Rice Price in East Pakistan | Percentage Change in East Pakistan Price Index | Percentage Change in Wheat Price in West Pakistan | Percentage Change in West Pakistan Price Index |
|-------------|--|--|---|--|
|             | (1)  | (2)  | (3)   | (4)  |
| 1952-53 ... | -2.2   | -3.6   | +29.6   | +14.2  |
| 1953-54 ... | -27.1  | -21.0  | -20.8   | -13.5  |
| 1954-55 ... | -26.4  | -22.9  | -26.3   | -17.3  |
| 1955-56 ... | +58.0  | +42.0  | +21.7   | +14.1  |
| 1956-57 ... | +47.2  | +41.8  | +33.3   | +20.1  |
| 1957-58 ... | -7.3   | -4.1   | -9.9  | -2.3   |
| 1958-59 ... | +6.7   | +3.7   | +12.9   | +3.4   |
| 1959-60 ... | +5.0   | +5.2   | -10.2   | +5.9   |

The change in the index in each wing can always be largely explained by the change in the price of one heavily weighted food item.

In the case of East Pakistan, a change in the price of rice *always* induced a change in the price index in the same direction, and often by an equal amount. In the case of West Pakistan, a change in the price of wheat *almost always* induced a change in the general price index in the same direction, although usually by a smaller amount. Table 2 illustrates the situation.

The greater correspondence between the rice price in East Pakistan and the East Pakistan price index (than between the wheat price in West Pakistan and the West Pakistan price index)<sup>3</sup> is largely explained by the heavier weight of rice in East Pakistan than of wheat in West Pakistan. Wheat in West Pakistan averaged 24.4 per cent of the total weights during 1951-60 while rice in East Pakistan averaged 80.2 per cent of the total weights.<sup>4</sup>

It is useful to divide the non-rice/wheat<sup>5</sup> items into four broad categories: (1) non-rice/wheat agricultural goods; (2) those commodities which are either primarily exported or primarily imported, *i.e.*, the commodities whose prices are foreign-oriented; (3) those commodities which are primarily manufactured and consumed within the wing; and (4) those items which are primarily imported from the other wing.

Among these four groups of commodities, the prices of the non-rice/wheat agricultural items fluctuated most violently, the extent of fluctuation being in most cases more than 100 per cent of the minimum prices. But the changes in their prices also revealed a high degree of correlation with the changes in the index of the current year (as would be expected from casual analysis of either demand or supply). The following table contains the coefficients of correlation between the percentage price changes of these commodities (in each wing) and the percentage changes in the price index of that wing.

<sup>3</sup>. The coefficient of correlation between the changes in East Pakistan price index and the changes in rice price is +.99 and the coefficient of correlation between the changes in West Pakistan price index and the changes in wheat price is +.93. All correlations discussed in this section are presented in Appendix F.

<sup>4</sup>. Cf. Appendix E.

<sup>5</sup>. That is, all commodities other than rice in East Pakistan and other than wheat in West Pakistan.

TABLE 3

| Commodity        | Correlation:        |                     |
|------------------|---------------------|---------------------|
|                  | East Pakistan Index | West Pakistan Index |
|                  | (1)                 | (2)                 |
| 1. Wheat ... ..  | +.68                | (+.93)              |
| 2. Rice ... ..   | (+.99)              | +.51                |
| 3. Grams ... ..  | +.89                | +.74                |
| 4. Mash ... ..   | +.66                | +.81                |
| 5. Moong ... ..  | +.89                | +.88                |
| 6. Masoor ... .. | +.69                | +.60                |
| 7. Jawar*        | —                   | +.77                |
| 8. Bajra*        | —                   | +.80                |
| 9. Maize*        | —                   | +.91                |
| 10. Barley*      | —                   | +.87                |

\* Items 7-10 are not included in the East Pakistan Index.

The fluctuations in the prices of the items in the second group (with foreign-oriented prices) were considerably less than those of the first group but at least as violent as those of the third (domestically produced and consumed manufactures). It should, however, be remembered that a large part of the movements in the foreign-oriented prices was due to the devaluation in 1955. Changes in some of the prices of the commodities in the second category appear to have been fairly well correlated with the changes in the indices (motor tyres, motor tubes and kerosene oil) in both the wings.<sup>6</sup> But the rather tenuous relationship between the prices of the other commodities in this category and the indices makes it impossible to arrive at any generalization. This lack of relationship is to be expected, of course, from the very fact that the prices of those commodities are foreign-oriented.

<sup>6</sup> Cf. Appendix F.

The relationship between the domestically manufactured and consumed goods in the third category and the price index is rather tenuous in East Pakistan.<sup>7</sup> Although the changes in the prices of such goods in West Pakistan are not well correlated with the changes in the current year's price index, they are quite highly correlated in most cases with the changes in the *previous* year's price index. The following table shows these correlations for West Pakistan.

TABLE 4

| Commodity            | Coefficient of Correlation               |   |
|----------------------|--|---|
|                      | With changes of the current year's index | With changes of the previous year's index |
|                      | (1)                                      | (2)                                       |
| 1. Refined Sugar ... | +.08                                     | +.71                                      |
| 2. Cement ...        | +.27                                     | +.80                                      |
| 3. Coal ...          | +.27                                     | +.63                                      |
| 4. Motor Spirit ...  | +.28                                     | +.61                                      |
| 5. Fine Cloth ...    | +.03                                     | +.64                                      |
| 6. Medium Cloth ...  | +.19                                     | +.78                                      |
| 7. Coarse Cloth ...  | +.51                                     | +.64                                      |

This phenomenon may be explained in various ways, a full discussion of which is beyond the scope of this study. Our knowledge of the process of inflation, and its transmission between different sectors, in Pakistan is far from complete; it is hoped that this price index will encourage further research in this field.

Fluctuations in the prices of the commodities in the fourth category (commodities primarily imported from the other wing) was rather small (about 40 per cent increase over the minimum prices or less, except in the case of jute cloth in West Pakistan where it is 100 per cent). The relationship between the changes in the prices of these items and the changes in the indices is, as would be expected, uncertain.

<sup>7</sup> In fact there are few such items in the East Pakistan index.

In the remaining part of this section, the relation between the movements in the indices and the movements of the prices of individual commodities will be considered for each year. As has already been said above, the changes in the index can always be largely explained by changes in the price of wheat in West Pakistan and rice in East Pakistan. In this part, therefore, only the changes in non-rice/wheat prices will be discussed.

#### 1952-53

**West Pakistan** (Price Index 114.2: Increase 14.2%)

The prices of most agricultural commodities went up generally much more than the index. The prices of raw sugar, tea and fish went down to a considerable extent. The prices of manufactured items went up while those of imported items such as steel goods, autotyres and tubes, and coal actually declined.

**East Pakistan** (Price Index 96.4: Decrease 3.6%)

While the foreign-oriented prices (coal, autotyres and tubes, jute cloth) showed a declining trend, the prices of most of the other non-agricultural commodities rose from the preceding year. Among the agricultural items except rice, the prices of moong, masoor, raw sugar and tobacco declined while those of grams and mash rose.

#### 1953-54

**West Pakistan** (Price Index 98.8: Decrease 13.5%)

The prices of all the agricultural commodities except rice, mustard and masoor came down uniformly. The prices of salt, tobacco and tea increased. In case of manufactured items, prices of kerosene oil, steel, tyres and tubes, paper and jute cloth recorded some decline while those of others either remained constant or increased.

**East Pakistan** (Price Index 76.1: Decrease 21.0%)

Most agricultural prices declined. Prices of tea and tobacco increased while that of fish declined. In case of non-agricultural items only the

prices of gunny bags, matches and motor spirit showed slight increases.

#### **1954-55**

##### **West Pakistan (Price Index 81.7: Decrease 17.3%)**

There was a remarkable decline in the prices of all the agricultural goods in the index except tobacco. Prices of tobacco and fish increased to some extent. There was also a general decline in non-agricultural prices except steel.

##### **East Pakistan (Price Index 58.7: Decrease 22.9%)**

The prices of most of the agricultural commodities declined. There was also a general decline in the prices of non-agricultural items.

#### **1955-56**

##### **West Pakistan (Price Index 93.2: Increase 14.1%)**

Most of the agricultural prices recorded increases. Prices of refined sugar, tobacco and fish declined considerably. Prices of many of the manufactured items went down while the foreign-oriented prices (autotyres and tubes, and gunny bags) increased due to the devaluation of the Pak currency in August 1955.

##### **East Pakistan (Price Index 83.4: Increase 42.0%)**

The prices of most of the agricultural commodities moved upwards although in most cases to a lesser extent than the index. There was also a general increase in the prices of the manufactured items.

#### **1956-57**

##### **West Pakistan (Price Index 112.0: Increase 20.1%)**

All the agricultural prices moved upwards. Most of the manufactured goods recorded higher prices. The increase was especially remarkable in cases of some of the imported items such as steel goods, coal and auto-tyres.

**East Pakistan** (Price Index 118.2: Increase 41.8%)

There was general rise in the prices of all the agricultural items and most of the manufactured items.

**1957-58**

**West Pakistan** (Price Index 109.4: Decrease 2.3%)

The prices of most of the manufactured goods increased with the exception of matches and gunny bags. The prices of rice, bajra, barley, grams, masoor, refined sugar, and fish also recorded considerable increase.

**East Pakistan** (Price Index 113.4: Decrease 4.1%)

Among the agricultural commodities, the prices of wheat, raw sugar, tobacco and mustard increased while those of grams, mash, moong, and masoor declined. The prices of refined sugar, tea and fish increased considerably. Among the manufactured goods the prices either moved upward or remained unchanged (except in cases of matches and gunny bags, where it actually declined).

**1958-59**

**West Pakistan** (Price Index 113.2: Increase 3.4%)

The prices of rice, mash, moong, raw sugar and tobacco decreased whereas all other agricultural prices revealed an upward trend. The prices of refined sugar and fish moved sharply upward. Among the non-agricultural items the prices of cement, jute cloth, coal, gunny bags, matches and auto tyres and tubes declined. The prices of paper and steel goods declined sharply. The prices of other manufactured items either remained constant or moved only slightly.

**East Pakistan** (Price Index 117.6: Increase 3.7%)

The prices of most of the agricultural commodities actually declined. Noticeable price increase was found in the case of refined sugar, fish, and rape and mustard. The prices of some non-agricultural items

(*e.g.*, kerosene oil, coal, auto tyres, jute cloth and paper) increased while those of others (*e.g.*, gunny bags, matches, cotton textiles and auto tubes) declined.

**1959-60**

**West Pakistan** (Price Index 119.9: Increase 5.9%)

The price index in West Pakistan rose despite a 10.2 per cent decline in the price of wheat. This unusual phenomena occurred because all the agricultural, manufactured, and foreign-oriented commodities in the index (except bajra, moong, mustard and coal) recorded price increases.

**East Pakistan** (Price Index 123.7: Increase 5.2%)

Agricultural prices went up generally at least as much as the index. The prices of manufactured commodities and foreign-oriented goods also increased (except in cases of kerosene, motor tyres, and cigarettes).

### SECTION III

#### COMPARISON WITH OTHER PRICE INDICATORS

A comparison of the wholesale price index with other price indices is helpful in assessing the accuracy and bias of the index. Of course, no two price indicators measure quite the same thing, but wide differences require explanation. In this section, the wholesale price index is compared with the following:

- (1) Cost-of-living indices for industrial workers in selected centres.
- (2) Consumers price index for government and commercial employees (clerical) in Karachi.
- (3) Indices of import and export prices.

A simple average of the C.S.O. cost-of-living indices for industrial workers at Karachi, Lahore, Khewra, and Sialkot is used to represent



a West Pakistan cost-of-living index; Narayanganj, the only centre in East Pakistan for which a cost-of-living index is available, is used for East Pakistan.<sup>8</sup>

In both wings, the cost-of-living indices reflect, as does the wholesale price index, a general decline in prices up to 1954-55 and a rise thereafter. But the extent of the price changes is not the same. The cost-of-living index at Narayanganj declines 16 per cent during the pre-Plan period and rises 39 per cent during the Plan period, in contrast to a 41 per cent decline and a 111 per cent rise in the wholesale price index. Similarly, in West Pakistan, the cost-of-living index *rose* 4 per cent over 1951-55 and increased 18 per cent over 1955-1960, as opposed to a decline of 18 per cent and a rise of 47 per cent in the wholesale price index. In short, the cost-of-living indices have moved much less, in both directions, than the wholesale price indices.

There are several possible explanations for this difference in sensitivity to price changes. Most obvious is the fact that the cost-of-living indices are based largely on controlled prices, which move slowly and reluctantly.<sup>9</sup> While the weights assigned to food items in the indices are comparable to those in the wholesale price indices,<sup>10</sup> the other weights are quite different. The cost-of-living indices are based upon expenditures (in 1944) of workers having an income of Rs. 80-100; the wholesale price index weights rest upon amounts of *goods* entering final, domestic use. Thus, the cost-of-living index includes the damping effect of rents and services, whose prices have moved less violently over the 1950's. It is also possible that retailers' real incomes, as with other services, move inversely with the price level; if this is so, a cost-of-living index, which uses retail prices, would move relatively less than a wholesale price index.

Despite the differences in the volatility of the cost-of-living and

<sup>8</sup>. These indices are presented in columns (4) and (5) of Table 5. All indices in Table 5 are converted to a 1951-52 base in order to make them comparable to the wholesale price index (presented for East, West, and all-Pakistan in columns (1) through (3) of Table 5).

<sup>9</sup>. See, for example, the relationship of controlled and free market prices of wheat in West Pakistan and rice in East, given in Note 2 of the Appendix on Methodology.

<sup>10</sup>. Foods receive 63 per cent of the total weights in the West Pakistan cost-of-living index and 75 per cent in East Pakistan. For the weights in the wholesale price indices, see Appendix E.

wholesale price indices, the year-to-year movements should be checked for inexplicable differences in direction. In East Pakistan, inverse movements occur in 1952-53 and 1957-58; in West Pakistan, in 1955-56, 1957-58, and 1958-59. The explanation of these differences primarily rests, in every case, in the diverse movements of free and controlled prices.<sup>11</sup>

The C.S.O. Consumers Price Index for Government and Commercial Employees (clerical) in Karachi<sup>12</sup> moves very closely with the West Pakistan cost-of-living index, showing a 1 per cent rise in the pre-Plan period and a 19 per cent rise in the Plan period. Although based upon a higher family income (Rs. 240), this index is computed in very similar fashion to the industrial workers' cost-of-living indices. Thus, it differs from the wholesale price index in the same way.

To the extent that urban workers buy at controlled prices, the C.S.O. cost-of-living indices are useful. And even if they do purchase significantly at free prices, the differences in concept between a cost-of-living index and the wholesale price index are sufficiently great that the two should never be considered interchangeable. The wholesale price index is *not* a cost-of-living index.

A comparison of the all-Pakistan wholesale price index with the C.S.O. indices of import and export prices (columns (7) and (8) Table 5) indicates that wholesale prices moved much more closely with import prices than export prices. This is to be expected since imports are considered in the wholesale price index while exports are not. Nevertheless, a large proportion of Pakistan's imports consists of items (such as chemicals, machinery and transportation equipment) which are not included in the index, so that the similarity of movement of the wholesale price index and import prices must be considered somewhat coincidental. Certainly the manner in which changes in export and import prices affect the domestic price level is too complex to be casually explained.

<sup>11</sup>. Some indication of this can be seen in Note 2 of the Appendix on Methodology.

<sup>12</sup>. Given in column (6) of Table 5. It is available only on a calendar year basis for several years and hence has been reconstructed, for comparability, with 1952 as base and using 1952 as 1951-52, 1953 as 1952-53, etc. Only the first seven months of 1960 are used for 1959-60.

TABLE 5  
Price Indicators in Pakistan

| Year       | Wholesale Price Indices |                   |                  | Cost of Living Indices |                   | Consumers Price Index (Karachi) (6) | Import Price Index (7) | Export Price Index (8) |
|------------|-------------------------|-------------------|------------------|------------------------|-------------------|-------------------------------------|------------------------|------------------------|
|            | East Pakistan (1)       | West Pakistan (2) | All Pakistan (3) | East Pakistan (4)      | West Pakistan (5) |                                     |                        |                        |
| 1951-52... | 100                     | 100               | 100              | 100                    | 100               | 100                                 | 100                    | 100                    |
| 1952-53... | 96                      | 114               | 105              | 104                    | 111               | 102                                 | 82                     | 59                     |
| 1953-54... | 76                      | 99                | 88               | 97                     | 109               | 102                                 | 90                     | 57                     |
| 1954-55... | 59                      | 82                | 70               | 84                     | 104               | 101                                 | 86                     | 60                     |
| 1955-56... | 83                      | 93                | 88               | 100                    | 103               | 104                                 | 128                    | 73                     |
| 1956-57... | 118                     | 112               | 115              | 104                    | 112               | 112                                 | 152                    | 82                     |
| 1957-58... | 113                     | 109               | 111              | 111                    | 120               | 116                                 | 162                    | 81                     |
| 1958-59... | 118                     | 113               | 115              | 111                    | 114               | 110                                 | 164                    | 74                     |
| 1959-60... | 124                     | 120               | 122              | 116                    | 123               | 120                                 | 165                    | 73                     |

SOURCES: Columns (1)—(3); Appendix C.  
Columns (4)—(8), C.S.O. *Statistical Bulletins*.

#### SECTION IV

##### NATIONAL INCOME IN CURRENT PRICES

The need for a series of national income in current prices is so great that there is real danger of the incorrect use of the wholesale price index for this purpose. To anticipate and forestall such abuse, this section derives, from the material used in the wholesale price index, a current price national income series and the deflator (*i.e.*, price index) implicit in the constant price national income conversion. The procedure is a series of assumptions and approximations; and the error in the results may be quite large.

From 1949-50 to 1953-54, the C.S.O. published estimates of national income both in constant and in current prices; these are given in columns (1) and (2), respectively, of Table 6. From 1954-55, however, only the constant price national income has been calculated. The early estimates of constant price national income have been revised slightly since 1955 (column (3) of Table 6), and it seems advisable to revise proportionately the early estimates of current price national income (column (4)). The estimates of columns (3) and (4) are used throughout this section.

TABLE 6

## National Income of Pakistan

(In million Rs.)

| Year        | Earlier Estimates |                  | Later Estimates   |                  |
|-------------|-------------------|------------------|-------------------|------------------|
|             | (Constant Prices) | (Current Prices) | (Constant Prices) | (Current Prices) |
|             | (1)               | (2)              | (3)               | (4)              |
| 1949-50 ... | 17204             | 16815            | 17238             | 16849            |
| 1950-51 ... | 18266             | 17151            | 18324             | 17205            |
| 1951-52 ... | 18066             | 18469            | 18161             | 18566            |
| 1952-53 ... | 18339             | 18275            | 18482             | 18418            |
| 1953-54 ... | 19213             | 18156            | 19447             | 18377            |

SOURCES: Columns (1) and (2): C.S.O. *Pakistan Statistical Yearbook*, 1955, pp. 39-44.

Column (3): Government of Pakistan, *Budget*, 1960-61, Statistics Section, p. I.

Column (4): equals the products of columns (3) and (2) divided by column (1).

There are many ways of viewing the components of national income. Let us consider the following breakdown:

$$(1) \quad Y = C_g + C_s + I_f + I_i + G_g + X - M$$

where:  $Y$  is national income in current prices,

$C_g$  is consumption of goods,

$C_s$  is consumption of services,<sup>13</sup>

$I_f$  is investment in fixed capital,

$I_i$  is inventory investment,

$G_g$  is government purchase of goods,

$G_s$  is government purchase of services,<sup>13</sup>  
 $X$  is export of goods and services, and  
 $M$  is imports of goods and services.

From this equation, some idea of the coverage of the wholesale price index can be derived (and this will prove necessary in order to estimate current price national income). *Ideally*, the index covers all the goods absorbed domestically, *i.e.*,  $C_g$ ,  $G_g$ , and  $I_f$ . But these quantities cannot be calculated directly from the national income data.

Equation (1) can be rewritten with the terms of the ideal coverage of the index,  $(C_g + G_g + I_f)$ , on the left:

$$(2) \quad (C_g + G_g + I_f) = Y - I_f - (C_s + G_s) - (X - M)$$

In order to estimate the ideal coverage, one needs to know all the terms on the right side of (2). National income in current prices ( $Y$ ) is given by the C.S.O. through 1953-1954. Inventory investment may be cursorily handled by assuming it to be 1 per cent of national income.<sup>14</sup> There is no data on household and government *consumption* of services, but there is data for *production* of services. Since consumption of services equals production less exports plus imports of services, equation (2) may be rewritten:

$$(3) \quad (C_g + G_g + I_f) = .99 Y - P_s - (X - M)_g$$

Where  $P$  is output of services<sup>15</sup> and  $(X - M)_g$  is the export of goods less the import of goods.<sup>16</sup>

<sup>13</sup>. Services are here more broadly defined than usual; they include banking and insurance, transport and communications, construction, rental income, and wholesale and retail trade as well as what are usually considered services.

<sup>14</sup>. A value typical of countries for which this data is available.

<sup>15</sup>. In accordance with the broad definition of services here adopted,  $P_s$  is found by subtracting the product of agriculture, mining and manufacturing from national income.

<sup>16</sup>. This is simply the "balance of trade" as computed by the C.S.O. and available on a July-June basis in the State Bank annual *Currency and Finance Reports*.

Thus, for the years in which current price national income data is available and the wholesale price index calculated (*i.e.*, 1951-52 through 1953-54), the ideal coverage of the index,  $(C_g + G_g + I_r)$ , can be computed from equation (3) (column (3) of Table 7).

The actual coverage (*i.e.*,  $\sum_i p_i^t q_i^t$ , as given in Appendix C) is in column (4) and the ratio of actual to ideal coverage (column (4) divided by column (3)) in column (5).

TABLE 7  
Coverage of Wholesale Price Index  
(In million Rs.)

| Year        | Output of Services, $(P_s)$ | Balance of Trade $(X-M)_g$ | Ideal Coverage | Actual Coverage | Fraction Covered |
|-------------|-----------------------------|----------------------------|----------------|-----------------|------------------|
|             | (1)                         | (2)                        | (3)            | (4)             | (5)              |
| 1951-52 ... | 6262                        | -233                       | 12351          | 9256            | .75              |
| 1952-53 ... | 6003                        | 126                        | 12105          | 9798            | .81              |
| 1953-54 ... | 5998                        | 120                        | 12075          | 9006            | .75              |

This suggests that the index covers, in fact, about 75-80 per cent of the value of goods that it would ideally comprise. The estimate of  $(C_g + G_g + I_r)$ , derived from the actual coverage of the index, permits us to estimate current price national income in the years since 1953-54. Rearranging the terms of equation (3), and taking the ratio of actual to ideal coverage as .77:

$$(4) \quad Y = \frac{1}{.99} \left[ \frac{1}{.77} \sum_i p_i^t q_i^t + P_s + (X-M)_t \right]$$

The only problem in estimating current price national income from the quantities on the right-side of equation (4) is  $P_s$ . One would expect that the C.S.O., when it ended the current price national income series, would also stop collecting  $P_s$  in current price terms. Fortunately, however, the values of  $P_s$  used in the constant price national income calculations are largely in current prices.<sup>17</sup>

As a result, constant price national income less that part of it originating in agriculture, mining and manufacturers may be used as

<sup>17</sup>. See C.S.O., *Statistical Bulletin*, Feb. 1955, pp. 149-154.

an approximation to the value of output of services in current prices.<sup>18</sup> The current price national income estimates for 1954-55 through 1959-60 are given below (in column (4)).

