

INPUT-OUTPUT TABLES FOR RAJASTHAN :
METHODOLOGY AND ESTIMATES

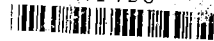
By

Ravindra H. Dholakia

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Bakul H. Dholakia

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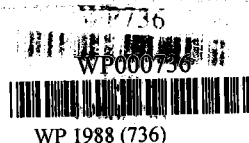
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ABSTRACT

In the present paper, an attempt is made to construct Input-Output Tables for Rajasthan compatible and consistent with the national I-O tables for the year 1984-85 which formed the basis for the national 7th Five Year Plan. Input-Output coefficient matrix and input transaction matrix for Rajasthan are presented for 50 x 50 commodity sectors at the current (1984-85) prices. Both the survey based and non-survey based methods of estimating the I-O tables are used. A detailed comparison of the estimates reveals that non-survey based method used in the paper performs satisfactorily to capture the overall regional differences from the national technology. If, however, the purpose is to capture sector-activity-specific differences in the regional technology, the survey-based method should be preferred over the non-survey based method although it involves much greater time and effort.

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RAVINDRA H. DHOLAKIA

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1. Need for Regional Tables

Inter-Industry table, popularly known as input-output (I/O) table, is an accounting device to represent the flows of transactions taking place in an economy over a given period of time which is generally taken to be a year. It captures the sectoral inter-dependence, basic structure and broad technology in the economy. Since development planning in the economy aims at achieving different goals by carefully avoiding bottlenecks and imbalances in the system, the detailed description of the economy provided in the inter-industry table assumes special importance in the planning models. After the Third Five Year Plan, the macro planning models used in India have been based on an input-output table for the whole economy. While such aggregative planning models based on I/O tables ensure internal consistency at the macro level for the specific sectoral targets, they fail to capture the dimension of space. Recent studies on regional disparities have clearly

shown that not only the levels of technology and production structure differ substantially but their rates of change over time also vary considerably across the regions in India (R.H. Dholakia, 1985). In order to make the plan targets more realistic, it is, therefore, necessary to incorporate the spatial dimension explicitly into the planning model.

One approach to tackle this problem is to decentralize the planning process by adopting the multi-level planning framework so as to capture the local circumstances and information more effectively. This would require preparation of state plans in the framework of the national plan. The requirement of the internal consistency of the state plans can be met only when the sectoral interdependence and sectoral links existing in the state are clearly spelt out. In other words, an inter-industry table at the state level should be used as the basis for the state plan just as the national inter-industry table is used as the basis for national plan. The state I/O table is expected to capture the basic differences between the state economy and the national economy in terms of the production structure and technology. The method of decentralized planning can thus result in a direct incorporation of the spatial dimension into the overall planning model.

The other approach to deal with the spatial dimension in the national planning is to directly attack the problem by replacing regional I/O tables for the national I/O matrix. In other words, the planning model itself can be modified by decentralizing the I/O table rather than the plan itself. The specific requirement of such an approach is that (i) I/O table for each of the regions in the nation must be prepared; (ii) the reference year for all regional I/O tables must be the same; (iii) the sectoral dimensions of all regional I/O tables should also be the same; and (iv) broad methodology for constructing I/O tables must be the same for all regions.

It is evident that, in both these approaches designed to incorporate the spatial dimension in the national plan model, we require estimation of the regional I/O matrix compatible with the national I/O matrix. Since the I/O tables prove most useful in deriving a consistent estimate of the target of gross output for different sectors on the basis of given levels of final demands, the regional I/O tables are required essentially to get more realistic targets of the gross output in different sectors of the economy.

Another important use of the regional I/O tables is in estimating or forecasting the region specific total demand of critical input industries in future. The regional I/O table

can predict with greater degree of reliability the input demand implications of various alternative developmental strategies under consideration at the regional level. It can also be used to predict the likely effects of any type of supply shocks like drought on the regional economy. Thus, the inter-industry transaction structure in a regional economy is a valuable tool for forecasting the demand for inputs and supply of outputs in the specific regional developmental context. It can also serve as a basis for transport planning since a complete system of regional I/O tables provides the implicit estimates of interregional flows by commodities.

In short, the importance of regional I/O tables compatible with the national I/O table cannot be overstated in the context of realistic planning for economic development in any large sized multi-region national economy like India.

II. Previous Studies for Rajasthan

Efforts in the direction of preparing regional I/O matrices in India were initiated in the 1950's. Subsequently, several individual researchers and institutions have constructed I/O tables for different states during the last two decades. A detailed survey of the availability of regional I-O tables in different states in India has been presented in Prasad and Dalvi (1982). Brief surveys of available studies on regional I-O tables are also presented in Venkatramaiah et. al. (1979) and Saluja (1980).

For Rajasthan, the first attempt for constructing regional I/O matrix was made by Mehta and Bohra (1971) for the reference year 1964-65. Subsequently, Mehta (1983) updated and improved upon the earlier attempt to construct I-O matrix for the year 1970-71. However, the sectoral classification attempted in Mehta's study (1983) was relatively aggregative as it consisted of 10 agricultural sectors, 31 industrial sectors and 8 other sectors accounting for the rest of the economy. The most detailed and relatively comprehensive sectoral classification attempted so far for constructing regional I-O table for Rajasthan has been the one presented in the wider study carried out by Venkataramaiah et al. (1979). This study presents a rectangular 60 x 47 input coefficients matrix for Rajasthan for the year 1965. After 1977, when Mehta's table was first made available, no serious attempt seems to have been made either for updating the existing I-O matrix or for constructing a fresh one for the Rajasthan State. On the other hand, at the national level, the Seventh Plan is based on an I-O matrix of 50 x 50 for the year 1984-85. It is an updated but abridged version of the I-O table for the year 1973-74 prepared and published by CSO (1981). However, no effort is made to construct compatible I-O matrices at regional level even for the base year 1973-74. The latest year for which the I-O table of Rajasthan is available as of now is 1970-71. It not only involves sectoral mismatch with the latest national I-O table, but it is also very outdated in

terms of the reference year as well as the basic source material. It, therefore, cannot capture adequately the regional differences in technology and production structure. For the same reason, we also cannot use the table prepared by Venkatramaiah et al (1979) as the basic reference table. In view of this, we have to necessarily think in terms of a direct approach to construct the I-O table for Rajasthan compatible and consistent with the latest national I-O table.

III. Basic Approaches for Constructing Regional I-O Tables

There are basically two alternative approaches for estimating the regional I-O matrix, viz., the Survey Method and the Non-Survey Method. In the survey-based method of estimating regional matrix, all the actual input-output transactions are estimated by using whatever information is available on such transactions from the secondary and primary sources for the regional unit. If some gaps in the availability of data are found, they are sought to be bridged by conducting specific primary surveys in the region. On the other hand, the non-survey method of estimating the regional I-O matrix uses the national I-O matrix as the basic reference and modifies it to the necessary extent by using the corresponding estimates of the gross output, value added and other relevant data readily obtainable for the regional unit. In particular, the two approaches differ on the following grounds :

1. While the compatibility and consistency of the regional matrix with the national matrix need to be carefully ensured in the survey method, these are always ensured in the non-survey method.
2. The survey method requires enormous time and effort whereas the non-survey method requires significantly less time and effort.
3. Voluminous amount of data collection and processing is involved in the survey method with the result that its requirement in terms of appropriate software and computer time is substantial. The amount of data collection and processing and hence software requirements are minimal for the non-survey method.
4. As against all the above mentioned disadvantages of the survey method vis-a-vis the non-survey method, the relative merit of the former lies in its ability to capture all of the regional variations in the production technology. While the non-survey method captures some regional variation, it fails to capture all relevant regional variations in production technology including major changes in the input structures of individual industries that may be found at the regional level.

In the present paper, we construct the I-O table for Rajasthan based on both the survey and the non-survey methods. An attempt has also been made to present some comparisons of our regional tables with the national I-O table of 50 x 50 sectors for the year 1984-85. The basic table that we have constructed is the one showing input coefficients of 50 commodity x 50 commodity matrix for Rajasthan. The input transaction table has also been derived by using the corresponding estimates of gross outputs.

IV. Data Sources and Method of Estimation for Survey-Based I-O Matrix

As we have already discussed above, in the survey method we have to take special care to ensure compatibility and consistency of the regional I-O table with the national I-O table. Accordingly, in the present case, we have to ensure compatibility with the national table in the following aspects :

- i) Coverage in terms of the number of sectors and their precise definitions in the I-O table. The Technical Note on Seventh Five Year Plan provides the relevant information about the number and definition of sectors in National I-O matrix. The reference year for the national I-O table is 1984-85 and the table is at current prices. Moreover, it is based on 50-sector

classification of the economy. We have to use the same number and definitions of sectors and the reference year for Rajasthan.

- ii) Concepts used for the regional I-O table should be the same as the ones used for constructing the national I-O table. Particularly, we should ensure that the I-O table should be in terms of commodity x commodity matrix. Further, it should be based on the 'industry technology assumption' which states that the input structure of a secondary product is considered to be similar to that of the industry where it has been produced (see, CSO 1981). Finally the regional I-O table should be in terms of producers' prices for inputs and outputs.

- iii) Apart from the similarity of broad methodology followed in the estimation of input coefficients in different sectors, the adjustment for the following aspects should be on similar lines in the regional I-O table as in the national I-O table : (a) unregistered manufacturing; (b) trade-margins; and (c) indirect taxes.

Keeping these requirements in view to ensure compatibility of the regional I-O table with the national I-O table, we may now outline the details of the methodology adopted in the present paper to construct the survey-based I-O table for Rajasthan for the year 1984-85.

As a first step in the methodology, we divide the regional economy into four broad categories. Since the national I-O table describes the whole economy with 50 sectors/commodities, we classify the same 50 commodities describing the whole economy of Rajasthan into four broad categories based on the following criteria : (i) the level of the sectoral disaggregation given in the national I-O matrix; (ii) the nature of the data availability at the regional level; and (iii) the nature of the activity. The four categories are :

- A. Industry including Electricity (30 sectors)
- B. Agriculture and Animal Husbandry (8 sectors)
- C. Fishing, Forestry and Mining (7 sectors)
- D. Supra-regional Transactors and Services (5 sectors).

We may now discuss the details of the methodology to derive the I-O coefficients for Rajasthan in each of the four above-mentioned categories.

IV-A: Industrial Sector: The industrial sector including electricity covers 30 out of the total of 50 commodities of the economy. It consists of not only the registered manufacturing and electricity sectors but also the unregistered manufacturing sector in the income accounts of the state. Since the basic source material and nature as well as availability of data differ substantially in these two sub-sectors, we distinguish these two segments of the industrial sector and treat

them separately to begin with. Later on we add them to derive the required estimates for the industrial sector.

IV-A (a) : Registered Manufacturing and Electricity

The basic source material in this sub-sector is the detailed tabulation of the factory sector of the Annual Survey of Industries (ASI). The latest year for which these detailed tables of the ASI are available is 1978-79. We have, therefore, made use of this information as the basic source.*¹ Tables 4, 5 and 7 in the ASI detailed tabulation provide very useful information on the inputs and outputs of the registered factories at four digit level of industrial aggregation. These data are both in the physical units and value terms. The data on inputs were classified first into three categories:

- (i) Material inputs
- (ii) Fuel Inputs
- (iii) Other Inputs

Having first identified the four digit level industries for which the data on all these 3 types ^{of} inputs are separately available for Rajasthan State, an exhaustive list of the value of material input items by each of the 4-digit level industries was made. This information is available from Tables of the ASI

*1. It may be noted here that the national I-O table for 1984-85 as available in the Technical Note on the 7th Plan, uses the detailed tabulation of ASI for the year 1973-74. However, the tabulation of 1978-79 ASI data was completed subsequently, but it was only in the year 1987 that the corresponding results in the form of relevant detailed tables were available from CSO. We have made use of this most recently available information for constructing the I-O table for Rajasthan.

detailed tabulation. Using the NIC (1970) codes for 8-digit level product/commodity classification, we identified each of the items used as material inputs in each of the ASI 4-digit level industries in the State. Using the definitions of the 50 sectors of the national I-O matrix as given in the Technical Note on 7th Plan and CSO (1981), we then arrived at the aggregation of the 8-digit level inputs item codes into our required sectors for each of 4-digit level ASI industries in the state for the year 1978-79.

Table 4 in the ASI detailed tabulation for the factory sector provides information on the fuel inputs and lubricants used in the production of outputs in different industries at 4-digit level. It provides data on physical units as well as in value terms on 15 categories of fuels and lubricants. The values of these items were collected and aggregated into our required 50 sectors by using the definitions of the sectors for each of the 4 digit level industries.

In the case of other inputs, the information was obtained from Table 7 of the detailed tabulation of ASI, 1978-79 for each of the 4-digit level industry in the state. The broad treatment of different items in Table 7 was similar to the one followed in CSO (1981) which underlies the national I-O matrix for the year 1984-85. Table 7 in ASI detailed tabulation provides information in value terms on the following items which deserve special mention : (i) addition to stock of semi-

finished products, (ii) work done for customers, (iii) sale value of goods sold in the same condition as purchased, (iv) cost of contracts and commission, (v) products reported for sale in last year but used for further manufacture, (vi) miscellaneous charges, (vii) office supplies, (viii) purchase value of goods sold in the same condition as purchased, (ix) cost of repair and maintenance. Whereas the first 3 items relate to output, the remaining 6 items are essentially input items. The difference between (iii) and (viii) is taken as the trade input. Items (iv) and (vi) are allocated to the "other services" sector (Sector No. 50). Item (v) is considered as commodity produced and consumed in the same industry. Item (vii) is broken up equally into two groups of items, viz., paper & stationery and other office equipments. Item (ix) is allocated to "other manufacturing" sector (Sector No. 44).

IV-A (b) : Unregistered Manufacturing

In terms of availability of reasonably detailed information on inputs and outputs, the unregistered manufacturing sector is not at all comparable to the registered manufacturing sector. The data for unregistered manufacturing is collected only through sample surveys which are not very frequently conducted. The latest year for which a detailed sample survey in this sector was conducted through NSSO and for which the results are now available, is 1978-79. It provides information

on aggregate inputs, gross outputs, value added, depreciation, etc. by 2-digit industry groups for major state economies. The results of the central sample are published recently by CSO (1985). Since our required sectoral classification does not match with the 2-digit industrial classification, the first step is to enlarge and match the two classifications. This was accomplished by assuming that within the given 2-digit level industry group, the further disaggregation pattern in the unregistered manufacturing sector is similar to the one in the registered manufacturing sector in the state economy. This method was followed in respect of the aggregates like gross value added and gross output.

Since we do not have any details for the input structure within the unregistered manufacturing, although we have the overall gross value added proportion by industry groups, we have to generate the total input proportions by our required industrial sectors within the unregistered manufacturing in Rajasthan. For the same industry groups, we also have the total input proportions from the ASI tabulations. By adjusting the input-use proportions for the registered manufacturing based on the ASI data to the total input-use proportion in the unregistered manufacturing in each of the required sectors, the required input-use proportions were obtained for the unregistered manufacturing for the year 1978-79.

As we can see from the above discussion, the input-use coefficient matrices for all the sectors covered under the registered as well as unregistered manufacturing pertained to the year 1978-79. We can, therefore, take their weighted average and combine the registered and unregistered manufacturing technologies in the "average" input-use proportions prevalent in the economy. It may be pointed out here that such a procedure of taking weighted average, which is also followed in the national I-O matrix, would necessitate changes in the input-use proportions whenever the relative weightage of the registered and unregistered manufacturing changes in the economy. If we consider any change in the input-use coefficient as revealing the technological change as is often treated in the literature (see for instance, Ramachandra Rao and Narayana 1987), we should treat the changing proportion of registered and unregistered manufacturing as a source for technological change in the economy.

Having obtained the input-use coefficients for the industry sectors for the year 1978-79, the problem was to carry it forward to the year 1984-85. Basically, two different but related phenomena occur in any economy over time in this context : (i) prices of inputs and outputs change at different rates over time; and (ii) the input substitution on account of either changing relative input prices and/or

changing technology takes place. The latter is usually related to the former. It is well-known that relatively cheaper inputs are substituted for relatively costlier inputs. Thus, two opposite effects are likely to operate on the input use coefficients over time. The net impact could be in any direction as far as the input use coefficient in value terms is concerned. We compared the total input use proportions for all the industry sectors covered under registered manufacturing for the year 1978-79 with the ones in the year 1982-83 obtained from the ASI factory sector's summary results for Rajasthan State. The two proportions were found to be remarkably similar in most of the sectors. On the other hand, when we made price adjustments by using the data on price indices by sectors from Finance Ministry (1979; 1983 and 1985) and deflators for state domestic product estimates, the total input use proportions in several sectors were considerably distorted, even to the extent of indicating negative value added proportions in some cases, for both the years 1982-83 and 1984-85. One of the main reasons for this phenomenon may perhaps lie in the fact that such price adjustments at best represent only partial adjustments inasmuch as the corresponding changes in input use proportions in physical terms are not captured by these adjustments. Moreover, it may also be noted that detailed product-wise price information is not readily available at the state level in the required form. In view of

this, it is preferable not to make any price adjustments while deriving regional I-O matrix, especially in the light of available empirical evidence on relative stability of input use coefficients in the short run. Thus, we are in effect assuming that the net impact of relative price changes and inter-input substitution taken together is negligible on the input use coefficients in value terms over the period 1978-79 to 1984-85 in Rajasthan.

