

CHAPTER 8

UNREGISTERED MANUFACTURING

Coverage

8.1 The registered manufacturing sector and the unregistered manufacturing sector are complementary to each other. These together constitute manufacturing sector. The manufacturing sector covers all manufacturing, processing and repair & maintenance services units irrespective of their employment size, investment and location. The unregistered manufacturing sector - being complementary to registered manufacturing sector - thus, by implication, covers all those units which are not covered under the registered manufacturing sector. In other words, the unregistered manufacturing sector covers all the manufacturing, processing, repair & maintenance services units employing less than 10 workers and using power or less than 20 workers and not using power. It, by implication, also covers Own Account Enterprises (OAE) engaged in the manufacturing activity. However, conversion of sugarcane into indigenous gur, slaughtering of animals and dressing of meat carried out by farmers and individuals are excluded from this sector as they are included under agriculture and allied activities.

Methodology and Source material

8.2 Like other unorganised sectors of non-agricultural economy, the estimates of GVA for the unregistered manufacturing sector are also obtained as a product of the work force and the corresponding GVA per worker. These estimates are first worked out for the bench mark (base) year and then carried forward to subsequent years on the basis of indicators representing physical volume of activity.

Sources of Data

8.3 The additional data that became available at the time of finalisation of the present series estimates in respect of this sector were (i) the results of the 33rd round (July 1978-June 1979) of the NSSO on Non-Directory Manufacturing Enterprises (NDMEs) and OAE, (ii) Summary Results for Central Sample of Directory Manufacturing Establishments (DMEs) Survey (October 1978-September 1979) released in 1985, (iii) Production data on bidi maintained by the Directorate of Tobacco Development, (iv) Production of cloth in the decentralised sector covering cotton blended and man-made fabrics available in the Reports of Textile Commissioner (Textiles in India), (v) Production data on woolen, acrylic and polyester woolen, pure silk and hosiery available in the Report of the Consumption Panel Project, All India Annual Survey of Textile Committee. These data were thoroughly examined with a view to assessing their suitability and acceptability for use in working out the GVA for the year 1980-81 and onwards as discussed in subsequent paragraphs.

8.4 In order to meet the long felt need for the availability of reliable data in respect of unorganised sectors of non-agricultural sectors of the economy, an Economic Census and Surveys Scheme was launched by the CSO in 1976. Under this scheme, a country wide census of non-agricultural establishments i.e., those employing at least one hired worker on a fairly regular basis, was conducted during the last quarter of 1977 to collect basic information, such as the number and nature of establishments, persons usually working in them, ownership etc. Based on the census frame, a sample survey covering unregistered manufacturing sector was conducted to collect detailed information on employment, emoluments, inputs, output, investment etc. For this purpose, establishments covered in the EC were categorised into two groups, namely, (i) Directory Establishments (DE) i.e., establishments having a total employment of six or more persons and (ii) the rest called Non-Directory Establishments (NDE); and the survey was conducted separately for these two groups, the latter also covering the own account enterprises. The sample survey of NDMEs and OAEs was conducted as a part of the 33rd round of NSS during July 1978 - June 1979. The survey of DME was organised during October 1978 - September 1979.

The coverage of NDME and OAE as well as DME was fairly complete. However, the sample size selected for some of the major industry groups, particularly, in the case of DME survey was not adequate to give firm and reliable estimates of principal characteristics including GVA. The estimates of GVA obtained from the results of the NDME and OAE combined with the corresponding results of DME when compared with the corresponding estimates based on the results of 29th round Survey of Self-employed Households in Non-agricultural Enterprises; Centrally Sponsored Scheme on Survey of Small Scale Industries and the Census of Small Scale Industrial Units CSSI by Development Commissioner, Small Scale Industries which were used in the 1970-71 series of National Accounts Statistics showed wide divergence at the industry level. While some of the industry groups showed significantly higher results, the other showed a much lower figure. Even the industry-wise estimates of GVA per worker obtained from the above surveys were not consistent, with the corresponding estimates obtained from the 29th round (1974-75) of NSS even after adjusting for the price rise. However, at the aggregate level, the estimates of value added published in the NAS and the total value added obtained as a product of the value added per worker obtained from the combined results of the NDME, OAE and DME and the revised estimates of work force were quite comparable. Since the NAS estimates are published at the disaggregated level and the use of combined results of NDME, OAE and DME would have brought about violent fluctuations at the industry level, it was not considered desirable to utilise these results for purposes of working out industry-wise estimates of GVA for the year 1980-81.

