

**Discussion Paper No 1/2007 (29)**  
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**The Growth Experience of the Small Scale Industries  
of North 24-Parganas and Medinipur Districts,  
West Bengal, 1988-2001**

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**Introduction**

While justifying the case for small-scale industries (SSI) sector, attention is usually drawn toward their employment potential and the economy they make in capital use, which are really appealing characteristics in a labour abundant, capital scarce economy. Not only the SSI units use relatively small amount of capital per unit of labour, they also enjoy higher output and value added per worker when adjusted for difference in capital per worker. In India the productive capital per employee in the large units in 1994-95 was five to six times higher than that in the small units, while value added per unit of employment in large units was 2.5 times higher than that in the small units (Annual Survey of Industries). Moreover, the small scale sector has other merits in the context of developing countries: (a) the employment generation in small-scale sector is more dispersed spatially; (b) the small units have a special role in the process of growth transmission by spread effect - as they help mobilize local fund, create indigenous entrepreneurship, utilize local resources and skill and strengthen local-level rural linkages; (c) the SSI sector offers low cost non-durable consumer goods of mass consumption, a point not to be forgotten in a country with a large proportion of low budget consumers. (d) Still another justification for encouraging SSI units lies in the possibility of developing ancillary industry to the formal sector manufacturing utilizing input-output linkages.



The study relates to two districts of West Bengal, North-24 Parganas and Medinipur, one adjacent to the metropolitan Kolkata and the other is a district that has seen growth of large industry only very recently. The period covered in this study is 1988 to 2001. In case of North-24 Parganas, the period is divided into two sub-periods: the first sub-period 1988-93 relates to the years immediately before and after economic reform started, and the second sub-period 1994-2001, relates to the years when economic reform gathered pace. Comparison between the two sub-periods would give some idea about the impact of economic reform on the small-scale sector in two districts. In case of Medinipur, the period is divided into three sub-periods: 1988-91, 1992-97, 1998-2001.

Principal source of data has been the primary data collected by the District Industry Centres (DIC) working under the Directorate of Cottage and Small Scale Industries, Government of West Bengal. Units obtaining registration as small-scale industry during the period under study have been considered here. It may be noted here that the definition of small units was not the same over the period under consideration. For the small and the ancillary units the upper limit of investment in plant and machinery was raised in stages from Rs 35 lakhs in 1988 to Rs.3 crores in 1997 following the recommendation of the Abid Hussain Committee, but in 1999 the limit was reduced to Rupees one crore. However, for the tiny units the investment limits of Rs. 5 to 25 lakhs remained unchanged for this whole period.



### **North 24-Parganas**

North 24-Parganas enjoys unique advantages because of its geographical location. Being in and adjacent to the greater Kolkata industrial complex, the district provides access to agglomeration economies, and other external advantages, which are important for industrial location. In concrete terms the proximity to a large, concentrated market of a metropolitan city, access to the port and good transport network providing inter-city connection are some of the external advantages. North-24-Parganas and neighbouring Howrah have concentration of manufacturing units producing machine parts, transport, electrical and related equipments having input-output links among themselves. The percentage share of this district in the total number of SSI units of West Bengal was seven percent in 1993. The product base of the SSI sector of North 24-Parganas shows good range of variety. There has been a concentration of units engaged in food and non-food consumer good products, chemical and rubber based products, non-metallic mineral products (e.g. brick making), engineering products, machine parts, accessories and the like. Large parts of the district being agriculturally rich, agro-processing units have come up in large number. Units in food-processing, textiles and brickfields enjoy rural linkages by way of local resource utilization. Units producing varieties of mass consumption goods of low cost thrived with the advantage of high density and assured demand. The flourishing demand for housing provided a boost for construction and related activities. The growth pattern of the SSI sector of the district has been studied from the following aspects:



- Growth (average annual change) in the number of units, employment and investment in fixed capital;
- Change in fixed capital per unit and per worker overtime;
- Average employment per unit in different product groups; and
- The relative importance of different product groups in terms of the shares in employment, fixed capital and number of units.

Comparing the two sub-periods we find that though the average annual addition in number of units declined in the sub-period 2 (1994-2001) compared to the sub-period 1 (1988-93), there was an increase in the average annual addition to fixed capital over time (Tables 1 and 2). The number of units coming up annually on an average recorded a decline from 288 in 1988-93 to 188 in 1994-2001. Fixed capital coming up annually was Rs. 2.82 crores, during the sub-period 1988-93 while it was Rs. 5.88 crores during 1994-2001 (Table 2). Capital per worker increased and was associated with increase in average unit size in terms of employment (Table 3). These changes are anticipated as in the decade of 1990-s in the changing economic environment with growing market orientation the small-scale enterprises reshaped their activity pattern and strengthened their financial position.