In order to generate the transaction matrix, we require to estimate gross output for the year 1984-85 in different industrial sectors covered in our 50 x 50 sector framework. The latest ASI results for the factory sector are available only in the summary form for Rajasthan state for the year 1982-83. Moreover, these summary results are available for the 3-digit level disaggregation only. On the other hand, the state income data provide the estimates of net value added at current prices in the registered and unregistered manufacturing sectors separately for the year 1984-85. Using the estimate for the rate of depreciation for the registered and unregistered manufacturing sectors from CSO (1987), we generated the gross value added at current prices for these two sectors in 1984-85. Then, by applying the profile of the gross value added for our required industrial sectors from the ASI summary results for the year 1982-83, we obtained the estimates of gross value added in 1984-85 for our different industrial sectors consistent with the

corresponding overall estimate of the gross value added for the entire registered manufacturing sector provided by the official state income statistics. Applying the ratio of gross value added to gross output from the 1982-83 ASI data for Rajasthan by industry groups, the corresponding estimates of gross output by the required sectors were obtained for the registered manufacturing for the year 1984-85.

The 1978-79 data on unregistered manufacturing by the required 30 sectors were similarly processed to obtain the percentage share of gross value added. These percentages were applied to the estimated gross value added for the unregistered manufacturing sector in 1984-85 to get the series of gross value added by the required sectors in 1984-85. The 1978-79 value added proportions for these sectors were used to obtain the corresponding estimates of gross output from gross value added for unregistered manufacturing in 1984-85. The gross outputs in the registered and unregistered manufacturing by the required sectors were then added so as to obtain the corresponding input use transactions matrix for manufacturing in Rajasthan for the year 1984-85 at current prices.

IV-B Agriculture and Animal Husbandry

The main source of data on these sub-sectors is the basic set of worksheets of the state income unit of the Directorate of Economics and Statistics, Government of Rajasthan. From this

source, we obtained the data on gross output by different crops and animal husbandry sub-sectors. However, data on inputs by different items and depreciation were available only for the agriculture and animal husbandry sector as a whole. These data were readily available both at constant and current prices for the year 1984-85. However, in order to allocate the input cost by items to different crops and animal husbandry, we have to use other sources of information. Cost of diesel and electricity were allocated to crops using the statistics on area under irrigation by crops available from the Directorate of Agriculture, Government of Rajasthan. Having generated the transaction columns for the 8 sub-sectors of agriculture in the required 50 x to sector I-O table, these transactions were added to the manufacturing transactions matrix already derived as per the methodology described in the section IV-A above.

€ In order to adjust these transactions for the trade and transport margins, commodity specific margin rates for Railways, Other Transport and Trade were obtained from the Technical Note on the Seventh Plan. These rates were applied to the transaction table for manufacturing and agricultural sectors. The aggregated margins in each column were then added to their respective sector rows.

IV-C. Fishing, Forestry and Mining :

The main source of data for these sectors is again the state domestic product accounts. From this source, we get the data on net domestic product, depreciation rates and other inputs used by the required sub-sectors at current prices for the year 1984-85. It was, therefore, possible to calculate the total input use proportions and gross value added proportions in these sub-sectors in Rajasthan. The allocation of inputs by commodities in the state was obtained by adjusting the national input use coefficients in each sub-sector at the same rate as the overall input use proportion in the respective sector. The inter-industry transactions were then added to the already obtained transaction matrix for the manufacturing and agriculture.

IV-D. Supra-Regional Transactors and Services :

The main source of data in this sector is also the state income accounts and the CSO. Official estimates of Net State Domestic Product at current prices for the year 1984-85 in these sub-sectors were converted into gross value added by applying sector-specific depreciation rates obtained from the CSO. In the case of the supra-regional transactors like railways, communication, banking and insurance, etc., even the estimates of SDP are received by the state statistical bureau from the CSO. Moreover, in the case of most of

these services, the technology is unlikely to show significant regional variations. National input use coefficients were, therefore, adopted in these sectors and the corresponding transactions were generated.

When these transactions were added to the already derived transaction table, a complete 50 x 50 sector transaction table for Rajasthan State was formed. It was then converted into the input use coefficient form. By post-multiplying this input use coefficient matrix by the Make Matrix obtained from the Technical Note on 7th Plan, the required input-output coefficient matrix for Rajasthan was obtained. The input-output coefficient matrix for Rajasthan for 1984-85, so derived, is presented in Appendix Table 1. The inter-industry transaction table for Rajasthan corresponding to the input-output coefficient matrix for the year 1984-85 at current prices is presented below in Appendix Table 2.

V. Data Sources and Method of Estimation for Non-Survey-Based I-O Matrix

There are several non-survey methods available to regionalize the national inter-industry table. The method that is conventionally used for this purpose is the well-known RAS method (for discussion of RAS method, see Kundu et al., 1978; and Saluja, 1980). Further improvements and refinements in the application of the RAS method is suggested in Braschler et al., (1984). Dalvi and Prasad (1981 and 1982)

have proposed another non-survey method based on the generalized inverse technique. They have also compared the performance of their method based on the Moore-Penrose inverse and the RAS method in the case of the two Indian states. They have found that use of generalized inverse for regionalization of a national I-O matrix can be made for empirical research with a larger degree of confidence as compared to RAS method (see Dalvi and Prasad, 1982). Subsequently, Dholakia and Choudhry (1986) have modified the Dalvi-Prasad (1981) method based on generalized inverse by explicitly introducing the value added constraints. They have demonstrated with the help of the Canadian regional input-output tables for the year 1974 that their method performs far better than the method of Dalvi and Prasad based on the Moore-Penrose generalized inverse. We have, therefore, used the Dholakia-Choudhry method of regionalizing the national I-O matrix for Rajasthan.

Central to the non-survey method based on the generalized inverse technique is the proposition that the national coefficients are weighted averages of the corresponding regional coefficients, the weights being the proportion of regional gross outputs to national gross output in a given industry (j). Symbolically,

$$a_{ij} = \sum_{r=1}^K p_j^r \cdot a_{ij}^r \quad \dots \quad (1)$$

where a_{ij} is the national input use coefficient for the i^{th} commodity in the j^{th} industry, p_j^r is the r^{th} region's share

of j^{th} industry's national gross output and a_{ij}^r is the input use coefficient for the i^{th} commodity in the j^{th} industry for the r^{th} region. In matrix form, (1) may be expressed as :

$$\begin{matrix} A & = & P & \cdot & A^R & \dots & (2) \\ (m \times mn) & & (m \times mk) & & (mk \times mn) & & \end{matrix}$$

where n is number of commodities, m is number of industries, and k is the number of regions. All these matrices are defined for the sake of convenience in row diagonal and block diagonal matrix form. (for details, see Dholakia and Choudhry, 1986). From (2), we obtain :

$$A^R = P^+ \cdot A \quad \dots \quad (3)$$

where P^+ is a generalized inverse of P . Dalvi and Prasad (1981) use the Moore-Penrose generalized inverse of P to get the solution as :

$$a_{ij}^r = p_j^r \cdot a_{ij} / \sum_{r=1}^k (p_j^r)^2 \quad \dots \quad (4)$$

Dholakia and Choudhry (1986) on the other hand, impose the value added constraint and obtain the solution as :

$$a_{ij}^r = a_{ij} \left(\sum_{i=1}^n a_{ij}^r \right) / \left(\sum_{i=1}^n a_{ij} \right) \quad \dots \quad (5)$$

Since the Dholakia-Choudhry method worked far more satisfactorily than the Dalvi-Prasad method, which in turn worked more efficiently than the traditional RAS method, we have used the Dholakia-Choudhry solution to generate the non-survey based Rajasthan matrix from the national input use matrix for the year 1984-85.

The data requirements for this method are relatively less as compared to the other methods. We require the estimates of the value of gross output and total inputs used in each of the 50 sectors for Rajasthan for the given reference year. The most comprehensive source of such data at the state level is generally the state income division of the Directorate of Economics & Statistics of the state government. Although the required data are available at the aggregate sectoral level in the state economy, the same are not always available at the required disaggregated sectoral levels. In such cases, allocation of the aggregates particularly the total inputs used among the corresponding sub-sectors has been made by using appropriate methods.

In order to allocate the total inputs used in a sector, say agriculture, to the sub-sectors covered in our 50 x 50 classification, we have used the value added proportions obtained from the national table for each of the sub-sectors. Since at the aggregate sector level, we have the regional value added proportion which may be different from the corresponding proportion for the national sector, we adjust the value added proportions in the sub-sectors at the national level in the same direction and rate for estimating the Rajasthan proportions. For the industrial sub-sectors' gross output and total input use proportions, the same data sources and methods were used as described above in section IV-A.

For supra-regional transactors and services, we adopt the national input use coefficients for the respective columns for Rajasthan state.

The input use coefficient matrix for Rajasthan based on the non-survey method was obtained by consolidating the above estimates for the respective coefficients. After post multiplying the input use coefficient matrix by the make matrix for 1984-85 obtained from the Technical Note on 7th Plan, we get the input-output coefficient matrix for Rajasthan, which is presented below in Appendix Table 3. The corresponding transaction table for Rajasthan State for the year 1984-85 at current prices based on the non-survey method is presented in Appendix Table 4.

VI. Analysis of the Results

The two alternative methods of estimating the regional I/O matrices give two different sets of estimates of the coefficients. Since both are estimates, their comparison has to be made with respect to some well-defined common characteristic. As we have discussed in the beginning, the need for regional matrices is felt basically to capture the extent of regional variation in the technology. We should, therefore, examine the deviations of the regional matrices obtained by the two alternative methods from the national matrix. The summary of the results in terms of frequency distributions

of deviations from the national input-use matrix of the estimated regional matrix by the survey and the non-survey methods are presented below in a tabular form :

Frequency Distribution of the Deviations of
Rajasthan Input-Use Coefficients from the
National Coefficients, 1984-85

Frequency Range	Frequency of Differences Between	
	Survey Based - National	Non-Survey Based - National
-0.15 or less	16	8
-0.149999 to -0.1	8	4
-0.099999 to -0.05	25	11
-0.049999 to -0.01	130	65
-0.009999 to -0.001	257	166
-0.000999 to -0.0001	106	196
-0.000099 to -0.00001	15	30
-0.000009 to +0.000009	1480	1363
0.00001 to 0.000099	74	177
0.0001 to 0.000999	178	336
0.001 to 0.009999	117	111
0.01 to 0.049999	58	27
0.05 to 0.099999	17	4
0.1 to 0.149999	4	2
0.15 or more	15	0
Total	2500	2500

From these frequency distributions of the deviations of regional coefficients from the national coefficients, it is evident that the Rajasthan input use coefficients differ on the whole from the national ones. Although most of the coefficients of Rajasthan are not different from the national coefficients in the first three decimal places, about 3% of the total coefficients of Rajasthan differ from the national ones by 0.05 or more. In specific sectors or activities, therefore, there appears to be considerable regional differences in the technology as reflected by input use coefficients. The most interesting question in this regard is whether the non-survey based method of estimating regional I/O matrix performs as efficiently as the survey based method in capturing the regional variations in the coefficients. We may use the test of mean difference for this purpose on the distributions of differences of regional input use coefficients and national coefficients. When we consider all the observations (i.e. 2500 coefficient differences), the calculated t-value turns out to be only 0.2923 which is statistically insignificant. This implies that the average overall difference of the regional coefficient from the national coefficient remains statistically the same whether we use the survey based method or non-survey based method to estimate the regional coefficients. Thus, if the purpose is to capture the overall difference of the regional technology from the national technology, both the survey based and non-survey based methods of estimating the regional coefficients appear to perform almost equally.

If, however, our purpose is to look into the differences of regional technology from national technology in the sector-activity-specific context, we need to consider those ranges of differences which are more than 5 percentage points in absolute terms. If we apply the mean difference test only to these ranges of differences in the two methods, we get the calculated t-value of 2.7454 which is significant at 5% level of significance. This implies that on an average the differences in regional coefficients from national coefficients when exceed 0.05 in absolute terms, the two methods of estimating regional coefficients differ statistically significantly. Thus, if our interest is to capture sector-activity -specific differences in the regional technology, we have to make a conscious choice between the two alternative methods of estimating the regional coefficients. It is obvious at this stage that survey based method should be given priority over the non-survey based method if the estimates based on the former are available for any regional economy.

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sector code/item	1	2	3	4	5	6	7	-
1 paddy	0.528192	0.001149	0.000000	0.000712	0.000000	0.000000	0.028125	0.010642
2 wheat	0.000091	0.191215	0.000000	0.000214	0.000000	0.000000	0.021110	0.002862
3 other cereals	0.000000	0.000000	0.016032	0.000000	0.000000	0.000000	0.000351	0.002969
4 pulses	0.014821	0.000159	0.000000	0.072066	0.000000	0.000000	0.001684	0.023811
5 fibre crops	0.000056	0.000041	0.000000	0.000360	0.008369	0.000000	0.000071	0.000000
6 tea, coffee	0.000025	0.000013	0.000000	0.000033	0.000000	0.000000	0.000065	0.000000
7 other crops	0.000600	0.000584	0.000000	0.000212	0.000000	0.000000	0.068734	0.203237
8 animal husbandry	0.013915	0.106889	0.038832	0.032361	0.115356	0.000000	0.040582	0.000935
9 forestry & logging	0.000058	0.000004	0.000000	0.000004	0.000000	0.000000	0.000092	0.000000
10 fishing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 coal & lignite	0.000286	0.000007	0.000000	0.000011	0.000000	0.000000	0.000030	0.000000
12 crude petroleum & natural gas	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 iron ore	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 other metallic minerals	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 non-metallic minerals	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
16 sugar	0.000002	0.000001	0.000000	0.000002	0.000000	0.000000	0.000005	0.000000
17 khandasari & boora	0.000000	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000
18 other food & beverage indus.	0.000561	0.000307	0.000000	0.000740	0.000000	0.000000	0.001481	0.058693
19 cotton textiles	0.000035	0.000020	0.000000	0.000181	0.000000	0.000000	0.000052	0.012618
20 art silk & synthetic fibre textiles	0.000003	0.000002	0.000000	0.000028	0.000000	0.000000	0.000001	0.000000
21 woollen textiles	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
22 other textiles	0.009792	0.000204	0.000000	0.000028	0.000000	0.000000	0.001727	0.000000
23 wood based industries	0.000006	0.000004	0.000000	0.000009	0.000000	0.000000	0.000016	0.000000
24 paper & paper based industries	0.000178	0.000018	0.000000	0.000036	0.000000	0.000000	0.000043	0.000000
25 leather & leather products	0.000000	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000
26 rubber products	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 plastics	0.000001	0.000002	0.000000	0.000001	0.000000	0.000000	0.000121	0.000000
28 petroleum products	0.028974	0.216478	0.078711	0.064596	0.233819	0.000000	0.080947	0.000000
29 coal tar products	0.000000	0.000002	0.000000	0.000001	0.000000	0.000000	0.000001	0.000000
30 fertilizers	0.003743	0.029288	0.010654	0.008781	0.031648	0.000000	0.010937	0.000000
31 pesticides	0.000417	0.000871	0.000557	0.000013	0.042938	0.000000	0.001822	0.000000
32 synthetic fibre resin	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
33 other chemicals	0.000033	0.000083	0.000000	0.000068	0.000000	0.000000	0.000086	0.000000
34 cement	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35 other non-metal mineral products	0.000793	0.000010	0.000000	0.000005	0.000000	0.000000	0.000141	0.000000
36 iron & steel	0.000001	0.000000	0.000000	0.000001	0.000000	0.000000	0.000001	0.000000
37 non-ferrous metal	0.000000	0.000007	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000
38 non-electrical machinery	0.000000	0.000000	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000
39 electrical machinery	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40 rail equipments	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
41 motor vehicles	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
42 other transport equipment	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 communication & electronic equipments	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 other manufacturing	0.006005	0.000146	0.000000	0.000126	0.000000	0.000000	0.000708	0.000000
45 rail transport service	0.004600	0.016911	0.004955	0.004982	0.015492	0.000000	0.005670	0.001000
46 other transport service	0.003898	0.007695	0.002586	0.003002	0.009271	0.000000	0.004089	0.005588
47 electricity	0.007196	0.017064	0.005679	0.004728	0.016871	0.000000	0.006842	0.000000
48 construction	0.005882	0.018447	0.036874	0.014055	0.010551	0.000000	0.005366	0.009748
49 communication	0.000105	0.000351	0.000115	0.000080	0.000127	0.000000	0.000057	0.000000
50 other services	0.026724	0.030771	0.010116	0.011100	0.045180	0.000000	0.018073	0.066898
51 total 1 to 50	0.656992	0.638744	0.205113	0.219409	0.529621	0.000000	0.299030	0.402200
52 indirect taxes	-0.011189	-0.030968	0.000160	0.002140	-0.005159	0.000000	-0.008710	0.019900
53 val added	0.354197	0.392224	0.794727	0.778451	0.475538	0.000000	0.709680	0.577800
54 gross output	1.000000	1.000000	1.000000	1.000000	1.000000	0.000000	1.000000	1.000000

Appendix Table 1 (Contd.)

