

CHAPTER VIII

INCOME FROM SMALL ENTERPRISES

This chapter reviews the data available for estimating the contribution to national income from small enterprises, discusses the method that was being followed so far (the method is described in paragraphs 2.139 to 2.146 of the Final Report of the NIC and presents revised estimates of net income from this sector for the years 1955-56 to 1959-60. As stated in Chapter VII, 'small enterprises' sector comprises all manufacturing and processing activities including repairs and maintenance services, undertaken by household enterprises or factories not registered under the Indian Factories Act 1948. In other words, it covers all industrial enterprises employing less than 10 workers if using power and less than 20 workers if not using power. Construction activity which was so far included in the small enterprises sector has now been separated out and treated separately in Chapter IX. It may be added that hand pounding of rice and conversion of sugarcane into gur continue to be included in the 'agriculture' sector. Similarly, slaughtering for meat, and preparation of milk products such as ghee, dahi¹ etc. are covered in the 'animal husbandry' sector. Hotels and restaurants are included in the 'other commerce' sector.

2. 'Small enterprises' though constituting an important sector both in respect of income generated and employment is characterised by its unorganised nature of production and lack of adequate statistical data on employment, earnings, output, value added, cost structure etc. This makes the work of estimation of income originating in this sector very difficult.

2.1. The only statistics relating to the whole of small enterprises sector available for the entire country relates to the census occupational table which gives the total number of persons engaged in industries. By a process of subtraction of factory employment from this total, the number of persons engaged in small enterprises can be obtained. The availability of data on occupational classification of persons from population censuses has already been discussed in Chapter I on working force.

2.2. Apart from the population census another set of data which is available on all-India basis relates to that collected by the NSS in its various rounds. These data are contained in the NSS Reports No. 19 and 21 (published) and No. 51 and 52 (unpublished). Report No. 52 presents at one place the data collected on small enterprises in the seventh to tenth rounds of the survey. These rounds relate to the reference periods as shown below :—

Seventh round	...	Oct. 1953–March 1954
Eighth round	...	July 1954–April 1955
Ninth round	...	May 1955–Nov. 1955
Tenth round	...	Dec. 1955–May 1956.

¹ Except khoa, ice cream and chhana.

Income from Small Enterprises

The NSS Report Nos. 19, 51 and 52 cover only household small scale manufacturing establishments smaller than registered factories (as defined in the Factories Act of 1948) while Report No. 21 covers household small scale manufacturing establishments smaller than those covered by Industries (Development and Regulation) Act, 1951. All the reports exclude from their purview non-household enterprises such as those run by cooperative societies, joint stock companies or public bodies. The small enterprises sector for purposes of national income estimation should cover small scale manufacturing enterprises smaller than the registered factories and should cover both household and non-household enterprises. The estimates presented in the NSS reports include certain services such as hotels, restaurants and laundry services which are covered in other sectors for the purpose of national income estimation. Similarly, some of the activities such as dehusking of paddy, production of indigenous gur, slaughtering for meat, production of butter, ghee and other dairy products have been included under small scale manufacturing activity in the NSS surveys while they are considered under the broad agriculture sector for national income purposes. The NSS Report No. 19 does not cover Jammu and Kashmir State while the other reports do so. The households engaged in productive activities meant entirely for own consumption have been excluded from the NSS surveys while estimates of national income should cover subsistence production also. Further the NSS surveys cover only a part of the construction activity as the 'repair and constructional services rendered on own account by artisans like carpenters, masons etc.' alone have been accounted for. Reference period for most of the surveys was one month and as such all the NSS results on small scale industries (except those contained in Report No. 21 where the reference period was three accounting years prior to the date of investigation) are influenced by seasonal fluctuations. However, the estimates of employment, output, value added etc. according to the seventh to the tenth rounds of NSS have been presented in Table 8.1 which show that there was substantial increase from the seventh to the tenth round in employment, output and value added by manufacture while cost of repairs and maintenance fell considerably during the same period. It would appear that the value added by manufacture in small enterprises sector almost doubled from the 7th to the 10th round. According to Report No. 19 a hired labourer seems to earn as much as 50 per cent more than the entire household of an entrepreneur. Further, a comparison of the level of net earnings from small enterprises with the level of consumption expenditure revealed by the NSS for the same period also gives rise to the feeling that the level of net earnings and value added per person or household engaged in small scale manufacturing activity is considerably underestimated by the NSS.