Though the average employment per unit in the SSI sector taken as a whole recorded an increase from 5.3 in 1988-93 to 8.0 in 1994-2001 (Table 4) and the rise was quite similar across the various product groups, the annual average job creation in the SSI sector remained almost same in the two sub-periods. Of course there was variation across the product groups (Table 2). The product groups that fared better in



job creation were nonmetallic mineral products (mainly the brickfields) engineering and machine parts, and textile work, in order of performance (Tables 1 and 3). But those activities witnessed low additional capital formation. Employment faced a setback in the wood products, printing, leather and metal works.

While capital stock per unit increased from Rs. 96,600 on average during 1988-93 to Rs. 2,96,800 during 1994-2001, capital per worker recorded a slower rise from Rs. 18,300 in 1988-94 to Rs. 37,000 in 1994-2001 all in nominal values (Tables 3 and 4). Further to note that capital per unit is much lower compared to all-India SSI sector average of Rs 149000 in 2001-2 as per the Third Census of SSI sector.

The change over the two sub-periods in the relative shares (percentage) of the various product groups in number of units, employment or addition to fixed capital may be analysed to understand the degree of diversification in the SSI sector. The percentage share of the group food and non-food consumer products with respect to the number of units were 26.3 and 31.7 in the periods 1988-93 and 1994-2001, relative share in employment throughout the period was around 28 percent. As regards metal and engineering products the relative share in number of units and investment in fixed capital witnessed decline from 35.7 percent to 29.4 percent and from 37.1 percent to 22.3 percent respectively. Share in employment, however, remained almost constant. The coal-chemical group shows remarkable increase in investment share accounting for 56.3 per cent of addition to fixed capital in the SSI sector in 1994-2001), followed by metal, engineering group (Table 3).



The growing importance of the food group in the district in terms of the number of units may be explained at least partly with reference to the expanding market in the Kolkata metropolitan region. This product group had relatively high fixed capital per unit and enjoyed linkages with the local area in market and raw material. As to the metal engineering group, the fixed capital per unit and average employment per unit increased over the entire period (Table 4) keeping parity with the entire SSI sector.

An overall assessment of performance of the SSI sector in North-24 Parganas would include the following:

- (i) no major trend toward product diversification;
- (ii) increasing capital intensity and increasing average size (number of employees) of the SSI units;
- (iii) low growth of units and employment over the period.

Now we turn toward the Medinipur district.

### **Medinipur**

The erstwhile Medinipur district was divided in 2002 to form two separate districts - Purba Medinipur and Paschim Medinipur, but the present study considers the undivided district because of data problems. The district plays an important role in the West Bengal economy not only because of its large share in the rice production of the state but also for hosting two important urban centers, namely, Kharagpur and Haldia. Agricultural prosperity has all along provided the major thrust for growth of



trade, commerce and a large number of cottage and household industries operating in small scale. Traditionally there has been a good concentration of cottage and small industries in towns like Kharagpur, Medinipur, Nimpura, Tamluk, Contai and in rural areas like Ramnagar and Sabang. Haldia and Kolaghat are new addition to the urban map of the district. Kharagpur, being an important railway junction, and having a railway workshop and an administrative center of the South Eastern Railways, is a focal point of urban-industrial growth for a long time, and Nimpura, in the vicinity of Kharagpur, has an industrial estate. Of more recent vintage is the urban-industrial complex of Haldia centering port facilities at Haldia, which has had an oil refinery, a petro-chemical complex and a number of other modern industries and become the destination of industrial, educational and trade related activities. Emerging fields of activity include chemical and chemical processing, synthetic goods, metal and engineering product, iron and steel processing. The urban-industrial complex of Haldia, well connected with other urban and semi-urban settlements (e.g., Tamluk, Mahisadal, and Panskura) and also with the agriculturally prosperous hinterland in the district, is a potential location for small scale units.

The period of study is divided, in view of the data availability, into three sub-periods: 1988-91, 1992-97, 1998-2001. We examine the product composition, the linkages, and location aspects of the SSI units registered in the period and reach the following broad observations:

During the period of study (1988-2001) the major product groups among the newly registered SSI units of the district are (i) food processing, (ii) chemical and



coal products, (iii) brick-tiles and related non-metallic mineral products, (iv) metal products, which underwent changes with respect to the relative share in employment and fixed capital so far as new registered (Tables 6, 7 and 8).