TABLE 8  
Current Price National Income Estimates

(In million Rs.)

| Year        | Actual Coverage of Index | $P_s$ | $(X-M)_c$ | Estimate of National Income (current prices) | C.S.O. National Income (current prices) |
|-------------|--------------------------|-------|-----------|--|---|
|             | (1)                      | (2)   | (3)       | (4)  | (5)                                     |
| 1951-52 ... | 9256                     | 6262  | -233      | 18232  | 18566                                   |
| 1952-53 ... | 9798                     | 6003  | 126       | 19044  | 18418                                   |
| 1953-54 ... | 9006                     | 5998  | 120       | 17994  | 18377                                   |
| 1954-55 ... | 7266                     | 6265  | 120       | 15981  | ..                                      |
| 1955-56 ... | 8787                     | 6059  | 458       | 18110  | ..                                      |
| 1956-57 ... | 13726                    | 6270  | -727      | 23605  | ..                                      |
| 1957-58 ... | 13262                    | 6544  | -630      | 23371  | ..                                      |
| 1958-59 ... | 12958                    | 6585  | -253      | 23395  | ..                                      |
| 1959-60 ... | 15608                    | 6536  | -618      | 26453  | ..                                      |

Column (5) is reprinted from column (4) of Table 6 for comparative purposes. Of course, columns (4) and (5) are *far* from independent estimates.<sup>19</sup>

The next task is to calculate the national income price index, or deflator. This can be defined by any of the three formulas given earlier (Laspeyre, Paasche or Fisher) where the p's refer to sale price and the q's to the quantity domestically produced for final use or export.<sup>20</sup> Knowledge of current price and constant price national income are by

<sup>18</sup>. This was also done in Table 7, column (1).

<sup>19</sup>. The difference between columns (4) and (5) is attributable to the fact that the actual coverage of the index is not 77 per cent of the ideal in each year (see Table 7, column (5)).

<sup>20</sup>. Under the value added approach to national income, the p's refer to value added per unit of output. The result is conceptually identical.

themselves insufficient to permit computation of the various price indices. If, however, it is assumed that the Laspeyre and Paasche formulas yield the same values, the national income deflator can be approximated easily by:

$$(5) \text{ Deflator (t)} = \frac{\text{National Income(t) in current prices}}{\text{National Income(t) in constant prices}} \cdot \frac{\text{National income(b) in constant prices}}{\text{National Income(b) in current prices}}$$

Where t is the current year and b is the base year. (This formula is derived in Note 1 at the end of this section). We shall set b = 1951-52 in order to compare the deflator to the wholesale price index. The current and constant price national incomes, the national income deflator and the wholesale price index are presented in Table 9 below:

TABLE 9

(In million Rs.)

| Year        | National Income (constant prices) | National Income* (current prices) | National Income Deflator | Wholesale Price Index |
|-------------|-----------------------------------|-----------------------------------|--------------------------|-----------------------|
|             | (1)                               | (2)                               | (3)                      | (4)                   |
| 1949-50 ... | 17238                             | 16849                             | 96                       | —                     |
| 1950-51 ... | 18324                             | 17205                             | 92                       | —                     |
| 1951-52 ... | 18161                             | 18566                             | 100                      | 100                   |
| 1952-53 ... | 18482                             | 18418                             | 97                       | 105                   |
| 1953-54 ... | 19447                             | 18377                             | 92                       | 88                    |
| 1954-55 ... | 19857                             | 15981                             | 79                       | 70                    |
| 1955-56 ... | 19516                             | 18110                             | 91                       | 88                    |
| 1956-57 ... | 20785                             | 23605                             | 111                      | 115                   |
| 1957-58 ... | 20987                             | 23371                             | 109                      | 111                   |
| 1958-59 ... | 20927                             | 23395                             | 109                      | 115                   |
| 1959-60 ... | 21897                             | 26453                             | 118                      | 122                   |

\*CS.O. estimates through 1953-54; the estimates of column (4), Table 8 thereafter.



Only once does the national income deflator move in a different direction than the wholesale price index, and this reflects the tremendous drop in export prices over 1951-53, a movement which does not directly influence the wholesale price index. The relatively greater stability of the national income deflator derives from its inclusion of services whose prices move less violently from year to year.

Finally, it should be repeated that *much less* confidence should be placed in the national income deflator series than in the wholesale price index. The C.S.O. has recently shown interest in renewing its estimates of current price national income; if and when that occurs, the estimates made in this section will become *obsolete*. For the interim, however, these estimates may be of value, despite their possibly serious errors.

**Note 1. Derivation of the National Income Deflator:**

Let  $Y_t$  be national income in current prices in year  $t$  and  $X_t$  be national income in constant prices in  $t$ . The "constant prices" are the simple average of prices over the four years, 1949-50 to 1952-53. Let  $t=0$  in 1949-50. Then,

$$(6) Y_t = \sum_i p_i^t q_i^t$$

$$(7) X_t = \sum_i \left[ \frac{p_i^0 + p_i^1 + p_i^2 + p_i^3}{4} \right] q_i^t$$

Where  $p$  is the sale price (less indirect taxes) and  $q$  is the quantity domestically produced for final use or export.

The national income price index is, by Laspeyre's formula (see Appendix on Methodology):

$$(8) \frac{\sum_i p_i^t q_i^0}{\sum_i p_i^0 q_i^0}$$

and by Paasche's formula,

$$(9) \frac{\sum_i p_i^t q_i^t}{\sum_i p_i^0 q_i^t}$$

where the base year,  $t=2$  is 1951-52. The assumption (or approximation) that these formulas are equivalent is a euphemistic way of saying that

$$(10) \quad q_t^i = a_t q_2^i$$

where  $a_t$  may vary with  $t$  but does *not* vary with  $i$ —in other words, that the quantities of all goods change, between any two years, by the same proportion. If this is so, the two index number formulas become identical; *i.e.*, equation (9) becomes:

$$(11) \quad \text{Deflator } (t) = \frac{\sum_i p_t^i q_t^i}{a_t \sum_i p_2^i q_2^i} = \frac{Y_t}{a_t Y_2}$$

Under this assumption (10), equation (7) may be re-written as

$$(12) \quad X_t = \frac{a_t}{4} \left[ \frac{1}{a_0} \sum_i p_i^0 q_i^0 + \frac{1}{a_1} \sum_i p_i^1 q_i^1 + \frac{1}{a_2} \sum_i p_i^2 q_i^2 + \frac{1}{a_3} \sum_i p_i^3 q_i^3 \right]$$

and, since  $a_2 = 1$ ,

$$(13) \quad \frac{X_2}{X_t} = \frac{1}{a_t}$$

Equations (11) and (13) uniquely determine the national income deflator for year  $t$  (by both Laspeyre and Paasche, by assumption):

$$(5) \quad \text{Deflator } (t) = \frac{X_2}{Y_2} \cdot \frac{Y_t}{X_t}$$

This is formula (5) of the text.

#### APPENDIX ON METHODOLOGY

The wholesale price index is computed for East and West Pakistan separately and for all Pakistan by means of three formulas: Laspeyre's,

$$(14) \quad 100 \cdot \frac{\sum_{i=1}^n p_t^i q_1^i}{\sum_{i=1}^n p_1^i q_1^i}$$

Paasche's

$$(15) \quad 100. \frac{\sum_{i=1}^N p_i^t q_i^t}{\sum_{i=1}^N p_i^b q_i^t}$$

and Fisher's "ideal" formula,

$$(16) \quad 100. \sqrt{\frac{\sum_{i=1}^N p_i^t q_i^b \sum_{i=1}^N p_i^b q_i^t}{\sum_{i=1}^N p_i^b q_i^b \sum_{i=1}^N p_i^t q_i^t}}$$

Each of these three formulas yields a price index for the year t, where the symbols have the following meaning:

$p_i^t$ : the price of the  $i^{\text{th}}$  commodity in the  $t^{\text{th}}$  year,

$q_i^t$ : the quantity weight of the  $i^{\text{th}}$  commodity in the  $t^{\text{th}}$  year.  
 the subscript i: refers to the  $i^{\text{th}}$  good. There are  $i=1, 2, \dots, N$  different commodities in the index; N is 25 in the East Wing index, 35 in the West Wing index.

The superscript t: refers to the value of the variable in the  $t^{\text{th}}$  year.  $t=0, 1, \dots, T$  in this index;  $t=0$  refers to 1951-52,  $t=b$  refers to the base year (in this paper  $b=0$  since the base year has been chosen as 1951-52) and  $t=T=8$  refers to 1959-60.

For the base year (when  $t=b$ ), each of the three formulas yields a value of 100.

This is not the place to discuss at length the merits and demerits of each formula.<sup>21</sup> The chief merit of Laspeyre's formula is that the

<sup>21</sup> That is sufficiently done elsewhere. Cf. I. Fisher, *The Making of Index Numbers*, Houghton Mifflin Co., Boston & New York 1927. pp. 538 or more recently, A. Mudgett, *Index Numbers*, Wiley, New York, 1951. pp. 135.

change in the index is not influenced by a change in the weights; its chief demerit is that the weights can become obsolete as time passes (changed structure of production, appearance of new goods, etc.). The merits and demerits of Paasche's formula are the reverse of those of Laspeyre's. Fisher's formula, the geometric mean of the two other formulas, is "ideal" only in that it is the simplest reliable formula that is "reversible" (*i.e.*, the index for year 1, using year 0 as base, is the inverse of the index for year 0, using year 1 as base). In Appendix C, the indices according to all three formulas are given; in the text, only the index derived by Fisher's formula is presented.

If one looks carefully at the formulas, the five basic questions of index-number calculation can be seen in their symbols: What prices ( $p$ )? Of what goods, *i.e.*, what coverage ( $i=1, \dots, N$ )? With what weights<sup>22</sup> ( $q_i$ )? Over what time period ( $t=0, 1, \dots, T$ )? And with which year as the base ( $b$ )? The remainder of this section consists of a detailed discussion of these choices.

#### 1. Prices<sup>23</sup>

The decision to use wholesale rather than retail prices avoids the necessity of choosing meaningfully from thousands of retail prices. The choice of wholesale prices reduces the magnitude of the problem but does not remove it altogether; while wholesale price figures are available at only a few market centres, they are generally available at more than one. As with retail prices, if there were no market imperfections between different centres it would be legitimate to use the prices of any one centre as representing prices everywhere. If there is market imperfection, some error is involved wherever any one price is used, although it can be made small by choosing a "typical" price and an "important" centre.<sup>24</sup>

In the case of the East and West Wings of Pakistan, prices of the same commodities have often had diverse trends because of trans-

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<sup>22</sup> Strictly, the  $q$ 's are not weights, but quantities; see Appendix E.

<sup>23</sup> The specific sources of price data (and method of computation) for each commodity is given in Appendices A and B.

<sup>24</sup> A more rigorous discussion of this statement and of the words in inverted commas is conducted in Note 1 at the end of this section.

portation bottlenecks and governmental inter-zonal trading restrictions, together with the different consumption patterns of the two regions. For this reason, in the construction of the all-Pakistan index, a particular commodity in the East Wing and that same commodity in the West Wing are treated as two distinct commodities.

Within each Wing, however, the price at one centre is taken as representative of prices at different centres; it would be better to use prices at each centre (weighted by the quantity sold at that centre), but such a course is not possible with existing data. Thus, one centre is chosen for each good—"important" and "typical" insofar as possible. For similar reasons, where different qualities of a commodity were traded at a particular centre, the price of a "typical" and "important" grade is used insofar as possible.<sup>25</sup>

The proper handling of a given commodity at a given centre at *different times of the year* also presents problems. Ideally, perhaps, one should treat a single commodity at different times as equivalent to different commodities; such a procedure would be, even if possible, enormously time-consuming. Here, it is assumed that the seasonal pattern of prices and sales is invariant—this permits average price over the year (from weekly or monthly data) to be considered as *the* price of the commodity (at a particular centre) for that year.

<sup>25</sup> In the case of thirteen commodities (eight in the West and five in the East Wing), it was either not possible or not reasonable to use, for the entire period, a *single wholesale price quotation for one grade at one centre*. These commodities are listed below:

| <i>WEST WING</i>  | <i>EAST WING</i> |
|-------------------|------------------|
| Raw Sugar (C)     | Tea (G)          |
| Tea (C, G)        | Matches (R, S)   |
| Tobacco (C)       | Cloth (C, R)     |
| Matches (C, R, S) | Paper (G, S)     |
| Fine Cloth (S)    | Coal (G, S)      |
| Paper (G, S)      | Rice (S)         |
| Cement (G, S)     |                  |
| Coal (G, S)       |                  |

The letters in parentheses indicate the exceptional treatment the commodity received.

- C: Average price of more than one *centre*
- G: Average price of more than one *grade*
- R: *Retail* prices are used (adjusted down for retailers' profit margins).
- S: More than one price *series* used over the period.

The details of all sources and adjustments are given in Appendices A and B.

— A further complication arises from the simultaneous existence of free-market prices and controlled prices for the same product, same time, and same place. Indiscriminate use of controlled prices would lead to serious under-estimation of the actual changes in the price level, and of free-market prices to over-estimation.<sup>26</sup> Ideally, a partly rationed (or price-controlled) good might be considered as two goods, the controlled price being used for the part sold through the controlled market and the free-market price being used for the remainder. This cannot be done in fact because of the inadequacy and incomparability of the data on controlled market sales. As an approximation, for these goods which are sold *primarily* in controlled markets, the controlled price is used.<sup>27</sup> For all other goods, *only* the free market price is used. To the extent that these goods are also traded on controlled markets at lower prices, this procedure leads to error. The extent of this error is, however, probably small.<sup>28</sup>

Two final, and perhaps conceptually the most intractable, price problems involve the valuation of farm products which never leave the grower (or, more generally, never enter the monetized sector of the economy). In the first place, should such commodities be considered in an index of price change at all? All economists would agree that inflation is a phenomenon of a money economy, some would argue that the concept is applicable only to the monetized sector. But this latter claim applies only if the non-monetized part of the economy is quite far removed, literally and figuratively, from the monetized sector. Because farmers, in Pakistan, *choose* not to sell that part of their output which they consume themselves (though this choice may be so customary that the farmer is barely aware of it), the prices of self-consumed farm products should be, and are, included in the price index. This decision, however, raises the second problem: at what price should self-consumed output be valued? To this, there is no

<sup>26</sup>. If no distinction between actual and "suppressed" inflation were desired, free-market prices might be preferred; even then, they would probably still over-estimate the price level change that would have occurred in the absence of controls (because the income effect of lower controlled prices contributes to higher free prices.)

<sup>27</sup>. In this category are, for the East Pakistan index, wheat and refined sugar, and for the West Pakistan index, rice and refined sugar.

<sup>28</sup>. Estimates of the error in the cases of wheat in West Pakistan and rice in East Pakistan are made in Note 2 at the end of this section.

easy answer; here such production is valued at the same wholesale price as that output which is in fact delivered through a wholesale marketing centre. It should be clear to the user of this index that these are crucial decisions for the movements of the index are greatly affected by them.

## 2. Coverage

“Ideal” coverage by this index would imply inclusion of *all goods delivered into final use within Pakistan*. This “ideal” coverage can of course never be attained with the less-than-perfect data with which one necessarily deals. Nevertheless, in the effort to achieve a close approximation to it, two chief sources of error must be attacked: first, that of including a particular item twice (or more) and second, that of failing to include a particular item at all.

Double counting, the first source of error, must be avoided lest the price changes of a particular commodity be given undue influence in the index. Thus, raw cotton is excluded from the index, for its price changes are reflected through finished textiles. Similarly raw jute and sugar-cane are either directly exported or further processed before attaining final use in Pakistan. Less easy is the disposition of goods which, by their nature, are sometimes final and sometimes intermediate, *e.g.*, coal or electricity.

Failure to include, the second source of error, arises from the paucity of data for certain commodities. Insufficient information to permit inclusion in the index exists, in the agricultural sector, for fruits, vegetables, meats, milk and dairy products and, in manufactures, for many products of small-scale industry and for products whose quality and/or composition has altered over the period. To a certain extent these gaps can be covered by using, in the index commodities that are known to be intermediate in the production of such (reluctantly excluded) commodities. The sum of two errors, counting some intermediate goods and failing to count some final goods, will often yield the best result. For example, adequate data exists for tobacco and cigarette production but not for *bidi* output; therefore tobacco is included in the index as a proxy for *bidis*.<sup>29</sup> There is still

<sup>29</sup>. More accurately, that part of tobacco which does not enter cigarette production is included in the index; this elimination is required to avoid double-counting of the tobacco in cigarettes.

error—the wholesale price of *bidis* differs from that of tobacco and will correlate less than perfectly with that of tobacco—but to exclude both tobacco and *bidis* would certainly incur larger error. For this reason several other intermediate (or partially intermediate) goods are included in computing the index, *e.g.*, steel tubing, gunny bags, electricity, cement. It is therefore possible that the index will over-cover or under-cover its “ideal”—that is, either source of error may predominate. In fact, the second source is far more important; despite the device of including some intermediate goods, many commodities are necessarily, but incorrectly, omitted. The analysis of Section IV suggests that the coverage of the index is about 75-80 per cent of its ideal, or perfect, coverage. This evidence, however, is drawn entirely from the early years of the index (1951-52 to 1953-54), and the error in all of the analysis of Section IV is possibly large.

Even this evidence does not, of course, imply that there is equally complete coverage of all sub-groups of commodities (as, for example, food, agricultural non-food, primarily imported, etc.). It is probably safe to suggest (as an untestable hypothesis) that the index covers agricultural goods much more completely (perhaps 85-95 per cent of “ideal”) than non-agricultural. To the extent that this is true, the index reflects over-much the movements in prices of agricultural goods; and, since these are the more volatile prices of the Pakistan economy, the index may overstate the extent of general price changes.

Some tests are made in Appendix D which suggest that the volatility of the price index is *not* primarily the result of undercovering non-agricultural commodities. Because of this and because any adjustment of the weights to compensate for uneven coverage is arbitrary, it is believed that making no such adjustments represents the best procedure.<sup>30</sup>

### 3. *Weights*

In the construction of the index (for each wing), the price of each good (in that wing) is weighted by the amount absorbed by final users

<sup>30</sup>. There is also the temptation to produce an overly volatile index in order partly to compensate for the overly sluggish character of the other price indices presently computed in Pakistan.



(in that wing). The net absorption of the  $i^{\text{th}}$  commodity in the  $t^{\text{th}}$  year ( $q_i^t$ ) is computed as follows:

$$(17) \quad q_i^t = P_i^t + S_i^t + I_i^t + M_i^t - E_i^t - X_i^t$$

where: P is production,

S is change in stocks (in equation (17) the + sign applies when stocks decrease, the — when stocks increase),

I is imports from foreign countries,

M is imports from the other Wing,

E is exports to foreign countries,

X is exports to the other wing.

The superscript  $t$  refers to the year, and the subscript  $i$  refers to the commodity. The problems faced and the assumptions made in deriving the availabilities,  $q_i^t$  from the six right-side components (in 17) are discussed below.<sup>31</sup>

(a) *Production (P) and Change in Stocks (S).*—No problems would be encountered if all production and stocks data were published on a July-June basis by wings. In some cases this is so, and in many other cases it can be achieved by resort to unpublished data (of C.S.O., Central Board of Revenue, Department of Fisheries, etc.). Generally, adequate production data is obtained, but stocks figures are either not available or very inadequate.

Where stocks data are not available, much bias may be introduced naively using production figures under the assumption that stocks remain unchanged from one June to the next. Nevertheless, in the case of manufactures, whenever figures for stocks are not available, this assumption is made. In the case of agricultural commodities, it is

<sup>31</sup>. The specific sources of data and the values of P, S, I, etc. for each commodity are given in Appendices A and B. The resulting values of  $q_i^t$  are also there. The "weight" of each goods in the index is discussed and presented in Appendix E.

assumed that stocks become negligible at some time of the year but that there is a lag between the time these goods are harvested and the time they are made available to final users. For simplicity, a three-month lag is assumed. Thus, those crops harvested in *March-June* are assumed to be absorbed (*i.e.*, become available and exhausted) during the *subsequent* July-June period; those crops harvested in *July-February* are assumed to be absorbed during the *current* July-June period.<sup>32</sup> This assumption is of course not accurate,<sup>33</sup> and may be responsible for bias in the index; but no better is readily available from present data.

(b) *Foreign Trade (I, E)*.—Data for imports and exports are published by C.S.O. for most commodities on an all-Pakistan basis. Unpublished data of C.S.O. is used to place these figures on a wing basis.

(c) *Inter-wing Trade (M, X)*.—These figures are collected by C.S.O., although, for some commodities, the inter-wing trade data cannot be derived because the C.S.O. categories are not appropriate to those of this index. In these cases, the inter-wing trade is assumed zero. This source of error is not significant because the inter-regional trade of all such commodities is certainly small.

Some problems arise concerning the internal consistency of the data. For each commodity (consider the  $i^{\text{th}}$ ) the data for production ( $P_i^t$ ) are generally gathered from the same source for all the years ( $t=0, 1, \dots, T$ ); so also for stocks ( $S_i^t$ ), for imports from foreign countries ( $I_i^t$ ), etc. To the extent that one dares “expect” anything of data-collection, it is that a single time series, collected by a single agency, will be internally consistent—that is, the observations at different points of time may be compared to each other with confidence. The series may well be too low or too high throughout, but there is confidence that the year-to-year changes are fairly accurate. But when it comes

<sup>32</sup> The crops which are harvested during March-June (and hence for which production of the preceding July-June period is used in calculating absorption) are wheat, barley, gram, masur, tobacco and rape and mustard. (One of the three East Pakistan rice crops, the *boro* harvest, occurs during March-April; since it is less than 5 per cent of total rice production, all East Pakistan rice is assumed to become available in the July-June period of its harvest).

<sup>33</sup> For example, the *aman* (December-January) rice crop in East Pakistan is rarely exhausted by the following July. But it would be difficult to specify the fraction which carries into the subsequent July-June period.

to comparing two different time series, even if collected by the same agency, confidence must wane. Where one is too high, the other may be too low. When calculating the weights,  $q_i^t$ , it is this latter comparison that is made. While there is hope for a cancelling out of high and low series, nevertheless it must be recognized that *greater error is possible in the final weights ( $q_i^t$ ) than in any of the component series ( $P_i^t, S_i^t$ , etc.).*<sup>34</sup>

For this reason the resulting weights are checked carefully for obvious absurdity. Absurdity occurs, by any definition of that word, whenever the computed absorption of the commodity is negative. This happens on three occasions. In some other cases adjustments are made to avoid apparently unreasonable (though positive) values for the amounts absorbed. All such corrections are noted in the tables of Appendices A and B.

A weighting problem of quite a different character arises in the attempt to calculate an all-Pakistan index: how should one weight the price indices of each wing? A straight formula application of the intra-wing method would be to weight each wing's index by its total value. But the value in the East wing index is sufficiently larger than that of the West wing in all years to give us pause. More national income is certainly created in West Pakistan than East.<sup>35</sup> While the coverage of national income and our index differs greatly in concept,

<sup>34</sup>. Mathematically, one may write:

$$\begin{bmatrix} q_i^0 \\ q_i^1 \\ \vdots \\ q_i^T \end{bmatrix} = \begin{bmatrix} P_i^0 \\ P_i^1 \\ \vdots \\ P_i^T \end{bmatrix} + \begin{bmatrix} S_i^0 \\ S_i^1 \\ \vdots \\ S_i^T \end{bmatrix} + \begin{bmatrix} I_i^0 \\ I_i^1 \\ \vdots \\ I_i^T \end{bmatrix} + \dots - \begin{bmatrix} X_i^0 \\ X_i^1 \\ \vdots \\ X_i^T \end{bmatrix}$$

While each of these vectors for P, S, I, etc. may be *internally* comparable (i.e. column-wise,  $P_i^t$  with  $P_i^{t-1}$ ), we cannot be so confident that they are *externally* comparable (i.e., row-wise,  $P_i^t$  with  $S_i^t$ ). But it is this latter comparison which the computation of  $q_i^t$  makes.