8.5 Data on output of bidi production obtained from the Directorate of Tobacco Development, data on production of cloth in the decentralised sector covering cotton blended and man-made fabrics obtained from the Reports of the Textile Commissioner (Textiles in India) and the production data on woollen, acrylic, polyester woollen, pure silk and hosiery available in the reports of the Consumption Panel Project, All India Annual Survey of Textile Committee were critically examined and considered quite comprehensive and reliable for working out the estimates of GVA for the two industry groups, namely, beverages & tobacco and textiles.

Estimates at Current Prices and Constant Prices

8.6 The industry-wise estimates of GVA for the year 1980-81 are based on the Survey results mentioned in paragraph 8.4 except for the two industry groups, namely, beverages & tobacco and textiles. The estimates of GVA for these two industry groups have been worked out on the basis of firm and current available data referred to in the preceding paragraphs. The estimates of GVA of unregistered manufacturing establishments are not adjusted for banking charges. The value of such services forms a part of the income originating in the Banking & Insurance sector and as such needs to be deducted from the GVA of the unregistered manufacturing sector. In the absence of adequate details, adjustment for imputed bank charges are made at the aggregate level, to obtain GVA less imputed bank charges. The nature of these services and the method of imputation of their values are described in the chapter relating to Banking & Insurance. Industry-wise unadjusted estimates of GVA for the year 1980-81 are given in Table 8.1. A note on industry-wise estimates of value added built up for the base year 1970-71 is given in Appendix 8.1.

8.7 The estimates for the subsequent years are obtained first at constant prices by carrying forward the bench mark year estimates of 1980-81 by appropriate physical indicators. The industry-wise physical indicators have been reviewed and updated. Efforts have been made to use the latest data either on inputs or on output of relevant industry group for which these industries are working as ancillary industries. In the industry group Food Products, the net availability of wheat, sugarcane, oilseeds and pulses at 1980-81 prices has also been taken into account for building the relevant indicator. The industry-wise indicators are given in Appendix 8.2.

8.8 The industry-wise current price estimates are obtained from the corresponding constant price estimates by superimposing the price changes as revealed by the indices of wholesale prices. For grouping of items under wholesale price indices to

correspond to the industry groups under unregistered manufacturing sector, reference may be made to Appendix 7.2.

Quality and limitations of data base

8.9 The 29th round NSS results provide comprehensive data on principal characteristics in respect of household manufacturing sector only. The results of the ad-hoc surveys on unregistered non-household manufacturing establishments utilised to supplement the results of the 29th round of NSS suffer from incomplete coverage.

8.10 The periodic surveys provide detailed data on input and output once in five years only and the problem of preparing the estimates for the intervening years remain. There has been no satisfactory data to build up annual indicators necessary for carrying forward the bench-mark year estimates and this is a major gap in the data availability.

APPENDIX 8.1: Estimation procedure followed for 1970-71 Series

The industry-wise estimates of value added were first built up for the base year 1970-71 on the basis of value added per worker in each industry group and the estimated working force. The value added per worker were based on the results of 29th Round (1974-75) Survey of NSSO on household non-agricultural enterprises and the results available from the Centrally Sponsored Scheme on Survey on Small Scale Industries (1970-71) CSSI, 1972 undertaken by the Office of the Development Commissioner, Small Scale Industries. The estimates of the working force were built up on the basis of population census results duly adjusted for the number of workers in the registered sector obtained from the ASI. The estimates for other years at 1970-71 prices were first worked out by carrying forward the base year estimates with the help of indicators of physical output-input and appropriate indices of industrial production. The current price estimates were then obtained from the constant price estimates for each industry group by superimposing thereon the price change as revealed by the indices of wholesale prices issued by the Office of the EA.

APPENDIX 8.2 : Physical indicators used for preparation of estimates of Gross Value Added at 1980-81 prices