STHAN I/O COEFFICIENT MATRIX 1984-85 [SURVEY METHOD]

Code/Item	9	10	11	12	13	14	15	16
paddy	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
wheat	0.000003	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000016
other cereals	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
pulses	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001
fibre crops	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000004
tea, coffee	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000007
other crops	0.000007	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.513165
animal husbandry	0.000005	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000078
forestry & logging	0.000023	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.001152
fishing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
coal & lignite	0.000939	0.000000	0.000000	0.000000	0.000000	0.000000	0.000007	0.000450
crude petroleum & natural gas	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
iron ore	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
other metallic minerals	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
non-metallic minerals	0.000008	0.000000	0.000000	0.000000	0.000000	0.000000	0.000103	0.002801
sugar	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000791
khandsari & hoora	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000455
other food & beverage indu.	0.000007	0.000047	0.000000	0.000000	0.000000	0.000000	0.000000	0.000170
cotton textiles	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000005
art silk & synthetic fibre textiles	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
woollen textiles	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
other textiles	0.000773	0.003155	0.000000	0.000000	0.000000	0.000000	0.000045	0.021241
wood based industries	0.005406	0.000056	0.000000	0.000000	0.000000	0.000000	0.000004	0.006969
paper & paper based industries	0.006195	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000500
leather & leather products	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
rubber products	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
plastics	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
petroleum products	0.003415	0.002685	0.000000	0.000000	0.081250	0.019641	0.031434	0.014342
coal tar products	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000773
fertilizers	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001466
pesticides	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001
synthetic fibre resin	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
other chemicals	0.000001	0.000061	0.000000	0.000000	0.007500	0.010892	0.009553	0.001245
cement	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000030	0.000000
other non-metal mineral products	0.000003	0.000000	0.000000	0.000000	0.000000	0.000000	0.000041	0.000990
iron & steel	0.000013	0.000047	0.000000	0.000000	0.000000	0.000000	0.000036	0.000000
non-ferrous metal	0.000001	0.000005	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
non-electrical machinery	0.001290	0.000000	0.000000	0.000000	0.026750	0.034226	0.020660	0.014548
electrical machinery	0.003915	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
rail equipments	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
motor vehicles	0.009833	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.005964
other transport equipment	0.000467	0.006035	0.000000	0.000000	0.000000	0.000000	0.000000	0.000004
communication & electronic equipments	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
other manufacturing	0.002294	0.000002	0.000000	0.000000	0.000000	0.000000	0.000020	0.002369
rail transport service	0.002225	0.000043	0.000000	0.000000	0.001000	0.000468	0.000439	0.003358
other transport service	0.109785	0.001387	0.000000	0.000000	0.001000	0.001083	0.000802	0.008878
electricity	0.002013	0.000000	0.000000	0.000000	0.015750	0.064729	0.018207	0.007281
construction	0.025591	0.000000	0.000000	0.000000	0.017250	0.008056	0.005644	0.001631
communication	0.004403	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
other services	0.021653	0.000983	0.000000	0.000000	0.008750	0.010100	0.007323	0.160528
Total 1 to 50	0.200276	0.014507	0.000000	0.000000	0.159250	0.149282	0.094463	0.771124
indirect taxes	0.006047	0.006865	0.000000	0.000000	0.029156	0.013132	0.013024	0.010218
Val added	0.793677	0.978628	0.000000	0.000000	0.811594	0.837586	0.892513	0.218658
Gross output	1.000000	1.000000	0.000000	0.000000	1.000000	1.000000	1.000000	1.000000

MAJSTHAN I/O COEFFICIENT MATRIX 1984-85 [SURVEY METHOD]

sector code\item	25	26	27	28	29	30	31	32
1 paddy	0.000002	0.000732	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
2 wheat	0.000382	0.001368	0.000000	0.000000	0.000000	0.000000	0.000006	0.000000
3 other cereals	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4 pulses	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5 fibre crops	0.000014	0.000382	0.000099	0.000000	0.000000	0.000000	0.005173	0.002847
6 tea, coffee	0.000002	0.000582	0.000000	0.000000	0.000000	0.000000	0.000003	0.000000
7 other crops	0.003113	0.013789	0.002525	0.000000	0.000000	0.000000	0.125124	0.068942
8 animal husbandry	0.260731	0.006738	0.000215	0.000000	0.000000	0.000000	0.000153	0.000307
9 forestry & logging	0.004035	0.000080	0.000808	0.000000	0.000000	0.000000	0.001663	0.006321
10 fishing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11 coal & lignite	0.000240	0.000175	0.003058	0.000000	0.000000	0.000000	0.001623	0.004128
12 crude petroleum & natural gas	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002	0.000001
13 iron ore	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 other metallic minerals	0.000000	0.000000	0.000006	0.000000	0.000000	0.000000	0.000311	0.000171
15 non-metallic minerals	0.000078	0.000022	0.000174	0.000000	0.000000	0.000000	0.004152	0.006331
16 sugar	0.000022	0.000044	0.000005	0.000000	0.000000	0.000000	0.000044	0.000181
17 khandasari & boora	0.000016	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
18 other food & beverage indu.	0.003668	0.013189	0.000058	0.000000	0.000000	0.000000	0.002062	0.001685
19 cotton textiles	0.004296	0.000509	0.001038	0.000000	0.000000	0.000000	0.000005	0.001506
20 art silk & synthetic fibre textiles	0.000005	0.000006	0.000031	0.000000	0.000000	0.000000	0.000001	0.001550
21 woollen textiles	0.000138	0.000078	0.000730	0.000000	0.000000	0.000000	0.000000	0.000023
22 other textiles	0.027951	0.001237	0.094681	0.000000	0.000000	0.000000	0.016904	0.011338
23 wood based industries	0.007160	0.001308	0.000756	0.000000	0.000000	0.000000	0.000299	0.008885
24 paper & paper based industries	0.002808	0.001239	0.006851	0.000000	0.000000	0.000000	0.023235	0.030405
25 leather & leather products	0.111649	0.000156	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 rubber products	0.053549	0.022009	0.000396	0.000000	0.000000	0.000000	0.000000	0.000029
27 plastics	0.001093	0.000853	0.095816	0.000000	0.000000	0.000000	0.009221	0.006731
28 petroleum products	0.002577	0.002088	0.004287	0.000000	0.000000	0.000000	0.004268	0.079446
29 coal tar products	0.000050	0.000055	0.005489	0.000000	0.000000	0.000000	0.001143	0.001002
30 fertilizers	0.000001	0.000013	0.000123	0.000000	0.000000	0.000000	0.001882	0.004231
31 pesticides	0.000000	0.000097	0.000000	0.000000	0.000000	0.000000	0.182312	0.000000
32 synthetic fibre resin	0.013264	0.130394	0.200446	0.000000	0.000000	0.000000	0.000383	0.061332
33 other chemicals	0.051783	0.005369	0.017030	0.000000	0.000000	0.000000	0.240770	0.123047
34 cement	0.000007	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000014
35 other non-metal mineral products	0.001775	0.001993	0.000103	0.000000	0.000000	0.000000	0.003770	0.002167
36 iron & steel	0.000828	0.000379	0.002690	0.000000	0.000000	0.000000	0.000000	0.002172
37 non-ferrous metal	0.000429	0.000390	0.001096	0.000000	0.000000	0.000000	0.003940	0.003042
38 non-electrical machinery	0.007078	0.000118	0.000509	0.000000	0.000000	0.000000	0.000024	0.010899
39 electrical machinery	0.000004	0.000055	0.000106	0.000000	0.000000	0.000000	0.000000	0.000019
40 rail equipments	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
41 motor vehicles	0.000279	0.000663	0.000236	0.000000	0.000000	0.000000	0.000002	0.001070
42 other transport equipment	0.000008	0.000121	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 communication & electronic equipments	0.000000	0.000104	0.000000	0.000000	0.000000	0.000000	0.000000	0.000065
44 other manufacturing	0.017586	0.007114	0.003639	0.000000	0.000000	0.000000	0.022673	0.004907
45 rail transport service	0.002876	0.000506	0.002875	0.000000	0.000000	0.000000	0.011528	0.006681
46 other transport service	0.024289	0.006258	0.018607	0.000000	0.000000	0.000000	0.020434	0.015722
47 electricity	0.007342	0.005389	0.021064	0.000000	0.000000	0.000000	0.005914	0.051801
48 construction	0.000729	0.007627	0.000715	0.000000	0.000000	0.000000	0.002880	0.005230
49 communication	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 other services	0.157856	0.048002	0.072592	0.000000	0.000000	0.000000	0.152808	0.158027
51 total 1 to 50	0.769711	0.281231	0.558858	0.000000	0.000000	0.000000	0.844717	0.682257
52 indirect taxes	0.045737	0.121268	0.273727	0.000000	0.000000	0.000000	0.016818	0.120135
53 val added	0.184552	0.597501	0.167415	0.000000	0.000000	0.000000	0.138465	0.197608
54 gross output	1.000000	1.000000	1.000000	0.000000	0.000000	0.000000	1.000000	1.000000

Appendix Table 1 (Contd.)

37

RAJASTHAN I/O COEFFICIENT MATRIX 1984-85 [SURVEY METHOD]

sector code\item	49	50
1 paddy	0.000000	0.002699
2 wheat	0.000000	0.000808
3 other cereals	0.000000	0.000000
4 pulses	0.000000	0.000475
5 fibre crops	0.000000	0.000000
6 tea, coffee	0.000000	0.000000
7 other crops	0.000000	0.005093
8 animal husbandry	0.000000	0.028292
9 forestry & logging	0.000000	0.000000
10 fishing	0.000000	0.006051
11 coal & lignite	0.000000	0.000000
12 crude petroleum & natural gas	0.000000	0.000252
13 iron ore	0.000000	0.000000
14 other metallic minerals	0.000000	0.000000
15 non-metallic minerals	0.000000	0.000000
16 sugar	0.000000	0.000983
17 khandsari & boora	0.000000	0.000000
18 other food & beverage indu.	0.000000	0.003107
19 cotton textiles	0.000000	0.000034
20 art silk & synthetic fibre textiles	0.000000	0.000000
21 woollen textiles	0.000000	0.000000
22 other textiles	0.000026	0.003974
23 wood based industries	0.003147	0.003982
24 paper & paper based industries	0.007138	0.011264
25 leather & leather products	0.000000	0.000000
26 rubber products	0.000000	0.000036
27 plastics	0.000001	0.000118
28 petroleum products	0.013999	0.001097
29 coal tar products	0.000000	0.000013
30 fertilizers	0.000000	0.000000
31 pesticides	0.000000	0.000020
32 synthetic fibre resin	0.000000	0.000000
33 other chemicals	0.000000	0.044152
34 cement	0.000000	0.000000
35 other non-metal mineral products	0.000000	0.000421
36 iron & steel	0.000000	0.000011
37 non-ferrous metal	0.000000	0.000000
38 non-electrical machinery	0.000243	0.000715
39 electrical machinery	0.001212	0.000781
40 rail equipments	0.000000	0.000000
41 motor vehicles	0.007881	0.000625
42 other transport equipment	0.000189	0.000718
43 communication & electronic equipments	0.002819	0.000031
44 other manufacturing	0.002534	0.014298
45 rail transport service	0.016852	0.004096
46 other transport service	0.011250	0.030552
47 electricity	0.008318	0.004609
48 construction	0.024002	0.033488
49 communication	0.000000	0.008607
50 other services	0.014319	0.081478
51 total 1 to 50	0.113930	0.292879
52 indirect taxes	0.009610	0.014186
53 val added	0.876460	0.692935
54 gross output	1.000000	1.000000

RAJASTHAN TRANSACTION MATRIX 1984-85 [SURVEY METHOD] (RS IN LAKHS)

sector code\item	1	2	3	4	5	6	7	
1 paddy	12873.614	67.850	0.000	41.963	0.000	0.000	3981.459	1776.28
2 wheat	2.209	11291.825	0.000	12.630	0.000	0.000	2913.335	477.75
3 other cereals	0.000	0.000	695.968	0.000	0.000	0.000	48.389	495.58
4 pulses	361.225	9.410	0.000	4244.428	0.000	0.000	232.360	3974.37
5 fibre crops	1.364	2.395	0.000	21.174	104.780	0.000	9.834	0.32
6 tea, coffee	0.604	0.791	0.000	1.922	0.000	0.000	9.834	0.54
7 other crops	14.621	34.477	0.000	47.809	0.000	0.000	9485.685	33923.34
8 animal husbandry	339.155	6312.128	1685.717	1985.946	1444.251	0.000	5600.520	5.90
9 forestry & logging	1.410	0.230	0.000	0.246	0.000	0.000	12.636	0.02
10 fishing	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
11 coal & lignite	6.964	0.394	0.000	0.670	0.000	0.000	4.104	0.12
12 crude petroleum & natural gas	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
13 iron ore	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
14 other metallic minerals	0.000	0.032	0.000	0.003	0.000	0.000	0.005	0.00
15 non-metallic minerals	0.000	0.049	0.000	0.007	0.000	0.000	0.007	0.00
16 sugar	0.045	0.063	0.000	0.144	0.000	0.000	0.674	0.04
17 khandasari & boora	0.002	0.003	0.000	0.043	0.000	0.000	0.002	0.00
18 other food & beverage indu.	13.675	18.106	0.000	43.560	0.000	0.000	204.456	9796.76
19 cotton textiles	0.862	1.175	0.000	10.641	0.000	0.000	7.232	2105.77
20 art silk & synthetic fibre textiles	0.883	0.115	0.000	1.648	0.000	0.000	0.078	0.00
21 woollen textiles	0.000	0.008	0.000	0.000	0.000	0.000	0.117	0.00
22 other textiles	238.653	12.044	0.000	1.665	0.000	0.000	238.399	0.13
23 wood based industries	0.145	0.219	0.000	0.504	0.000	0.000	2.145	0.10
24 paper & paper based industries	4.346	1.067	0.000	0.345	0.000	0.000	5.907	0.04
25 leather & leather products	0.002	0.003	0.000	0.043	0.000	0.000	0.033	0.00
26 rubber products	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.00
27 plastics	0.015	0.131	0.000	0.064	0.000	0.000	16.739	0.01
28 petroleum products	706.180	12783.656	3416.852	3822.097	2927.414	0.000	11171.177	0.31
29 coal tar products	0.006	0.125	0.000	0.050	0.000	0.000	0.077	0.00
30 fertilizers	91.235	1729.561	462.480	517.149	396.233	0.000	1509.415	0.00
31 pesticides	10.159	51.437	24.198	0.762	537.586	0.000	251.437	0.00
32 synthetic fibre resin	0.003	0.032	0.000	0.011	0.000	0.000	0.050	0.00
33 other chemicals	0.015	4.896	0.000	3.986	0.000	0.000	11.896	600.58
34 cement	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
35 other non-metal mineral products	19.318	0.566	0.000	0.310	0.000	0.000	19.432	0.04
36 iron & steel	0.021	0.012	0.000	0.070	0.000	0.000	0.095	0.00
37 non-ferrous metal	0.001	0.406	0.000	0.035	0.000	0.000	0.061	0.00
38 non-electrical machinery	0.009	0.003	0.000	0.042	0.000	0.000	0.004	0.00
39 electrical machinery	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
40 rail equipments	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
41 motor vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
42 other transport equipment	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
43 communication & electronic equipments	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
44 other manufacturing	146.361	6.604	0.000	7.429	0.000	0.000	97.669	1.84
45 rail transport service	112.113	998.662	215.095	293.416	193.957	0.000	782.486	167.93
46 other transport service	94.995	454.398	112.266	176.795	116.070	0.000	564.264	933.74
47 electricity	175.393	1007.686	246.535	278.485	211.221	0.000	944.246	0.43
48 construction	143.352	1089.358	1600.700	827.757	132.099	0.000	740.477	1625.99
49 communication	2.553	20.714	4.992	4.706	1.590	0.000	7.835	0.02
50 other services	651.345	1817.136	439.135	653.730	565.656	0.000	2494.192	11167.38
51 total 1 to 50	16012.854	37719.769	8903.938	12922.298	6630.857	0.000	41267.977	67135.52
52 indirect taxes	-272.709	-1828.753	6.946	126.037	-64.591	0.000	-1202.032	3334.79
53 val added	8632.856	23161.984	34499.117	45047.665	5953.733	0.000	97940.055	96444.62
54 gross output	24373	59053	43410	58096	12520	0	138006	16691

ASTHAN TRANSACTION MATRIX, 1984-85 (SURVEY METHOD) (RS IN LAKHS)