2.3. Under the auspices of the RPC of the Planning Commission a number of surveys and studies have been undertaken on cottage and small scale industries² in different parts of the country. The RPC approved till 1959, 12 schemes relating to surveys of cottage and small scale industries. These studies aimed at obtaining

² Detailed list of the surveys and studies is given in the bibliography.

National Income Statistics

and analysing data concerning the economics of these industries. In respect of these surveys two reports relating to small scale industries in Delhi State and those in Sivakasi and Sattur have been published and seven other reports are available in unpublished form. Some of these contain useful information on employment, output and earnings in small scale industries for the areas covered by them. The definition of small enterprises adopted for most of these surveys is in conformity with that adopted for national income estimation. Besides these, few socio-economic city surveys were also conducted under the auspices of the RPC, some of which contain useful information on small scale enterprises. As the areas covered by all these surveys are urban centres the data obtained from them can be adopted only for the urban areas.

TABLE 8.1: ESTIMATES OF EMPLOYMENT, OUTPUT AND VALUE ADDED IN HOUSEHOLD SMALL SCALE ENTERPRISES ACCORDING TO NSS*

(reference period—one month)

rounds	period of the round	no. of households (in lakhs)	no. of workers (in lakhs)	monthly cost of repairs and maintenance (Rs. lakhs)	total input per month (Rs. lakhs)	gross output per month (Rs. lakhs)	value added per month (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
seventh	Oct. 1953 to March 1954	99	126	109	3834	6073	2203
eighth	July 1954 to April 1955	108	142	98	3900	6332	2432
ninth	May 1955 to Nov. 1955	122	161	93	2849	6065	3216
tenth	Dec. 1955 to May 1956	124	202	68	4351	6538	4195

* NSS Draft Report No. 52, Small Scale Manufacture.

2.4. The Ministry of Food and Agriculture has sponsored agro-economic surveys in a large number of villages located in different States in the country. These studies have been undertaken by different institutions and some of them contain useful information, inter alia, on small scale industries. Though no rigorous definition of small scale industries seems to have been given, the data obtained from these surveys may be taken to relate to small enterprises of our definition as these surveys are restricted to villages only. The reports of these surveys contain information on average earnings per head or value added per worker.

2.5. The SSB of West Bengal has conducted an economic survey of small industries in that State. The survey relates to the year 1954 and the definition of small industries has been used in a rather wide sense. Apart from processing, repairing and manufacturing activities carried on by all small establishments falling outside the purview of the 1948 Factories Act, it embraces activities like laundry services, dairying etc. The SSB, Bombay (now Maharashtra) had undertaken a sample survey

Income from Small Enterprises

for some of the cottage industries in the old Bombay State excluding greater Bombay and Karnataka and for 18 major industries in the greater Bombay area. For the purposes of this survey an establishment having a capital investment upto Rs. 6000 and employing not more than 9 persons has been treated as a cottage unit. Any establishment with a capital investment above Rs. 6000 and employing more than 9 persons even if not covered by the Factories Act of 1948 is excluded from these surveys. Some of the other SSBs such as Assam and Bihar have also conducted sample surveys of cottage industries in their States.

2.6. The Administration Report of the Small Industries Corporation for the year 1956-57 contains data on employment and value added in a large number of small scale industries. However, the definition of small scale industries adopted here is different from that used for the purpose of national income estimates in as much as enterprises employing less than 50 workers with power or less than 100 workers without power and with a capital asset not exceeding Rs. 5 lakhs have been considered as small scale industries.