<sup>35</sup>. C.S.O. estimates put the West wing national income (in constant prices) 10—15% above East wing for 1956-58.

the relation between the two wings should not be reversed. This apparent anomaly undoubtedly results from the implicit over-weighting of agricultural commodities (see page 29), together with the greater relative preponderance of agriculture in the East Pakistan economy. In short, the East wing index very probably has coverage nearer the "ideal" than the West wing (although such a hypothesis is untestable). Thus, it is decided to give the East wing index less weight in the all-Pakistan index than its total values would suggest. Arbitrarily, but certainly *not* on the principle of insufficient reason, the simple arithmetic average of the wing indices is used.<sup>36</sup>

#### 4. *Time Period*

The index is annual (July-June) over the period 1951-52 to 1959-60. The index was not constructed for the years before 1951-52 because of the lack of data (the main source of data for this index, the C.S.O., began publication in 1952). The temptation to produce the index on a quarterly (or monthly) basis is resisted in the interest of expediency and accuracy. An index covering periods of less than a year falls prey to many seasonal influences; if these are not known and stated, confusion may occur in the interpretation of the index. It is perhaps still too early (after only ten adequately recorded data years—years of structural change and exogenous shocks of many types) to know the seasonal pattern of prices in Pakistan; and, even if possible, the uncovering of such knowledge would greatly delay publication of the index.

The index is prepared on a July-to-June basis because much of the production data is available (or readily available) only on this (*i.e.*, "trade year") basis. If adequate data on changes in stocks from month to month were always available, this July-June device would be unimportant. Where there are drastic assumptions (of constancy or exhaustion) of stocks at a particular date, however, the "trade-year" choice may lead to greater error than another basis. But consideration of other bases is obviated by the fact that much production data exist only in July-to-June form.

<sup>36</sup>. This procedure follows from (or implies) the assumption that total values in the East wing and West wing would be equal if "ideal" coverage were achieved.

### 5. *Base year*

The choice of one year from the turbulent decade of the 1950s for use as a base of the index is difficult. But the decision for 1951-52 as the base period seems almost inevitable if one surveys the succeeding years. 1953-54 and 1954-55, the "post-Korean" years, were notable for the collapse of the export boom and the resulting deflationary tendencies in the economy. A 31 per cent devaluation of the Pakistan rupee occurred during 1955-56. Since then, the price level has been subject to the pressures of increasing development expenditure under the First Plan. The year, 1951-52, has the advantage of being a period of fewer general controls than in later years on prices, production and imports; and in that year prices did not differ much from the preceding two years. For these reasons 1951-52 is preferred not only to any other year but also to any combination of it and other years.

#### **Note 1: The Choice of a Representative Centre**

In the text, it is claimed that the error in the index resulting from market imperfections can be reduced by considering a "typical" price and an "important" centre. This note attempts to give more exact meaning and justification to these two concepts.

Assume, for simplicity, that the multi-centre problem applies only to the first good, which is sold at J centres (denoted by the subscript  $j=1, \dots, J$ ). The price and quantity sold at the  $j^{\text{th}}$  centre in the  $t^{\text{th}}$  year are  $p_j^t$  and  $q_j^t$  respectively ( $t=0, 1, \dots, T$ ). If these prices differ among centres (at a particular time) the use of any one centre's price, weighted by total sales at all centres, would usually lead to error. The accurate index would consider each centre as if it sold a different commodity; for example, the Laspeyre index (with year 0 as base):

$$(18) \quad \frac{\sum_j p_j^t q_j^0 + (\dots)}{\sum_j p_j^0 q_j^0 + (\dots)}$$

where the expression, (...), represents the terms for all other goods. Consider now a simpler index which uses the price of only one centre (say  $p_k^t$ ) and weights that price by the total amount sold at all centres:

$$(19) \quad \frac{p_k^t \sum_j q_j^0 + (\dots)}{p_k^0 \sum_j q_j^0 + (\dots)}$$

where (...) is the same as before. This index differs from the "accurate" index (18) only in the entries for the first good. The difference in the numerators of the two indices can be written:

$$\begin{aligned}
 (20) \quad & \bar{p}_j^i q_j^i - p_k^i \bar{p}_j^i q_j^i \\
 &= \bar{p}_j^i (p_j^i - p_k^i) q_j^i \\
 &= (p_j^i - p_k^i) q_j^i + \dots + (p_{k-1}^i - p_k^i) q_{k-1}^i + \\
 &\quad + (p_{k+1}^i - p_k^i) q_{k+1}^i + \dots + (p_j^i - p_k^i) q_j^i
 \end{aligned}$$

It should be noticed that this difference, or "error", depends upon two elements: 1) the extent of the difference between prices in the  $k^{\text{th}}$  centre and other centres; and 2) the quantities sold in all centres *except* the  $k^{\text{th}}$  centre.

Since the "simple" index (19) is a great deal easier to compute than the "accurate" index (18) there is an advantage to using it if the size of this error can be kept small enough. But the problem of this monograph is different, namely, that the availability of data permits construction *only* of the "simple" index, and the  $k^{\text{th}}$  centre must be chosen so as to minimize the error involved. Inspection of the error (20) indicates the criteria that are relevant to the choice of  $k$ :

1) the price in the  $k^{\text{th}}$  centre should differ as little as possible from prices in other centres, *i.e.*, the terms  $(p_j^i - p_k^i)$  for  $j=1, \dots, J$  should be made small. This is what is meant by choosing a "typical" price.

2) the  $k^{\text{th}}$  centre should be one in which a large part of the total quantity is sold, *i.e.*,  $q_k^i$  should be large relative to the other  $q_j^i$ . This follows from the fact that the quantity,  $q_k^i$ , does not enter the equation for the error. This is what is meant by choosing an "important" centre.

While this indicates that an error-minimizing choice of centre can be made in each year, it does not insure that the same centre will be chosen every year. Implicit in the choice of a particular centre (or group of centres) for the entire period, 1951-52, to 1959-60, are the assumptions that the relative importance of the different centres does

not change much over the period and that the price relationships between different centres do not change much over the period. Briefly, these assumptions might be labelled a constant structure of distribution and a constant degree of market imperfection.

It cannot be contended that, in fact, the choice of centre (k) is always the best one, for the very data restrictions which preclude consideration of each centre separately (*i.e.*, the only information on the  $q_i$ 's is their sum over all j) also preclude accurate choice of the error-minimizing (k).

**Note 2: Use of Free or Controlled Prices**

The simultaneous existence of free and controlled markets, often with widely different prices, presents a problem of choice of price for the index. With a few exceptions, only the free market prices are used in construction of the index. A defense of this neglect of the controlled market in the cases of rice in East Pakistan and of wheat in West Pakistan is offered below.

In this note, the subscripts i and the superscripts t will, for simplicity of notation, be omitted (but understood). Write  $p_f$  and  $p_c$  as free and controlled prices, respectively, and  $q_f$  and  $q_c$  as quantities sold at the free and controlled prices, respectively. The ideal index would then use the value  $(p_f q_f + p_c q_c)$ . For all but a few commodities, the controlled price is neglected in this index; the value  $p_f (q_f + q_c)$  is used, the difference between this and the ideal being  $q_c (p_f - p_c)$ . This difference, divided by the actual value used, gives an indication of the error (e) incumbent upon this procedure:

$$(21) \quad e = \frac{q_c (p_f - p_c)}{p_f (q_f + q_c)}$$

Let  $q' = q_c/q_f$  and  $p' = p_c/p_f$ ; then the error may be written:

$$(22) \quad e = \frac{q' (1 - p')}{1 + q'}$$

This "error" is computed in Tables 10 and 11 for each of wheat in West Pakistan and rice in East Pakistan respectively, for several years.

TABLE 10

## Wheat: West Pakistan

| Year    | q <sub>c</sub><br>(in 1000<br>tons) | q <sub>f</sub><br>(in 1000<br>tons) | q'  | P <sub>c</sub><br>(Rs. per<br>maund) | P <sub>f</sub><br>(Rs. per<br>maund) | (1-p') | e     |
|---------|-------------------------------------|-------------------------------------|-----|--------------------------------------|--------------------------------------|--------|-------|
|         | (1)                                 | (2)                                 | (3) | (4)                                  | (5)                                  | (6)    | (7)   |
| 1951-52 | 284                                 | 3592                                | .08 | 11.25                                | 11.81                                | .05    | —**   |
| 1952-53 | 734                                 | 2784                                | .26 | 12.50                                | 15.31                                | .18    | .03   |
| 1953-54 | 1027                                | 2076                                | .49 | 12.81                                | 12.13                                | —0.06  | —0.02 |
| 1954-55 | 267                                 | 3320                                | .08 | 11.13                                | 8.94                                 | —0.25  | —0.02 |
| 1955-56 | 457                                 | 2706                                | .17 | 10.88                                | 10.88                                | —*     | —*    |
| 1956-57 | 852                                 | 2954                                | .29 | 12.25                                | 14.50                                | .16    | .03   |
| 1957-58 | 808                                 | 3386                                | .24 | 12.25                                | 13.06                                | .06    | .01   |
| 1958-59 | 1023                                | 3084                                | .33 | 12.25                                | 14.75                                | .17    | .03   |

\*Zero.

\*\*less than .005 in absolute value.

SOURCES: Data for P<sub>c</sub> from Ministry of Food, Govt. of Pakistan.Data for q<sub>c</sub> taken equal to: Govt. procurements less changes in government stocks plus Govt. imports less Govt. exports. The first two figures obtained from Ministry of Food and Agriculture, Govt. of Pakistan; the latter two figures obtained from C.S.O.Date of p<sub>f</sub> and q<sub>f</sub> from Appendix B. q<sub>f</sub> is total absorption less q<sub>c</sub>.

TABLE 11

## Rice: East Pakistan

| Year    | q <sub>c</sub><br>(in 1000<br>tons) | q <sub>f</sub><br>(in 1000<br>tons) | q'  | P <sub>c</sub><br>(Rs. per<br>maund) | P <sub>f</sub><br>(Rs. per<br>maund) | (1-p') | e     |
|---------|-------------------------------------|-------------------------------------|-----|--------------------------------------|--------------------------------------|--------|-------|
|         | (1)                                 | (2)                                 | (3) | (4)                                  | (5)                                  | (6)    | (7)   |
| 1951-52 | 219                                 | 6868                                | .03 | 20.00                                | 25.25                                | .21    | .01   |
| 1952-53 | 172                                 | 7229                                | .02 | 20.44                                | 24.69                                | .16    | .01   |
| 1953-54 | 42                                  | 8253                                | .01 | 21.25                                | 18.00                                | —0.18  | —*    |
| 1954-55 | 41                                  | 7550                                | .01 | 21.25                                | 13.25                                | —0.60  | —0.01 |
| 1955-56 | 226                                 | 6239                                | .03 | 20.00                                | 20.75                                | .04    | —*    |
| 1956-57 | 529                                 | 8191                                | .06 | 20.00                                | 30.83                                | .35    | .02   |
| 1957-58 | 368                                 | 7820                                | .05 | 20.44                                | 28.58                                | .28    | .01   |
| 1958-59 | 671                                 | 6538                                | .09 | 22.50                                | 30.50                                | .26    | .02   |

\*less than .005 in absolute value.

SOURCES: Data for p<sub>c</sub> from Ministry of Food, Govt. of Pakistan.Data for q<sub>c</sub> obtained from Dept. of Food and Agriculture, Government of East Pakistan.Data for p<sub>f</sub>, q<sub>f</sub> from Appendix A. q<sub>f</sub> is total absorption less q<sub>c</sub>.



Thus, *e* is never above 3 per cent in absolute value. And, since wheat and rice receive only a fraction (albeit a large one) of the total weights in the indices, one may fairly safely conclude that the use of a value figure which is less than 3 per cent in error would lead to an error in the total index also less than 3 per cent.<sup>37</sup> The error in the index caused by neglected controlled markets of other less heavily weighted commodities would, *a fortiori*, be even smaller.

Still, under ideal conditions, it would be better to avoid even this error by treating the controlled and free markets as if different commodities were sold in each. Unfortunately, the data for quantities sold in controlled markets are sufficiently dissimilar to the data for total absorption that more error would probably be created than avoided by such treatment. In any case, a far more serious problem is begged—how to price the farmers' self-consumed output.

#### APPENDIX A

##### SYMBOLS AND EQUIVALENTS

|           |   |                      |   |              |
|-----------|---|----------------------|---|--------------|
| 1 million | = | .1 crore             | = | 10 lakhs     |
| 1 ton     | = | 2240 lbs             | = | 27.22 maunds |
| 1 maund   | = | 82.29 lbs            | = | 40 seers     |
| *         |   | Provisional          |   |              |
| ...       |   | Nil or Insignificant |   |              |
| —         |   | Not available.       |   |              |

<sup>37</sup>. This statement rests on intuition, not proof. Counter-cases, where the index error is larger than 3 per cent, can easily be conceived, but not with great plausibility.

**Superscripts:**

- a indicates average prices of 1 to 3 months quotations.
- b indicates average prices of 4 to 6 months quotations.
- c indicates average prices of 7 to 9 months quotations.
- d indicates unpublished data.
- e indicates estimated.

Year means from 1st July to 30th June unless specified otherwise.

**Abbreviations:**

- CSO ... Central Statistical Office, Government of Pakistan.
- CSOB ... *Statistical Bulletin* (monthly publication) issued by the Central Statistical Office.
- CSOYB ... Data obtained from: *CSO Year Book*, 1955 for 1951-55; *C.S.O. Bulletins*, March 1955, July 1955 and July 1956, for 1955-56; and *C.S.O. Bulletin*, Sept., 1960 for 1956-60.
- MFA ... Ministry of Food and Agriculture, Government of Pakistan.
- LCSP ... Ministry of Food and Agriculture, *Land and Crop Statistics of Pakistan*, Fact Series III, March 1959.
- CBR ... Central Board of Revenue's Statistical Office (Government of Pakistan).

## APPENDIX A

TABLE 1

Net Availability and Price of Wheat  
(West Pakistan)

(Quantity in 000 Tons)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|---------------------|
|         |            |                   | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                     |
| 1951-52 | 3,930      | —                 | ...                 | ...           | 41                  | 13            | 3,876            | 11.81               |
| 1952-53 | 2,962      | —                 | 563                 | ...           | ...                 | 7             | 3,518            | 15.31               |
| 1953-54 | 2,367      | —                 | 740                 | ...           | ...                 | 4             | 3,103            | 12.13               |
| 1954-55 | 3,587      | —                 | 4                   | ...           | ...                 | 4             | 3,587            | 8.94                |
| 1955-56 | 3,136      | —                 | 48                  | ...           | ...                 | 21            | 3,163            | 10.88               |
| 1956-57 | 3,316      | —                 | 609                 | ...           | ...                 | 19            | 3,806            | 14.50               |
| 1957-58 | 3,582      | —                 | 626                 | ...           | ...                 | 14            | 4,194            | 13.06               |
| 1958-59 | 3,521      | —                 | 593                 | ...           | ...                 | 7             | 4,107            | 14.75               |
| 1959-60 | 3,840      | —                 | 806                 | ...           | ...                 | 17            | 5,629            | 13.25               |

SOURCES: 1. Production LCSP for 1951-59 and CSOB, Nov. 1959 for 1959-60. Production is assumed to be absorbed in subsequent year.  
 2. Changes in stocks —  
 3. Interwing Trade CSOYB.  
 4. Foreign Trade CSO for 1951-59 and MFA for 1959-60.  
 5. Price *Pakistan Times*, 1951-60—Lyallpur quotations. Price is given per maund for convenience.

TABLE 2

Net Availability and Price of Rice  
(West Pakistan)

(Quantity in 000 Tons)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|---------------------|
|         |            |                   | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                     |
| 1951-52 | 719        | —                 | ...                 | ...           | 67                  | 74            | 578              | 17.31               |
| 1952-53 | 819        | —                 | ...                 | ...           | 90                  | 67            | 662              | 18.94               |
| 1953-54 | 906        | —                 | ...                 | ...           | 50                  | 50            | 806              | 20.13               |
| 1954-55 | 825        | —                 | ...                 | ...           | 77                  | 2             | 746              | 18.25               |
| 1955-56 | 828        | —                 | ...                 | ...           | 107                 | 26            | 695              | 18.94               |
| 1956-57 | 831        | —                 | ...                 | ...           | ...                 | 3             | 828              | 23.88               |
| 1957-58 | 863        | —                 | ...                 | ...           | 77                  | 50            | 736              | 28.50               |
| 1958-59 | 970        | —                 | ...                 | ...           | 36                  | 164           | 770              | 26.25               |
| 1959-60 | 979        | —                 | ...                 | ...           | 80                  | 83            | 816              | 31.91               |

SOURCES: 1. Production LCSP for 1951-59 and CSOB Sept., 1960, for 1959-60.  
 2. Changes in stocks —  
 3. Interwing Trade CSOYB  
 4. Foreign Trade MFA  
 5. Price CSOB, 1952-60. Quotations of medium quality at Karachi. Price is given per maund for convenience.

TABLE 3  
Net Availability and Price of Jowar  
(West Pakistan)

| Year    | Production | Changes in Stocks | Imports from       |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad             | East Pakistan | Abroad     | East Pakistan |                  |                     |
|         |            |                   | (Quantity in Tons) |               |            |               |                  |                     |
| 1951-52 | 204,465    | —                 | ...                | ...           | ...        | ...           | 204,465          | 7.88                |
| 1952-53 | 219,605    | —                 | ...                | ...           | ...        | ...           | 219,605          | 17.31               |
| 1953-54 | 288,193    | —                 | ...                | ...           | ...        | ...           | 288,193          | 9.06                |
| 1954-55 | 220,462    | —                 | ...                | ...           | ...        | ...           | 220,462          | 6.81                |
| 1955-56 | 248,966    | —                 | ...                | ...           | ...        | ...           | 248,966          | 8.13                |
| 1956-57 | 254,235    | —                 | ...                | ...           | ...        | ...           | 254,235          | 11.75               |
| 1957-58 | 180,944    | —                 | ...                | ...           | ...        | ...           | 180,944          | 11.94               |
| 1958-59 | 211,082    | —                 | ...                | ...           | ...        | ...           | 211,082          | 13.25               |
| 1959-60 | 229,000    | —                 | ...                | ...           | ...        | ...           | 229,000          | 14.00               |

SOURCES: 1. Production LCSP for 1951-59 and CSOB Sept. 1960 for 1959-60.  
 2. Changes in stocks —  
 3. Interwing Trade ...  
 4. Foreign Trade ...  
 5. Price CSOB, 1952-60; Multan quotations. Price is given per maund for convenience.

TABLE 4  
Net Availability and Price of Bajra  
(West Pakistan)

| Year    | Production | Changes in Stocks | Imports from       |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad             | East Pakistan | Abroad     | East Pakistan |                  |                     |
|         |            |                   | (Quantity in Tons) |               |            |               |                  |                     |
| 1951-52 | 265,139    | —                 | ...                | ...           | ...        | ...           | 265,139          | 11.88               |
| 1952-53 | 266,824    | —                 | ...                | ...           | ...        | ...           | 266,824          | 19.81               |
| 1953-54 | 460,440    | —                 | ...                | ...           | ...        | ...           | 460,440          | 11.00               |
| 1954-55 | 348,303    | —                 | ...                | ...           | ...        | ...           | 348,303          | 8.31                |
| 1955-56 | 340,038    | —                 | ...                | ...           | ...        | ...           | 340,038          | 10.56               |
| 1956-57 | 362,512    | —                 | ...                | ...           | ...        | ...           | 362,512          | 13.00               |
| 1957-58 | 273,420    | —                 | ...                | ...           | ...        | ...           | 273,420          | 15.25               |
| 1958-59 | 302,516    | —                 | ...                | ...           | ...        | ...           | 302,516          | 15.69               |
| 1959-60 | 324,000    | —                 | ...                | ...           | ...        | ...           | 324,000          | 14.83               |

SOURCES: 1. Production LCSP for 1951-59 and CSOB Sept. 1960 for 1959-60.  
 2. Changes in stocks —  
 3. Interwing Trade ...  
 4. Foreign Trade ...  
 5. Price CSOB 1952-60; Multan quotations. Price is given per maund for convenience.

TABLE 5  
Net Availability and Price of Maize  
(West Pakistan)

(Quantity in Tons)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                     |
| 1951-52 | 376,975    | —                 | ...          | ...           | ...        | ...           | 376,975          | 11.25               |
| 1952-53 | 346,350    | —                 | ...          | ...           | ...        | ...           | 346,350          | 17.25               |
| 1953-54 | 402,091    | —                 | ...          | ...           | ...        | ...           | 402,091          | 11.56               |
| 1954-55 | 425,353    | —                 | ...          | ...           | ...        | ...           | 425,353          | 8.13                |
| 1955-56 | 450,304    | —                 | ...          | ...           | ...        | ...           | 450,304          | 10.88               |
| 1956-57 | 446,856    | —                 | ...          | ...           | ...        | ...           | 446,856          | 13.56               |
| 1957-58 | 439,968    | —                 | ...          | ...           | ...        | ...           | 439,968          | 12.44               |
| 1958-59 | 464,900    | —                 | ...          | ...           | ...        | ...           | 464,900          | 14.94               |
| 1959-60 | 478,000    | —                 | ...          | ...           | ...        | ...           | 478,000          | 15.95               |

SOURCES: 1. Production LCSP for 1951-59 and CSOB, Sept., 1960 for 1959-60.  
 2. Changes in stocks —  
 3. Interwing Trade ...  
 4. Foreign Trade ...  
 5. Price CSOB 1952-60; Lyallpur quotations. Price is given per maund for convenience.

TABLE 6  
Net Availability and Price of Barley  
(West Pakistan)

(Quantity in Tons)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                     |
| 1951-52 | 128,796    | —                 | ...          | ...           | ...        | ...           | 128,796          | 8.00                |
| 1952-53 | 99,549     | —                 | ...          | ...           | ...        | ...           | 99,549           | 12.81               |
| 1953-54 | 91,635     | —                 | ...          | ...           | ...        | ...           | 91,635           | 8.88                |
| 1954-55 | 127,050    | —                 | ...          | ...           | ...        | ...           | 127,050          | 6.00                |
| 1955-56 | 104,425    | —                 | ...          | ...           | ...        | ...           | 104,425          | 7.38                |
| 1956-57 | 125,752    | —                 | ...          | ...           | ...        | ...           | 125,752          | 9.06                |
| 1957-58 | 113,136    | —                 | ...          | ...           | ...        | ...           | 113,136          | 9.75                |
| 1958-59 | 156,393    | —                 | ...          | ...           | ...        | ...           | 156,393          | 11.25               |
| 1959-60 | 145,000    | —                 | ...          | ...           | ...        | ...           | 145,000          | 11.69               |

SOURCES: 1. Production LCSP for 1951-59 and CSOB Sept., 1960 for 1959-60. Production is assumed to be absorbed in subsequent year.  
 2. Changes in Stocks —  
 3. Interwing Trade ...  
 4. Foreign Trade ...  
 5. Price CSOB 1952-60; Multan quotations. Price is given per maund for convenience.