Factor code/Item	9	10	11	12	13	14	15	16
1 paddy	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.070
2 wheat	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.029
3 other cereals	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4 pulses	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
5 fibre crops	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007
6 tea, coffee	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012
7 other crops	0.007	0.000	0.000	0.000	0.000	0.000	0.000	893.420
8 animal husbandry	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.135
9 forestry & logging	0.024	0.000	0.000	0.000	0.000	0.000	0.000	2.005
10 fishing	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11 coal & lignite	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12 crude petroleum & natural gas	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13 iron ore	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14 other metallic minerals	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15 non-metallic minerals	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16 sugar	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.378
17 khandsari & boora	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.792
18 other food & beverage indu.	0.007	0.071	0.000	0.000	0.000	0.000	0.000	0.296
19 cotton textiles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20 art silk & synthetic fibre textiles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21 woollen textiles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22 other textiles	0.024	6.051	0.000	0.000	0.000	0.000	0.000	36.980
23 wood based industries	5.757	0.100	0.000	0.000	0.000	0.000	0.000	12.134
24 paper & paper based industries	6.598	0.000	0.000	0.000	0.000	0.000	0.000	0.870
25 leather & leather products	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26 rubber products	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27 plastics	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28 petroleum products	3.637	5.150	0.000	0.000	0.325	193.326	434.233	24.970
29 coal tar products	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.346
30 fertilizers	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.552
31 pesticides	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32 synthetic fibre resin	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33 other chemicals	0.001	0.117	0.000	0.000	0.000	107.210	131.972	2.160
34 cement	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
35 other non-metal mineral products	0.003	0.000	0.000	0.000	0.000	0.000	0.000	1.723
36 iron & steel	0.013	0.071	0.000	0.000	0.000	0.000	0.000	0.000
37 non-ferrous metal	0.001	0.007	0.000	0.000	0.000	0.000	0.000	0.000
38 non-electrical machinery	1.374	0.000	0.000	0.000	0.107	336.097	205.401	25.320
39 electrical machinery	4.170	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40 rail equipments	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41 motor vehicles	10.473	0.000	0.000	0.000	0.000	0.000	0.000	10.210
42 other transport equipment	0.497	11.576	0.000	0.000	0.000	0.000	0.000	0.007
43 communication & electronic equipments	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44 other manufacturing	2.443	0.003	0.000	0.000	0.000	0.000	0.000	4.124
45 rail transport service	2.369	0.002	0.000	0.000	0.004	4.607	6.039	5.047
46 other transport service	116.921	2.660	0.000	0.000	0.004	10.660	11.079	15.456
47 electricity	2.144	0.000	0.000	0.000	0.063	637.120	251.517	12.676
48 construction	27.255	0.000	0.000	0.000	0.069	79.295	77.965	2.039
49 communication	4.689	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50 other services	23.061	1.006	0.000	0.000	0.035	99.414	101.150	279.479
51 total 1 to 50	213.294	27.024	0.000	0.000	0.637	1469.303	1304.910	1342.526
52 indirect taxes	6.440	13.167	0.000	0.000	0.117	129.250	179.914	17.790
53 val added	845.266	1077.009	0.000	0.000	3.246	0244.359	12329.160	300.604
54 gross output	1065	1910	0	0	4	9043	13014	1741

RAJASTHAN TRANSACTION MATRIX 1984-85 (SURVEY METHOD) (RS IN LAKHS)

sector code\item	17	18	19	20	21	22	23	24
1 paddy	0.000	625.287	14.132	0.000	0.027	0.011	0.057	2.971
2 wheat	0.000	1138.551	4.512	0.000	0.057	0.019	0.099	0.00
3 other cereals	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
4 pulses	0.000	1.521	136.311	0.626	0.074	0.035	0.000	0.00
5 fibre crops	0.000	310.014	27008.411	126.037	19.293	17.325	0.112	0.13
6 tea, coffee	0.000	484.170	1.897	0.000	0.022	0.009	0.042	0.00
7 other crops	0.000	11678.191	2224.023	715.945	15.494	39.812	2.006	28.29
8 animal husbandry	0.000	5299.179	24.788	5.579	3210.012	2.515	1.304	0.31
9 forestry & logging	0.000	29.051	179.847	11.555	30.329	1.992	790.807	1.13
10 fishing	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
11 coal & lignite	0.000	112.040	306.391	296.567	17.606	5.077	0.082	19.71
12 crude petroleum & natural gas	0.000	0.005	0.001	0.000	0.000	0.000	0.000	0.00
13 iron ore	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
14 other metallic minerals	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
15 non-metallic minerals	0.000	1.384	4.072	11.468	0.003	0.016	0.055	0.01
16 sugar	0.000	36.255	0.154	0.298	0.002	0.002	0.004	0.00
17 khandasari & boora	0.000	0.040	59.972	0.274	0.033	0.037	0.002	2.59
18 other food & beverage indu.	0.000	10760.724	113.753	1.438	0.594	0.309	0.973	0.04
19 cotton textiles	0.000	315.750	13222.409	1318.481	111.804	268.840	0.103	7.32
20 art silk & synthetic fibre textiles	0.000	0.788	2890.511	8292.492	17.988	20.861	0.005	0.00
21 woollen textiles	0.000	0.057	30.264	48.066	668.546	188.963	0.034	0.10
22 other textiles	0.000	124.860	719.019	159.368	249.108	561.049	0.239	3.69
23 wood based industries	0.000	115.559	69.897	33.166	2.532	6.214	227.403	10.48
24 paper & paper based industries	0.000	54.974	178.975	128.993	4.117	4.729	20.204	1415.47
25 leather & leather products	0.000	0.520	59.157	0.270	1.653	0.053	0.001	0.30
26 rubber products	0.000	0.267	0.003	0.007	0.765	0.128	34.286	0.01
27 plastics	0.000	14.090	14.690	15.041	7.985	4.942	0.040	0.18
28 petroleum products	0.000	296.078	337.438	553.479	41.569	31.408	15.478	34.00
29 coal tar products	0.000	5.941	51.936	1.858	1.790	4.459	0.064	0.10
30 fertilizers	0.000	5.562	0.690	6.002	0.000	0.053	0.015	0.03
31 pesticides	0.000	80.754	0.326	0.000	0.004	0.001	0.007	0.00
32 synthetic fibre resin	0.000	3.277	0.087	110.647	0.180	1.253	0.340	0.34
33 other chemicals	0.000	698.391	1837.777	778.762	71.973	57.233	0.571	42.45
34 cement	0.000	0.005	0.095	0.000	0.000	0.000	0.014	0.00
35 other non-metal mineral products	0.000	52.987	76.396	152.774	13.781	1.155	2.237	1.03
36 iron & steel	0.000	2.831	111.381	18.636	33.717	74.357	10.060	5.65
37 non-ferrous metal	0.000	10.261	2.803	0.981	0.466	2.022	1.865	16.89
38 non-electrical machinery	0.000	0.692	58.220	20.947	0.132	0.197	0.660	1.22
39 electrical machinery	0.000	0.093	0.011	0.000	0.000	0.031	100.025	0.00
40 rail equipments	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
41 motor vehicles	0.000	0.242	0.000	2.032	0.004	0.046	0.057	0.00
42 other transport equipment	0.000	0.000	0.000	0.000	0.000	0.001	1.736	0.00
43 communication & electronic equipments	0.000	0.000	0.000	0.000	0.000	4.752	0.004	0.00
44 other manufacturing	0.000	1661.143	643.169	989.246	100.645	80.475	24.822	61.84
45 rail transport service	0.000	189.184	212.625	148.060	17.418	14.514	20.148	18.14
46 other transport service	0.000	691.629	1839.867	364.480	105.872	45.886	43.656	53.42
47 electricity	0.000	403.976	1127.711	733.750	46.075	17.654	70.387	136.50
48 construction	0.000	64.593	322.135	101.148	18.731	1.035	1.842	29.67
49 communication	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
50 other services	0.000	4583.986	6457.863	2591.951	902.130	709.606	617.689	391.96
51 total 1 to 50	0.000	40057.325	61153.026	17741.306	5800.430	2170.716	2005.538	2267.91
52 indirect taxes	0.000	2074.491	1847.569	6357.412	195.172	70.561	74.274	176.25
53 val added	0.000	4155.184	15318.605	6314.282	1039.398	571.723	807.109	843.02
54 gross output	0	46287	78320	30413	7035	2813	2887	330

RAJASTHAN TRANSACTION MATRIX 1984-85 [SURVEY METHOD] (RS IN LAKHS)

sector code\item	25	26	27	28	29	30	31	32
1 paddy	0.020	15.537	0.000	0.000	0.000	0.000	0.076	0.004
2 wheat	0.065	29.028	0.000	0.000	0.000	0.000	0.142	0.000
3 other cereals	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4 pulses	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000
5 fibre crops	0.002	0.109	0.018	0.000	0.000	0.000	114.813	37.975
6 tea, coffee	0.000	12.358	0.000	0.000	0.000	0.000	0.050	0.000
7 other crops	0.526	292.552	0.467	0.000	0.000	0.000	2776.992	919.478
8 animal husbandry	44.064	142.969	0.040	0.000	0.000	0.000	3.397	4.000
9 forestry & logging	0.682	1.691	0.149	0.000	0.000	0.000	36.899	84.309
10 fishing	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11 coal & lignite	0.041	3.710	0.566	0.000	0.000	0.000	36.018	55.062
12 crude petroleum & natural gas	0.000	0.000	0.000	0.000	0.000	0.000	0.041	0.014
13 iron ore	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14 other metallic minerals	0.000	0.007	0.001	0.000	0.000	0.000	6.905	2.284
15 non-metallic minerals	0.013	0.464	0.032	0.000	0.000	0.000	92.148	84.432
16 sugar	0.004	0.935	0.001	0.000	0.000	0.000	0.981	2.410
17 khandsari & boora	0.003	0.010	0.000	0.000	0.000	0.000	0.000	0.004
18 other food & beverage indu.	0.620	279.835	0.011	0.000	0.000	0.000	45.773	22.478
19 cotton textiles	0.726	10.794	0.192	0.000	0.000	0.000	0.105	20.092
20 art silk & synthetic fibre textiles	0.001	0.134	0.006	0.000	0.000	0.000	0.030	20.674
21 woollen textiles	0.023	1.665	0.135	0.000	0.000	0.000	0.000	0.309
22 other textiles	4.724	26.251	17.516	0.000	0.000	0.000	375.171	151.219
23 wood based industries	1.210	27.744	0.140	0.000	0.000	0.000	6.627	118.496
24 paper & paper based industries	0.475	26.280	1.267	0.000	0.000	0.000	515.686	405.589
25 leather & leather products	18.069	3.302	0.000	0.000	0.000	0.000	0.000	0.001
26 rubber products	9.050	466.972	0.073	0.000	0.000	0.000	0.000	0.386
27 plastics	0.185	18.000	17.726	0.000	0.000	0.000	204.645	89.760
28 petroleum products	0.436	44.298	0.793	0.000	0.000	0.000	94.714	1059.570
29 coal tar products	0.000	1.160	1.015	0.000	0.000	0.000	25.357	13.350
30 fertilizers	0.000	0.200	0.023	0.000	0.000	0.000	41.769	56.431
31 pesticides	0.000	2.056	0.000	0.000	0.000	0.000	4046.238	0.000
32 synthetic fibre resin	2.242	2766.565	37.082	0.000	0.000	0.000	0.494	817.980
33 other chemicals	0.751	113.922	3.150	0.000	0.000	0.000	5343.643	1641.076
34 cement	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.101
35 other non-metal mineral products	0.300	42.295	0.019	0.000	0.000	0.000	83.677	20.900
36 iron & steel	0.140	0.032	0.498	0.000	0.000	0.000	0.007	20.960
37 non-ferrous metal	0.073	0.284	0.203	0.000	0.000	0.000	0.451	40.570
38 non-electrical machinery	1.196	2.498	0.094	0.000	0.000	0.000	0.537	145.360
39 electrical machinery	0.001	1.163	0.020	0.000	0.000	0.000	0.000	0.259
40 rail equipments	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41 motor vehicles	0.047	14.059	0.044	0.000	0.000	0.000	0.053	14.265
42 other transport equipment	0.001	2.578	0.000	0.000	0.000	0.000	0.000	0.000
43 communication & electronic equipments	0.000	2.197	0.000	0.000	0.000	0.000	0.000	0.000
44 other manufacturing	2.972	150.939	0.673	0.000	0.000	0.000	503.213	65.449
45 rail transport service	0.406	10.727	0.532	0.000	0.000	0.000	255.056	89.109
46 other transport service	4.105	132.780	3.442	0.000	0.000	0.000	453.522	209.683
47 electricity	1.241	114.329	3.897	0.000	0.000	0.000	131.266	690.860
48 construction	0.123	161.028	0.132	0.000	0.000	0.000	63.913	69.750
49 communication	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
50 other services	26.678	1018.452	13.431	0.000	0.000	0.000	3391.419	2107.611
51 total 1 to 50	130.001	5966.000	103.309	0.000	0.000	0.000	18747.641	9099.260
52 indirect taxes	7.730	2572.943	32.139	0.000	0.000	0.000	373.259	1602.240
53 val added	31.189	12677.168	49.472	0.000	0.000	0.000	3073.101	2635.494
54 gross output	169	21217	185	0	0	0	22194	13337

Appendix Table 2 (Contd.)

42

INDIAN TRANSACTIONS MATRIX 1984-85 [SURVEY METHOD] (RS IN LAKHS)

Factor code/Item	33	34	35	36	37	38	39	40
1 paddy	12.819	0.000	0.304	0.004	0.004	0.002	0.009	0.002
2 wheat	20.490	0.000	0.210	0.000	0.000	0.000	0.015	0.000
3 other cereals	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4 pulses	0.000	0.000	0.005	0.000	0.011	0.000	0.000	0.000
5 fibre crops	296.765	0.000	0.090	0.002	2.273	0.020	0.130	0.000
6 tea, coffee	8.599	0.000	0.090	0.000	0.000	0.000	0.007	0.000
7 other crops	7167.500	0.000	3.174	0.062	0.319	0.637	3.221	0.000
8 animal husbandry	103.113	0.000	1.300	6.135	7.360	5.879	2.262	0.003
9 forestry & logging	94.005	0.309	48.495	7.105	22.723	2.721	1.171	12.534
0 fishing	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 coal & lignite	93.784	1179.161	629.399	98.774	7.954	16.416	1.130	35.100
2 crude petroleum & natural gas	0.103	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3 iron ore	0.000	0.001	0.000	0.154	0.000	0.007	0.000	0.000
4 other metallic minerals	17.322	0.053	0.004	6.270	0.344	0.306	0.013	0.002
5 non-metallic minerals	31.446	857.301	1620.137	3.045	3.033	5.276	2.206	0.003
6 sugar	3.146	0.000	0.007	0.000	0.000	0.000	0.002	0.000
7 khandsari & boora	0.014	0.000	0.000	0.001	0.005	0.000	0.000	0.000
8 other food & beverage indu.	306.206	0.002	3.749	0.205	0.390	0.156	22.530	0.001
9 cotton textiles	8.125	0.000	0.060	0.011	1.335	0.026	0.170	0.003
0 art silk & synthetic fibre textiles	1.002	0.000	0.001	0.001	0.191	0.001	0.002	0.001
1 woollen textiles	0.063	0.000	0.000	0.003	0.140	0.012	0.061	0.000
2 other textiles	119.502	1627.060	709.677	5.974	2.782	0.912	3.233	0.019
3 wood based industries	21.634	0.077	63.140	6.662	3.001	6.076	26.592	1.354
4 paper & paper based industries	265.949	6.133	23.591	8.409	19.890	32.267	347.092	1.629
5 leather & leather products	0.666	0.000	0.000	0.005	0.006	0.716	0.005	0.001
6 rubber products	0.453	0.000	0.256	1.479	1.847	39.390	17.903	0.295
7 plastics	60.543	0.013	23.590	0.145	4.599	0.107	2.122	0.001
8 petroleum products	159.491	112.074	203.743	211.332	971.301	204.274	170.030	92.057
9 coal tar products	63.729	4.945	26.020	93.015	6.792	16.200	0.920	26.233
0 fertilizers	105.007	0.000	0.023	0.001	0.002	0.007	0.040	0.000
1 pesticides	50.093	0.000	0.596	0.000	0.000	0.000	0.001	0.000
2 synthetic fibre resin	37.673	0.030	2.207	4.935	1.541	1.037	44.032	0.191
3 other chemicals	2107.205	0.103	19.379	16.294	19.255	0.465	53.154	19.054
4 cement	0.347	0.778	402.090	0.007	0.419	0.135	0.637	0.000
5 other non-metal mineral products	211.246	471.657	653.367	96.113	6.770	13.436	6.316	0.033
6 iron & steel	4.227	29.763	573.640	3535.939	370.504	3509.953	535.142	375.503
7 non-ferrous metal	236.005	4.029	10.630	513.022	0115.205	300.491	2621.105	149.542
8 non-electrical machinery	5.396	0.000	0.352	10.123	3.400	1549.939	11.705	7.225
9 electrical machinery	0.191	0.000	1.216	1.900	12.024	5.064	514.450	0.024
0 rail equipments	0.000	0.000	0.000	0.631	0.000	6.122	0.010	391.023
1 motor vehicles	0.574	0.000	0.209	1.075	1.521	20.766	0.021	0.112
2 other transport equipment	0.032	0.000	0.000	2.237	2.963	1.726	0.690	1.901
3 communication & electronic equipments	0.970	0.000	0.000	0.390	23.513	1.400	26.724	0.004
4 other manufacturing	223.340	294.601	327.530	2166.462	1016.631	522.292	275.409	36.570
5 rail transport service	121.717	603.742	617.515	145.303	60.377	112.114	34.220	26.354
6 other transport service	207.423	453.714	344.926	143.050	263.564	121.624	124.399	39.517
7 electricity	217.525	607.530	364.703	420.475	475.067	267.066	170.302	72.267
8 construction	77.791	17.746	95.726	26.046	191.353	30.920	16.501	11.602
9 communication	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0 other services	1696.234	1430.609	2620.910	1705.646	2652.600	1024.340	1124.552	320.709
1 total 1 to 50	14331.950	7790.410	9576.910	9239.505	14204.409	0717.916	6177.410	1630.707
2 indirect taxes	1341.650	306.196	707.264	620.346	1563.474	1004.121	697.904	264.022
3 val added	2941.393	2462.394	4001.027	951.149	2527.037	2306.963	310.605	1669.471
4 gross output	10615	10639	14446	10019	10375	12029	7106	3565