3. *Method of estimation* : The NIC made estimates of income originating in this sector for the years 1948-49 to 1950-51 and the method adopted has been broadly discussed in para 2.139 to para 2.146 of their Final Report. The estimates for the subsequent years have been prepared by the CSO generally on the same lines. The method broadly consisted in working out the number of 'gainfully occupied' persons in small enterprises on the one hand and the level of average income per occupied person on the other. The total gainful employment in industries as a whole (both factory establishments and small enterprises) was derived by direct interpolation using the rate of growth over the 1941-51 decade as revealed by the census occupational data for 1941 and 1951. The total employment figures derived by this process were distributed among individual census divisions, sub-divisions and groups according to the 1951 proportions. The estimates of working force in different classes of small enterprises were obtained from this total by subtracting the gainful employment (average daily employment marked up for absenteeism) in the corresponding categories of factory industries. The figures of annual average income per worker for each industry were based on various published and unpublished data of varying reliability. As these data related to different time period, they were first adjusted to relate to the year 1948-49 on the basis of the rate of change in annual average earnings of factory labour and a bench-mark estimate for the year 1948-49 was built up. This estimate was carried forward for later years on the basis of the change in average annual earnings of factory labour and that of rural skilled labour, viz. carpenters, blacksmiths and cobblers. The former was presumed to indicate the change in average per head earnings in urban areas and the latter in rural areas. The share of urban and rural areas in the value added from small enterprises was found to be nearly equal and hence the simple average of the change in wage rates of factory labour and rural skilled labour was in practice being used. The estimated total earnings were then inflated by 20 per cent to allow for factor payments other than wages and salaries as the earnings quotations used were mostly in the nature

National Income Statistics

of wages. This allowance of 20 per cent made for other factory payments such as interest, rent and profits was on the basis of data on total wages and value added as available from the Survey of Cottage Industries in Aligarh Town and Surrounding Rural Areas, relating to the year 1949.

3.1. The above procedure of estimation suffers from various drawbacks. Exclusive dependence on the 1941 and 1951 Census data on gainful employment and projection thereof for the subsequent decade for the industry sector as a whole is not satisfactory. Derivation of gainful employment in small enterprises as a residue by subtracting factory counterpart from the total employment in industries implied some negative correlation between employment in small enterprises and that in factory establishments. This may not be realistic. Further, as the industry-wise employment in factories according to the SSMI was not available since 1953, the estimates for later years were being obtained by projecting the 1953 SSMI employment data for each of the 63 industries with the help of employment relatives worked out from the series of employment in factories brought out by the Labour Bureau. This method may not be considered satisfactory due to lack of strict comparability between the SSMI and the Labour Bureau classification and also due to difference in their scope and coverage. Similarly the application of index of earnings of factory workers and rural skilled labour for year to year adjustment of average annual income of workers in small enterprises is also open to objection. Apart from the limitations inherent in the 'income approach' there is, as stated earlier, acute dearth of current data on output, input and value added, which might permit an alternative estimate by 'product approach'. An attempt has been made to rectify some of these defects in the revised estimates described in this chapter.

3.2. The method adopted for the revised estimates is broadly to build up estimates of the total number of persons engaged in small scale manufacturing activity and the average value added per person both for urban and rural areas for a benchmark year (1955-56) for 7 broad industrial groups separately. This benchmark estimate of the total value added in rural and urban areas together has been projected for later years on the basis of physical production of relevant commodities such as handloom cloth for textiles, availability of cloth for tailoring, the average supply of oil seeds for oil crushing, of tobacco for bidi industries etc. The estimates so built up at constant prices of 1955-56 were then adjusted for change in prices on the basis of index numbers of prices of handloom cloth, tobacco, leather, cigarettes etc. to obtain estimates at current prices. In view of the various limitations of the NSS data indicated in para 2.3 of this chapter it has not been possible to rely entirely on the NSS data.

3.3. The primary schedules relating to small enterprises filled up during the fourteenth round of the NSS in respect of Punjab and Delhi areas were scrutinised and got hand-tabulated in the NIU. The income of each household from different kinds of small scale industrial activity were taken together to the extent possible. These resultant estimates have also been taken into consideration in deciding about the comparative level of urban and rural average value added per person in different

Income from Small Enterprises

groups of small-scale enterprises. Thus, even though the absolute levels of the NSS estimates have not been adopted as such they have been considered useful for inter-industry and inter-regional comparison purposes.

3.4. The method of estimation of working force or the number of persons engaged in small scale manufacturing activity has already been discussed in Chapter I on 'working force'. Broadly speaking the estimates of number of persons engaged in small enterprises obtained as a residual from the 1951 Population Census has been adjusted for the estimated additional employment generated in this sector during the period 1951 to 1955-56 on the assumption that the increase in earning dependants is proportional to the increase in the number of self-supporting persons. The estimate so built up for the year 1955-56 has been distributed among seven broad industrial groups in urban and rural areas separately in proportion to the distribution of self-supporting persons in 1951.