TABLE 7  
Net Availability and Price of Gram  
(West Pakistan)

(Quantity in Tons)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                     |
| 1951-52 | ...        | ...               | ...          | ...           | ...        | 5,298         | 739,038          | 9.06                |
| 1952-53 | ...        | ...               | ...          | ...           | ...        | 2,315         | 424,546          | 17.31               |
| 1953-54 | ...        | ...               | ...          | ...           | ...        | 1,786         | 314,000          | 14.06               |
| 1954-55 | ...        | ...               | ...          | ...           | ...        | 1,961         | 559,660          | 7.56                |
| 1955-56 | ...        | ...               | ...          | ...           | ...        | 1,869         | 591,832          | 9.44                |
| 1956-57 | ...        | ...               | ...          | ...           | ...        | 30,003        | 658,779          | 10.56               |
| 1957-58 | ...        | ...               | ...          | ...           | ...        | 13,053        | 668,218          | 11.50               |
| 1958-59 | ...        | ...               | ...          | ...           | ...        | 1,681         | 649,458          | 13.75 <sup>c</sup>  |
| 1959-60 | ...        | ...               | ...          | ...           | ...        | 8,471         | 553,529          | 15.27               |

SOURCES: 1. Production LCSP production is assumed to be absorbed in subsequent year.  
 2. Changes in stocks — CSOYB.  
 3. Interwing Trade ...  
 4. Foreign Trade ...  
 5. Price CSOB, 1952-60; Okara quotations. Price is given per maund for convenience.

TABLE 8  
Net Availability and Price of Mash  
(West Pakistan)

(Quantity in Tons)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                     |
| 1951-52 | ...        | ...               | ...          | ...           | ...        | ...           | 14,309           | 25.06               |
| 1952-53 | ...        | ...               | ...          | ...           | ...        | ...           | 14,537           | 29.13               |
| 1953-54 | ...        | ...               | ...          | ...           | ...        | ...           | 22,177           | 17.44               |
| 1954-55 | ...        | ...               | ...          | ...           | ...        | ...           | 15,156           | 13.69               |
| 1955-56 | ...        | ...               | ...          | ...           | ...        | ...           | 15,596           | 22.44               |
| 1956-57 | ...        | ...               | ...          | ...           | ...        | ...           | 13,209           | 30.13               |
| 1957-58 | ...        | ...               | ...          | ...           | ...        | ...           | 11,911           | 29.44               |
| 1958-59 | ...        | ...               | ...          | ...           | ...        | ...           | 14,000           | 22.25               |
| 1959-60 | ...        | ...               | ...          | ...           | ...        | ...           | 14,000           | 24.17               |

SOURCES: 1. Production LCSP for 1951-58 Figures for 1958-59 and 1959-60 are based on the average of the preceding four years.  
 2. Changes in stocks — Entire quantity of pulses is assumed to be Masur.  
 3. Interwing Trade ...  
 4. Foreign Trade ...  
 5. Price CSOB, 1952-60 Multan quotations. Price is given per maund for convenience.

TABLE 9  
Net Availability and Price of Moong  
(West Pakistan)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                     |
| 1951-52 | 28,128     | —                 | ...          | ...           | ...        | ...           | 28,128           | 29.25               |
| 1952-53 | 25,431     | —                 | ...          | ...           | ...        | ...           | 25,431           | 37.94               |
| 1953-54 | 30,185     | —                 | ...          | ...           | ...        | ...           | 30,185           | 25.38               |
| 1954-55 | 25,620     | —                 | ...          | ...           | ...        | ...           | 25,620           | 17.19               |
| 1955-56 | 27,557     | —                 | ...          | ...           | ...        | ...           | 27,557           | 27.88               |
| 1956-57 | 25,543     | —                 | ...          | ...           | ...        | ...           | 25,543           | 41.38               |
| 1957-58 | 21,207     | —                 | ...          | ...           | ...        | ...           | 21,207           | 40.00               |
| 1958-59 | 21,207     | —                 | ...          | ...           | ...        | ...           | 21,207           | 32.06               |
| 1959-60 | 21,207     | —                 | ...          | ...           | ...        | ...           | 21,207           | 30.38               |

SOURCES: 1. Production LCSP for 1951-59. Figure of 1957-58 is repeated in 1958-59 and 1959-60 for want of data.  
 2. Changes in stocks —  
 3. Interwing Trade ... Entire quantity of pulses is assumed to be Masur.  
 4. Foreign Trade ...  
 5. Price CSOB, 1952-60; Quotations of split (Punjab) at Karachi. Price is given per maund for convenience.

TABLE 10  
Net Availability and Price of Masur  
(West Pakistan)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                     |
| 1951-52 | 25,485     | —                 | ...          | 422           | ...        | 3,374         | 22,533           | 14.50               |
| 1952-53 | 25,213     | —                 | ...          | 7,144         | ...        | ...           | 32,357           | 15.38               |
| 1953-54 | 20,251     | —                 | ...          | 1,789         | ...        | ...           | 22,040           | 15.81               |
| 1954-55 | 27,035     | —                 | ...          | 160           | ...        | ...           | 27,195           | 10.06               |
| 1955-56 | 37,835     | —                 | ...          | 455           | ...        | ...           | 38,290           | 10.06               |
| 1956-57 | 31,475     | —                 | ...          | 103           | ...        | ...           | 31,578           | 13.50               |
| 1957-58 | 32,950     | —                 | ...          | 523           | ...        | ...           | 33,473           | 17.56               |
| 1958-59 | 29,733     | —                 | ...          | 3,692         | ...        | ...           | 33,425           | 17.34 <sup>c</sup>  |
| 1959-60 | 29,733     | —                 | ...          | 748           | ...        | ...           | 30,481           | 19.78               |

SOURCES: 1. Production LCSP for 1951-59. Figure of 1958-59 is repeated in 1959-60 for want of data. Production is assumed to be absorbed in subsequent year.  
 2. Changes in stocks —  
 3. Interwing Trade CSOYB.  
 4. Foreign Trade ...  
 5. Price CSOB, 1952-60; Lyallpur quotations. Price is given per maund for convenience.

TABLE 11  
Net Availability and Price of Raw Sugar  
(West Pakistan)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                     |
| 1951-52 | 501        | —                 | ...          | ...           | ...        | ...           | 501              | 29.63               |
| 1952-53 | 654        | —                 | ...          | ...           | ...        | ...           | 654              | 17.09               |
| 1953-54 | 826        | —                 | ...          | ...           | ...        | ...           | 826              | 14.69               |
| 1954-55 | 815        | —                 | ...          | ...           | ...        | ...           | 815              | 14.50               |
| 1955-56 | 743        | —                 | ...          | ...           | ...        | ...           | 743              | 22.81               |
| 1956-57 | 766        | —                 | ...          | ...           | ...        | ...           | 766              | 24.97               |
| 1957-58 | 947        | —                 | ...          | ...           | ...        | ...           | 947              | 19.41               |
| 1958-59 | 1,005      | —                 | ...          | ...           | ...        | ...           | 1,005            | 14.88               |
| 1959-60 | 937        | —                 | ...          | ...           | ...        | ...           | 937              | 25.13               |

SOURCES: 1. Production

2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

*Report on Sugar Industry of Pakistan*, March, 1958, (p. 140) for consumption of cane by mills. LCSP and CSOB Sept., 1960 for production of sugarcane. Production is estimated at 10 per cent of the total sugarcane produced minus cane consumed by mills for production of refined sugar. Mill consumptions of sugar cane in 1957-60 is estimated on the basis of average yield and production of refined sugar.

CSOB, 1952-60; average of first quality gur at Lyallpur and Mardan. Price is given per maund for convenience.

TABLE 12  
Net Availability and Price of Refined Sugar  
(West Pakistan)

| Year    | Production | Changes in Stocks <sup>d</sup> | Imports from        |               | Exports to |               | Net-Avail-ability | Price Rs. per Maund |
|---------|------------|--------------------------------|---------------------|---------------|------------|---------------|-------------------|---------------------|
|         |            |                                | Abroad <sup>d</sup> | East Pakistan | Abroad     | East Pakistan |                   |                     |
| 1951-52 | 30         | ...                            | 94                  | ...           | ...        | ...           | 124               | 44.94               |
| 1952-53 | 48         | -10                            | 40                  | ...           | ...        | ...           | 78                | 49.94               |
| 1953-54 | 49         | ...                            | 57                  | ...           | ...        | 11            | 95                | 50.81               |
| 1954-55 | 40         | +10                            | 66                  | ...           | ...        | 13            | 103               | 48.75               |
| 1955-56 | 56         | -5                             | 96                  | ...           | ...        | 1             | 146               | 45.00               |
| 1956-57 | 76         | -20                            | 82                  | ...           | ...        | 2             | 136               | 45.44               |
| 1957-58 | 121        | -31                            | 69                  | ...           | ...        | 8             | 151               | 50.75               |
| 1958-59 | 113        | -10                            | 18                  | ...           | ...        | 27            | 94                | 55.00               |
| 1959-60 | 83         | +39                            | ...                 | ...           | ...        | 1             | 121               | 55.00               |

SOURCES: 1. Production

2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

*Report on Sugar Industry of Pakistan*, March 1958 (P-140) for 1951-57; and CBR for 1957-60.

CBR.  
CSOYB.

MFA. Imports during 1951-52 at 185,397 tons were abnormally high. Average of 1951-54 is therefore used for 1951-52.

CSOB, 1952-60; controlled price at Lahore. Price is given per maund for convenience.



TABLE 13  
Net Availability and Price of Tea  
(West Pakistan)

(Quantity in 000 Tons)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs per lb. |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|------------------|
|         |            |                   | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                  |
| 1951-52 | ...        | —                 | 578          | 17,137        | 1,119      | ...           | 15,596           | 2.14             |
| 1952-53 | ...        | —                 | 829          | 26,627        | 688        | ...           | 26,768           | 1.94             |
| 1953-54 | ...        | —                 | 340          | 25,918        | 680        | ...           | 25,578           | 2.34             |
| 1954-55 | ...        | —                 | 288          | 23,161        | 1,663      | ...           | 21,788           | 3.19             |
| 1955-56 | ...        | —                 | 320          | 34,585        | 1,107      | ...           | 33,798           | 3.34             |
| 1956-57 | ...        | —                 | 144          | 28,577        | 1,484      | ...           | 27,237           | 3.03             |
| 1957-58 | ...        | —                 | 155          | 33,218        | 2,161      | ...           | 31,212           | 3.16             |
| 1958-59 | ...        | —                 | 51           | 38,118        | 1,710      | ...           | 36,459           | 3.34             |
| 1959-60 | ...        | —                 | 153          | 40,124        | 320        | ...           | 39,957           | 3.98             |

SOURCES: 1. Production ...  
 2. Changes in stocks ...  
 3. Interwing Trade CSOYB.  
 4. Foreign Trade CSOB, 1952-60.  
 5. Price CSOB, 1952-60; Average of jokoja dust at Karachi and white label at Lahore.

TABLE 14  
Net Availability and Price of Salt  
(West Pakistan)

(Quantity in 000 Maunds)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Maund |
|---------|-------------------------|--------------------------------|---------------------|---------------|---------------------|---------------|------------------|---------------------|
|         |                         |                                | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                     |
| 1951-52 | 9,400                   | +300                           | 1                   | ...           | ...                 | 2,663         | 7,038            | 4.25                |
| 1952-53 | 8,190                   | +900                           | 1                   | ...           | ...                 | 1,221         | 7,870            | 4.19                |
| 1953-54 | 9,145                   | -544                           | ...                 | ...           | 11                  | 1,260         | 7,330            | 4.44                |
| 1954-55 | 10,779                  | -804                           | ...                 | ...           | ...                 | 1,333         | 8,642            | 4.50                |
| 1955-56 | 11,263                  | -28                            | 1                   | ...           | 1,184               | 857           | 9,195            | 4.50                |
| 1956-57 | 11,836                  | -267                           | ...                 | ...           | 1,528               | 317           | 9,724            | 4.75                |
| 1957-58 | 11,244                  | -4,317                         | ...                 | ...           | 269                 | 84            | 6,574            | 4.75                |
| 1958-59 | 7,194                   | +49                            | ...                 | ...           | 434                 | 3             | 6,806            | 5.00                |
| 1959-60 | 10,312                  | -585                           | ...                 | ...           | 439                 | 4,193         | 5,095            | 5.00                |

SOURCES: 1. Production CBR.  
 2. Changes in stocks CBR.  
 3. Interwing Trade CSOYB.  
 4. Foreign Trade CSO.  
 5. Price CSOB, 1952-60; quotations of Rock Salt at Lahore.

TABLE 15  
Net Availability and Price of Cigarettes  
(West Pakistan)

(Quantity in million)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per 1000 Cigarettes |
|---------|-------------------------|--------------------------------|---------------------|---------------|---------------------|---------------|------------------|-------------------------------|
|         |                         |                                | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                               |
| 1951-52 | 2,764                   | ...                            | 36                  | ...           | ...                 | 182           | 2,618            | 31.94                         |
| 1952-53 | 3,725                   | +31                            | 18                  | 19            | ...                 | 134           | 3,659            | 32.25                         |
| 1953-54 | 4,206                   | +1                             | 25                  | 43            | ...                 | 1,140         | 3,135            | 32.81                         |
| 1954-55 | 4,364                   | +8                             | 22                  | 41            | ...                 | 814           | 3,621            | 31.56                         |
| 1955-56 | 4,627                   | -27                            | 1                   | 89            | ...                 | 724           | 3,966            | 31.56                         |
| 1956-57 | 5,425                   | -16                            | 21                  | 23            | ...                 | 635           | 4,818            | 34.25                         |
| 1957-58 | 6,190                   | -1                             | ...                 | 18            | ...                 | 356           | 5,851            | 27.50                         |
| 1958-59 | 7,242                   | +18                            | 1                   | 36            | ...                 | 724           | 5,573            | 26.25                         |
| 1959-60 | 8,172                   | +9                             | 1                   | 5             | ...                 | 546           | 7,641            | 26.09                         |

SOURCES: 1. Production CBR  
2. Changes in stocks CBR.  
3. Interwing Trade CSOYB; Quantity is estimated by dividing total value by average price during that year.  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; quotations of 'Scissors' at Karachi.

TABLE 16  
Net Availability and Price of Tobacco  
(West Pakistan)

(Quantity in 000 lbs.)

| Year    | Production | Used for Manufacture of Cigarettes | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Maund |
|---------|------------|------------------------------------|---------------------|---------------|---------------------|---------------|------------------|---------------------|
|         |            |                                    | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                     |
| 1951-52 | 66,277     | -6,991                             | 3,494               | 860           | 4                   | ...           | 63,636           | 74.94               |
| 1952-53 | 78,369     | -9,338                             | 1,980               | 2,156         | 12                  | 1,632         | 71,523           | 82.06               |
| 1953-54 | 57,369     | -10,515                            | 2,188               | 1,112         | 9                   | ...           | 51,145           | 116.94              |
| 1954-55 | 83,990     | -10,910                            | 1,762               | 3,559         | 1                   | 3,680         | 74,720           | 131.00              |
| 1955-56 | 162,622    | -11,563                            | 3,222               | 4,654         | 125                 | 10,757        | 148,053          | 97.38               |
| 1956-57 | 107,606    | -13,563                            | 2,142               | 1,600         | 191                 | 14,007        | 83,587           | 109.31              |
| 1957-58 | 102,721    | -15,485                            | 554                 | 1,578         | 529                 | 13,335        | 75,504           | 106.56              |
| 1958-59 | 124,870    | -18,105                            | 138                 | 2,996         | 72                  | 14,659        | 95,168           | 103.13              |
| 1959-60 | 122,000    | -20,430                            | 1,156               | 1,778         | 96                  | 32,773        | 71,635           | 123.88              |

SOURCES: 1. Production LCSP for 1951-59 and MFA for 1959-60. Production is assumed to be absorbed in subsequent year.  
2. Changes in stocks ... Tobacco used for cigarettes manufacturing is estimated @ one lb. per 400 cigarettes.  
3. Interwing Trade CSOYB.  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; Average of prices at Sargodha and Mardan. Price is given per maund for convenience.

TABLE 17  
Net Availability and Price of Fish  
(West Pakistan)

(Quantity in Tons)

| Year    | Production <sup>d</sup> | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Seer |        |      |
|---------|-------------------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|--------------------|--------|------|
|         |                         |                   | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                    |        |      |
| 1951-52 | ...                     | ...               | 42,220              | —             | ...                 | ...           | 5,650            | ...                | 36,570 | 0.88 |
| 1952-53 | ...                     | ...               | 51,342              | —             | ...                 | ...           | 5,205            | ...                | 46,137 | 0.70 |
| 1953-54 | ...                     | ...               | 59,700              | —             | ...                 | ...           | 7,954            | ...                | 51,746 | 0.70 |
| 1954-55 | ...                     | ...               | 62,325              | —             | ...                 | ...           | 7,587            | ...                | 54,738 | 0.61 |
| 1955-56 | ...                     | ...               | 65,900              | —             | ...                 | ...           | 7,994            | ...                | 57,906 | 0.61 |
| 1956-57 | ...                     | ...               | 67,100              | —             | ...                 | ...           | 5,769            | ...                | 61,331 | 0.83 |
| 1957-58 | ...                     | ...               | 70,700              | —             | ...                 | ...           | 13,695           | ...                | 57,005 | 0.88 |
| 1958-59 | ...                     | ...               | 73,000              | —             | ...                 | ...           | 10,994           | ...                | 62,056 | 0.81 |
| 1959-60 | ...                     | ...               | 80,000              | —             | ...                 | ...           | 14,333           | ...                | 65,667 | 1.16 |

SOURCES: 1. Production

2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

Department of Fisheries, Government of Pakistan. Wingwise production for 1951-55 is estimated on the basis of calendar year production, which was available on wingwise basis.

...

CSO.

Cooperation & Marketing Department, Government of Pakistan, 'Markets & Prices,' 1951-60. quotations of 'Salmon' at Karachi. Price is given per seer for convenience.

TABLE 18  
Net Availability and Price of Rapeseed and Mustard  
(West Pakistan)

(Quantity in 000 Tons)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |       |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|-------|
|         |            |                   | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                     |       |
| 1951-52 | ...        | ...               | 196          | —             | ...        | ...           | 55               | 141                 | 17.94 |
| 1952-53 | ...        | ...               | 198          | —             | ...        | ...           | 50               | 148                 | 19.50 |
| 1953-54 | ...        | ...               | 125          | —             | ...        | ...           | 65               | 60                  | 23.88 |
| 1954-55 | ...        | ...               | 163          | —             | ...        | ...           | 41               | 122                 | 19.88 |
| 1955-56 | ...        | ...               | 216          | —             | ...        | ...           | 42               | 174                 | 17.75 |
| 1956-57 | ...        | ...               | 220          | —             | ...        | ...           | 69               | 151                 | 20.81 |
| 1957-58 | ...        | ...               | 220          | —             | ...        | ...           | 77               | 143                 | 29.25 |
| 1958-59 | ...        | ...               | 227          | —             | ...        | ...           | 61               | 166                 | 30.06 |
| 1959-60 | ...        | ...               | 227          | —             | ...        | ...           | 52               | 175                 | 25.39 |

SOURCES: 1. Production

2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

LCSP for 1951-59 and CSOB, September, 1960 for 1959-60. Production is assumed to be absorbed in subsequent year.

...

CSOYB.

CSOB, 1952-60; quotations at Lyallpur. Price is given per maund for convenience.

TABLE 19  
Net Availability and Price of Fine Cloth  
(West Pakistan)

(Quantity in 000 yards)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from |               | Exports to |               | Net Availability | Price Rs. per Yard |
|---------|-------------------------|--------------------------------|--------------|---------------|------------|---------------|------------------|--------------------|
|         |                         |                                | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                    |
| 1951-52 | 8,032                   | -650                           | —            | —             | —          | —             | 7,382            | 2.84               |
| 1952-53 | 14,064                  | +869                           | —            | 125           | —          | —             | 15,058           | 3.00               |
| 1953-54 | 24,001                  | -263                           | —            | 1,479         | —          | —             | 25,217           | 3.44 <sup>b</sup>  |
| 1954-55 | 21,957                  | -538                           | —            | 1,745         | —          | —             | 23,164           | 3.06               |
| 1955-56 | 26,440                  | -3,519                         | —            | 1,304         | —          | —             | 24,225           | 2.69               |
| 1956-57 | 49,123                  | -869                           | —            | 51            | —          | —             | 50,043           | 2.81 <sup>b</sup>  |
| 1957-58 | 39,701                  | -642                           | —            | 413           | —          | —             | 39,572           | 3.50               |
| 1958-59 | 34,241                  | +3,467                         | —            | 64            | —          | —             | 37,772           | 4.38               |
| 1959-60 | 36,047                  | -1,448                         | —            | 584           | —          | —             | 35,183           | 5.70               |

SOURCES: 1. Production CBR.  
2. Changes in stocks CBR.  
3. Interwing Trade CSOYB. Imports into West Pakistan are assumed fine cloth while exports from West Pakistan are assumed medium cloth.  
4. Foreign Trade CSO. Imports are not included for want of detailed information.  
5. Price CSOB, 1952-60; prices of imported long cloth (Holland) at Karachi for 1951-58. For 1958-60 prices of indigenous poplin W. 36" (Colony) at Karachi, adjusted for the difference between the prices of imported cloth and domestic cloth are used.

TABLE 20  
Net Availability and Price of Medium Cloth  
(West Pakistan)

(Quantity in 000 yards)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from |               | Exports to |               | Net Availability | Price Rs. per Yard |
|---------|-------------------------|--------------------------------|--------------|---------------|------------|---------------|------------------|--------------------|
|         |                         |                                | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                    |
| 1951-52 | 61,041                  | -4,943                         | —            | —             | —          | 26,821        | 29,277           | 1.28               |
| 1952-53 | 106,886                 | +6,604                         | —            | —             | —          | 16,086        | 97,404           | 1.31 <sup>b</sup>  |
| 1953-54 | 182,406                 | -1,996                         | —            | —             | 1          | 23,444        | 156,965          | 1.56               |
| 1954-55 | 263,482                 | -4,087                         | —            | —             | 19         | 13,377        | 246,999          | 1.19               |
| 1955-56 | 329,457                 | -13,948                        | —            | —             | 2,672      | 27,007        | 285,830          | 1.06               |
| 1956-57 | 239,837                 | -2,162                         | —            | —             | 22,493     | 60,578        | 154,604          | 1.19               |
| 1957-58 | 213,222                 | +7,683                         | —            | —             | 2,726      | 65,210        | 152,969          | 1.31               |
| 1958-59 | 245,689                 | +4,305                         | —            | —             | 13,223     | 64,394        | 171,822          | 1.19               |
| 1959-60 | 294,097                 | -5,143                         | —            | —             | 78,330     | 63,290        | 147,334          | 1.48               |

SOURCES: 1. Production CBR.  
2. Changes in stocks CBR.  
3. Interwing Trade CSOYB. Imports into West Pakistan are assumed to be fine cloth while exports from West Pakistan are assumed to be medium cloth.  
4. Foreign Trade CSOB, 1952-60; Imports are not included for want of detailed information.  
5. Price CSO, 1952-60; price of long cloth 11000 w 36" (colony) at Karachi.