RAJASTHAN TRANSACTION MATRIX 1984-85 [SURVEY METHOD] (RS IN LAKHS)

sector code\item	41	42	43	44	45	46	47	48
1 paddy	0.002	0.005	0.000	1.537	0.000	31.272	0.427	0.000
2 wheat	0.000	0.000	0.000	0.409	0.000	0.000	0.362	0.000
3 other cereals	0.000	0.000	0.000	0.000	0.000	5.059	0.000	0.000
4 pulses	0.000	0.000	0.000	0.035	0.000	3.066	0.216	0.000
5 fibre crops	0.000	0.000	0.000	65.129	0.000	0.000	45.410	0.000
6 tea, coffee	0.000	0.000	0.000	0.170	0.000	0.000	0.153	0.000
7 other crops	0.000	0.007	0.000	1577.564	0.000	281.651	171.695	6802.000
8 animal husbandry	0.066	0.024	0.210	1730.049	0.000	0.000	3.942	0.000
9 forestry & logging	18.104	0.158	0.090	38.527	0.148	0.000	3.699	1730.467
10 fishing	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11 coal & lignite	0.370	0.014	0.024	69.919	1232.834	0.000	89.693	105.499
12 crude petroleum & natural gas	0.000	0.000	0.000	0.023	0.000	0.000	0.001	0.000
13 iron ore	0.000	0.000	0.000	0.015	0.000	0.000	0.007	0.000
14 other metallic minerals	0.002	0.000	0.001	4.508	0.000	0.000	0.392	0.000
15 non-metallic minerals	0.009	0.000	0.001	11.892	0.000	0.000	9.196	2380.834
16 sugar	0.000	0.000	0.000	0.564	0.000	0.000	0.243	0.000
17 khandsari & boora	0.000	0.000	0.000	0.052	0.000	0.000	0.377	0.000
18 other food & beverage indus.	0.036	0.002	0.047	29.531	0.000	60.398	4.372	0.000
19 cotton textiles	0.004	0.007	0.198	7.269	0.000	14.256	26.755	0.000
20 art silk & synthetic fibre textiles	0.001	0.002	0.000	0.112	0.000	0.000	16.319	0.000
21 woollen textiles	0.000	0.000	0.000	4.936	0.000	0.000	2.673	0.000
22 other textiles	0.113	0.038	1.246	141.170	0.000	2.964	27.886	0.000
23 wood based industries	7.155	2.916	2.466	49.727	0.000	9.504	26.003	4590.486
24 paper & paper based industries	13.466	0.037	1.523	137.147	27.841	28.615	113.722	4.945
25 leather & leather products	0.001	0.001	0.000	3.325	0.000	0.000	0.718	0.000
26 rubber products	963.056	0.555	0.102	59.054	0.000	937.952	6.796	0.000
27 plastics	0.094	0.001	1.309	26.287	0.000	0.153	0.520	20.669
28 petroleum products	130.271	0.541	2.227	1050.604	1832.939	11498.910	139.529	1305.173
29 coal tar products	0.203	0.011	0.050	112.346	0.000	0.000	5.323	1441.358
30 fertilizers	0.000	0.000	0.000	23.616	0.000	0.000	1.420	0.000
31 pesticides	0.000	0.000	0.000	0.029	0.000	0.000	0.026	0.000
32 synthetic fibre resin	42.700	0.400	0.905	15.375	0.000	0.000	13.379	0.000
33 other chemicals	48.228	0.352	2.949	541.037	0.000	3.803	30.800	005.193
34 cement	0.000	0.000	0.000	0.621	0.000	0.000	0.427	5982.130
35 other non-metal mineral products	23.917	0.010	1.931	97.569	0.709	0.000	7967.849	12223.590
36 iron & steel	104.025	3.737	10.029	15575.164	18.128	0.000	203.152	15993.650
37 non-ferrous metal	403.473	0.250	11.000	3553.940	0.000	0.000	46.250	0.000
38 non-electrical machinery	17.272	0.321	2.217	92.739	153.020	5.110	10.609	1.014
39 electrical machinery	51.258	0.051	11.666	80.897	742.617	20.695	2.566	3209.359
40 rail equipments	0.014	0.014	0.000	0.955	2237.063	0.000	1.172	0.000
41 motor vehicles	906.046	0.179	0.655	52.099	0.000	971.677	4.881	25.487
42 other transport equipment	2.431	4.093	0.000	11.624	0.090	1167.433	30.048	0.000
43 communication & electronic equipments	0.113	0.009	65.017	20.522	26.431	0.000	0.078	0.000
44 other manufacturing	69.162	4.420	17.233	2060.490	86.151	11.395	262.245	213.154
45 rail transport service	12.089	0.163	2.901	503.561	569.518	59.733	57.931	1431.721
46 other transport service	66.578	0.285	4.397	491.008	1247.596	576.384	297.228	1414.730
47 electricity	50.744	0.553	4.755	559.395	1077.567	32.396	4631.175	69.860
48 construction	1.062	0.056	0.627	85.741	4377.376	34.338	442.582	0.000
49 communication	0.000	0.000	0.000	0.000	0.354	173.835	0.001	31.320
50 other services	655.534	4.535	67.363	7255.715	1097.000	030.545	3605.775	14420.420
51 total 1 to 50	3670.088	23.738	222.039	36152.076	14737.262	16761.224	18314.901	74207.30
52 indirect taxes	910.093	3.140	22.065	3316.153	821.970	3999.900	1601.003	6996.681
53 val added	1981.019	5.123	55.295	8690.970	13964.760	30336.076	13265.016	45592.90
54 gross output	6570	32	301	48160	29524	51098	33181	126802

Appendix Table 2 (Contd.)

RAJASTHAN TRANSACTION MATRIX 1984-85 (SURVEY METHOD) (RS IN LAKHS)

sector code\item	49	50	51	52	53
			total	F.D. gross output	
1 paddy	0.000	838.159	20184	4189	24373
2 wheat	0.000	258.766	16143	42910	59053
3 other cereals	0.000	0.000	1245	42165	43410
4 pulses	2.000	147.546	9113	49783	58896
5 fibre crops	0.000	0.000	28993	-16473	12520
6 tea, coffee	0.000	0.000	520	-520	0
7 other crops	0.000	1581.602	80689	57317	138006
8 animal husbandry	0.000	8785.168	36678	130237	166915
9 forestry & logging	0.000	0.000	3167	-2102	1065
10 fishing	0.000	1879.038	1879	39	1918
11 coal & lignite	0.000	310.280	4741	-4741	0
12 crude petroleum & natural gas	0.000	0	0	0	0
13 iron ore	0.000	0.000	0	4	4
14 other metallic minerals	0.000	0.000	39	9804	9843
15 non-metallic minerals	0.000	0.000	5134	8680	13814
16 sugar	0.000	305.320	353	1388	1741
17 khandsari & boora	0.000	0.000	64	-64	0
18 other food & beverage indu.	0.000	964.629	22896	23391	46287
19 cotton textiles	0.000	10.539	17471	60949	78320
20 art silk & synthetic fibre textiles	0.000	0.000	11264	19149	30413
21 woollen textiles	0.000	0.000	954	6081	7035
22 other textiles	0.135	1233.979	6804	-3991	2813
23 wood based industries	16.314	1236.470	6711	-3824	2887
24 paper & paper based industries	37.003	3497.731	7343	-4035	3308
25 leather & leather products	0.000	0.000	90	79	169
26 rubber products	0.000	11.159	2552	18665	21217
27 plastics	0.005	36.576	581	-396	185
28 petroleum products	72.571	340.647	56587	-56587	0
29 coal tar products	0.000	4.030	1912	-1912	0
30 fertilizers	0.000	0.000	4951	-4951	0
31 pesticides	0.000	6.199	5871	17123	22194
32 synthetic fibre resin	0.000	0.000	3914	9423	13337
33 other chemicals	0.000	13789.970	29016	-10401	18615
34 cement	0.000	0.000	6476	4163	10639
35 other non-metal mineral products	0.000	130.807	22404	-7958	14446
36 iron & steel	0.000	3.410	41140	-30321	10819
37 non-ferrous metal	0.000	0.000	16315	2060	18375
38 non-electrical machinery	1.260	221.939	2976	9053	12029
39 electrical machinery	6.283	242.397	5011	2175	7186
40 rail equipments	0.000	0.000	2638	927	3565
41 motor vehicles	40.855	194.041	2280	4290	6570
42 other transport equipment	0.980	222.868	1474	-1442	32
43 communication & electronic equipments	14.614	9.609	207	94	301
44 other manufacturing	13.136	4439.006	16401	31759	48160
45 rail transport service	87.361	1271.752	9494	20030	29524
46 other transport service	58.320	9486.999	21980	29118	51098
47 electricity	43.121	1431.107	17830	15351	33181
48 construction	124.426	10390.560	23115	103687	126802
49 communication	0.000	2672.561	2925	2259	5184
50 other services	74.230	25300.231	107098	202619	310517
51 total 1 to 50	590.614	91175.975			
52 indirect taxes	49.010	4404.994			
53 val added	4543.560	214936.031			
54 gross output	5184	310517			

RAJASTHAN (1984-85) I/O COEFFICIENT MATRIX (NON SURVEY METHOD)

	1	2	3	4	5	6	7	8
1 paddy	0.216798	0.000704	0.000000	0.000968	0.000000	0.000000	0.012201	0.016569
2 wheat	0.000187	0.142458	0.000000	0.000201	0.000000	0.000000	0.004907	0.004510
3 other cereals	0.000004	0.000272	0.015983	0.000008	0.000000	0.000000	0.000391	0.004613
4 pulses	0.001087	0.003622	0.000000	0.072269	0.000000	0.000000	0.001212	0.038478
5 fibre crops	0.000402	0.000024	0.000000	0.000355	0.009590	0.000000	0.000060	0.000000
6 tea, coffee	0.000168	0.000091	0.000000	0.000221	0.000000	0.000000	0.000443	0.000022
7 other crops	0.004598	0.006691	0.000000	0.005360	0.000000	0.000000	0.032265	0.332345
8 animal husbandry	0.174742	0.065194	0.115013	0.052134	0.053292	0.000000	0.040946	0.000008
9 forestry & logging	0.000137	0.000014	0.000000	0.000004	0.000000	0.000000	0.000023	0.000000
10 fishing	0.000017	0.000009	0.000000	0.000022	0.000000	0.000000	0.000044	0.000002
11 coal & lignite	0.000039	0.000022	0.000000	0.000005	0.000000	0.000000	0.000007	0.000000
12 crude petroleum & natural gas	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 iron ore	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 other metallic minerals	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
15 non-metallic minerals	0.000000	0.000004	0.000000	0.000001	0.000000	0.000000	0.000001	0.000000
16 sugar	0.000011	0.000006	0.000000	0.000014	0.000000	0.000000	0.000028	0.000001
17 khandhari & boora	0.000002	0.000002	0.000000	0.000002	0.000000	0.000000	0.000004	0.000000
18 other food & beverage indu.	0.000250	0.000146	0.000000	0.000512	0.000000	0.000000	0.000631	0.067564
19 cotton textiles	0.000030	0.000021	0.000000	0.000073	0.000000	0.000000	0.000048	0.014790
20 art silk & synthetic fibre textiles	0.000001	0.000001	0.000000	0.000007	0.000000	0.000000	0.000000	0.000000
21 woollen textiles	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 other textiles	0.002426	0.000908	0.000001	0.000287	0.000001	0.000000	0.000203	0.000001
23 wood based industries	0.000733	0.000535	0.000058	0.000120	0.000065	0.000000	0.000184	0.000004
24 paper & paper based industries	0.000110	0.000075	0.000005	0.000027	0.000006	0.000000	0.000037	0.000001
25 leather & leather products	0.000000	0.000004	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 rubber products	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 plastics	0.000003	0.000002	0.000000	0.000004	0.000000	0.000000	0.000007	0.000000
28 petroleum products	0.066432	0.030649	0.026024	0.015556	0.016201	0.000000	0.018355	0.000002
29 coal tar products	0.000000	0.000007	0.000000	0.000004	0.000000	0.000000	0.000001	0.000000
30 fertilizers	0.119714	0.087265	0.026255	0.012978	0.039142	0.000000	0.049579	0.000000
31 pesticides	0.003645	0.001157	0.000566	0.000012	0.046470	0.000000	0.003144	0.000000
32 synthetic fibre resin	0.000000	0.000002	0.000000	0.000001	0.000000	0.000000	0.000001	0.000000
33 other chemicals	0.000050	0.000199	0.000000	0.000227	0.000000	0.000000	0.000080	0.004756
34 cement	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
35 other non-metal mineral products	0.000006	0.000019	0.000000	0.000008	0.000000	0.000000	0.000017	0.000001
36 iron & steel	0.000005	0.000006	0.000000	0.000006	0.000000	0.000000	0.000007	0.000000
37 non-ferrous metal	0.000001	0.000009	0.000000	0.000002	0.000000	0.000000	0.000003	0.000000
38 non-electrical machinery	0.004552	0.006485	0.006078	0.002475	0.001236	0.000000	0.001542	0.000001
39 electrical machinery	0.000183	0.000095	0.000024	0.000016	0.000025	0.000000	0.000029	0.000000
40 rail equipments	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
41 motor vehicles	0.000243	0.000167	0.000028	0.000026	0.000032	0.000000	0.000043	0.000000
42 other transport equipment	0.000005	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
43 communication & electronic equipments	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 other manufacturing	0.000102	0.000068	0.000002	0.000043	0.000003	0.000000	0.000076	0.000003
45 rail transport service	0.007205	0.004149	0.001412	0.000808	0.003907	0.000000	0.001551	0.001735
46 other transport service	0.007405	0.003399	0.001812	0.001414	0.003717	0.000000	0.002096	0.007644
47 electricity	0.023275	0.057734	0.007676	0.007245	0.010929	0.000000	0.008291	0.000003
48 construction	0.050681	0.023118	0.036874	0.014116	0.010550	0.000000	0.011533	0.009741
49 communication	0.000904	0.000439	0.000115	0.000081	0.000127	0.000000	0.000140	0.000000
50 other services	0.053862	0.024161	0.014109	0.010955	0.038680	0.000000	0.018499	0.044563
51 total	0.740014	0.459932	0.252035	0.198565	0.233973	0.000000	0.208631	0.547361
52 i-tax	-0.011180	-0.030960	0.000160	0.002140	-0.005150	0.000000	-0.008710	0.019979
53 val added	0.271166	0.571028	0.747805	0.799295	0.771177	0.000000	0.800079	0.432660
54 gross output	1	1	1	1	1	0	1	1

RAJASTHAN (1984-85) I/O COEFFICIENT MATRIX (NON SURVEY METHOD)