3.5. Surveys sponsored by the RPC provide estimates of employment and value added in a number of small enterprises in the towns covered by them. They generally relate to the period 1954-56 and have been taken without any adjustment to refer to the year 1955-56. The estimates of value added per person engaged have been worked out for as many small scale industries as possible and then classified into seven groups, viz. textiles and tailoring, leather and footwear, wood, glass and ceramics, metal manufacturing and engineering, chemicals, food, drink and tobacco and other industries. These, together with the data on net value added per worker, culled out from the Administration Report of Small Scale Industries Corporation for the year 1956-57 and from various surveys discussed earlier in this chapter, have been used for estimating the bench-mark estimates of net value added per worker in urban areas in each of the seven groups of small scale industries. Similarly for the rural areas the estimates of net value added per worker have been obtained from the agro-economic surveys which again relate generally to 1954-56 and the West Bengal survey to which a reference has already been made. The 'Agricultural Situation in India', published by the Ministry of Food and Agriculture, contains data on daily wages of carpenters, blacksmiths and cobblers in a large number of centres throughout the country. These daily wage rates pertaining to 1955-56 have been averaged and converted to average annual wages by multiplying them by 200. The corresponding number of days used for converting daily wage rates to annual wages by the NIC was 300. According to the NSS Report No. 52 relating to small enterprises, the number of working days in the year 1955-56 in rural areas was estimated at 155. This is considered to be on the low side in view of 300 days used by the NIC. We have, however, preferred to take 200 days². The annual wages of rural skilled labour so estimated have also been utilised without any marking up for other factor payments for obtaining the net value added per worker in the rural areas. The estimates of average net value added per worker so arrived at in urban and rural areas separately are given in Table 3.2.

² The total number of days worked by an adult male agricultural labour has been placed at 218 in 1950-51 and 222 in 1956-57 according to Second Agricultural Labour Enquiry Report.

National Income Statistics

3.6. It may be mentioned that the average value added per person has been worked out from the total value added in the small enterprises (in areas or regions covered by the surveys) and the total number of persons engaged in small enterprises irrespective of the fact that some of these persons were following small enterprises as their secondary or tertiary means of livelihood only. As such the estimated average value added per person relates to persons engaged in small scale industrial activity both as their principal and secondary means of livelihood together. Therefore, in order to estimate the total value added in this sector the estimate of working force has also got to be adjusted for persons following small enterprises as their secondary means of livelihood. According to the 1951 Population Census the total number of self-supporting persons having production other than cultivation as their secondary means of livelihood (31 lakhs) formed a little over 19 per cent of the total working force (self supporting persons plus earning dependants) engaged in production other than cultivation as a whole and about 24 per cent of the estimated working force in small enterprises, assuming that factory enterprises are likely to provide much less scope as secondary means of livelihood. The former may be considered to provide the lower limit and the latter the upper limit. Hence a mark-up of 20 per cent has been made in the working force to estimate the number of 'incomes', i.e. self-supporting persons plus earning dependants plus persons following it as secondary means of livelihood. In fact, this percentage of 20 may be on the low side in view of the fact that the secondary means of livelihood of self-supporting persons alone have been considered. Table 8.2 gives the estimate of working force, total working

TABLE 8.2: NET OUTPUT OF SMALL ENTERPRISES: 1955-56
(at current prices)

industry group	rural				urban				total net output (Rs. crores) col.5-col.9
	working force (SS+ED)* (000)	total working force incl. secondary M/L* (000)	value added per person (Rs.)	net output col.3 x col.4 (Rs. crores)	working force (SS+ED) (000)	total working force incl. secondary M/L (000)	value added per person (Rs.)	net output col.7 x col.8 (Rs. crores)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. textiles and tailoring	2100	2520	275	69	1188	1426	1000	143	212
2. leather and leather products	487	584	400	23	275	330	800	26	49
3. wood, glass, stone and ceramics	1424	1709	430	73	806	967	875	85	158
4. metal manufacturing and engineering	648	778	500	40	367	440	1170	51	91
5. chemicals	23	28	480	1	13	16	1110	2	3
6. food drink and tobacco	939	1127	340	38	531	637	800	51	89
7. other industries	359	431	250	11	203	244	900	22	33
8. all industries	5980	7177	—	255	3383	4060	—	380	635

*SS = self-supporting persons; ED = earning dependants; M/L = means of livelihood.

Income from Small Enterprises

force including secondary means of livelihood, average value added per person engaged and the net output at current prices for the year 1955-56.