TABLE 21  
Net Availability and Price of Coarse Cloth  
(West Pakistan)

(Quantity in 000 yards)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from |               | Exports to |               | Net Availability | Price Rs. per Yard |
|---------|-------------------------|--------------------------------|--------------|---------------|------------|---------------|------------------|--------------------|
|         |                         |                                | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                    |
| 1951-52 | 11,244                  | -911                           | —            | —             | —          | —             | 10,333           | 0.88               |
| 1952-53 | 19,690                  | +1,217                         | —            | —             | —          | —             | 20,907           | 1.06               |
| 1953-54 | 33,601                  | -368                           | —            | —             | —          | —             | 33,235           | 1.19               |
| 1954-55 | 28,230                  | -753                           | —            | —             | —          | —             | 27,477           | 0.83               |
| 1955-56 | 62,461                  | -9,262                         | —            | —             | —          | —             | 53,199           | 0.78               |
| 1956-57 | 163,038                 | -3,574                         | —            | —             | —          | —             | 159,464          | 0.84               |
| 1957-58 | 261,855                 | -3,877                         | —            | —             | —          | —             | 257,978          | 0.84               |
| 1958-59 | 262,984                 | +9,299                         | —            | —             | —          | —             | 271,283          | 0.88               |
| 1959-60 | 191,152                 | +853                           | —            | —             | —          | —             | 192,005          | 0.98               |

SOURCES: 1. Production CBR.  
2. Changes in stocks CBR.  
3. Interwing Trade CSOYB. Imports into West Pakistan are assumed to be fine cloth while exports from West Pakistan are assumed to be medium cloth.  
4. Foreign Trade CSOB, 1952-60. Imports are not included for want of detailed information.  
5. Price CSOB; price of grey long cloth W. 44" at Karachi.

TABLE 22  
Net Availability and Price of Hessian Cloth  
(West Pakistan)

(Quantity in 000 yards)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Yard |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|--------------------|
|         |            |                   | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                    |
| 1951-52 | ...        | —                 | 2,743               | ...           | ...                 | ...           | 2,743            | 0.81               |
| 1952-53 | ...        | —                 | 3,448               | 2,457         | ...                 | ...           | 5,905            | 0.69               |
| 1953-54 | ...        | —                 | ...                 | 8,259         | ...                 | ...           | 8,259            | 0.56               |
| 1954-55 | ...        | —                 | ...                 | 9,204         | 9                   | ...           | 9,195            | 0.45               |
| 1955-56 | ...        | —                 | ...                 | 14,095        | ...                 | ...           | 14,095           | 0.50               |
| 1956-57 | ...        | —                 | ...                 | 19,176        | 3,195               | ...           | 15,981           | 0.42               |
| 1957-58 | ...        | —                 | ...                 | 27,505        | 13,453              | ...           | 14,052           | 0.44               |
| 1958-59 | ...        | —                 | ...                 | 25,417        | 16,045              | ...           | 9,372            | 0.50               |
| 1959-60 | ...        | —                 | ...                 | 9,920         | 7,504               | ...           | 2,416            | 0.70               |

SOURCES: 1. Production ...  
2. Changes in stocks ...  
3. Interwing Trade CSOYB  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; price of Hessian Cloth at Karachi.

TABLE 23  
Net Availability and Price of Gunny Bags  
(West Pakistan)

(Quantity in 000 Numbers)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per hundred pieces |    |        |                     |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|------------------------------|----|--------|---------------------|
|         |            |                   | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                              |    |        |                     |
| 1951-52 | ..         | ..                | ..                  | ..            | —                   | 10,313        | 687              | ..                           | .. | 11,000 | 209.38              |
| 1952-53 | ..         | ..                | ..                  | ..            | —                   | 5,143         | 21,119           | ..                           | .. | 26,262 | 128.89              |
| 1953-54 | ..         | ..                | ..                  | ..            | —                   | ..            | 38,020           | 1                            | .. | 38,019 | 134.00              |
| 1954-55 | ..         | ..                | ..                  | ..            | —                   | ..            | 31,921           | 19                           | .. | 31,902 | 134.19              |
| 1955-56 | ..         | ..                | ..                  | ..            | —                   | ..            | 35,820           | 2,672                        | .. | 33,148 | 152.19              |
| 1956-57 | ..         | ..                | ..                  | ..            | —                   | ..            | 37,532           | 1,074                        | .. | 36,458 | 152.25 <sup>b</sup> |
| 1957-58 | ..         | ..                | ..                  | ..            | —                   | ..            | 29,613           | 3,326                        | .. | 26,287 | 140.94              |
| 1958-59 | ..         | ..                | ..                  | ..            | —                   | ..            | 33,148           | 3,322                        | .. | 29,826 | 130.75              |
| 1959-60 | ..         | ..                | ..                  | ..            | —                   | ..            | 22,372           | 2,649                        | .. | 19,723 | 181.31              |

SOURCES: 1. Production ...  
2. Changes in stocks ...  
3. Interwing Trade CSOYB.  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60, Price of gunny bags at Karachi.

TABLE 24  
Net Availability and Price of Paper  
(West Pakistan)

(Quantity in Tons)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Ton |       |         |                      |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|-------------------|-------|---------|----------------------|
|         |            |                   | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                   |       |         |                      |
| 1951-52 | ..         | ..                | ..                  | ..            | —                   | 8,282         | ..               | ..                | 8,282 | 2100.00 |                      |
| 1952-53 | ..         | ..                | ..                  | ..            | —                   | 5,244         | ..               | ..                | 5,244 | 2696.00 |                      |
| 1953-54 | ..         | ..                | ..                  | ..            | —                   | 7,796         | 2,575            | ..                | ..    | 10,371  | 2240.00              |
| 1954-55 | ..         | ..                | ..                  | ..            | —                   | 8,506         | 14,405           | ..                | ..    | 22,911  | 1680.00 <sup>a</sup> |
| 1955-56 | ..         | ..                | ..                  | ..            | —                   | 6,697         | 12,566           | ..                | ..    | 19,263  | 2170.00              |
| 1956-57 | ..         | ..                | ..                  | ..            | —                   | 6,908         | 15,229           | ..                | ..    | 22,137  | 2170.00              |
| 1957-58 | ..         | ..                | ..                  | ..            | —                   | 7,880         | 13,404           | ..                | ..    | 21,284  | 2205.00              |
| 1958-59 | ..         | ..                | ..                  | ..            | —                   | 4,243         | 18,236           | ..                | ..    | 22,479  | 2100.00              |
| 1959-60 | ..         | ..                | ..                  | ..            | —                   | 13,065        | 13,437           | ..                | ..    | 26,502  | 2170.00              |

SOURCES: 1. Production ...  
2. Changes in stocks ...  
3. Interwing Trade CSOYB. Data pertain to writing and printing paper only.  
4. Foreign Trade CSO. Data pertain to writing and printing paper only.  
5. Price CSOB, 1952-60; average of imported printing paper and imported writing paper at Karachi for 1951-53; and of white printing and creamlaid in West Pakistan for 1954-60. Price for 1953-54 is average of 1952-53 and 1954-55.

TABLE 25  
Net Availability and Price of Matches  
(West Pakistan)

(Quantity in 000 gross boxes)

| Year    | Production <sup>d</sup> | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per gross boxes |
|---------|-------------------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|---------------------------|
|         |                         |                   | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                           |
| 1951-52 | 38                      | +16               | 2,257               | 63            | ...                 | ...           | 2,374            | 7.19                      |
| 1952-53 | 496                     | +132              | 619                 | ...           | ...                 | ...           | 1,251            | 7.19                      |
| 1953-54 | 2,141                   | -222              | 177                 | 118           | ...                 | ...           | 2,214            | 10.81                     |
| 1954-55 | 1,577                   | +44               | 7                   | 504           | ...                 | ...           | 2,132            | 7.19                      |
| 1955-56 | 1,595                   | +135              | ...                 | 1,462         | ...                 | ...           | 3,192            | 7.25 <sup>a</sup>         |
| 1956-57 | 1,634                   | +24               | ...                 | 796           | ...                 | ...           | 2,454            | 7.88                      |
| 1957-58 | 785                     | -187              | ...                 | 4,283         | ...                 | ...           | 4,981            | 7.63                      |
| 1958-59 | 752                     | +180              | ...                 | 2,210         | ...                 | ...           | 3,142            | 7.31                      |
| 1959-60 | 542                     | +4                | ...                 | 4,064         | ...                 | ...           | 4,610            | 7.52                      |

SOURCES: 1. Production CBR. Production is converted into boxes containing 50 sticks each.  
2. Changes in stocks CBR.  
3. Interwing Trade CSOYB. Match boxes are assumed to contain 50 sticks.  
4. Foreign Trade CSO. Match boxes are assumed to contain 50 sticks.  
5. Price CSOB, 1952-60. Retail prices (less 20 per cent retail profit) of 50 sticks matches at Lahore for 1951-55; Wholesale prices of 50 sticks matches at Karachi for 1955-60.

TABLE 26  
Net Availability and Price of Cycle Tyres  
(West Pakistan)

(Quantity in dozens)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per dozen |
|---------|-------------------------|--------------------------------|---------------------|---------------|---------------------|---------------|------------------|---------------------|
|         |                         |                                | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                     |
| 1951-52 | 30,820                  | -931                           | 1,008               | —             | ...                 | —             | 30,897           | 90.00               |
| 1952-53 | 23,134                  | +717                           | 273                 | —             | ...                 | —             | 24,124           | 90.00               |
| 1953-54 | 62,207                  | -513                           | 25                  | —             | ...                 | —             | 61,719           | 90.00               |
| 1954-55 | 58,860                  | +553                           | 5                   | —             | ...                 | —             | 59,418           | 90.00               |
| 1955-56 | 71,306                  | +139                           | ...                 | —             | ...                 | —             | 71,167           | 90.00               |
| 1956-57 | 70,393                  | -479                           | 13                  | —             | ...                 | —             | 69,932           | 91.00               |
| 1957-58 | 104,732                 | +342                           | 3                   | —             | ...                 | —             | 105,077          | 92.00               |
| 1958-59 | 81,876                  | +333                           | ...                 | —             | ...                 | —             | 82,209           | 95.69               |
| 1959-60 | 100,426                 | -626                           | ...                 | —             | ...                 | —             | 99,800           | 104.25              |

SOURCES: 1. Production CBR. For 1951-56 production of cycle tyres and tubes was grouped together. Figures are segregated on the basis of 1956-60 ratio which was 2:3.  
2. Changes in stocks CBR.  
3. Interwing Trade —  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; price of National Road Master 28" x 1½" at Karachi.

TABLE 27  
Net Availability and Price of Cycle Tyres  
(West Pakistan)

(Quantity in dozens)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per dozen |
|---------|-------------------------|--------------------------------|---------------------|---------------|---------------------|---------------|------------------|---------------------|
|         |                         |                                | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                     |
| 1951-52 | 46,230                  | -1,398                         | 4,156               | —             | ...                 | —             | 48,988           | 40.50               |
| 1952-53 | 34,700                  | +1,077                         | 15,972              | —             | ...                 | —             | 51,749           | 40.13               |
| 1953-54 | 93,311                  | -770                           | 8                   | —             | ...                 | —             | 92,549           | 36.00               |
| 1954-55 | 88,290                  | +830                           | ...                 | —             | ...                 | —             | 89,120           | 36.00               |
| 1955-56 | 106,459                 | -209                           | 15                  | —             | ...                 | —             | 106,765          | 34.50               |
| 1956-57 | 105,596                 | -826                           | 5                   | —             | ...                 | —             | 104,775          | 32.50               |
| 1957-58 | 148,237                 | -205                           | ...                 | —             | ...                 | —             | 148,032          | 33.00               |
| 1958-59 | 113,949                 | +1,321                         | ...                 | —             | ...                 | —             | 115,270          | 36.00               |
| 1959-60 | 152,932                 | -3,729                         | ...                 | —             | ...                 | —             | 149,203          | 37.50               |

SOURCES: 1. Production CBR. For 1951-56 production of cycle tyres and tubes was grouped together. Figures are segregated on the basis of 1956-60 ratio which was 2:3.  
2. Changes in stocks CBR.  
3. Interwing Trade —  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; prices of National Road Master 28" × 1½" at Karachi.

TABLE 28  
Net Availability and Price of Motor Tyres  
(West Pakistan)

(Quantity in numbers)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per tyre |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|--------------------|
|         |            |                   | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                    |
| 1951-52 | ...        | —                 | 69,850              | —             | ...                 | —             | 69,850           | 279.69             |
| 1952-53 | ...        | —                 | 36,630              | —             | ...                 | —             | 36,630           | 268.19             |
| 1953-54 | ...        | —                 | 66,516              | —             | ...                 | —             | 66,516           | 237.25             |
| 1954-55 | ...        | —                 | 89,255              | —             | ...                 | —             | 89,255           | 217.13             |
| 1955-56 | ...        | —                 | 68,737              | —             | ...                 | —             | 68,737           | 296.56             |
| 1956-57 | ...        | —                 | 54,235              | —             | ...                 | —             | 54,235           | 345.56             |
| 1957-58 | ...        | —                 | 44,782              | —             | ...                 | —             | 44,782           | 359.63             |
| 1958-59 | ...        | —                 | 29,198              | —             | ...                 | —             | 29,198           | 369.50             |
| 1959-60 | ...        | —                 | 15,277              | —             | ...                 | —             | 15,277           | 349.02             |

SOURCES: 1. Production ...  
2. Changes in stocks —  
3. Interwing Trade —  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; price of 32" × 6" cover Dunlop at Karachi.



TABLE 29  
Net Availability and Price of Motor Tubes  
(West Pakistan)

(Quantity in numbers)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per tube |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|--------------------|
|         |            |                   | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                    |
| 1951-52 | ..         | ..                | ..                  | ..            | —                   | —             | 75,671           | 23.69              |
| 1952-53 | ..         | ..                | ..                  | ..            | —                   | —             | 24,207           | 21.75              |
| 1953-54 | ..         | ..                | ..                  | ..            | —                   | —             | 62,416           | 19.25              |
| 1954-55 | ..         | ..                | ..                  | ..            | —                   | —             | 91,560           | 17.38              |
| 1955-56 | ..         | ..                | ..                  | ..            | —                   | —             | 24,968           | 23.88              |
| 1956-57 | ..         | ..                | ..                  | ..            | —                   | —             | 47,951           | 27.69              |
| 1957-58 | ..         | ..                | ..                  | ..            | —                   | —             | 26,228           | 28.69              |
| 1958-59 | ..         | ..                | ..                  | ..            | —                   | —             | 22,151           | 27.50              |
| 1959-60 | ..         | ..                | ..                  | ..            | —                   | —             | 48,617           | 27.80              |

SOURCES: 1. Production ...  
2. Changes in stocks —  
3. Interwing Trade —  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; price of 32" x 6" Tube at Karachi.

TABLE 30  
Net Availability and Price of Cement  
(West Pakistan)

(Quantity in 000 Tons)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per ton |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|-------------------|
|         |            |                   | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                   |
| 1951-52 | ..         | ..                | ..                  | ..            | —                   | —             | 476              | 95.31             |
| 1952-53 | ..         | ..                | ..                  | ..            | —                   | —             | 575              | 95.31             |
| 1953-54 | ..         | ..                | ..                  | ..            | —                   | —             | 540              | 95.31             |
| 1954-55 | ..         | ..                | ..                  | ..            | —                   | —             | 735              | 83.25             |
| 1955-56 | ..         | ..                | ..                  | ..            | 5                   | —             | 649              | 78.50             |
| 1956-57 | ..         | ..                | ..                  | ..            | 64                  | 11            | 658              | 82.81             |
| 1957-58 | ..         | ..                | ..                  | ..            | 117                 | 20            | 890              | 95.25             |
| 1958-59 | ..         | ..                | ..                  | ..            | 7                   | 52            | 988              | 100.69            |
| 1959-60 | ..         | ..                | ..                  | ..            | ..                  | 70            | 937              | 100.81            |

SOURCES: 1. Production CSOB, 1952-60. Calendar year figures are used for want of data on trade year basis.  
2. Changes in stocks —  
3. Interwing Trade CSOYB.  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; quotations at Karachi of Dalmia Portland for 1951-56 and average of Dalmia Portland and Zeal Pak for 1956-60.

TABLE 31  
Net Availability and Price of Coal  
(West Pakistan)

(Quantity in 000 Tons)

| Year    | Production | Changes in Stocks | Imports from     |               | Exports to |               | Net Availability | Price Rs. per ton |
|---------|------------|-------------------|------------------|---------------|------------|---------------|------------------|-------------------|
|         |            |                   | Abroad           | East Pakistan | Abroad     | East Pakistan |                  |                   |
| 1951-52 | 575        | —                 | 759              | ...           | ...        | ...           | 1,334            | 96.53             |
| 1952-53 | 605        | —                 | 564              | ...           | ...        | ...           | 1,169            | 66.75             |
| 1953-54 | 543        | —                 | 546              | ...           | ...        | ...           | 1,089            | 66.75             |
| 1954-55 | 580        | —                 | 586              | ...           | ...        | ...           | 1,166            | 54.88             |
| 1955-56 | 553        | —                 | 524 <sup>d</sup> | ...           | ...        | ...           | 1,077            | 47.31             |
| 1956-57 | 563        | —                 | 277 <sup>d</sup> | ...           | ...        | ...           | 840              | 75.44             |
| 1957-58 | 567        | —                 | 570 <sup>d</sup> | ...           | ...        | ...           | 1,137            | 89.00             |
| 1958-59 | 558        | —                 | 359 <sup>d</sup> | ...           | ...        | ...           | 957              | 94.00             |
| 1959-60 | 775        | —                 | 446 <sup>d</sup> | ...           | ...        | ...           | 1,221            | 76.81             |

SOURCES: 1. Production CSOB, 1952-60  
 2. Changes in stocks —  
 3. Interwing Trade ...  
 4. Foreign Trade CSOB, July 1955 for 1951-55; CSO for 1955-60.  
 5. Price CSOB, 1952-60; average of steam coal high grade (South Africa) and Selected 'A' Indian in West Pakistan. Prices in 1951-52 are estimated on the basis of import prices, adjusted for the difference with domestic prices. Prices for 1959-60 are for Indian coal only.

TABLE 32  
Net Availability and Price of Steel Ingots  
(West Pakistan)

(Quantity in Tons)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per ton |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|-------------------|
|         |            |                   | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                   |
| 1951-52 | 4,644      | —                 | 12,633              | ...           | ...                 | ...           | 17,277           | 362.00            |
| 1952-53 | 9,000      | —                 | 29,324              | ...           | ...                 | ...           | 38,324           | 346.00            |
| 1953-54 | 10,507     | —                 | 46,795              | ...           | ...                 | ...           | 57,302           | 250.00            |
| 1954-55 | 10,212     | —                 | 34,559              | ...           | ...                 | ...           | 44,771           | 277.00            |
| 1955-56 | 9,267      | —                 | 65,350              | ...           | ...                 | ...           | 74,617           | 505.00            |
| 1956-57 | 12,293     | —                 | 70,019              | ...           | ...                 | ...           | 82,312           | 595.00            |
| 1957-58 | 11,028     | —                 | 65,919              | ...           | ...                 | ...           | 76,947           | 618.00            |
| 1958-59 | 7,898      | —                 | 39,655              | ...           | ...                 | ...           | 47,553           | 416.00            |
| 1959-60 | 9,484      | —                 | 37,194              | ...           | ...                 | ...           | 46,678           | 466.75            |

SOURCES: 1. Production CSOB 1952-60.  
 2. Changes in stocks —  
 3. Interwing Trade ...  
 4. Foreign Trade CSO.  
 5. Price CSOB, 1952-60; price obtained by dividing total value of imports by quantity imported.

TABLE 33  
Net Availability and Price of Kerosene Oil  
(West Pakistan)

(Quantity in 000 gallons)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per gallon |
|---------|-------------------------|--------------------------------|---------------------|---------------|---------------------|---------------|------------------|----------------------|
|         |                         |                                | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                      |
| 1951-52 | 1,947                   | +35                            | 14,049              | 7             | ...                 | 97            | 15,941           | 1.63                 |
| 1952-53 | 2,332                   | -10                            | 9,838               | 12            | ...                 | 38            | 12,134           | 1.75                 |
| 1953-54 | 2,580                   | +38                            | 19,377              | 1             | ...                 | 118           | 21,878           | 1.44                 |
| 1954-55 | 2,760                   | -76                            | 12,343              | 23            | ...                 | 90            | 14,960           | 1.13                 |
| 1955-56 | 3,824                   | +26                            | 12,186              | ...           | ...                 | 16            | 16,030           | 1.25                 |
| 1956-57 | 4,467                   | -9                             | 2,268               | ...           | ...                 | 24            | 6,702            | 1.38                 |
| 1957-58 | 4,051                   | +31                            | 2,639               | ...           | ...                 | 33            | 6,688            | 1.38                 |
| 1958-59 | 3,868                   | +44                            | 1,970               | ...           | ...                 | 46            | 5,836            | 1.38                 |
| 1959-60 | 4,740                   | -65                            | 35,569              | ...           | ...                 | 1,015         | 39,229           | 1.58                 |

SOURCES: 1. Production CBR.  
2. Changes in stocks CBR.  
3. Interwing Trade CSOYB, Entire quantity of mineral oil is assumed to be kerosene oil.  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; price at Lahore.

TABLE 34  
Net Availability and Price of Motor Spirit (Petrol)  
(West Pakistan)

(Quantity in 000 gallons)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per gallon |
|---------|-------------------------|--------------------------------|---------------------|---------------|---------------------|---------------|------------------|----------------------|
|         |                         |                                | Abroad <sup>d</sup> | East Pakistan | Abroad <sup>d</sup> | East Pakistan |                  |                      |
| 1951-52 | 13,716                  | -382                           | 21,103              | ...           | —                   | ...           | 34,437           | 2.38                 |
| 1952-53 | 15,458                  | +333                           | 10,194              | ...           | —                   | ...           | 25,985           | 2.63                 |
| 1953-54 | 18,222                  | +247                           | 13,206              | ...           | —                   | ...           | 31,675           | 3.00                 |
| 1954-55 | 19,383                  | -415                           | 17,615              | ...           | —                   | ...           | 36,583           | 2.56                 |
| 1955-56 | 18,845                  | +1,225                         | 5,931               | ...           | —                   | ...           | 26,001           | 2.63                 |
| 1956-57 | 21,082                  | -1,058                         | 158                 | ...           | —                   | ...           | 20,182           | 2.69                 |
| 1957-58 | 21,201                  | +293                           | 160                 | ...           | —                   | ...           | 21,654           | 2.81                 |
| 1958-59 | 22,839                  | +176                           | 530                 | ...           | —                   | ...           | 23,545           | 2.81                 |
| 1959-60 | 26,325                  | -329                           | 27,838              | ...           | —                   | ...           | 53,834           | 2.81                 |

SOURCES: 1. Production CBR.  
2. Changes in stocks CBR.  
3. Interwing Trade ... Entire quantity of mineral oil is assumed to be Kerosene oil.  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; price at Karachi.

TABLE 35  
Net Availability and Price of Electricity  
(West Pakistan)

(Quantity in 000 Kwh)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Kwh |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|-------------------|
|         |            |                   | Abroad       | East Pakistan | Abroad     | East Pakistan |                  |                   |
| 1951-52 | 241,105    | —                 | 54,369       | ...           | ...        | ...           | 295,474          | 0.28              |
| 1952-53 | 341,836    | —                 | 30,172       | ...           | ...        | ...           | 372,008          | 0.28              |
| 1953-54 | 434,468    | —                 | 20,965       | ...           | ...        | ...           | 455,433          | 0.28              |
| 1954-55 | 497,894    | —                 | 19,208       | ...           | ...        | ...           | 517,102          | 0.28              |
| 1955-56 | 688,397    | —                 | 17,585       | ...           | ...        | ...           | 705,982          | 0.28              |
| 1956-57 | 809,654    | —                 | 20,482       | ...           | ...        | ...           | 821,136          | 0.28              |
| 1957-58 | 990,399    | —                 | 21,095       | ...           | ...        | ...           | 1,011,494        | 0.28              |
| 1958-59 | 1,198,779  | —                 | —            | ...           | ...        | ...           | 1,198,779        | 0.28              |
| 1959-60 | 1,198,779  | —                 | —            | ...           | ...        | ...           | 1,198,779        | 0.28              |

SOURCES: 1. Production *Electricity Supply of Pakistan Statistics (1948-55)* Govt. of Pakistan, for 1951-55; CSOB, 1955-59 for 1955-59. Figures of 1958-59 are repeated in 1959-60 for want of data.  
2. Changes in stocks —  
3. Interwing Trade —  
4. Foreign Trade CSOB, 1952-60.  
5. Price Karachi Electric Supply Corporation; price charged to domestic consumers.