	9	10	11	12	13	14	15	16
1 paddy	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000017
2 wheat	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000008
3 other cereals	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001
4 pulses	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000002
5 fibre crops	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6 tea, coffee	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000048
7 other crops	0.000011	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.513270
8 animal husbandry	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000005	0.000028
9 forestry & logging	0.000008	0.000000	0.000000	0.000000	0.000000	0.000000	0.000007	0.001153
10 fishing	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000005
11 coal & lignite	0.000937	0.000000	0.000000	0.000000	0.000071	0.000087	0.000084	0.000449
12 crude petroleum & natural gas	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 iron ore	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 other metallic minerals	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
15 non-metallic minerals	0.000006	0.000000	0.000000	0.000000	0.000000	0.000000	0.000082	0.002801
16 sugar	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000794
17 khandsari & boora	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000456
18 other food & beverage indu.	0.000003	0.000047	0.000000	0.000000	0.000000	0.000000	0.000000	0.000076
19 cotton textiles	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000005
20 art silk & synthetic fibre textiles	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
21 woollen textiles	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
22 other textiles	0.000771	0.003155	0.000000	0.000000	0.000000	0.000000	0.000007	0.021242
23 wood based industries	0.005425	0.000056	0.000000	0.000000	0.000000	0.000000	0.000022	0.006975
24 paper & paper based industries	0.006195	0.000000	0.000000	0.000000	0.000000	0.000000	0.000004	0.000502
25 leather & leather products	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
26 rubber products	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
27 plastics	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001
28 petroleum products	0.003412	0.002685	0.000000	0.000000	0.081207	0.019641	0.031435	0.014345
29 coal tar products	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.000773
30 fertilizers	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.001473
31 pesticides	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
32 synthetic fibre resin	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
33 other chemicals	0.000005	0.000061	0.000000	0.000000	0.007599	0.010892	0.009582	0.001244
34 cement	0.000002	0.000000	0.000000	0.000000	0.000000	0.000000	0.000030	0.000000
35 other non-metal mineral products	0.000004	0.000000	0.000000	0.000000	0.000000	0.000000	0.000047	0.000991
36 iron & steel	0.000011	0.000048	0.000000	0.000000	0.000000	0.000000	0.000024	0.000001
37 non-ferrous metal	0.000001	0.000005	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
38 non-electrical machinery	0.001293	0.000000	0.000000	0.000000	0.026863	0.034226	0.020676	0.014552
39 electrical machinery	0.003912	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
40 rail equipments	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
41 motor vehicles	0.009834	0.000000	0.000000	0.000000	0.000000	0.000000	0.000003	0.005865
42 other transport equipment	0.000467	0.006036	0.000000	0.000000	0.000000	0.000000	0.000000	0.000004
43 communication & electronic equipments	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
44 other manufacturing	0.002295	0.000002	0.000000	0.000000	0.000000	0.000000	0.000018	0.002352
45 rail transport service	0.002223	0.000043	0.000000	0.000000	0.000920	0.000468	0.000420	0.003358
46 other transport service	0.015914	0.000138	0.000000	0.000000	0.001053	0.001083	0.000802	0.008881
47 electricity	0.002014	0.000000	0.000000	0.000000	0.015820	0.064729	0.018212	0.007282
48 construction	0.025591	0.000000	0.000000	0.000000	0.017184	0.008056	0.005643	0.001633
49 communication	0.004403	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 other services	0.021654	0.000984	0.000000	0.000000	0.008836	0.010100	0.007333	0.160566
51 total	0.106402	0.013260	0.000000	0.000000	0.159553	0.149282	0.094444	0.771152
52 i-tax	0.006047	0.006865	0.000000	0.000000	0.029156	0.013132	0.013024	0.010218
53 val added	0.887551	0.979875	0.000000	0.000000	0.811291	0.837586	0.892532	0.218630
54 gross output	1	1	0	0	1	1	1	1

RAJASTHAN (1984-85) I/O COEFFICIENT MATRIX (NON SURVEY METHOD)

	17	18	19	20	21	22	23	24
1 paddy	0.000000	0.005701	0.000466	0.000005	0.000010	0.000020	0.000023	0.000029
2 wheat	0.000000	0.011341	0.000510	0.000007	0.000010	0.000032	0.000019	0.000581
3 other cereals	0.000000	0.001846	0.000009	0.000001	0.000005	0.000031	0.000003	0.000000
4 pulses	0.000000	0.002821	0.000562	0.000006	0.000004	0.000010	0.000004	0.000000
5 fibre crops	0.000000	0.000798	0.321818	0.015543	0.017874	0.098430	0.001105	0.000057
6 tea, coffee	0.000000	0.070853	0.000164	0.000000	0.000021	0.000019	0.000099	0.000001
7 other crops	0.000000	0.377346	0.001884	0.000199	0.001543	0.008648	0.007620	0.010401
8 animal husbandry	0.000000	0.026769	0.000535	0.001322	0.240732	0.051954	0.000499	0.000041
9 forestry & logging	0.000000	0.001106	0.000309	0.000438	0.000497	0.000617	0.087323	0.010470
10 fishing	0.000000	0.007053	0.000016	0.000000	0.000002	0.000002	0.000010	0.000000
11 coal & lignite	0.000000	0.000724	0.002211	0.001445	0.001600	0.000681	0.000617	0.004223
12 crude petroleum & natural gas	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
13 iron ore	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 other metallic minerals	0.000000	0.000004	0.000001	0.000000	0.000000	0.000001	0.000001	0.000003
15 non-metallic minerals	0.000000	0.000195	0.000038	0.000377	0.000003	0.000045	0.000060	0.000024
16 sugar	0.000000	0.004548	0.000012	0.000010	0.000001	0.000005	0.000007	0.000002
17 khandhari & boora	0.000000	0.000688	0.000002	0.000000	0.000000	0.000001	0.000115	0.000629
18 other food & beverage indu.	0.000000	0.097530	0.006779	0.000341	0.001335	0.002457	0.002119	0.002715
19 cotton textiles	0.000000	0.007497	0.053676	0.036281	0.007778	0.041277	0.000677	0.003104
20 art silk & synthetic fibre textiles	0.000000	0.000005	0.007239	0.001531	0.011226	0.015102	0.000023	0.000007
21 woollen textiles	0.000000	0.000001	0.000232	0.000905	0.150974	0.028029	0.000063	0.000015
22 other textiles	0.000000	0.004704	0.017680	0.024733	0.031631	0.168042	0.006671	0.009026
23 wood based industries	0.000000	0.011799	0.006618	0.005618	0.010305	0.008817	0.278083	0.011910
24 paper & paper based industries	0.000000	0.003741	0.002726	0.008146	0.001834	0.002471	0.005114	0.123386
25 leather & leather products	0.000000	0.000013	0.000159	0.000004	0.000238	0.000074	0.000076	0.000277
26 rubber products	0.000000	0.000007	0.000074	0.000006	0.000145	0.000710	0.002291	0.000058
27 plastics	0.000000	0.001097	0.000356	0.000542	0.000134	0.000445	0.000977	0.000182
28 petroleum products	0.000000	0.007060	0.006275	0.008031	0.002846	0.004945	0.002721	0.011710
29 coal tar products	0.000000	0.000217	0.000167	0.000063	0.000046	0.000122	0.000150	0.000104
30 fertilizers	0.000000	0.000147	0.000080	0.000227	0.000000	0.000003	0.000001	0.000001
31 pesticides	0.000000	0.000006	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000
32 synthetic fibre resin	0.000000	0.000201	0.003074	0.090524	0.008765	0.004388	0.005638	0.002135
33 other chemicals	0.000000	0.015149	0.047064	0.046400	0.039710	0.014560	0.016456	0.067389
34 cement	0.000000	0.000000	0.000002	0.000002	0.000014	0.000088	0.000005	0.000097
35 other non-metal mineral products	0.000000	0.002694	0.000135	0.000114	0.000036	0.000286	0.001885	0.006254
36 iron & steel	0.000000	0.001161	0.002400	0.000092	0.001393	0.002624	0.010238	0.002492
37 non-ferrous metal	0.000000	0.000576	0.000143	0.000172	0.001034	0.006664	0.000654	0.002643
38 non-electrical machinery	0.000000	0.004566	0.025403	0.008212	0.012343	0.022301	0.020971	0.019226
39 electrical machinery	0.000000	0.000000	0.000000	0.000001	0.000000	0.000299	0.000323	0.000025
40 rail equipments	0.000000	0.000000	0.000008	0.000000	0.000000	0.000001	0.000011	0.000004
41 motor vehicles	0.000000	0.000876	0.001964	0.000618	0.001115	0.001342	0.001470	0.002719
42 other transport equipment	0.000000	0.000000	0.000001	0.000000	0.000001	0.000011	0.000740	0.000049
43 communication & electronic equipments	0.000000	0.000000	0.000000	0.000000	0.000000	0.001689	0.000002	0.000001
44 other manufacturing	0.000000	0.011020	0.001081	0.005677	0.002205	0.012118	0.016418	0.010321
45 rail transport service	0.000000	0.003035	0.003140	0.002311	0.003520	0.002502	0.012293	0.009147
46 other transport service	0.000000	0.020153	0.028172	0.015033	0.023966	0.018895	0.015419	0.018670
47 electricity	0.000000	0.010228	0.056979	0.034968	0.033033	0.028948	0.024331	0.053784
48 construction	0.000000	0.001551	0.004843	0.002166	0.002547	0.000446	0.000633	0.006584
49 communication	0.000000	0.000001	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 other services	0.000000	0.147149	0.134926	0.133991	0.191349	0.192016	0.201171	0.200136
51 total	0.000000	0.863977	0.739936	0.446061	0.801826	0.742170	0.725131	0.590628
52 i-tax	0.000000	0.044818	0.023590	0.209036	0.027743	0.025084	0.025727	0.053282
53 val added	0.000000	0.091205	0.236474	0.344903	0.170431	0.232746	0.249142	0.356090
54 gross output	0	1	1	1	1	1	1	1

Appendix Table 3 (Contd.)

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RAJASTHAN (1984-85) I/O COEFFICIENT MATRIX (NON SURVEY METHOD)

	25	26	27	28	29	30	31	32
1 paddy	0.000002	0.000307	0.000023	0.000000	0.000000	0.000000	0.001187	0.000653
2 wheat	0.000380	0.000631	0.000001	0.000000	0.000000	0.000000	0.000005	0.000002
3 other cereals	0.000000	0.000103	0.000000	0.000000	0.000000	0.000000	0.000001	0.000000
4 pulses	0.000001	0.000156	0.000000	0.000000	0.000000	0.000000	0.000005	0.000002
5 fibre crops	0.000164	0.000190	0.001013	0.000000	0.000000	0.000000	0.000144	0.000145
6 tea, coffee	0.000013	0.003945	0.000000	0.000000	0.000000	0.000000	0.000018	0.000000
7 other crops	0.003094	0.125561	0.001256	0.000000	0.000000	0.000000	0.016387	0.009108
8 animal husbandry	0.260806	0.001999	0.000638	0.000000	0.000000	0.000000	0.000359	0.000238
9 forestry & logging	0.004035	0.000354	0.000190	0.000000	0.000000	0.000000	0.001084	0.005964
10 fishing	0.000001	0.000393	0.000000	0.000000	0.000000	0.000000	0.002006	0.000000
11 coal & lignite	0.000223	0.001194	0.000217	0.000000	0.000000	0.000000	0.000415	0.003206
12 crude petroleum & natural gas	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000019	0.000010
13 iron ore	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
14 other metallic minerals	0.000000	0.000000	0.000002	0.000000	0.000000	0.000000	0.000076	0.000045
15 non-metallic minerals	0.000077	0.002045	0.000233	0.000000	0.000000	0.000000	0.007170	0.007360
16 sugar	0.000023	0.000253	0.000011	0.000000	0.000000	0.000000	0.000357	0.000353
17 khandsari & boora	0.000016	0.000038	0.000002	0.000000	0.000000	0.000000	0.000091	0.000050
18 other food & beverage indu.	0.003653	0.005432	0.000264	0.000000	0.000000	0.000000	0.012047	0.006714
19 cotton textiles	0.004221	0.003847	0.002748	0.000000	0.000000	0.000000	0.002728	0.003124
20 art silk & synthetic fibre textiles	0.000029	0.000170	0.000284	0.000000	0.000000	0.000000	0.000014	0.000633
21 woollen textiles	0.000087	0.000033	0.000309	0.000000	0.000000	0.000000	0.000000	0.000017
22 other textiles	0.027606	0.028764	0.007130	0.000000	0.000000	0.000000	0.009655	0.006274
23 wood based industries	0.007235	0.008728	0.005052	0.000000	0.000000	0.000000	0.026705	0.011874
24 paper & paper based industries	0.002804	0.002201	0.004093	0.000000	0.000000	0.000000	0.010658	0.029164
25 leather & leather products	0.111695	0.000165	0.000077	0.000000	0.000000	0.000000	0.000000	0.000000
26 rubber products	0.053582	0.265795	0.002282	0.000000	0.000000	0.000000	0.000006	0.000334
27 plastics	0.000785	0.000634	0.006663	0.000000	0.000000	0.000000	0.001159	0.000831
28 petroleum products	0.002642	0.016971	0.032827	0.000000	0.000000	0.000000	0.007553	0.082190
29 coal tar products	0.000028	0.000053	0.000049	0.000000	0.000000	0.000000	0.000806	0.000462
30 fertilizers	0.000000	0.000012	0.000090	0.000000	0.000000	0.000000	0.000176	0.003292
31 pesticides	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.128851	0.000000
32 synthetic fibre resin	0.012867	0.013794	0.084167	0.000000	0.000000	0.000000	0.000979	0.054573
33 other chemicals	0.051864	0.064183	0.020434	0.000000	0.000000	0.000000	0.169954	0.150450
34 cement	0.000007	0.000056	0.000002	0.000000	0.000000	0.000000	0.000000	0.000010
35 other non-metal mineral products	0.001784	0.000240	0.001887	0.000000	0.000000	0.000000	0.004366	0.002230
36 iron & steel	0.000546	0.004313	0.002116	0.000000	0.000000	0.000000	0.000510	0.001470
37 non-ferrous metal	0.000352	0.001136	0.000630	0.000000	0.000000	0.000000	0.006351	0.003250
38 non-electrical machinery	0.007148	0.003458	0.003437	0.000000	0.000000	0.000000	0.009919	0.012850
39 electrical machinery	0.000005	0.005649	0.000445	0.000000	0.000000	0.000000	0.000000	0.000045
40 rail equipments	0.000002	0.000000	0.000012	0.000000	0.000000	0.000000	0.000000	0.000010
41 motor vehicles	0.000307	0.002353	0.001129	0.000000	0.000000	0.000000	0.001720	0.001410
42 other transport equipment	0.000038	0.000140	0.000107	0.000000	0.000000	0.000000	0.000000	0.000110
43 communication & electronic equipments	0.000000	0.000104	0.000002	0.000000	0.000000	0.000000	0.000000	0.000060
44 other manufacturing	0.017732	0.006304	0.008351	0.000000	0.000000	0.000000	0.023780	0.007590
45 rail transport service	0.002857	0.004010	0.001356	0.000000	0.000000	0.000000	0.009497	0.006290
46 other transport service	0.024275	0.018670	0.009544	0.000000	0.000000	0.000000	0.013054	0.015140
47 electricity	0.007385	0.025814	0.016737	0.000000	0.000000	0.000000	0.026573	0.057110
48 construction	0.000730	0.008360	0.000452	0.000000	0.000000	0.000000	0.002968	0.005210
49 communication	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
50 other services	0.157827	0.127741	0.069431	0.000000	0.000000	0.000000	0.345110	0.171180
51 total	0.768926	0.756297	0.285695	0.000000	0.000000	0.000000	0.844463	0.661140
52 i. in x	0.045737	0.121268	0.273727	0.000000	0.000000	0.000000	0.016818	0.120130
53 val added	0.185337	0.122435	0.440578	0.000000	0.000000	0.000000	0.138719	0.218720
54 gross output	1	1	1	0	0	0	1	1

RAJASTHAN (1984-85) I/O COEFFICIENT MATRIX (NON SURVEY METHOD)

	49	50
1 paddy	0.000000	0.002704
2 wheat	0.000000	0.000809
3 other cereals	0.000000	0.000000
4 pulses	0.000000	0.000476
5 fibre crops	0.000000	0.000000
6 tea, coffee	0.000000	0.000000
7 other crops	0.000000	0.004739
8 animal husbandry	0.000000	0.028342
9 forestry & logging	0.000000	0.000000
10 fishing	0.000000	0.006062
11 coal & lignite	0.000000	0.001001
12 crude petroleum & natural gas	0.000000	0.000252
13 iron ore	0.000000	0.000000
14 other metallic minerals	0.000000	0.000000
15 non-metallic minerals	0.000000	0.000000
16 sugar	0.000000	0.000985
17 khandsari & boora	0.000000	0.000000
18 other food & beverage indu.	0.000000	0.003111
19 cotton textiles	0.000000	0.000034
20 art silk & synthetic fibre textiles	0.000000	0.000000
21 woollen textiles	0.000000	0.000000
22 other textiles	0.000026	0.003972
23 wood based industries	0.003147	0.003989
24 paper & paper based industries	0.007138	0.011282
25 leather & leather products	0.000000	0.000000
26 rubber products	0.000000	0.000036
27 plastics	0.000001	0.000118
28 petroleum products	0.013999	0.001089
29 coal tar products	0.000000	0.000013
30 fertilizers	0.000000	0.000000
31 pesticides	0.000000	0.000020
32 synthetic fibre resin	0.000000	0.000000
33 other chemicals	0.000000	0.044230
34 cement	0.000000	0.000000
35 other non-metal mineral products	0.000000	0.000422
36 iron & steel	0.000000	0.000011
37 non-ferrous metal	0.000000	0.000000
38 non-electrical machinery	0.000243	0.000716
39 electrical machinery	0.001212	0.000782
40 rail equipments	0.000000	0.000000
41 motor vehicles	0.007881	0.000626
42 other transport equipment	0.000189	0.000719
43 communication & electronic equipments	0.002819	0.000031
44 other manufacturing	0.002534	0.014283
45 rail transport service	0.016852	0.004102
46 other transport service	0.011250	0.030599
47 electricity	0.008318	0.003970
48 construction	0.024002	0.033547
49 communication	0.000000	0.008622
50 other services	0.014319	0.081534
51 total	0.113930	0.293228
52 i-tax	0.009160	0.014186
53 val added	0.876910	0.692586
54 gross output	1	1