Major group/ NIC-1970	Indicator
Food products	Index of value of output of paddy and net availability of wheat, sugarcane, oilseeds and pulses at 1980-81 prices with value of output for 1980-81 as weights
Beverages, tobacco and related products	Indicators of value of production of mangoes grapes, citrus fruits at 1980-81 prices and production of tobacco leaf
Textiles and Textile products	Indicator used for textiles (other than jute) is based on value of output at 1980-81 prices of cotton, silk and woollen textiles of decentralised sectors (supplied by Textile Commissioner). For jute textiles, index of production of raw jute has been used. Two components of textile group are projected separately.
Wood and wood products, furniture and fixtures	Value of output of industrial wood and plywood at 1980-81 prices duly adjusted for their use in the construction industry
Paper and paper products and printing, publishing and allied industries	Index of industrial production of paper & paper products etc
Leather and leather & fur products except repair	Value of output of cattle buffalo hides & goat and sheep skins at 1980-81 prices.
Rubber, plastic, petroleum and coal products	Weighted average of indices of & industrial production at 3-digit level of industry groups: 300 (tyre & tubes industries), 301 (manufacture (mfr) of footwear made primarily of vulcanized or moulded rubber), 302 (mfr. of rubber products not elsewhere classified (n.e.c.)), 303 (mfr. of plastic products n.e.c. (except house furnishing), 304 (petroleum refineries), 305 (mfr. of products of petroleum n.e.c.), 306 (production of coal tar in coke ovens) and 307 (mfr. of other coal and coal tar products n.e.c.).
Chemicals and chemical products (except products of petroleum and coal)	Weighted average of indices of industrial production at 3-digit level of industry groups: 310 (mfr. of basic industrial organic & inorganic chemicals and gases), 311 (mfr. of fertilizers & pesticides), 312 (mfr. of paints, varnishes & lacquers), 313 (mfr. of drugs & medicines), 314 (mfr. of perfumes, cosmetics, lotions, hair dressings, tooth pastes, soaps and other toilet preparations), 316 (mfr. of turpentine, synthetic resins, plastic materials and synthetic fibres), 317 (mfr. of matches), 318 (mfr. of explosives and ammunition & fireworks) and 319 (mfr. of chemical products n.e.c.).
Non-metallic mineral products *	Weighted average of indices of industrial production of industry groups: 320 (mfr. of structural clay products), 324 (mfr. of cement, lime & plaster), 328 (mfr. of asbestos, cement & other cement products) and 329 (mfr. of miscellaneous non-metallic mineral products and other non-metallic mineral products n.e.c.).
Basic metal and alloys industries *	Weighted average of indices of industrial production of industry groups: 330 (iron & steel industries), 331 (foundries for casting & forging iron & steel), 332 (mfr. of ferro alloys), 333 (copper manufacturing) (mfg.), 334 (brass mfg.) and 335 (aluminium mfg.).
Metal products and parts except machinery and transport equipment	Index of quantity of production of except steel released for small scale sector obtained from the Annual Report of Steel Authority of India

Continued..

APPENDIX 8.2 : Physical indicators used for preparation of estimates of Gross Value Added at 1980-81 prices

(Concluded)

Major group/ NIC-1970	Indicator
Machinery, machine tools and parts except electrical machinery	
Electrical machinery, apparatus, appliances and supplies and parts	Index of industrial production of relevant group
Transport equipment and parts	
Other manufacturing industries	
Repair services	Average of indices of industrial production of (i) leather & leather and fur products, (ii) machinery other than electrical, (iii) electrical machinery and (iv) transport equipment, with weights as the weights of Index of Industrial Production

* - Gross Value Added estimates of Economic Census Directory Manufacturing Establishments 1978-79 have been used as weights for combining the 3-digit level estimates into 2-digit level.

TABLE 8.1 : Gross Value Added, 1980-81

		(Rs. Crore)
NIC-1970/ Major Group	Industry Description	Gross Value Added including bank charges
(1)	(2)	(3)
20-21	Manufacture of food products	713
22	Manufacture of beverages, tobacco and related products	460
23	Manufacture of cotton textiles	
24	Manufacture of wool, silk and synthetic fibre textiles	
25	Manufacture of jute, hemp and mesta textiles	
26	Manufacture of textile products (including wearing apparel other than footwear)	
27	Manufacture of wood and wood products, furniture and fixtures	590
28	Manufacture of paper and paper products and printing, publishing and allied industries	279
29	Manufacture of leather and leather & fur products except repair	320
30	Manufacture of rubber, plastic, petroleum and coal products	87
31	Manufacture of chemicals and chemical products (except products of petroleum and coal)	260
32	Manufacture of non-metallic mineral products	493
33	Basic metal and alloys industries	19
34	Manufacture of metal products and parts, except machinery and transport equipment	438
35	Manufacture of machinery, machine tools and parts except electrical machinery	289
36	Manufacture of electrical machinery, apparatus, appliances and supplies and parts	142
37	Manufacture of transport equipment and parts	212
38	Other manufacturing industries	467
97	Repair services	397
	Gross value Added including Banking Charges	9503
	Less : Imputed Banking Charges	140
	Gross value Added	9363

* - For corresponding codes in revised National Industrial Classification 1987 reference may be made to Appendix 7.1.