## APPENDIX B

TABLE 1  
Net Availability and Price of Wheat  
(East Pakistan)

(Quantity in 000 Tons)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per maund |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|---------------------|
|         |            |                   | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                     |
| 1951-52 | 20         | —                 | ...                 | 13            | ...                 | ...           | 33               | 17.81               |
| 1952-53 | 23         | —                 | ...                 | 7             | ...                 | ...           | 30               | 16.13               |
| 1953-54 | 24         | —                 | ...                 | 4             | ...                 | ...           | 28               | 13.00               |
| 1954-55 | 24         | —                 | 10                  | 4             | ...                 | ...           | 38               | 12.56               |
| 1955-56 | 26         | —                 | ...                 | 21            | ...                 | ...           | 47               | 19.19               |
| 1956-57 | 22         | —                 | 49                  | 19            | ...                 | ...           | 90               | 19.31               |
| 1957-58 | 23         | —                 | 71                  | 14            | ...                 | ...           | 108              | 19.38               |
| 1958-59 | 22         | —                 | 59                  | 7             | ...                 | ...           | 88               | 16.38               |
| 1959-60 | 25         | —                 | 158                 | 17            | ...                 | ...           | 200              | 17.56               |

SOURCES: 1. Production LCSP for 1951-59 and CSOB, Feb. 1960 for 1959-60. Production is assumed to be absorbed in subsequent year.  
2. Changes in stocks —  
3. Interwing Trade CSOYB.  
4. Foreign Trade MFA.  
5. Price CSOB, 1952-60; quotations at Dacca. Price is given per maund for convenience.

TABLE 2  
Net Availability and Price of Rice  
(East Pakistan)

(Quantity in 000 Tons)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per maund |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|---------------------|
|         |            |                   | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                     |
| 1951-52 | 7,034      | —                 | ...                 | 74            | 21                  | ...           | 7,087            | 25.25               |
| 1952-53 | 7,335      | —                 | ...                 | 67            | ...                 | ...           | 7,401            | 24.69               |
| 1953-54 | 8,245      | —                 | ...                 | 50            | ...                 | ...           | 8,295            | 18.00               |
| 1954-55 | 7,589      | —                 | ...                 | 2             | ...                 | ...           | 7,591            | 13.25               |
| 1955-56 | 6,384      | —                 | 55                  | 26            | ...                 | ...           | 6,465            | 20.94               |
| 1956-57 | 8,184      | —                 | 533                 | 3             | ...                 | ...           | 8,720            | 30.83               |
| 1957-58 | 7,598      | —                 | 540                 | 50            | ...                 | ...           | 8,188            | 28.58               |
| 1958-59 | 6,921      | —                 | 124                 | 164           | ...                 | ...           | 7,209            | 30.50               |
| 1959-60 | 8,482      | —                 | 379                 | 52            | ...                 | ...           | 8,913            | 32.02               |

SOURCES: 1. Production LCSP for 1951-59 and CSOB, Sept., 1960 for 1959-60.  
2. Changes in stocks —  
3. Interwing Trade CSOYB.  
4. Foreign Trade MFA.  
5. Price CSOB, 1952-60; quotations of medium quality at Dacca, except for 1956-57 when Chittagong prices were used. Price is given per maund for convenience.

TABLE 3  
Net Availability and Price of Grams  
(East Pakistan)

(Quantity in Tons)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | West Pakistan | Abroad     | West Pakistan |                  |                     |
| 1951-52 | 46,600     | —                 | ...          | 5,298         | ...        | ...           | 51,898           | 11.63               |
| 1952-53 | 51,700     | —                 | ...          | 2,315         | ...        | ...           | 54,015           | 12.44               |
| 1953-54 | 52,800     | —                 | ...          | 1,786         | ...        | ...           | 54,586           | 9.44                |
| 1954-55 | 53,700     | —                 | ...          | 1,961         | ...        | ...           | 55,661           | 7.69                |
| 1955-56 | 62,600     | —                 | ...          | 1,869         | ...        | ...           | 64,469           | 10.50               |
| 1956-57 | 43,400     | —                 | ...          | 30,003        | ...        | ...           | 73,403           | 21.25               |
| 1957-58 | 35,000     | —                 | ...          | 13,053        | ...        | ...           | 48,053           | 15.38               |
| 1958-59 | 35,100     | —                 | ...          | 1,681         | ...        | ...           | 36,781           | 16.00               |
| 1959-60 | 38,000     | —                 | ...          | 8,471         | ...        | ...           | 46,471           | 16.19               |

SOURCES: 1. Production LCSP. Production is assumed to be absorbed in subsequent year.  
2. Changes in stocks —  
3. Interwing Trade CSOYB.  
4. Foreign Trade ...  
5. Price CSOB, 1952-60; quotations at Dacca. Price is given per maund for convenience.

TABLE 4  
Net Availability and Price of Mash  
(East Pakistan)

(Quantity in Tons)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | West Pakistan | Abroad     | West Pakistan |                  |                     |
| 1951-52 | 36,300     | —                 | ..           | —             | ...        | —             | 36,300           | 9.44                |
| 1952-53 | 38,450     | —                 | ...          | —             | ...        | —             | 38,450           | 10.06               |
| 1953-54 | 39,300     | —                 | ...          | —             | ...        | —             | 39,300           | 10.38               |
| 1954-55 | 39,700     | —                 | ...          | —             | ...        | —             | 39,700           | 8.69                |
| 1955-56 | 50,600     | —                 | ...          | —             | ...        | —             | 50,600           | 10.06               |
| 1956-57 | 35,700     | —                 | ...          | —             | ...        | —             | 35,700           | 28.50               |
| 1957-58 | 36,500     | —                 | ...          | —             | ...        | —             | 36,500           | 15.44               |
| 1958-59 | 37,700     | —                 | ...          | —             | ...        | —             | 37,700           | 12.13               |
| 1959-60 | 37,700     | —                 | ...          | —             | ...        | —             | 37,700           | 17.16               |

SOURCES: 1. Production  
2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

LCSP for 1951-59. Figure of 1958-59 is repeated in 1959-60 for want of data. Production is assumed to be absorbed in subsequent year.

— Entire quantity of pulses is assumed to be Masur.

CSOB, 1952-60; quotation of Mash, Kali (whole) at Dacca. Price is given per maund for convenience.

TABLE 5  
Net Availability and Price of Moong  
(East Pakistan)

(Quantity in Tons)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | West Pakistan | Abroad     | West Pakistan |                  |                     |
| 1951-52 | 31,250     | —                 | ...          | —             | ...        | —             | 31,250           | 19.31               |
| 1952-53 | 30,700     | —                 | ...          | —             | ...        | —             | 30,700           | 18.00               |
| 1953-54 | 31,200     | —                 | ...          | —             | ...        | —             | 31,200           | 16.63               |
| 1954-55 | 34,200     | —                 | ...          | —             | ...        | —             | 34,200           | 14.06               |
| 1955-56 | 17,600     | —                 | ...          | —             | ...        | —             | 17,600           | 18.69               |
| 1956-57 | 15,400     | —                 | ...          | —             | ...        | —             | 15,400           | 29.50               |
| 1957-58 | 10,700     | —                 | ...          | —             | ...        | —             | 10,700           | 27.06               |
| 1958-59 | 10,700     | —                 | ...          | —             | ...        | —             | 10,700           | 23.38               |
| 1959-60 | 10,700     | —                 | ...          | —             | ...        | —             | 10,700           | 27.27               |

SOURCES: 1. Production  
2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

LCSO for 1951-58. Figure of 1957-58 is repeated in 1958-60 for want of data.

— Entire quantity of pulses is assumed to be Masur.

CSOB, 1952-60; quotations at Dacca. Price is given per maund for convenience.

TABLE 6  
Net Availability and Price of Masur  
(East Pakistan)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | West Pakistan | Abroad     | West Pakistan |                  |                     |
| 1951-52 | 63,100     | —                 | ...          | 3,374         | ...        | 422           | 66,052           | 23.44               |
| 1952-53 | 71,200     | —                 | ...          | ...           | ...        | 7,144         | 64,056           | 13.31               |
| 1953-54 | 72,500     | —                 | ...          | ...           | ...        | 1,789         | 70,711           | 11.69               |
| 1954-55 | 74,700     | —                 | ...          | ...           | ...        | 160           | 74,540           | 11.81               |
| 1955-56 | 85,400     | —                 | ...          | ...           | ...        | 455           | 84,945           | 13.63               |
| 1956-57 | 58,900     | —                 | ...          | ...           | ...        | 103           | 58,797           | 22.44               |
| 1957-58 | 58,700     | —                 | ...          | ...           | ...        | 523           | 58,177           | 21.44               |
| 1958-59 | 48,900     | —                 | ...          | ...           | ...        | 3,692         | 45,208           | 19.38               |
| 1959-60 | 48,900     | —                 | ...          | ...           | ...        | 748           | 48,152           | 20.14               |

SOURCES: 1. Production LCSP for 1951-59. Figure of 1958-59 is repeated in 1959-60 for want of data. Production is assumed to be absorbed in subsequent year.  
2. Changes in stocks —  
3. Interwing Trade CSOYB; Entire quantity of pulses is assumed to be Masur.  
4. Foreign Trade CSOB, 1952-60; quotations of Masur 'whole' at Dacca. Price is given per maund for convenience.  
5. Price

TABLE 7  
Net Availability and Price of Raw Sugar  
(East Pakistan)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | West Pakistan | Abroad     | West Pakistan |                  |                     |
| 1951-52 | 298        | —                 | ...          | ...           | ...        | ...           | 298              | 23.06               |
| 1952-53 | 331        | —                 | ...          | ...           | ...        | ...           | 331              | 20.69               |
| 1953-54 | 366        | —                 | ...          | ...           | ...        | ...           | 366              | 25.00               |
| 1954-55 | 318        | —                 | ...          | ...           | ...        | ...           | 318              | 19.56               |
| 1955-56 | 341        | —                 | ...          | ...           | ...        | ...           | 341              | 19.81               |
| 1956-57 | 352        | —                 | ...          | ...           | ...        | ...           | 352              | 28.69               |
| 1957-58 | 336        | —                 | ...          | ...           | ...        | ...           | 336              | 38.00               |
| 1958-59 | 323        | —                 | ...          | ...           | ...        | ...           | 323              | 24.52               |
| 1959-60 | 293        | —                 | ...          | ...           | ...        | ...           | 293              | 22.19               |

SOURCES: 1. Production LCSP and CSOB, Sept., 1960 for production of sugarcane; *Report on Sugar Industry of Pakistan*, March, 1958 for consumption of cane by mills. Figures for 1957-60 are based on information obtained from C.B.R. Production is estimated at 10 per cent of the total sugarcane produced minus cane consumed by mills for production of refined sugar. Mill consumption of sugarcane in 1957-60 is estimated on the basis of average yield and production of refined sugar.  
2. Changes in stocks—  
3. Interwing Trade ...  
4. Foreign Trade ...  
5. Price CSOB, 1952-60; quotations of first quality gur at Dacca. Price is given per maund for convenience.

TABLE 8  
Net Availability and Price of Refined Sugar  
(East Pakistan)

(Quantity in 000 Tons)

| Year    | Production      | Changes in Stocks <sup>d</sup> | Imports from        |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|-----------------|--------------------------------|---------------------|---------------|------------|---------------|------------------|---------------------|
|         |                 |                                | Abroad <sup>d</sup> | West Pakistan | Abroad     | West Pakistan |                  |                     |
| 1951-52 | 40              | -20                            | 31                  | ...           | ...        | ...           | 51               | 42.88               |
| 1952-53 | 31              | +13                            | ...                 | ...           | ...        | ...           | 44               | 44.00               |
| 1953-54 | 28              | +11                            | 7                   | 11            | ...        | ...           | 57               | 44.00               |
| 1954-55 | 47              | -19                            | 24                  | 13            | ...        | ...           | 65               | 42.88               |
| 1955-56 | 47              | +5                             | 1                   | 1             | ...        | ...           | 54               | 40.81               |
| 1956-57 | 31              | +8                             | 7                   | 2             | ...        | ...           | 48               | 36.88 <sup>a</sup>  |
| 1957-58 | 36 <sup>d</sup> | +3                             | 12                  | 8             | ...        | ...           | 59               | 49.00               |
| 1958-59 | 56 <sup>d</sup> | -27                            | 18                  | 27            | ...        | ...           | 74               | 51.25               |
| 1959-60 | 61 <sup>d</sup> | -4                             | ...                 | ...           | ...        | ...           | 57               | 53.75               |

SOURCES: 1. Production: *Report on Sugar Industry of Pakistan*, National Planning Board, March 1958 (Page 140) for 1951-57; and CBR for 1957-60.  
2. Changes in stocks: CBR.  
3. Interwing Trade: CSOYB.  
4. Foreign Trade: MFA.  
5. Price: CSOB, 1952-60; controlled price at Chittagong. Price is given per maund for convenience.

TABLE 9  
Net Availability and Price of Tea  
(East Pakistan)

(Quantity in 000 lbs)

| Year    | Production | Changes in Stocks <sup>d</sup> | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per lb  |
|---------|------------|--------------------------------|---------------------|---------------|---------------------|---------------|------------------|-------------------|
|         |            |                                | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                   |
| 1951-52 | 53,000     | +277                           | 92                  | ...           | 33,008              | 17,137        | 3,224            | 0.89 <sup>b</sup> |
| 1952-53 | 51,274     | +798                           | 161                 | ...           | 23,533              | 26,627        | 2,073            | 1.11              |
| 1953-54 | 52,024     | -74                            | 99                  | ...           | 22,124              | 25,918        | 4,007            | 1.84              |
| 1954-55 | 54,006     | +1,291                         | 82                  | ...           | 24,364              | 23,161        | 7,854            | 2.41              |
| 1955-56 | 52,629     | -1,037                         | 121                 | ...           | 12,976              | 34,585        | 4,152            | 2.25              |
| 1956-57 | 54,734     | +2,665                         | 58                  | ...           | 19,546              | 28,577        | 9,334            | 1.86              |
| 1957-58 | 44,500     | -844                           | 90                  | ...           | 6,202               | 33,218        | 4,326            | 2.28              |
| 1958-59 | 53,760     | -1,776                         | 88                  | ...           | 8,830               | 38,118        | 5,124            | 2.33 <sup>c</sup> |
| 1959-60 | 56,000     | +2,234                         | 84                  | ...           | 15,436              | 40,124        | 2,758            | 3.06 <sup>c</sup> |

SOURCES: 1. Production: MFA, *Crops, Vegetables and Fruits in Pakistan*, Fact Series No. 2, Sept. 1959 for 1952-58 and CSOB, October 1960 for 1958-60. Figure for 1951-52 is taken from *Report of the Economic Appraisal Committee*, Nov. 1952, Published by Government of Pakistan.  
2. Changes in stocks: CBR.  
3. Interwing Trade: CSOYB.  
4. Foreign Trade: CSO.  
5. Price: CSOB 1952-60; price is average of 'Pekoe' and 'Plain Sylhet' Dust at Chittagong.



TABLE 10  
Net Availability and Price of Salt  
(East Pakistan)

(Quantity in 000 Maunds)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | West Pakistan | Abroad     | West Pakistan |                  |                     |
| 1951-52 | 5,987      | —                 | —            | —             | —          | —             | 5,987            | 8.50                |
| 1952-53 | 6,083      | —                 | —            | —             | —          | —             | 6,083            | 7.88                |
| 1953-54 | 6,180      | —                 | —            | —             | —          | —             | 6,180            | 7.25                |
| 1954-55 | 6,279      | —                 | —            | —             | —          | —             | 6,279            | 6.13                |
| 1955-56 | 6,380      | —                 | —            | —             | —          | —             | 6,380            | 6.00                |
| 1956-57 | 6,482      | —                 | —            | —             | —          | —             | 6,482            | 8.38                |
| 1957-58 | 6,585      | —                 | —            | —             | —          | —             | 6,585            | 7.50                |
| 1958-59 | 6,691      | —                 | —            | —             | —          | —             | 6,691            | 7.00                |
| 1959-60 | 6,798      | —                 | —            | —             | —          | —             | 6,798            | 6.25                |

SOURCES: 1. Production Availability is estimated directly on the basis of consumption during 1948-51 (which according to CBR was 58,00,000 maunds) after adjusting for 1.6 per cent per annum increases in population.  
2. Changes in stocks —  
3. Interwing Trade —  
4. Foreign Trade —  
5. Price CSOB, 1952-60; price of sea salt at Chittagong.

TABLE 11  
Net Availability and Price of Cigarettes  
(East Pakistan)

(Quantity in Millions)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per 1000 Cigarettes |
|---------|-------------------------|--------------------------------|---------------------|---------------|---------------------|---------------|------------------|-------------------------------|
|         |                         |                                | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                               |
| 1951-52 | ...                     | ...                            | 25                  | 182           | ...                 | ...           | 207              | 32.69                         |
| 1952-53 | ...                     | ...                            | 4                   | 134           | ...                 | 19            | 119              | 32.63                         |
| 1953-54 | ...                     | ...                            | 1                   | 1,140         | ...                 | 43            | 1,018            | 32.75                         |
| 1954-55 | 382                     | -1                             | 1                   | 814           | ...                 | 41            | 1,155            | 32.81                         |
| 1955-56 | 411                     | +4                             | ...                 | 724           | ...                 | 89            | 1,050            | 34.38                         |
| 1956-57 | 478                     | -5                             | ...                 | 635           | ...                 | 23            | 1,085            | 37.00                         |
| 1957-58 | 773                     | -1                             | ...                 | 356           | ...                 | 18            | 1,110            | 30.56 <sup>b</sup>            |
| 1958-59 | 900                     | +4                             | ...                 | 724           | ...                 | 36            | 1,592            | 27.50                         |
| 1959-60 | 1,103                   | ...                            | ...                 | 546           | ...                 | 5             | 1,644            | 26.00                         |

SOURCES: 1. Production CBR.  
2. Changes in stocks CBR.  
3. Interwing Trade CSOYB. Quantity is estimated by dividing total value by average price during that year.  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; price of 'Scissors' at Chittagong.

TABLE 12  
Net Availability and Price of Tobacco  
(East Pakistan)

(Quantity in 000 lbs)

| Year    | Production | Used for manufacture of Cigarettes | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Maund |
|---------|------------|------------------------------------|---------------------|---------------|---------------------|---------------|------------------|---------------------|
|         |            |                                    | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                     |
| 1951-52 | 96,074     | ...                                | 11,419              | ...           | 19                  | 860           | 106,614          | 119.63              |
| 1952-53 | 100,576    | ...                                | 2,015               | 1,632         | 14                  | 2,156         | 102,053          | 82.50               |
| 1953-54 | 109,763    | ...                                | 85                  | ...           | 13                  | 2,112         | 107,723          | 134.05              |
| 1954-55 | 110,443    | -955                               | ...                 | 3,681         | 8                   | 3,559         | 109,602          | 121.94              |
| 1955-56 | 118,274    | -1,028                             | ...                 | 10,757        | 9                   | 4,654         | 123,340          | 88.19               |
| 1956-57 | 89,822     | -1,195                             | ...                 | 14,007        | 12                  | 1,600         | 101,022          | 104.69              |
| 1957-58 | 89,376     | -1,933                             | 77                  | 13,335        | 2                   | 1,578         | 99,275           | 125.56              |
| 1958-59 | 77,503     | -2,250                             | 88                  | 14,659        | ...                 | 2,996         | 87,004           | 122.94              |
| 1959-60 | 59,000     | -2,758                             | ...                 | 32,773        | ...                 | 1,778         | 87,237           | 143.05              |

SOURCES: 1. Production

2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

LCSP for 1951-59 and MFA for 1959-60. Production is assumed to be absorbed in subsequent year. Tobacco used for cigarette manufacturing is estimated @ one lb per 400 cigarettes.

CSOYB.

CSO.

CSOB, 1952-60; quotations of 'Motihari' at Dacca. Price is given per maund for convenience.

TABLE 13  
Net Availability and Price of Fish  
(East Pakistan)

(Quantity in Tons)

| Year    | Production <sup>d</sup> | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Seer |
|---------|-------------------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|--------------------|
|         |                         |                   | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                    |
| 1951-52 | 84,000                  | —                 | 483                 | ...           | 11,024              | ...           | 73,459           | 1.58 <sup>b</sup>  |
| 1952-53 | 128,000                 | —                 | 111                 | ...           | 20,191              | ...           | 107,920          | 1.24               |
| 1953-54 | 200,000                 | —                 | ...                 | ...           | 14,129              | ...           | 185,871          | 1.15               |
| 1954-55 | 209,000                 | —                 | ...                 | ...           | 26,390              | ...           | 182,610          | 1.09               |
| 1955-56 | 211,000                 | —                 | ...                 | ...           | 24,325              | ...           | 186,675          | 1.16               |
| 1956-57 | 216,000                 | —                 | ...                 | ...           | 21,911              | ...           | 194,089          | 0.83               |
| 1957-58 | 213,000                 | —                 | ...                 | ...           | 12,641              | ...           | 200,359          | 1.23               |
| 1958-59 | 217,000                 | —                 | 234                 | ...           | 15,337              | ...           | 201,897          | 1.37               |
| 1959-60 | 220,000                 | —                 | ...                 | ...           | 15,430              | ...           | 204,570          | 1.43               |

SOURCES: 1. Production

2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

Dept. of Fisheries, Govt. of Pakistan. Wingwise production for 1951-55 is estimated on the basis of calendar year production, which was available on wingwise basis.

CSO.

CSO.

Cooperation & Marketing Adviser, Govt. of Pakistan, "Markets & Prices", 1951-60; price of 'chingri' at Dacca. Price is given per seer for convenience.

TABLE 14  
Net Availability and Price of Rapeseed and Mustard  
(East Pakistan)

(Quantity in 000 Tons)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Maund |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|---------------------|
|         |            |                   | Abroad       | West Pakistan | Abroad     | West Pakistan |                  |                     |
| 1951-52 | 89         | —                 | ...          | 55            | ...        | ...           | 144              | 23.13               |
| 1952-53 | 100        | —                 | ...          | 50            | ...        | ...           | 150              | 23.13               |
| 1953-54 | 103        | —                 | ...          | 65            | ...        | ...           | 168              | 27.56               |
| 1954-55 | 100        | —                 | ...          | 41            | ...        | ...           | 141              | 22.81               |
| 1955-56 | 105        | —                 | ...          | 42            | ...        | ...           | 146              | 22.81               |
| 1956-57 | 104        | —                 | ...          | 69            | ...        | ...           | 173              | 32.94               |
| 1957-58 | 93         | —                 | ...          | 77            | ...        | ...           | 170              | 38.75               |
| 1958-59 | 67         | —                 | ...          | 61            | ...        | ...           | 128              | 40.63               |
| 1959-60 | 105        | —                 | ...          | 52            | ...        | ...           | 157              | 35.64               |

SOURCES: 1. Production LCSP for 1951-59; and CSOB, Feb. 1960 for 1959-60. Production is assumed to be absorbed in subsequent year.  
2. Changes in stocks —  
3. Interwing Trade CSOYB.  
4. Foreign Trade ..  
5. Price CSOB, 1952-60; quotations at Mymensingh. Price is given per maund for convenience.