Appendix Table 4

RAJASTHAN (1984-85) TRANSACTION MATRIX (NON SURVEY METHOD) (Rupees in Lakhs)

	1	2	3	4	5	6	7	8
1 paddy	5284.02	41.57	0.00	57.03	0.00	0.00	1683.81	2765.56
2 wheat	4.56	8412.59	0.00	11.82	0.00	0.00	677.16	752.81
3 other cereals	0.11	16.04	693.82	0.47	0.00	0.00	53.96	770.01
4 pulses	26.49	213.92	0.00	4256.37	0.00	0.00	167.33	6422.59
5 fibre crops	9.79	1.44	0.00	20.90	120.07	0.00	8.23	0.03
6 tea, coffee	4.09	5.36	0.00	13.02	0.00	0.00	61.19	3.66
7 other crops	112.07	395.11	0.00	315.66	0.00	0.00	4452.74	55473.29
8 animal husbandry	4258.99	3849.87	4992.71	3070.46	667.22	0.00	5650.79	1.37
9 forestry & logging	3.34	0.85	0.00	0.23	0.00	0.00	3.15	0.05
10 fishing	0.41	0.53	0.00	1.30	0.00	0.00	6.09	0.36
11 coal & lignite	0.95	1.27	0.00	0.32	0.00	0.00	0.98	0.04
12 crude petroleum & natural gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13 iron ore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14 other metallic minerals	0.00	0.01	0.00	0.00	0.00	0.00	0.09	0.00
15 non-metallic minerals	0.00	0.25	0.00	0.03	0.00	0.00	0.09	0.00
16 sugar	0.26	0.38	0.00	0.84	0.00	0.00	3.92	0.23
17 khandhari & boora	0.04	0.12	0.00	0.13	0.00	0.00	0.60	0.04
18 other food & beverage indu.	6.11	8.64	0.00	30.15	0.00	0.00	87.04	11277.53
19 cotton textiles	0.74	1.22	0.00	4.32	0.00	0.00	6.63	2468.64
20 art silk & synthetic fibre textiles	0.02	0.03	0.00	0.40	0.00	0.00	0.04	0.00
21 woollen textiles	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00
22 other textiles	59.12	53.60	0.04	16.89	0.01	0.00	27.98	0.23
23 wood based industries	17.86	31.61	2.52	7.10	0.81	0.00	25.42	0.59
24 paper & paper based industries	2.69	4.44	0.22	1.59	0.08	0.00	5.07	0.19
25 leather & leather products	0.00	0.24	0.00	0.01	0.00	0.00	0.05	0.00
26 rubber products	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
27 plastics	0.06	0.14	0.00	0.22	0.00	0.00	0.93	0.06
28 petroleum products	1619.14	1809.90	1129.70	916.16	202.84	0.00	2533.10	0.35
29 coal tar products	0.01	0.39	0.00	0.22	0.00	0.00	0.19	0.01
30 fertilizers	2917.78	5153.27	1139.73	764.36	490.06	0.00	6842.18	0.00
31 pesticides	88.85	68.30	24.57	0.68	581.80	0.00	433.83	0.00
32 synthetic fibre resin	0.01	0.10	0.00	0.07	0.00	0.00	0.15	0.01
33 other chemicals	1.21	11.73	0.00	13.35	0.00	0.00	11.03	793.81
34 cement	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35 other non-metal mineral products	0.14	1.10	0.00	0.50	0.00	0.00	2.37	0.13
36 iron & steel	0.13	0.38	0.00	0.34	0.00	0.00	1.02	0.06
37 non-ferrous metal	0.02	0.53	0.00	0.10	0.00	0.00	0.35	0.02
38 non-electrical machinery	110.93	382.95	263.85	145.75	15.47	0.00	212.84	0.22
39 electrical machinery	4.47	5.60	1.04	0.95	0.31	0.00	4.04	0.00
40 rail equipments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41 motor vehicles	5.93	9.83	1.22	1.52	0.40	0.00	5.91	0.04
42 other transport equipment	0.12	0.12	0.00	0.00	0.00	0.00	0.05	0.00
43 communication & electronic equipments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44 other manufacturing	2.49	4.04	0.09	2.53	0.04	0.00	10.45	0.55
45 rail transport service	175.60	244.99	61.29	47.57	48.92	0.00	214.02	289.66
46 other transport service	180.47	200.73	78.66	83.27	46.54	0.00	289.31	1275.87
47 electricity	567.28	3409.34	333.22	426.68	136.83	0.00	1144.23	0.49
48 construction	1235.25	1365.16	1600.70	831.38	132.09	0.00	1591.61	1626.00
49 communication	22.03	25.94	4.99	4.77	1.59	0.00	19.35	0.00
50 other services	1312.78	1426.75	612.47	645.20	484.27	0.00	2553.03	7438.24
51 total	18036.37	27160.38	10940.84	11694.67	2929.34	0.00	28792.33	91362.71
52 i-tax	-272.49	-1828.28	6.95	126.04	-64.48	0.00	-1202.03	3334.79
53 val added	6609.12	33720.90	32462.22	47075.29	9655.14	0.00	110415.70	72217.50
54 gross output	24373	59053	43410	58896	12520	0	138006	166915

RAJASTHAN (1984-85) TRANSACTION MATRIX (NON SURVEY METHOD)

	9	10	11	12	13	14	15	16
1 paddy	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03
2 wheat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
3 other cereals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4 pulses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5 fibre crops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
6 tea, coffee	0.00	0.00	0.00	0.00	0.00	0.00	0.02	893.60
7 other crops	0.01	0.00	0.00	0.00	0.00	0.00	0.08	0.05
8 animal husbandry	0.00	0.00	0.00	0.00	0.00	0.00	0.10	2.01
9 forestry & logging	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
10 fishing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11 coal & lignite	1.00	0.00	0.00	0.00	0.00	0.86	1.16	0.78
12 crude petroleum & natural gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13 iron ore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14 other metallic minerals	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
15 non-metallic minerals	0.01	0.00	0.00	0.00	0.00	0.00	1.13	4.88
16 sugar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38
17 khandsari & boora	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79
18 other food & beverage indu.	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.13
19 cotton textiles	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
20 art silk & synthetic fibre textiles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21 woollen textiles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22 other textiles	0.82	6.05	0.00	0.00	0.00	0.00	0.09	36.98
23 wood based industries	5.78	0.11	0.00	0.00	0.00	0.00	0.31	12.14
24 paper & paper based industries	6.60	0.00	0.00	0.00	0.00	0.00	0.05	0.87
25 leather & leather products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26 rubber products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27 plastics	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
28 petroleum products	3.63	5.15	0.00	0.00	0.32	193.33	434.25	24.98
29 coal tar products	0.00	0.00	0.00	0.00	0.00	0.00	0.04	1.35
30 fertilizers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.56
31 pesticides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32 synthetic fibre resin	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
33 other chemicals	0.00	0.12	0.00	0.00	0.03	107.21	132.37	2.17
34 cement	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00
35 other non-metal mineral products	0.00	0.00	0.00	0.00	0.00	0.00	0.64	1.73
36 iron & steel	0.01	0.09	0.00	0.00	0.00	0.00	0.33	0.00
37 non-ferrous metal	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
38 non-electrical machinery	1.38	0.00	0.00	0.00	0.11	336.89	285.62	25.34
39 electrical machinery	4.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40 rail equipments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41 motor vehicles	10.47	0.00	0.00	0.00	0.00	0.00	0.05	10.21
42 other transport equipment	0.50	11.58	0.00	0.00	0.00	0.00	0.00	0.01
43 communication & electronic equipments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44 other manufacturing	2.44	0.00	0.00	0.00	0.00	0.00	0.24	4.09
45 rail transport service	2.37	0.08	0.00	0.00	0.00	4.61	5.80	5.85
46 other transport service	16.95	0.26	0.00	0.00	0.00	10.66	11.07	15.46
47 electricity	2.14	0.00	0.00	0.00	0.06	637.13	251.59	12.68
48 construction	27.25	0.00	0.00	0.00	0.07	79.30	77.96	2.84
49 communication	4.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50 other services	23.06	1.89	0.00	0.00	0.04	99.41	101.29	279.54
51 total	113.32	25.43	0.00	0.00	0.64	1469.38	1304.65	1342.57
52 i-tax	6.44	13.17	0.00	0.00	0.12	129.26	179.91	17.79
53 val added	945.24	1879.40	0.00	0.00	3.25	8244.36	12329.44	380.64
54 gross output	1065	1918	0	0	4	9843	13814	1741

Appendix Table 4 (Contd.)

RAJASTHAN (1984-85) TRANSACTION MATRIX (NON SURVEY METHOD)

	17	18	19	20	21	22	23	24
1 paddy	0.00	263.88	36.49	0.14	0.07	0.06	0.07	0.10
2 wheat	0.00	524.95	39.96	0.22	0.07	0.09	0.06	1.92
3 other cereals	0.00	85.43	0.73	0.02	0.04	0.09	0.01	0.00
4 pulses	0.00	130.57	44.02	0.20	0.03	0.03	0.01	0.00
5 fibre crops	0.00	36.95	25204.79	472.70	125.74	276.88	3.19	0.19
6 tea, coffee	0.00	3279.55	12.85	0.00	0.15	0.05	0.29	0.00
7 other crops	0.00	17466.22	147.56	6.06	10.86	24.33	22.00	34.41
8 animal husbandry	0.00	1239.06	41.93	40.20	1693.55	146.15	1.44	0.14
9 forestry & logging	0.00	51.20	24.17	13.33	3.50	1.73	252.10	34.63
10 fishing	0.00	326.47	1.28	0.00	0.01	0.01	0.03	0.00
11 coal & lignite	0.00	33.52	173.20	43.94	11.26	1.92	1.78	13.97
12 crude petroleum & natural gas	0.00	0.05	0.01	0.00	0.00	0.00	0.00	0.00
13 iron ore	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
14 other metallic minerals	0.00	0.20	0.06	0.00	0.00	0.00	0.00	0.01
15 non-metallic minerals	0.00	9.04	2.99	11.47	0.02	0.13	0.17	0.08
16 sugar	0.00	210.50	0.92	0.30	0.01	0.01	0.02	0.01
17 khandhari & boora	0.00	31.83	0.15	0.00	0.00	0.00	0.33	2.08
18 other food & beverage indu.	0.00	4514.35	530.96	10.36	9.39	6.91	6.12	8.98
19 cotton textiles	0.00	347.00	4203.94	1103.41	54.72	116.11	1.96	10.27
20 art silk & synthetic fibre textiles	0.00	0.24	566.99	46.56	78.97	42.48	0.07	0.02
21 woollen textiles	0.00	0.03	18.16	27.52	1062.10	78.85	0.18	0.05
22 other textiles	0.00	217.73	1384.72	752.19	222.53	472.70	19.26	29.86
23 wood based industries	0.00	546.14	518.31	170.86	72.49	24.80	802.83	39.40
24 paper & paper based industries	0.00	173.17	213.53	247.75	12.90	6.95	14.77	408.16
25 leather & leather products	0.00	0.60	12.41	0.11	1.68	0.21	0.22	0.92
26 rubber products	0.00	0.31	5.79	0.19	1.02	2.00	6.61	0.19
27 plastics	0.00	50.79	27.91	16.50	0.94	1.25	2.82	0.60
28 petroleum products	0.00	326.79	491.45	244.26	20.02	13.91	7.86	38.74
29 coal tar products	0.00	10.04	13.08	1.90	0.32	0.34	0.43	0.34
30 fertilizers	0.00	6.80	6.26	6.91	0.00	0.01	0.00	0.00
31 pesticides	0.00	0.29	0.08	0.00	0.00	0.00	0.00	0.00
32 synthetic fibre resin	0.00	9.30	240.72	2753.11	61.66	12.34	16.28	7.06
33 other chemicals	0.00	701.21	3686.06	1411.17	279.36	40.96	47.51	222.92
34 cement	0.00	0.00	0.14	0.06	0.10	0.25	0.02	0.32
35 other non-metal mineral products	0.00	124.71	10.54	3.48	0.25	0.80	5.44	20.69
36 iron & steel	0.00	53.73	187.99	2.79	9.80	7.38	29.56	8.24
37 non-ferrous metal	0.00	26.66	11.21	5.24	7.28	18.74	1.89	8.74
38 non-electrical machinery	0.00	211.34	1989.55	249.74	86.83	62.73	60.54	63.60
39 electrical machinery	0.00	0.02	0.01	0.03	0.00	0.84	0.93	0.08
40 rail equipments	0.00	0.00	0.61	0.00	0.00	0.00	0.03	0.01
41 motor vehicles	0.00	40.53	153.83	18.80	7.85	3.78	4.24	8.99
42 other transport equipment	0.00	0.01	0.04	0.00	0.01	0.03	2.14	0.16
43 communication & electronic equipments	0.00	0.00	0.00	0.00	0.00	4.75	0.01	0.00
44 other manufacturing	0.00	510.10	84.68	172.64	15.51	34.09	47.40	34.14
45 rail transport service	0.00	140.46	245.96	70.29	24.76	7.04	35.49	30.26
46 other transport service	0.00	932.84	2206.39	457.18	168.60	53.15	44.51	61.76
47 electricity	0.00	473.42	4462.58	1063.47	232.39	81.43	70.24	177.92
48 construction	0.00	71.78	379.34	65.86	17.92	1.25	1.83	21.78
49 communication	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.00
50 other services	0.00	6811.08	10567.41	4075.07	1346.14	540.14	580.78	662.05
51 total	0.00	39990.92	57951.81	13566.04	5640.85	2087.73	2093.45	1953.80
52 i-tax	0.00	2074.49	1847.57	6357.41	195.17	70.56	74.27	176.26
53 val added	0.00	4221.59	18520.62	10489.55	1198.98	654.71	719.27	1177.94
54 gross output	0	46287	78320	30413	7035	2813	2887	3308

RAJASTHAN (1984-85) TRANSACTION MATRIX (NON SURVEY METHOD)