3.7. The bench-mark estimates of net output in each of the broad groups of small enterprises for the year 1955-56 at current prices have been adjusted for later years on the basis of physical indicators of production of relevant commodities. The physical indicators used for the textile and tailoring group are the total handloom production of textiles and the total availability of cloth (both small scale and factory production) for tailoring. For the leather and leather products group, a new series of production relatives has been constructed by combining the production relatives of raw hides and skins, tanned hides and leather foot-wear in factory sector in the proportion of 2 : 1 : 1 respectively. The production of tanned hides in the factory sector has been used as an indicator for tanned hides purchased by the decentralised sector for making leather articles whereas the production of foot-wear has been presumed to indicate the movement in the volume of repair services. For the food, drink and tobacco group the net value added in the bench-mark year (1955-56) has been divided among three sub-groups, viz. (i) fats and oils, (ii) pan, bidi and tobacco, and (iii) other food items, on the basis of proportions of value added under these three sub-groups as obtained from the NSS data relating to the 9th and 10th rounds. The estimated availability of oil seeds for the decentralised sector (taking into account the import, and consumption in factories) has been used for year to year movement of the first sub-group. Similarly, for the second sub-group, the availability of tobacco estimated from production with adjustments for foreign trade and consumption by factories, has been used. The third sub-group has been linked up with the production of foodgrains. For the remaining groups of industries, namely wood, glass, stone and ceramics, metal manufacturing, chemicals and miscellaneous industries which together account for roughly 40 per cent of the total value added in small enterprises sector, no suitable physical indicator of year to year movement is available for adjustment. Hence the combined index of the main groups of small enterprises (textiles and tailoring, leather products and food, drink and tobacco) discussed earlier, the index of agricultural production and the index of population have been taken together and their simple average is used for moving the net output of this miscellaneous group.

3.8. The series of estimates of value added at 1955-56 prices so worked out for the years 1955-56 to 1959-60 have now been adjusted to the extent possible for changes in price level during the period on the basis of index numbers of wholesale prices of appropriate products. For the textile and tailoring group, the average of index of wholesale prices of handloom cloth and textiles has been taken. For the leather manufacturing and leather products group, the index of prices of leather and leather shoes are available. For the food, drink and tobacco group a combined index of wholesale prices of food articles, edible oils, liquor and tobacco and oil seeds has been built up. The wholesale price indices for (1) bricks and tiles, pottery goods and glass from the wood, glass, stone and ceramics group, (2) for aluminium utensils and metal products from metal manufacturing and engineering group and (3) for

National Income Statistics

general chemicals and soap from chemicals group have been combined in proportion to the estimated net value of output and this index has been used for adjusting value in all the remaining groups of industries taken together. Thus the net output at current prices for each year has been obtained from the series at constant prices by superimposing the price effect by means of the index numbers of wholesale prices described above.

4. *The estimates*: The revised method described in the preceding sections can not be considered quite satisfactory. Nevertheless, it relates the estimates to the change in physical production and prices of some of the key commodities and as such it may be considered to represent an improvement over the conventional estimates prepared so far on the basis of estimated working force and average per head earnings alone which were completely insensitive to actual changes occurring in the sector during the period under consideration.

4.1. The revised estimates at current prices are presented in Table 8.3. Table 8.4 presents the comparative level of the revised and conventional estimates. The use of revised estimates of working force and value added per person engaged has resulted in a fall in the estimated net output in the bench-mark year while the use of physical indicators for year to year movement is responsible for the steeper rise indicated by the revised series.

TABLE 8.3: NET OUTPUT OF SMALL ENTERPRISES

industry group	(at current prices)			(in Rs. crores)	
	1955-56	1956-57	1957-58	1958-59	1959-60
(1)	(2)	(3)	(4)	(5)	(6)
1. textile and tailoring	212	227	234	230	244
2. leather and leather products	49	55	58	60	66
3. food, drink and tobacco	89	105	99	116	121
4. other industries	285	310	316	351	355
5. all industries	635	697	707	757	786

TABLE 8.4: COMPARISON OF ESTIMATES OF NET OUTPUT OF SMALL ENTERPRISES SECTOR ACCORDING TO REVISED AND CONVENTIONAL METHODS (at current prices) (in Rs. crores)

year	revised estimates	conventional estimates
(1)	(2)	(3)
1955-56	635	745
1956-57	697	752
1957-58	707	750
1958-59	757	772
1959-60	697	773