TABLE 15  
Net Availability and Price of Indigenous Cloth  
(East Pakistan)

(Quantity in 000 yards)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from |               | Exports to          |               | Net Availability | Price Rs. per Yard |
|---------|-------------------------|--------------------------------|--------------|---------------|---------------------|---------------|------------------|--------------------|
|         |                         |                                | Abroad       | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                    |
| 1951-52 | 48,231                  | -3,194                         | —            | 26,821        | ...                 | ...           | 71,858           | 1.08               |
| 1952-53 | 54,844                  | +2,736                         | —            | 16,086        | ...                 | 125           | 73,541           | 1.30               |
| 1953-54 | 61,353                  | -849                           | —            | 23,444        | ...                 | 1,479         | 82,469           | 1.31               |
| 1954-55 | 68,166                  | -6,541                         | —            | 13,377        | ...                 | 1,745         | 73,267           | 1.09               |
| 1955-56 | 57,926                  | -3,035                         | —            | 27,007        | ...                 | 1,304         | 80,594           | 1.16               |
| 1956-57 | 44,977                  | +1,498                         | —            | 60,578        | ...                 | 51            | 107,002          | 1.05               |
| 1957-58 | 74,118                  | +5,870                         | —            | 65,210        | ...                 | 413           | 144,785          | 1.17               |
| 1958-59 | 77,459                  | -6,089                         | —            | 64,349        | ...                 | 64            | 135,655          | 1.08               |
| 1959-60 | 80,626                  | -6,479                         | —            | 63,290        | 788                 | 584           | 149,023          | 1.38               |

SOURCES: 1. Production CBR.  
2. Changes in stocks CBR.  
3. Interwing Trade CSOYB. Imports from West Pakistan are assumed to be medium cloth and exports to West Pakistan are assumed to be fine cloth.  
4. Foreign Trade CSO. Imports are not included for want of detailed information.  
5. Price CSOB, 1952-60; price is average of retail price of shirting at Dacca, Chittagong, Narayanjanj and Sylhet, less 20 per cent profit for retailers.

TABLE 16  
Net Availability and Price of Hessian Cloth  
(East Pakistan)

(Quantity in 000 yards)

| Year    | Production | Changes in Stocks   | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per yard |
|---------|------------|---------------------|---------------------|---------------|---------------------|---------------|------------------|--------------------|
|         |            |                     | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                    |
| 1951-52 | 757        | —                   | 43                  | ...           | 206                 | ...           | 594              | 0.81               |
| 1952-53 | 4,560      | —                   | 63                  | ...           | 1,344               | 2,457         | 822              | 0.69               |
| 1953-54 | 24,161     | —                   | ...                 | ...           | 7,566               | 8,259         | 8,336            | 0.56               |
| 1954-55 | 26,422     | —                   | ...                 | ...           | 12,429              | 9,204         | 4,789            | 0.45               |
| 1955-56 | 81,409     | —                   | ...                 | ...           | 40,870              | 14,095        | 26,444           | 0.50               |
| 1956-57 | 1,33,807   | —                   | ...                 | ...           | 69,312              | 19,176        | 45,319           | 0.42               |
| 1957-58 | 1,43,407   | -1,129 <sup>d</sup> | ...                 | ...           | 70,185              | 27,505        | 44,588           | 0.44               |
| 1958-59 | 1,94,149   | -5,003 <sup>d</sup> | ...                 | ...           | 60,666              | 25,417        | 1,03,063         | 0.50               |
| 1959-60 | 2,47,808   | -735 <sup>d</sup>   | ...                 | ...           | 1,96,735            | 9,920         | 40,418           | 0.70               |

SOURCES: 1. Production CSOB, 1952-60. Production is estimated on the assumption that one ton hessian produces 3750 yards of cloth.  
2. Changes in stocks CBR.  
3. Interwing Trade CSOYB.  
4. Foreign Trade CSO. Exports to abroad at 85059 thousand yards in 1955-56 were inconsistent with production. Average of exports in 1954-55 and 1956-57 is therefore used for 1955-56.  
5. Price CSOB, 1952-60; price of hessian cloth at Karachi.

TABLE 17  
Net Availability and Price of Gunny Bags  
(East Pakistan)

(Quantity in 000 Numbers)

| Year    | Production | Changes in Stocks   | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per 100 pieces |
|---------|------------|---------------------|---------------------|---------------|---------------------|---------------|------------------|--------------------------|
|         |            |                     | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                          |
| 1951-52 | 688        | —                   | 142                 | ...           | ...                 | 687           | 141              | 209.38                   |
| 1952-53 | 14,875     | —                   | 7                   | ...           | ...                 | 21,119        | —                | 128.88                   |
| 1953-54 | 40,081     | —                   | ...                 | ...           | ...                 | 38,020        | 2,061            | 134.00                   |
| 1954-55 | 45,375     | —                   | ...                 | ...           | 8,137               | 31,921        | 5,317            | 134.19                   |
| 1955-56 | 94,931     | —                   | ...                 | ...           | 57,459              | 35,820        | 1,652            | 152.19                   |
| 1956-57 | 1,05,356   | —                   | ...                 | ...           | 45,353              | 37,532        | 22,471           | 152.25 <sup>b</sup>      |
| 1957-58 | 1,10,191   | -958 <sup>d</sup>   | ...                 | ...           | 32,651              | 29,613        | 46,969           | 140.94                   |
| 1958-59 | 1,40,771   | -3,512 <sup>d</sup> | ...                 | ...           | 89,306              | 33,148        | 14,805           | 130.75                   |
| 1959-60 | 1,78,935   | -3,825 <sup>d</sup> | ...                 | ...           | 130,463             | 22,372        | 22,275           | 181.31                   |

SOURCES: 1. Production CSOB 1952-60. Production is estimated on the assumption that one ton sacking produces 1000 bags. Availability in 1952-53 is shown nil because of the discrepancy in production and exports to West Pakistan.  
2. Changes in stocks CBR.  
3. Interwing Trade CSOYB.  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; prices of gunny bags at Karachi.

TABLE 18  
Net Availability and Price of Paper  
(East Pakistan)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Ton |                      |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|-------------------|----------------------|
|         |            |                   | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                   |                      |
| 1951-52 | ..         | ..                | ..                  | ..            | 3,647               | ..            | 3,647            | 2100.00           |                      |
| 1952-53 | ..         | ..                | ..                  | ..            | 2,169               | ..            | 2,169            | 2696.00           |                      |
| 1953-54 | ..         | ..                | 5,680 <sup>d</sup>  | ..            | 2,402               | ..            | 2,575            | 5,507             | 2380.00              |
| 1954-55 | ..         | ..                | 19,772 <sup>d</sup> | ..            | 1,689               | ..            | 14,405           | 7,056             | 2030.00 <sup>a</sup> |
| 1955-56 | ..         | ..                | 21,590              | ..            | 1,770               | ..            | 12,566           | 10,794            | 2030.00              |
| 1956-57 | ..         | ..                | 24,398              | ..            | 955                 | ..            | 15,229           | 10,124            | 2030.00              |
| 1957-58 | ..         | ..                | 23,752              | ..            | 1,385               | ..            | 13,404           | 11,733            | 2030.00              |
| 1958-59 | ..         | ..                | 24,142              | ..            | 899                 | ..            | 18,236           | 6,805             | 2065.00              |
| 1959-60 | ..         | ..                | 17,813              | ..            | 1,688               | ..            | 13,437           | 6,064             | 2135.00              |

SOURCES: 1. Production  
2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

PIDC—Karnafuli Paper Mills, for 1953-55 and CSOB, 1956-60 for 1955-60.

CSOYB.  
CSO.

CSOB, 1952-60; price is average of imported writing paper and printing paper at Karachi for 1951-53; and of domestic white printing paper and creamlaid in East Pakistan for 1954-60. Price in 1953-54 is the average of price in 1952-53 and 1954-55.

TABLE 19  
Net Availability and Price of Matches  
(East Pakistan)

| Year    | Production <sup>d</sup> | Changes in Stocks <sup>d</sup> | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Gross Boxes |                   |
|---------|-------------------------|--------------------------------|---------------------|---------------|---------------------|---------------|------------------|---------------------------|-------------------|
|         |                         |                                | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                           |                   |
| 1951-52 | ..                      | ..                             | 157                 | ..            | 2,022               | ..            | 63               | 2,116                     | 5.38              |
| 1952-53 | ..                      | ..                             | 455                 | —2            | 776                 | ..            | ..               | 1,229                     | 5.38              |
| 1953-54 | ..                      | ..                             | 1,481               | —146          | 93                  | ..            | 118              | 1,310                     | 7.19              |
| 1954-55 | ..                      | ..                             | 2,402               | —93           | 3                   | ..            | 504              | 1,808                     | 7.25 <sup>a</sup> |
| 1955-56 | ..                      | ..                             | 3,083               | —36           | ..                  | ..            | 1,462            | 1,585                     | 7.19              |
| 1956-57 | ..                      | ..                             | 4,342               | —6            | ..                  | ..            | 796              | 3,540                     | 6.31 <sup>b</sup> |
| 1957-58 | ..                      | ..                             | 5,343               | +19           | ..                  | ..            | 4,283            | 1,079                     | 5.50              |
| 1958-59 | ..                      | ..                             | 5,827               | +146          | ..                  | ..            | 2,210            | 3,763                     | 5.25              |
| 1959-60 | ..                      | ..                             | 8,595               | —17           | ..                  | ..            | 4,064            | 4,514                     | 6.38              |

SOURCES: 1. Production  
2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

CBR. Production is converted into boxes containing 50 sticks each.

CBR.

CSOYB. Match boxes are assumed to contain 50 sticks.

CSO. Match boxes are assumed to contain 50 sticks.

CSOB; 1952-60; Retail price of 50 Sticks matches at Chittagong (less 20 per cent) for 1951-54 and 1955-56. Wholesale price of 'cock' 50 sticks at Chittagong for 1954-55 and 1956-60.

TABLE 20  
Net Availability and Price of Motor Tyres  
(East Pakistan)

(Quantity in Numbers)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Tyre |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|--------------------|
|         |            |                   | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                    |
| 1951-52 | ..         | ..                | ..                  | ..            | ..                  | ..            | 9,014            | 279.69             |
| 1952-53 | ..         | ..                | ..                  | ..            | ..                  | ..            | 3,856            | 268.19             |
| 1953-54 | ..         | ..                | ..                  | ..            | ..                  | ..            | 8,286            | 237.25             |
| 1954-55 | ..         | ..                | ..                  | ..            | ..                  | ..            | 7,152            | 217.13             |
| 1955-56 | ..         | ..                | ..                  | ..            | ..                  | ..            | 2,917            | 296.56             |
| 1956-57 | ..         | ..                | ..                  | ..            | ..                  | ..            | 21,531           | 345.36             |
| 1957-58 | ..         | ..                | ..                  | ..            | ..                  | ..            | 1,452            | 359.63             |
| 1958-59 | ..         | ..                | ..                  | ..            | ..                  | ..            | 4,480            | 369.50             |
| 1959-60 | ..         | ..                | ..                  | ..            | ..                  | ..            | 11,051           | 349.00             |

SOURCES: 1. Production ...  
2. Changes in stocks —  
3. Interwing Trade —  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; price of 32" × 6" cover Dunlop at Karachi.

TABLE 21  
Net Availability and Price of Motor Tubes  
(East Pakistan)

(Quantity in Numbers)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Tube |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|--------------------|
|         |            |                   | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                    |
| 1951-52 | ..         | ..                | ..                  | ..            | ..                  | ..            | 8,355            | 23.69              |
| 1952-53 | ..         | ..                | ..                  | ..            | ..                  | ..            | 3,985            | 21.75              |
| 1953-54 | ..         | ..                | ..                  | ..            | ..                  | ..            | 8,570            | 19.25              |
| 1954-55 | ..         | ..                | ..                  | ..            | ..                  | ..            | 6,421            | 17.38              |
| 1955-56 | ..         | ..                | ..                  | ..            | ..                  | ..            | 2,188            | 23.88              |
| 1956-57 | ..         | ..                | ..                  | ..            | ..                  | ..            | 14,217           | 27.69              |
| 1957-58 | ..         | ..                | ..                  | ..            | ..                  | ..            | 763              | 28.69              |
| 1958-59 | ..         | ..                | ..                  | ..            | ..                  | ..            | 4,309            | 27.50              |
| 1959-60 | ..         | ..                | ..                  | ..            | ..                  | ..            | 5,599            | 27.80              |

SOURCES: 1. Production ...  
2. Changes in stocks —  
3. Interwing Trade —  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; price of 32" × 6" Tube at Karachi.

TABLE 22  
Net Availability and Price of Coal  
(East Pakistan)

(Quantity in 000 Tons)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Ton |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|-------------------|
|         |            |                   | Abroad       | West Pakistan | Abroad     | West Pakistan |                  |                   |
| 1951-52 | ..         | ..                | ..           | ..            | ..         | ..            | 874              | 50.91             |
| 1952-53 | ..         | ..                | ..           | ..            | ..         | ..            | 775              | 46.50             |
| 1953-54 | ..         | ..                | ..           | ..            | ..         | ..            | 567              | 46.50             |
| 1954-55 | ..         | ..                | ..           | ..            | ..         | ..            | 595              | 41.31             |
| 1955-56 | ..         | ..                | ..           | ..            | ..         | ..            | 495 <sup>d</sup> | 34.75             |
| 1956-57 | ..         | ..                | ..           | ..            | ..         | ..            | 312 <sup>d</sup> | 52.06             |
| 1957-58 | ..         | ..                | ..           | ..            | ..         | ..            | 702              | 56.50             |
| 1958-59 | ..         | ..                | ..           | ..            | ..         | ..            | 861              | 63.00             |
| 1959-60 | ..         | ..                | ..           | ..            | ..         | ..            | 623              | 63.38             |

SOURCES: 1. Production  
2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

CSOB, July 1955 for 1951-55; Coal Commissioner's Office for 1955-57; and *Foreign Trade Statistics of Pakistan*. C.S.O. (quarterly issues) for 1957-60.  
CSOB, 1952-60. Price in 1951-52 is estimated on the basis of import prices, adjusted for the difference with domestic prices in subsequent years. For 1952-59 price is average of steam coal High grade (South Africa) and selected 'A' Indian. Price in 1959-60 is of Indian coal only.

TABLE 23  
Net Availability and Price of Kerosene Oil  
(East Pakistan)

(Quantity in 000 Gallons)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Gallon |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|----------------------|
|         |            |                   | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                      |
| 1951-52 | ..         | ..                | ..                  | ..            | ..                  | ..            | 21,223           | 1.53                 |
| 1952-53 | ..         | ..                | ..                  | ..            | ..                  | ..            | 23,836           | 1.59                 |
| 1953-54 | ..         | ..                | ..                  | ..            | ..                  | ..            | 33,394           | 1.59                 |
| 1954-55 | ..         | ..                | ..                  | ..            | ..                  | ..            | 35,407           | 1.39                 |
| 1955-56 | ..         | ..                | ..                  | ..            | ..                  | ..            | 14,796           | 1.63                 |
| 1956-57 | ..         | ..                | ..                  | ..            | ..                  | ..            | 33,246           | 1.75                 |
| 1957-58 | ..         | ..                | ..                  | ..            | ..                  | ..            | 17,060           | 1.75                 |
| 1958-59 | ..         | ..                | ..                  | ..            | ..                  | ..            | 14,556           | 1.88                 |
| 1959-60 | ..         | ..                | ..                  | ..            | ..                  | ..            | 28,626           | 1.58                 |

SOURCES: 1. Production  
2. Changes in stocks  
3. Interwing Trade  
4. Foreign Trade  
5. Price

CSOYB. Entire quantity of mineral oil is assumed to be Kerosene Oil.  
CSO.  
CSOB, 1952-60. Price at Chittagong.

TABLE 24  
Net Availability and Price of Motor Spirit (Petrol)  
(East Pakistan)

(Quantity in 000 Gallons)

| Year    | Production | Changes in Stocks | Imports from        |               | Exports to          |               | Net Availability | Price Rs. per Gallon |
|---------|------------|-------------------|---------------------|---------------|---------------------|---------------|------------------|----------------------|
|         |            |                   | Abroad <sup>d</sup> | West Pakistan | Abroad <sup>d</sup> | West Pakistan |                  |                      |
| 1951-52 | ..         | ..                | ..                  | ..            | ..                  | ..            | 4,445            | 2.50                 |
| 1952-53 | ..         | ..                | ..                  | ..            | ..                  | ..            | 1,853            | 2.75                 |
| 1953-54 | ..         | ..                | ..                  | ..            | ..                  | ..            | 4,824            | 3.25                 |
| 1954-55 | ..         | ..                | ..                  | ..            | ..                  | ..            | 4,590            | 2.63 <sup>b</sup>    |
| 1955-56 | ..         | ..                | ..                  | ..            | ..                  | ..            | 4,734            | 2.75 <sup>b</sup>    |
| 1956-57 | ..         | ..                | ..                  | ..            | ..                  | ..            | 6,393            | 2.81                 |
| 1957-58 | ..         | ..                | ..                  | ..            | ..                  | ..            | 6,172            | 2.94                 |
| 1958-59 | ..         | ..                | ..                  | ..            | ..                  | ..            | 6,500            | 2.94                 |
| 1959-60 | ..         | ..                | ..                  | ..            | ..                  | ..            | 7,357            | 2.94                 |

SOURCES: 1. Production ...  
2. Changes in stocks ...  
3. Interwing Trade CSOYB. Entire quantity of mineral oil is assumed to be Kerosene oil.  
4. Foreign Trade CSO.  
5. Price CSOB, 1952-60; price at Chittagong.

TABLE 25  
Net Availability and Price of Electricity  
(East Pakistan)

(Quantity in 000 Kwh)

| Year    | Production | Changes in Stocks | Imports from |               | Exports to |               | Net Availability | Price Rs. per Kwh |
|---------|------------|-------------------|--------------|---------------|------------|---------------|------------------|-------------------|
|         |            |                   | Abroad       | West Pakistan | Abroad     | West Pakistan |                  |                   |
| 1951-52 | ..         | ..                | ..           | ..            | ..         | ..            | 20,225           | 0.44              |
| 1952-53 | ..         | ..                | ..           | ..            | ..         | ..            | 22,029           | 0.44              |
| 1953-54 | ..         | ..                | ..           | ..            | ..         | ..            | 22,846           | 0.44              |
| 1954-55 | ..         | ..                | ..           | ..            | ..         | ..            | 31,781           | 0.44              |
| 1955-56 | ..         | ..                | ..           | ..            | ..         | ..            | 43,964           | 0.44              |
| 1956-57 | ..         | ..                | ..           | ..            | ..         | ..            | 51,106           | 0.44              |
| 1957-58 | ..         | ..                | ..           | ..            | ..         | ..            | 63,217           | 0.44              |
| 1958-59 | ..         | ..                | ..           | ..            | ..         | ..            | 77,226           | 0.44              |
| 1959-60 | ..         | ..                | ..           | ..            | ..         | ..            | 77,226           | 0.44              |

SOURCES: 1. Production: *Electricity Supply of Pakistan Statistics* (1948-55) Govt. of Pakistan for 1951-56; CSOB 1956-59 for 1956-59; figures of 1958-59 are repeated in 1959-60 for want of data.  
2. Changes in stocks ...  
3. Interwing Trade ...  
4. Foreign Trade ...  
5. Price *Electricity Supply of Pakistan Statistics* (1948-55), Govt. of Pakistan. Average of price charged to domestic consumers at Dacca and Chittagong.



APPENDIX C

Calculation of the Indices

TABLE C-1

West Pakistan

| Year    | $\sum_i^M p_i^o q_i^t$ | $\sum_i^M p_i^t q_i^o$ | $\sum_i^M p_i^t q_i^t$ | Laspeyres Index | Paasche Index | Fisher Index |
|---------|------------------------|------------------------|------------------------|-----------------|---------------|--------------|
|         | (1)                    | (2)                    | (3)                    | (4)             | (5)           | (6)          |
| 1951-52 | .. 3406096             | 3406096                | 3406096                | 100.0           | 100.0         | 100.0        |
| 1952-53 | .. 3510817             | 3986757                | 3910071                | 117.1           | 111.4         | 114.2        |
| 1953-54 | .. 3821574             | 3446596                | 3685081                | 101.2           | 96.4          | 98.8         |
| 1954-55 | .. 4199540             | 2781264                | 3431308                | 81.7            | 81.7          | 81.7         |
| 1955-56 | .. 4288104             | 3172814                | 4000840                | 93.2            | 93.3          | 93.2         |
| 1956-57 | .. 4523526             | 3861725                | 4999401                | 113.4           | 110.5         | 112.0        |
| 1957-58 | .. 4887102             | 3806036                | 5238577                | 111.7           | 107.2         | 109.4        |
| 1958-59 | .. 5012022             | 3985822                | 5489195                | 117.0           | 109.5         | 113.2        |
| 1959-60 | .. 5250408             | 4127604                | 6225203                | 121.2           | 118.6         | 119.9        |

Explanation:—Column (4) is computed by  $\frac{\sum_i^M p_i^t q_i^o}{\sum_i^M p_i^o q_i^o} + \frac{\sum_i^M p_i^o q_i^o}{\sum_i^M p_i^o q_i^o}$

Column (5) is computed by  $\frac{\sum_i^M p_i^t q_i^t}{\sum_i^M p_i^o q_i^t} + \frac{\sum_i^M p_i^o q_i^t}{\sum_i^M p_i^o q_i^t}$

Column (6) is  $\sqrt{\text{col. (4)} \cdot \text{col. (5)}}$

1951-52 is year 0 in the index

TABLE C-2  
East Pakistan

| Year    | $\sum_i p_i^0 q_i^t$ | $\sum_i p_i^t q_i^0$ | $\sum_i p_i^t q_i^t$ | Laspeyres Index | Paasche Index | Fisher Index |
|---------|----------------------|----------------------|----------------------|-----------------|---------------|--------------|
|         | (1)                  | (2)                  | (3)                  | (4)             | (5)           | (6)          |
| 1951-52 | 5849631              | 5849631              | 5849631              | 100.0           | 100.0         | 100.0        |
| 1952-53 | 6113706              | 5641760              | 5887699              | 96.5            | 96.3          | 96.4         |
| 1953-54 | 6995052              | 4458324              | 5321126              | 76.2            | 76.1          | 76.1         |
| 1954-55 | 6495727              | 3415668              | 3834209              | 58.4            | 59.0          | 58.7         |
| 1955-56 | 5748229              | 4883293              | 4785938              | 83.5            | 83.3          | 83.4         |
| 1956-57 | 7447808              | 6973606              | 8726475              | 119.2           | 117.2         | 118.2        |
| 1957-58 | 7146020              | 6694716              | 8023609              | 114.5           | 112.3         | 113.4        |
| 1958-59 | 6425091              | 6961262              | 7468329              | 119.0           | 116.2         | 117.6        |
| 1959-60 | 7635781              | 7280828              | 9382743              | 124.5           | 122.9         | 123.7        |

Explanation:—Column (4) is computed by  $\frac{\sum_i p_i^t q_i^0}{\sum_i p_i^0 q_i^0} \times 100$

Column (5) is computed by  $\frac{\sum_i p_i^0 q_i^t}{\sum_i p_i^0 q_i^0} \times 100$

Column (6) is  $\sqrt{\text{col. (4)} \cdot \text{col. (5)}}$

1951-52 is year 0 in the index.