25 26 27 28 29 30 31 32

	25	26	27	28	29	30	31	32
1 paddy	0.00	6.51	0.00	0.00	0.00	0.00	26.35	8.71
2 wheat	0.06	13.39	0.00	0.00	0.00	0.00	0.11	0.02
3 other cereals	0.00	2.18	0.00	0.00	0.00	0.00	0.02	0.00
4 pulses	0.00	3.31	0.00	0.00	0.00	0.00	0.12	0.03
5 fibre crops	0.03	4.03	0.19	0.00	0.00	0.00	3.20	1.93
6 tea, coffee	0.00	83.71	0.00	0.00	0.00	0.00	0.41	0.00
7 other crops	0.52	2664.02	0.23	0.00	0.00	0.00	363.69	121.48
8 animal husbandry	44.08	42.41	0.12	0.00	0.00	0.00	7.96	3.18
9 forestry & logging	0.68	7.50	0.04	0.00	0.00	0.00	24.07	79.54
10 fishing	0.00	8.33	0.00	0.00	0.00	0.00	44.51	0.00
11 coal & lignite	0.04	25.34	0.04	0.00	0.00	0.00	9.21	42.76
12 crude petroleum & natural gas	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.14
13 iron ore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14 other metallic minerals	0.00	0.00	0.00	0.00	0.00	0.00	1.69	0.60
15 non-metallic minerals	0.01	43.38	0.04	0.00	0.00	0.00	159.13	98.16
16 sugar	0.00	5.37	0.00	0.00	0.00	0.00	7.93	4.71
17 khandsari & boora	0.00	0.81	0.00	0.00	0.00	0.00	2.01	0.67
18 other food & beverage indu.	0.62	115.24	0.05	0.00	0.00	0.00	267.38	89.60
19 cotton textiles	0.71	81.61	0.51	0.00	0.00	0.00	60.55	41.66
20 art silk & synthetic fibre textiles	0.00	3.61	0.05	0.00	0.00	0.00	0.30	8.44
21 woollen textiles	0.01	0.69	0.06	0.00	0.00	0.00	0.00	0.23
22 other textiles	4.67	610.28	1.32	0.00	0.00	0.00	214.28	83.73
23 wood based industries	1.22	185.18	0.93	0.00	0.00	0.00	592.70	158.43
24 paper & paper based industries	0.47	46.69	0.76	0.00	0.00	0.00	236.55	388.92
25 leather & leather products	18.88	3.50	0.01	0.00	0.00	0.00	0.01	0.12
26 rubber products	9.06	5639.38	0.42	0.00	0.00	0.00	0.13	4.48
27 plastics	0.13	13.44	1.23	0.00	0.00	0.00	25.71	11.16
28 petroleum products	0.45	360.07	6.07	0.00	0.00	0.00	167.64	1096.21
29 coal tar products	0.00	1.12	0.01	0.00	0.00	0.00	17.88	6.17
30 fertilizers	0.00	0.26	0.02	0.00	0.00	0.00	3.90	43.90
31 pesticides	0.00	0.00	0.00	0.00	0.00	0.00	2859.72	0.00
32 synthetic fibre resin	2.17	292.67	15.57	0.00	0.00	0.00	21.73	727.83
33 other chemicals	8.77	1361.77	3.78	0.00	0.00	0.00	3771.96	2006.59
34 cement	0.00	1.18	0.00	0.00	0.00	0.00	0.01	0.18
35 other non-metal mineral products	0.30	5.09	0.35	0.00	0.00	0.00	96.90	29.85
36 iron & steel	0.09	91.51	0.39	0.00	0.00	0.00	11.32	19.61
37 non-ferrous metal	0.06	24.11	0.12	0.00	0.00	0.00	140.95	43.46
38 non-electrical machinery	1.21	73.37	0.64	0.00	0.00	0.00	220.14	171.49
39 electrical machinery	0.00	119.86	0.08	0.00	0.00	0.00	0.01	0.60
40 rail equipments	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.13
41 motor vehicles	0.05	49.92	0.21	0.00	0.00	0.00	38.17	18.93
42 other transport equipment	0.01	2.98	0.02	0.00	0.00	0.00	0.00	1.50
43 communication & electronic equipments	0.00	2.20	0.00	0.00	0.00	0.00	0.00	0.88
44 other manufacturing	3.00	133.75	1.54	0.00	0.00	0.00	527.77	101.22
45 rail transport service	0.48	85.09	0.25	0.00	0.00	0.00	210.77	83.97
46 other transport service	4.10	396.13	1.77	0.00	0.00	0.00	289.71	202.01
47 electricity	1.25	547.69	3.10	0.00	0.00	0.00	589.77	761.75
48 construction	0.12	177.38	0.08	0.00	0.00	0.00	65.88	69.57
49 communication	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50 other services	26.67	2710.28	12.84	0.00	0.00	0.00	7659.37	2283.11
51 total	129.95	16046.34	52.85	0.00	0.00	0.00	18742.02	8817.65
52 i-tax	7.73	2572.94	50.64	0.00	0.00	0.00	373.26	1602.24
53 val added	31.32	2597.71	81.51	0.00	0.00	0.00	3078.73	2917.11
54 gross output	169	21217	185	0	0	0	22194	13337

RAJASTHAN (1984-85) TRANSACTION MATRIX (NON SURVEY METHOD)

	33	34	35	36	37	38	39	40
1 paddy	71.37	0.00	7.50	0.01	0.02	0.05	0.05	0.00
2 wheat	9.65	0.00	2.09	0.01	0.01	0.02	0.23	0.00
3 other cereals	1.55	0.00	0.02	0.00	0.00	0.00	0.00	0.00
4 pulses	2.57	0.00	0.02	0.00	0.00	0.00	0.00	0.00
5 fibre crops	11.96	0.00	0.77	0.30	2.26	0.09	0.09	0.00
6 tea, coffee	58.25	0.00	0.61	0.00	0.00	0.00	0.04	0.00
7 other crops	1219.00	0.01	22.31	0.29	0.38	0.52	2.36	0.00
8 animal husbandry	43.92	0.05	86.31	0.57	0.92	1.81	0.39	0.00
9 forestry & logging	61.90	0.69	115.11	4.04	7.28	7.87	2.83	4.86
10 fishing	6.43	0.00	0.07	0.00	0.00	0.00	0.00	0.00
11 coal & lignite	20.35	912.10	161.31	140.27	33.78	12.19	3.32	0.98
12 crude petroleum & natural gas	1.04	0.00	1.46	0.00	0.00	0.00	0.00	0.00
13 iron ore	0.00	0.50	0.01	59.25	3.24	2.88	0.05	0.02
14 other metallic minerals	5.38	0.75	12.59	88.74	556.50	4.28	1.26	0.02
15 non-metallic minerals	135.77	936.35	1295.34	266.02	143.03	14.46	3.72	0.07
16 sugar	23.61	0.00	0.26	0.06	0.01	0.04	0.04	0.00
17 khandsari & boora	5.61	0.00	0.31	0.00	0.00	0.00	0.00	0.00
18 other food & beverage indu.	700.14	0.00	5.28	0.05	0.23	0.26	1.02	0.00
19 cotton textiles	159.05	0.01	10.69	0.50	3.47	17.85	30.79	0.01
20 art silk & synthetic fibre textiles	1.04	0.00	0.00	0.00	0.08	0.00	0.03	0.00
21 woollen textiles	0.08	0.00	0.01	0.30	0.28	0.21	0.09	0.00
22 other textiles	154.45	1312.47	105.88	61.37	31.01	15.59	21.72	0.25
23 wood based industries	296.85	104.05	351.63	262.37	129.34	155.64	138.08	10.95
24 paper & paper based industries	163.08	10.27	62.39	25.86	48.17	16.37	26.15	1.19
25 leather & leather products	0.68	0.00	0.02	0.10	0.12	0.42	0.07	0.00
26 rubber products	1.51	0.00	4.40	1.29	1.55	46.75	24.86	32.08
27 plastics	29.86	0.00	5.97	0.15	2.69	1.04	6.38	0.00
28 petroleum products	266.55	270.33	301.96	41.22	384.08	18.37	17.30	37.09
29 coal tar products	44.63	7.08	49.64	271.65	326.67	32.74	5.79	4.03
30 fertilizers	11.42	17.08	0.08	0.01	0.01	0.01	0.01	0.00
31 pesticides	40.63	0.00	0.45	0.00	0.00	0.00	0.00	0.00
32 synthetic fibre resin	70.92	0.01	11.22	0.67	8.21	2.68	49.06	0.21
33 other chemicals	4881.99	3.70	471.27	60.28	537.52	68.58	194.58	40.46
34 cement	0.34	23.67	474.74	0.09	0.42	0.14	0.77	0.00
35 other non-metal mineral products	209.47	1.24	737.49	96.27	10.75	12.35	79.25	3.51
36 iron & steel	32.23	116.05	383.17	2645.16	357.57	2838.64	1146.93	564.83
37 non-ferrous metal	278.05	3.87	8.61	467.49	2938.63	141.47	356.66	37.97
38 non-electrical machinery	182.24	163.37	248.00	332.41	245.98	1045.00	106.06	40.52
39 electrical machinery	0.24	0.07	2.92	10.48	14.08	76.31	404.02	17.62
40 rail equipments	0.01	0.00	0.01	0.43	0.29	2.17	0.09	116.01
41 motor vehicles	27.84	106.98	54.58	86.45	57.47	80.12	22.77	9.85
42 other transport equipment	0.17	0.00	0.16	5.23	6.47	17.54	2.03	1.91
43 communication & electronic equipments	0.97	0.00	0.02	0.45	23.67	2.10	34.36	0.00
44 other manufacturing	396.53	82.39	282.86	162.65	232.76	344.55	857.65	39.04
45 rail transport service	95.06	407.74	318.98	354.74	107.88	108.76	46.76	45.90
46 other transport service	287.16	215.32	338.01	112.35	287.38	81.01	84.17	15.16
47 electricity	783.40	1134.82	448.49	671.39	1997.83	229.70	136.38	58.33
48 construction	78.52	16.29	88.43	26.50	161.51	26.39	18.10	6.01
49 communication	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50 other services	3123.72	1586.30	2785.49	2249.84	3761.05	1506.86	1480.80	231.86
51 total	13997.21	7433.59	9258.92	8507.31	12424.62	6933.84	5307.12	1320.75
52 i-tax	1341.66	386.20	787.26	628.35	1563.47	1004.12	697.90	264.82
53 val added	3276.14	2819.22	4399.82	1683.35	4386.91	4091.04	1180.98	1979.43
54 gross output	18615	10639	14446	10819	18375	12029	7186	3565

RAJASTHAN (1984-85) TRANSACTION MATRIX (NON SURVEY METHOD)

	41	42	43	44	45	46	47	48
1 paddy	0.00	0.01	0.00	17.06	0.00	31.27	0.52	0.00
2 wheat	0.00	0.00	0.00	1.42	0.00	0.00	0.36	0.00
3 other cereals	0.00	0.00	0.00	0.04	0.00	5.06	0.03	0.00
4 pulses	0.00	0.00	0.00	0.31	0.00	3.07	0.11	0.00
5 fibre crops	0.00	0.00	0.00	9.29	0.00	0.00	43.61	0.00
6 tea, coffee	0.00	0.00	0.00	1.15	0.00	0.00	1.04	0.00
7 other crops	2.01	0.00	0.01	283.22	0.00	281.65	139.80	6808.00
8 animal husbandry	0.01	0.00	0.02	168.79	0.00	0.00	4.31	0.00
9 forestry & logging	2.28	0.14	0.09	72.29	0.15	0.00	5.43	1730.47
10 fishing	0.00	0.00	0.00	0.11	0.00	0.00	0.10	0.00
11 coal & lignite	2.77	0.01	0.04	95.93	1232.83	0.00	6083.68	105.50
12 crude petroleum & natural gas	0.00	0.00	0.00	0.24	0.00	0.00	598.50	0.00
13 iron ore	0.02	0.00	0.01	5.88	0.00	0.00	2.85	0.00
14 other metallic minerals	0.03	0.00	0.01	16.00	0.00	0.00	4.86	0.00
15 non-metallic minerals	0.13	0.00	0.03	123.94	0.00	0.00	22.82	2380.83
16 sugar	0.00	0.00	0.00	4.68	0.00	0.00	0.39	0.00
17 khandasari & boora	0.00	0.00	0.00	1.23	0.00	0.00	0.29	0.00
18 other food & beverage indu.	0.04	0.00	0.01	153.09	0.00	60.40	6.25	0.00
19 cotton textiles	3.79	0.01	0.26	105.94	0.00	14.26	11.62	0.00
20 art silk & synthetic fibre textiles	0.00	0.00	0.00	1.48	0.00	0.00	1.62	0.00
21 woollen textiles	0.04	0.00	0.01	52.51	0.00	0.00	1.32	0.00
22 other textiles	6.17	0.04	1.27	218.42	0.00	2.96	97.00	0.00
23 wood based industries	29.87	2.94	2.83	1133.38	0.00	9.50	53.65	4590.49
24 paper & paper based industries	6.84	0.04	0.98	133.21	27.84	28.61	40.92	4.95
25 leather & leather products	0.12	0.00	0.00	31.85	0.00	0.00	0.68	0.00
26 rubber products	274.65	0.52	0.12	111.59	0.00	937.95	8.60	0.00
27 plastics	0.19	0.00	1.38	14.63	0.00	0.15	0.38	20.67
28 petroleum products	114.66	0.53	1.86	378.79	1832.94	11498.89	2111.30	1305.17
29 coal tar products	2.77	0.01	0.07	97.12	0.00	0.00	14.03	1441.36
30 fertilizers	0.00	0.00	0.00	4.13	0.00	0.00	1.05	0.00
31 pesticides	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
32 synthetic fibre resin	9.00	0.41	0.89	60.94	0.00	0.00	16.26	0.00
33 other chemicals	48.58	0.36	3.27	1823.63	0.00	3.88	72.73	805.19
34 cement	0.00	0.00	0.00	2.07	0.00	0.00	0.55	5982.14
35 other non-metal mineral products	0.55	0.01	2.06	140.52	0.71	0.00	8.26	12223.59
36 iron & steel	1000.99	3.76	18.14	8435.43	18.13	0.00	267.96	15983.65
37 non-ferrous metal	26.67	0.20	7.71	1424.16	0.00	0.00	30.38	0.00
38 non-electrical machinery	94.04	0.32	2.47	659.32	153.82	5.11	43.15	1.01
39 electrical machinery	20.19	0.05	11.48	66.58	742.62	20.69	465.30	3209.36
40 rail equipments	0.01	0.00	0.01	67.45	2237.06	0.00	0.90	0.00
41 motor vehicles	1322.56	0.21	0.72	385.71	0.00	971.68	33.80	25.49
42 other transport equipment	24.48	4.10	0.10	821.31	8.09	1167.44	30.17	0.00
43 communication & electronic equipments	0.15	0.01	65.83	35.20	26.63	0.00	0.90	0.00
44 other manufacturing	209.91	4.41	18.56	6169.68	86.15	11.39	51.27	213.15
45 rail transport service	64.30	0.17	2.92	307.07	569.52	59.73	308.65	1431.72
46 other transport service	35.25	0.28	4.32	478.56	1247.60	576.39	294.68	1414.73
47 electricity	94.24	0.56	4.74	940.01	1077.57	32.40	4398.28	69.87
48 construction	1.67	0.06	0.63	103.72	4377.38	34.34	466.17	0.00
49 communication	0.00	0.00	0.00	0.00	0.35	173.84	58.66	31.32
50 other services	777.42	4.54	67.95	7130.48	1097.88	830.55	948.18	14428.42
51 total	4176.37	23.72	220.79	32289.58	14737.26	16761.22	16753.41	74207.07
52 i-tax	918.89	3.14	22.87	3316.15	821.98	3999.90	1601.08	6996.68
53 val added	1474.74	5.14	57.34	12554.27	13964.76	30336.88	14826.51	45598.25
54 gross output	6570	32	301	48160	29524	51098	33181	126802

Appendix Table 4 (Contd.)

RAJASTHAN (1984-85) TRANSACTION MATRIX (NON SURVEY METHOD)

	49	50	S1 TOTAL	S2 FD	S3 GROSS OUTPUT
1 paddy	0.00	839.64	11142	13231	24373
2 wheat	0.00	251.21	10705	48348	59053
3 other cereals	0.00	0.00	1630	41780	43410
4 pulses	0.00	147.81	11419	47477	58896
5 fibre crops	0.00	0.00	26359	-13839	12520
6 tea, coffee	0.00	0.00	3526	-3526	0
7 other crops	0.00	1471.54	92735	45271	138006
8 animal husbandry	0.00	8800.67	34860	132055	166915
9 forestry & logging	0.00	0.00	2518	-1453	1065
10 fishing	0.00	1882.35	2278	-360	1918
11 coal & lignite	0.00	310.83	9480	-9480	0
12 crude petroleum & natural gas	0.00	78.25	680	-680	0
13 iron ore	0.00	0.00	75	-71	4
14 other metallic minerals	0.00	0.00	693	9150	9843
15 non-metallic minerals	0.00	0.00	5654	8160	13814
16 sugar	0.00	305.86	572	1169	1741
17 khandsari & boora	0.00	0.00	47	-47	0
18 other food & beverage indu.	0.00	966.02	18862	27425	46287
19 cotton textiles	0.00	10.56	8873	69447	78320
20 art silk & synthetic fibre textiles	0.00	0.00	752	29661	30413
21 woollen textiles	0.00	0.00	1243	5792	7035
22 other textiles	0.13	1233.37	7477	-4664	2813
23 wood based industries	16.31	1238.65	11744	-8857	2887
24 paper & paper based industries	37.00	3503.25	5910	-2602	3308
25 leather & leather products	0.00	0.00	73	96	169
26 rubber products	0.00	11.18	7127	14090	21217
27 plastics	0.01	36.64	274	-89	185
28 petroleum products	72.57	338.15	30638	-30638	0
29 coal tar products	0.00	4.04	2355	-2355	0
30 fertilizers	0.00	0.00	17412	-17412	0
31 pesticides	0.00	6.21	4105	18089	22194
32 synthetic fibre resin	0.00	0.00	4391	8946	13337
33 other chemicals	0.00	13734.17	37365	-18750	18615
34 cement	0.00	0.00	6488	4151	10639
35 other non-metal mineral products	0.00	131.04	13962	484	14446
36 iron & steel	0.00	3.42	34241	-23422	10819
37 non-ferrous metal	0.00	0.00	6011	12364	18375
38 non-electrical machinery	1.26	222.33	8519	3510	12029
39 electrical machinery	6.28	242.82	5454	1732	7186
40 rail equipments	0.00	0.00	2425	1140	3565
41 motor vehicles	40.86	194.38	3812	2758	6570
42 other transport equipment	0.98	223.26	2333	-2301	32
43 communication & electronic equipments	14.61	9.63	222	79	301
44 other manufacturing	13.14	4435.11	15304	32856	48160
45 rail transport service	87.36	1273.74	7627	21897	29524
46 other transport service	58.32	9501.51	22060	29038	51098
47 electricity	43.12	1232.75	28741	4440	33181
48 construction	124.43	10416.91	25389	101413	126802
49 communication	0.00	2677.28	3025	2159	5184
50 other services	74.23	25317.69	119656	190861	310517
51 total	590.61	91052.28			
52 i-tax	47.49	4404.99			
53 val added	4545.90	215059.73			
54 gross output	5184	310517			