*Food processing group:* The food-processing group, the most important group among the new units, accounting for the highest share of fixed capital investment (47.5 percent), flourished due to the advantages of availability of raw material and market and its direct link with the agricultural economy of the district. But in recent sub-periods its relative importance has reduced as its share in fixed capital investment has a downward trend although its share in employment generation has an upward trend (Table 8).

*Chemical and coal product:* This product group is characterized by relatively large amount of fixed capital per unit and in terms of share in fixed capital investment is next to food processing group. The group has a rising share in the total investment in new units - 48.7 percent in 1998-2001 compared to 14.5 percent in 1992-97 (Tables 7 and 8). Thus the units engaged in chemical products are making fair progress since the mid 1990s. The units get benefit from the expanding chemical complex of Haldia and the growth of the downstream industries.

*Brick-tiles and non-metallic group:* The brick-tile group of units maintained a constant employment share between 1988 and 2001 while the fixed capital per unit increased considerably during the period. Brick making units have the highest



average employment per unit indicating the labour intensive nature of the production process (Tables 7a and 7b).

*Metal group:* The metal product units had a constant share in the total fixed capital investment throughout the period. The fixed capital per unit increased considerably, which was due to some new units with fairly large investment. However, there was a contrast between the growth pattern of the metal group in the pre-reform (1988-91) and the subsequent period. The metal product group in the pre-reform period (1988-91) experienced multiplication of units, and generated fairly large number of employment though for this group both fixed capital per unit and employment per unit were low. In contrast the period 1992-2001 witnessed less number of units coming up with larger size of fixed capital (Tables 6 and 7).

Products included are, mainly, construction materials, fabrications (e.g. grill gates) utensils for domestic use, and farming implements. The metal group flourished because of the expanding demand from the urban areas and rich agricultural hinterland. Units were mostly concentrated in two areas - Kharagpur-Nimpura-Medinipur area and Contai-Ramnagar area. The urban-industrial belt of Kharagpur-Nimpura provided some boost for construction related works, while the agricultural growth offered market for agricultural implements.

*Rise in capital per unit:* There has been a significant rise in fixed capital per unit. In Medinipur, average fixed capital investment by a SSI unit increased from Rs. 1.1 lakhs in 1992-97 to Rs. 7.5 lakh in 1998-2001. For chemical and coal



products it increased from 1.4 lakhs to 13.7 lakhs; for food processing from 1.8 lakhs to 8.0 lakhs and for brick and tiles from 1.4 lakhs to 4.4 lakhs. While these figures indicate that the rise in fixed capital per unit varied from three to more than ten times across the industry groups, the rise in wholesale price index during this period was around 60 percent, and the fixed capital per unit increased substantially in real terms also. The district witnessed coming up of six big SSI units with fairly large investment during the sub-period 1994-2001, of which three in the food processing group and the rest in chemical product group, metal product and brick-making (one in each).

The growth performance of SSI sector in the district as indicated by the annual addition to number of units, fixed capital investment is not very promising during the 1990s and is in contrast with the performance in the pre-reform period (1988-91). Total addition to fixed capital through new units came down from Rs. 8.48 crores during 1988-91 to Rs. 5.64 crores during 1998-2001. Average annual additions in the two sub-periods were Rs. 2.1 crores and Rs. 1.4 crores respectively. The decline was more in case of the number of units and employment (Table 2).

The declining performance may be related to the liberalization policy. In pre-reform period, in the 1980s, under the protection units even with low capital size could multiply in number, particularly in textiles, wood products, and metal and machinery products. In the 1990s, with the liberalization policy the small units were exposed to competition. The competitive environment necessitated high level of investment, up-gradation of technology and the scale and standard of operation. Small units that could not mobilize sufficient financial resources became unviable.



The product group metal engineering was especially hard hit for liberalization policy as discussed later.

It may be noted here, the trends discussed above relates to the registered units only and fails to capture the progress of unregistered units in cottage and household industries. Medinipur district hosts a large number of unregistered industrial units in the small scale sector and also in the household and cottage sectors, which provide numerous jobs in the transport, metal, wood, textile related works. For instance, mat-making, a very important activity in the cottage industry (in a number of places including Sabang), provides side employment to a large number of households<sup>1</sup>.

#### **An Inter-district Comparison of SSI sector Performance**

It is interesting to look into the points of similarities and the differences between the performances of the SSI sector of the two districts in terms of the newly registered units. The differences in geographical and locational factors, and economic background of the two districts have caused differences in the nature and composition of their SSI sector, and therefore also in the growth pattern. Dissimilarities along with similarities are observed with respect to (a) the pattern of product composition, measured by the relative importance of various product groups, (b) capital used per unit and (c) growth pattern measured by average annual addition to fixed capital and employment (Tables 2 to 9).