TABLE C-3  
All-Pakistan Price Index

| Year    | Fisher Index |
|---------|--------------|
| 1951-52 | 100.0        |
| 1952-53 | 105.3        |
| 1953-54 | 87.5         |
| 1954-55 | 70.2         |
| 1955-56 | 88.3         |
| 1956-57 | 115.1        |
| 1957-58 | 111.4        |
| 1958-59 | 115.4        |
| 1959-60 | 121.8        |

Explanation:—Arithmetic average of the Fisher indices of East and West Pakistan.

## APPENDIX D

### EFFECTS OF ALTERNATIVE WEIGHTS

It is suggested in the Appendix on Methodology (page 23) that the coverage of agricultural goods is probably more nearly complete than the coverage of other commodities. The purpose of this Appendix is to examine the effects on the index of such a coverage-differential between the two broad classes of food-grain<sup>1</sup> and other commodities.

Two new indices are constructed (for each wing), one where the absorption of each food-grain is reduced 20 per cent and another where that of each food-grain is reduced 40 per cent. These give the same results as raising the absorption of non-food-grains by 25 per cent and 67 per cent, respectively. Implicit in such a procedure is the assumption that there are many non-food-grains that escaped inclusion in the index and that their prices behaved, over the 1950's, in much the same way as those of the non-food-grains that are included in the index. If this is so, raising the weights of included non-food-grains will yield a more accurate estimate of the "true" index.<sup>2</sup>

Three values of the Fisher index (for each wing) are given in the table below: in column (1), the original index (see Appendix C), in column (2), the index with food-grains absorption reduced 20 per cent; and in column (3), the index with food-grains absorptions reduced 40 per cent.

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<sup>1</sup>. Food-grains are defined to include, in this Appendix, wheat, rice, jowar, bajra, maize, barley, gram, mash, moong, and masur.

<sup>2</sup>. The "true" index is, of course, *not* a "true" measure of inflation but only the index that would result if perfect coverage of commodities were achieved.

TABLE D-1

| Year    | West Pakistan   |              |              | East Pakistan   |              |              |
|---------|-----------------|--------------|--------------|-----------------|--------------|--------------|
|         | Original<br>(1) | (20%)<br>(2) | (40%)<br>(3) | Original<br>(1) | (20%)<br>(2) | (40%)<br>(3) |
| 1951-52 | 100             | 100          | 100          | 100             | 100          | 100          |
| 1952-53 | 114             | 111          | 108          | 96              | 96           | 96           |
| 1953-54 | 99              | 98           | 96           | 76              | 77           | 78           |
| 1954-55 | 82              | 82           | 82           | 59              | 60           | 61           |
| 1955-56 | 93              | 93           | 92           | 83              | 83           | 83           |
| 1956-57 | 112             | 110          | 109          | 118             | 117          | 116          |
| 1957-58 | 109             | 108          | 106          | 113             | 113          | 113          |
| 1958-59 | 113             | 111          | 108          | 118             | 117          | 116          |
| 1959-60 | 120             | 119          | 117          | 124             | 123          | 122          |

The suspicion of the text that better coverage of excluded non-food-grains would have reduced the volatility of the index is supported by these figures—but the support is indeed slight. Rarely does the vastly increased weight of non-food-grains move the index by more than three points in the direction of 100. One must conclude that it is the volatility of the prices, and not a bias of the weights, that induces the volatility<sup>1</sup> of the price index.

<sup>1</sup> The index is "volatile" only in comparison to other indices, of course. See Section 3 for these comparisons.

## APPENDIX E

### WEIGHTS

The Paasche index formula (equation 15) may be rewritten (with base year 0):

$$(23) \quad 100 \cdot \sum_{i=1}^N \left( \frac{p_i^t}{p_i^0} \right) w_i^t$$

where

$$(24) \quad w_i^t = \frac{p_i^0 q_i^t}{\sum_{i=1}^N p_i^0 q_i^t}$$

When the price index is written in this manner, it is more clearly seen as the weighted sum of the percentage price changes of each commodity (between year 0 and year  $t$ ). The weight is the amount of the commodity absorbed by the economy in that year ( $t$ ), valued at its price in the base year; and the sum of the weights is unity.

The Laspeyre formula (14) may also be rewritten as (23), but the weight formula is

$$(25) \quad w_i = \frac{p_i^0 q_i^0}{\sum_{i=1}^N p_i^0 q_i^0}$$

The Laspeyres weights, unlike the Paasche, are invariant over time; the percentage price change of a commodity is always weighted proportionately to its base year value.

The weights in the index are presented in Tables E-1 and E-2. The first column is the Laspeyre weight, (25), and the next eight columns are the Paasche weights for 1952-53, 1953-54, ..., 1959-60 (*i.e.*, (24) for  $t=1, 2, \dots, 8$ ).

The most interesting feature of these Tables is the decline in the weights of food items over the 1950's. One may interpret this, opti-

mistically, as evidence of an increasing variety to consumption concomitant to development and industrialisation; or pessimistically, as testimony of the failure of agricultural expansion plans. It is more wise to refrain from drawing conclusions from either the level or the changes in these weights; the index does not contain all the commodities it would ideally cover and hence the weights may mislead an analyst of the relative importance in the economy of different commodities.<sup>1</sup>

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<sup>1</sup>. As an example, consider "steel" in West Pakistan. Is it really so insignificant (less than 1 per cent of the weights) in the economy? The answer is no; only steel *tubing* is considered in the index to avoid the biasing effects of quality and compositional change. Other such examples exist.

TABLE E-1  
Percentage Weights of Commodities in West Pakistan

| Name of commodity | 1951-52 | 1952-53 | 1953-54 | 1954-55 | 1955-56 | 1956-57 | 1957-58 | 1958-59 | 1959-60 |
|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. Wheat          | 36.59   | 32.22   | 26.11   | 27.47   | 23.72   | 27.06   | 27.60   | 26.35   | 28.35   |
| 2. Rice           | 7.99    | 8.88    | 9.94    | 8.37    | 7.64    | 8.62    | 7.10    | 7.24    | 7.32    |
| 3. Jawar          | 1.29    | 1.34    | 1.62    | 1.13    | 1.25    | 1.21    | 0.79    | 0.90    | 0.94    |
| 4. Bajra          | 2.52    | 2.46    | 3.90    | 2.68    | 2.56    | 2.59    | 1.81    | 1.95    | 2.00    |
| 5. Maize          | 3.39    | 3.02    | 3.22    | 3.10    | 3.22    | 3.03    | 2.76    | 2.84    | 2.79    |
| 6. Barley         | 0.82    | 0.62    | 0.52    | 0.66    | 0.53    | 0.61    | 0.50    | 0.68    | 0.60    |
| 7. Grams          | 5.35    | 2.95    | 2.03    | 3.29    | 3.40    | 3.59    | 3.37    | 3.20    | 3.19    |
| 8. Mash           | 0.29    | 0.28    | 0.40    | 0.25    | 0.25    | 0.20    | 0.17    | 0.19    | 0.18    |
| 9. Moong          | 0.66    | 0.58    | 0.63    | 0.49    | 0.51    | 0.45    | 0.35    | 0.34    | 0.32    |
| 10. Masoor        | 0.26    | 0.36    | 0.23    | 0.26    | 0.35    | 0.28    | 0.27    | 0.26    | 0.23    |
| 11. Raw Sugar     | 11.86   | 15.02   | 17.43   | 15.65   | 13.97   | 13.66   | 15.63   | 16.17   | 14.39   |
| 12. Refined Sugar | 4.45    | 2.72    | 3.04    | 3.00    | 4.16    | 3.68    | 3.78    | 2.29    | 2.82    |
| 13. Tea           | 1.04    | 1.63    | 1.43    | 1.11    | 1.69    | 1.29    | 1.37    | 1.56    | 1.63    |
| 14. Salt          | 0.88    | 0.95    | 0.82    | 0.87    | 0.91    | 0.91    | 0.57    | 0.58    | 0.41    |
| 15. Cigarettes    | 2.45    | 3.33    | 2.62    | 2.75    | 2.95    | 3.40    | 3.82    | 4.19    | 4.65    |
| 16. Tobacco       | 1.70    | 1.85    | 1.22    | 1.62    | 3.14    | 1.68    | 1.40    | 1.89    | 1.24    |
| 17. Fish          | 1.03    | 1.26    | 1.30    | 1.25    | 1.29    | 1.30    | 1.12    | 1.19    | 1.20    |

TABLE E-1—Contd.  
Percentage Weights of Commodities in West Pakistan

| Name of commodity       | 1951-52 | 1952-53 | 1953-54 | 1954-55 | 1955-56 | 1956-57 | 1957-58 | 1958-59 | 1959-60 |
|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 18. Cement              | 1.33    | 1.56    | 1.35    | 1.67    | 1.44    | 1.39    | 1.74    | 1.88    | 1.70    |
| 19. Hessian Cloth       | 0.07    | 0.14    | 0.18    | 0.18    | 0.27    | 0.29    | 0.23    | 0.15    | 0.04    |
| 20. Gunny Bags          | 0.68    | 1.57    | 2.08    | 1.59    | 1.62    | 1.69    | 1.13    | 1.25    | 0.79    |
| 21. Matches             | 0.50    | 0.26    | 0.42    | 0.37    | 0.54    | 0.39    | 0.73    | 0.45    | 0.63    |
| 22. Rape seed & Mustard | 2.02    | 2.06    | 0.75    | 1.42    | 1.98    | 1.63    | 1.43    | 1.62    | 1.80    |
| 23. Coal                | 3.78    | 3.21    | 2.75    | 2.68    | 2.42    | 1.79    | 2.25    | 1.84    | 2.24    |
| 24. Paper               | 0.51    | 0.31    | 0.57    | 1.15    | 0.94    | 1.03    | 0.91    | 0.94    | 1.06    |
| 25. Cycle Tyres         | 0.08    | 0.06    | 0.15    | 0.13    | 0.15    | 0.14    | 0.19    | 0.15    | 0.17    |
| 26. Cycle Tubes         | 0.06    | 0.06    | 0.10    | 0.09    | 0.10    | 0.09    | 0.12    | 0.09    | 0.12    |
| 27. Motor Tyres         | 0.57    | 0.29    | 0.49    | 0.59    | 0.45    | 0.34    | 0.26    | 0.16    | 0.08    |
| 28. Motor Tubes         | 0.05    | 0.02    | 0.04    | 0.05    | 0.01    | 0.03    | 0.01    | 0.01    | 0.02    |
| 29. Steel Ingots        | 0.18    | 0.40    | 0.54    | 0.39    | 0.63    | 0.66    | 0.57    | 0.34    | 0.32    |
| 30. Kerosene Oil        | 0.76    | 0.56    | 0.93    | 0.58    | 0.61    | 0.24    | 0.22    | 0.19    | 1.22    |
| 31. Motor Spirit        | 2.41    | 1.76    | 1.97    | 2.07    | 1.44    | 1.06    | 1.05    | 1.12    | 2.44    |
| 32. Fine Cloth          | 0.62    | 1.22    | 1.87    | 1.57    | 1.60    | 3.14    | 2.23    | 2.14    | 1.90    |
| 33. Medium Cloth        | 1.10    | 3.55    | 5.26    | 7.53    | 8.53    | 4.37    | 4.01    | 4.39    | 3.59    |
| 34. Coarse Cloth        | 0.27    | 0.52    | 0.77    | 0.58    | 1.09    | 3.10    | 4.65    | 4.76    | 3.22    |
| 35. Electricity         | 2.43    | 2.97    | 3.34    | 3.45    | 4.61    | 5.08    | 4.80    | 6.70    | 6.39    |

N.B.—Column-wise totals may not always equal 100 because of rounding.

TABLE E-2  
Percentage Weights of Commodities in East Pakistan

| Name of commodity               | 1951-52 | 1952-53 | 1953-54 | 1954-55 | 1955-56 | 1956-57 | 1957-58 | 1958-59 | 1959-60 |
|---------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. Wheat .. ..                  | 0.27    | 0.24    | 0.19    | 0.29    | 0.40    | 0.59    | 0.73    | 0.66    | 1.27    |
| 2. Rice .. ..                   | 83.27   | 83.20   | 81.50   | 80.32   | 77.30   | 80.47   | 78.75   | 77.12   | 80.23   |
| 3. Grams .. ..                  | 0.28    | 0.28    | 0.25    | 0.27    | 0.36    | 0.31    | 0.21    | 0.18    | 0.19    |
| 4. Mash .. ..                   | 0.16    | 0.16    | 0.14    | 0.16    | 0.23    | 0.12    | 0.13    | 0.15    | 0.13    |
| 5. Moong .. ..                  | 0.28    | 0.26    | 0.23    | 0.28    | 0.16    | 0.11    | 0.08    | 0.09    | 0.07    |
| 6. Masoor .. ..                 | 0.72    | 0.67    | 0.64    | 0.73    | 0.94    | 0.73    | 0.52    | 0.48    | 0.40    |
| 7. Raw Sugar .. ..              | 3.20    | 3.40    | 3.28    | 3.07    | 3.72    | 2.97    | 2.95    | 3.16    | 2.41    |
| 8. Refined Sugar .. ..          | 1.04    | 0.84    | 0.95    | 1.17    | 1.10    | 0.75    | 0.96    | 1.34    | 0.87    |
| 9. Tea .. ..                    | 0.05    | 0.03    | 0.05    | 0.11    | 0.06    | 0.11    | 0.05    | 0.07    | 0.03    |
| 10. Salt .. ..                  | 0.87    | 0.85    | 0.75    | 0.82    | 0.94    | 0.74    | 0.78    | 0.89    | 0.76    |
| 11. Cigarettes .. ..            | 0.12    | 0.06    | 0.48    | 0.58    | 0.60    | 0.48    | 0.51    | 0.81    | 0.70    |
| 12. Tobacco .. ..               | 2.65    | 2.43    | 2.24    | 2.45    | 3.12    | 1.97    | 2.02    | 1.97    | 1.66    |
| 13. Fish .. ..                  | 2.17    | 3.05    | 4.57    | 4.83    | 5.59    | 4.47    | 4.82    | 5.40    | 4.61    |
| 14. Rape Seed and Mustard .. .. | 1.55    | 1.54    | 1.51    | 1.37    | 1.60    | 1.46    | 1.50    | 1.25    | 1.29    |

TABLE E-2—Contd.  
Percentage Weights of Commodities in East Pakistan

| Name of commodity                | 1951-52 | 1952-53 | 1953-54 | 1954-55 | 1955-56 | 1956-57 | 1957-58 | 1958-59 | 1959-60 |
|----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 15. Gunny Bags .. ..             | 0.01    | 0.00    | 0.06    | 0.17    | 0.06    | 0.63    | 1.38    | 0.48    | 0.61    |
| 16. Matches .. ..                | 0.19    | 0.11    | 0.10    | 0.15    | 0.15    | 0.26    | 0.08    | 0.32    | 0.32    |
| 17. Hessian Cloth .. ..          | 0.01    | 0.01    | 0.10    | 0.06    | 0.37    | 0.49    | 0.51    | 1.30    | 0.43    |
| 18. Cotton Textile (Cloth) .. .. | 1.33    | 1.30    | 1.27    | 1.22    | 1.51    | 1.55    | 2.19    | 2.28    | 2.11    |
| 19. Motor Tyres .. ..            | 0.04    | 0.02    | 0.03    | 0.03    | 0.01    | 0.08    | 0.01    | 0.01    | 0.04    |
| 20. Motor Tubes .. ..            | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |
| 21. Paper .. ..                  | 0.13    | 0.07    | 0.17    | 0.23    | 0.39    | 0.29    | 0.34    | 0.22    | 0.17    |
| 22. Coal .. ..                   | 0.76    | 0.65    | 0.41    | 0.47    | 0.44    | 0.21    | 0.50    | 0.68    | 0.42    |
| 23. Kerosene Oil .. ..           | 0.56    | 0.60    | 0.73    | 0.84    | 0.39    | 0.68    | 0.37    | 0.35    | 0.59    |
| 24. Motor Spirit .. ..           | 0.19    | 0.08    | 0.17    | 0.18    | 0.21    | 0.21    | 0.22    | 0.25    | 0.24    |
| 25. Electricity .. ..            | 0.15    | 0.16    | 0.14    | 0.22    | 0.34    | 0.30    | 0.39    | 0.53    | 0.44    |

N.B.—Column-wise totals may not always equal 100 because of rounding.



## APPENDIX F

### CORRELATION OF CHANGES IN PRICES WITH INDICES

In this appendix the coefficients of correlation between the percentage changes of each of the commodities in the index and the percentage changes of the indices are shown. As mentioned in section II, the commodities are grouped into four classes:

- (1) Agricultural.
- (2) Foreign-Oriented.
- (3) Domestically Manufactured and Consumed.
- (4) Primarily Imported from the other Wing.

This classification is made for each of the wings, and a particular commodity is not necessarily in the same category in both the wings (*e.g.*, tea is a foreign-oriented commodity in the East Pakistan Index but an other-wing-oriented commodity in the West Pakistan Index).

Overlapping has been particularly conspicuous for many of the manufactured items which are partially imported (or exported) and partially domestically produced (or consumed). In classifying these items a somewhat arbitrary method has been adopted. Commodities are considered to be foreign-oriented if more than 40 per cent are bought (or sold) internationally.

Some of the commodities changed groups in course of events. Paper was a foreign-oriented commodity during the early years of the index but became a domestically manufactured commodity from 1953-54. In all such cases classification has been made only after considering in which group the commodities continued to remain for at least two-thirds of the years.

Controlled prices are indicated by asterisks. Table F-1 shows the correlations between annual percentage price changes in East Pakistan of each good with (1) the percentage change of the East Pakistan Fisher index of that year and (2) the percentage change of the same index in the preceding year. Table F-2 presents the same correlations for West Pakistan.

TABLE F-1  
East Pakistan

| Commodity                                       | Correlation:<br>Current<br>Year's Index | Correlation:<br>Previous<br>Year's Index |
|---|---|--|
| <b>Agricultural</b>                             |   |  |
| *1. Wheat                                       | +.682                                   | -.271                                    |
| 2. Rice   | +.994                                   | +.414                                    |
| 3. Grams  | +.887                                   | +.361                                    |
| 4. Mash   | +.659                                   | +.427                                    |
| 5. Moong  | +.893                                   | +.104                                    |
| 6. Masur  | +.688                                   | +.457                                    |
| 7. Raw Sugar                                    | +.122                                   | +.714                                    |
| 8. Rape & Mustard                               | +.418                                   | +.746                                    |
| <b>Foreign Oriented</b>                         |   |  |
| 1. Tea  | -.854                                   | -.237                                    |
| 2. Motor Tyres                                  | +.898                                   | .000                                     |
| 3. Motor Tubes                                  | +.899                                   | .000                                     |
| 4. Gunny Bags                                   | +.212                                   | -.241                                    |
| 5. Kerosene Oil                                 | +.745                                   | +.032                                    |
| 6. Motor Spirit                                 | +.141                                   | +.316                                    |
| 7. Coal   | +.436                                   | +.793                                    |
| 8. Hessian Cloth                                | +.253                                   | -.063                                    |
| <b>Domestically Manufactured &amp; Consumed</b> |   |  |
| *1. Refined Sugar                               | -.354                                   | +.448                                    |
| 2. Salt   | +.464                                   | +.452                                    |
| 3. Electricity                                  | .000                                    | .000                                     |
| 4. Paper  | +.207                                   | +.406                                    |
| 5. Matches                                      | -.443                                   | -.425                                    |
| <b>Primarily Imported from the other Wing</b>   |   |  |
| 1. Cigarettes                                   | +.486                                   | -.103                                    |
| 2. Indigenous Cloth                             | +.032                                   | +.161                                    |
| <b>Miscellaneous</b>                            |   |  |
| 1. Tobacco                                      | -.307                                   | +.406                                    |
| 2. Fish   | -.184                                   | -.195                                    |

TABLE F-2  
West Pakistan

| Commodity                                       |     |     |     | Correlation:<br>Current<br>Year's Index | Correlation:<br>Previous<br>Year's Index |
|---|-----|-----|-----|---|--|
| <b>Agricultural</b>                             |     |     |     |   |  |
| 1. Wheat  | ..  | ..  | ..  | +.930                                   | -.055                                    |
| *2. Rice  | ..  | ..  | ..  | +.509                                   | +.680                                    |
| 3. Jawar  | ..  | ..  | ..  | +.765                                   | -.020                                    |
| 4. Bajra  | ... | ... | ... | +.799                                   | -.045                                    |
| 5. Maize  | ..  | ..  | ..  | +.910                                   | -.232                                    |
| 6. Barley                                       | ..  | ..  | ..  | +.867                                   | .000                                     |
| 7. Grams  | ..  | ..  | ..  | +.740                                   | +.110                                    |
| 8. Mash   | ..  | ..  | ..  | +.812                                   | -.288                                    |
| 9. Moong  | ..  | ..  | ..  | +.884                                   | -.155                                    |
| 10. Masoor                                      | ..  | ..  | ..  | +.596                                   | +.760                                    |
| 11. Raw Sugar                                   | ..  | ..  | ..  | +.239                                   | -.427                                    |
| 12. Rape Seed & Mustard                         | ..  | ..  | ..  | .000                                    | +.857                                    |
| <b>Foreign Oriented</b>                         |     |     |     |   |  |
| 1. Coal   | ..  | ..  | ..  | +.274                                   | +.632                                    |
| 2. Motor Tyres                                  | ..  | ..  | ..  | +.646                                   | -.332                                    |
| 3. Motor Tubes                                  | ..  | ..  | ..  | +.622                                   | -.307                                    |
| 4. Steel Ingots                                 | ..  | ..  | ..  | +.424                                   | -.434                                    |
| 5. Kerosene Oil                                 | ..  | ..  | ..  | +.911                                   | .000                                     |
| <b>Domestically Manufactured &amp; Consumed</b> |     |     |     |   |  |
| *1. Refined Sugar                               | ..  | ..  | ..  | +.077                                   | +.711                                    |
| 2. Salt   | ..  | ..  | ..  | -.158                                   | +.359                                    |
| 3. Cigarettes                                   | ..  | ..  | ..  | +.404                                   | -.130                                    |
| 4. Cement                                       | ..  | ..  | ..  | +.274                                   | +.810                                    |
| 5. Cycle Tyres                                  | ..  | ..  | ..  | +.148                                   | +.084                                    |
| 6. Cycle Tubes                                  | ..  | ..  | ..  | +.045                                   | -.207                                    |

| Commodity                                     |    |    | Correlation:<br>Current<br>Year's Index | Correlation:<br>Previous<br>Year's Index |
|---|----|----|---|--|
| 7. Motor Spirit ..                            | .. | .. | +.283                                   | +.610                                    |
| 8. Fine Cloth ..                              | .. | .. | -.032                                   | +.640                                    |
| 9. Medium Cloth ..                            | .. | .. | +.190                                   | +.777                                    |
| 10. Coarse Cloth ..                           | .. | .. | +.508                                   | +.643                                    |
| 11. Electricity ..                            | .. | .. | .000                                    | .000                                     |
| <b>Primarily Imported from the other Wing</b> |    |    |   |  |
| 1. Tea ..                                     | .. | .. | -.857                                   | -.381                                    |
| 2. Hessian Cloth ..                           | .. | .. | +.245                                   | -.138                                    |
| 3. Gunny Bags ..                              | .. | .. | -.100                                   | -.207                                    |
| 4. Matches ..                                 | .. | .. | .000                                    | +.546                                    |
| 5. Paper ..                                   | .. | .. | +.791                                   | -.214                                    |
| <b>Miscellaneous</b>                          |    |    |   |  |
| 1. Tobacco ..                                 | .. | .. | -.443                                   | +.501                                    |
| 2. Fish ..                                    | .. | .. | +.345                                   | +.422                                    |

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