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<sup>1</sup> An unofficial estimate in as early as 1978 recorded over 12000 cottage and household units engaged in mat-making.



In North 24-Parganas major part of employment and investment (about 70 percent) were concentrated in chemical-coal products, metal-engineering group and brick-tile group of products. Consumer goods including food and non-food group account for about 30 percent of employment and fixed capital. The district being a part of the greater Kolkata industrial area, have a good base for metal engineering and chemical group of products (Table 5).

In contrast in Medinipur district, though food-processing group comes first in importance, chemical, metal and brick-tile products related units are gradually emerging (Table 8) utilizing the market and material base of the district. While the importance food-processing group is due to the prosperous agricultural sector of the district, the growth of the other product groups is attributed to the rise of urban-industrial belt of Haldia-Kolaghat and Kharagpur-Nimpura.

As to the use of capital, in both districts food products group and chemical-coal products group are most important, though per unit fixed capital is much higher in North-24 Parganas compared to Medinipur for each group.

During the period under study average annual addition to fixed capital in North 24-Parganas was Rs. 4.6 crores. Similar figure for Medinipur was Rs. 1.57 crore indicating much lower rate of growth. This was reflected in lower number of job creation annually (Table 2).

The relative employment creation (employment in the newly registered SSI units per lakh population) marginally improved over time in North 24-Parganas, while declined markedly in case of Midnapur. In North 24-Parganas relative



employment creation was stable across the major product groups while in Medinipur it had sharp decline in every product group (Table 9).

### **Conclusion**

The growth of newly registered SSI units cannot be fully understood without referring to the policy changes. Apart from the macro-level liberalization policy, there was upward revision in the investment limit for the SSI sector during the period under consideration. As stated earlier the limit was raised gradually from Rs. 35 lakhs (in 1988) to Rs. 3 crores (in 1997), which then reduced to Rupees one crore (in 1999). Further, the incentives previously available for the SSI units in backward interior location were gradually withdrawn. All these had adverse impacts on the setting up of very small units in distant areas.

With the upward revision of the investment limit (particularly when it was not in line with increase in price of investment goods) units with relatively large capital size, which were previously outside the purview of the SSI sector, were now shifted to the SSI sector<sup>2</sup>. This wiped out the special advantages of the small size units, which were now thrown open to competition with the bigger units. Low level of financial resources adversely affected further growth as the smaller units lag behind due to their uneconomic nature of operation.

A recent study (Rani, 2004) on the position of industrial employment in organized and unorganized sector reveals that reform policies removed import

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<sup>2</sup> In Medinipur an average SSI unit starting during 1998-2001 had a fixed capital of about one lakh investment and average employment of 5.7 (Table-7a).



restriction for several products including metal and engineering group of products by placing them under Open General License (OGL). The withdrawal of reservation benefits and protection coverage were especially detrimental for the growth of small units. The study also pointed out that the chemical group of products got special boost over metal-engineering group. This had an adverse consequence for the growth of subsidiary and ancillary units as the linkage and scope of ancillary growth is much less for chemical product group compared to metal-engineering group. The above finding is consistent with our finding that the metal product group had a weak performance compared to the chemical group in the post reform period.

In spite of the relatively weak growth performance, the significance of the SSI sector is to be judged in the light of their gap-filling role in the overall industrial structure. Given the fact that net additional employment potential in the large industries has nearly been absent in the post-liberalization period, the SSI sector demands a new kind of understanding and policy recognition. Their significance is to be recognized with respect to their capital saving nature, potentialities of forming various linkages within the local area, utilization of local resource, promoting local entrepreneurship and spatially dispersed nature of activity. Wide varieties of their product base in the two districts under study confirm the above proposition.



**Table 1: Employment and Investment of the Registered SSI Units in North 24 Parganas District, during 1988 - 2001**

Product group	Units registered (numbers)		Employment (numbers)		Investment in fixed capital (Rs.000)	
	1988-93	1994- 2001	1988- 93	1994- 2001	1988-93	1994- 2001
Food processing and related products	110	130	633	958	22670	66276
Textile products	127	190	720	1344	8115	45711
Wood products furniture	79	64	417	353	3652	3921
Paper printing	128	66	719	523	17389	25631
Leather product	46	28	336	217	2750	6040
Coal products chemical products	530	420	2965	3106	53002	203249
Brick-tile, construction and related products in non-metal group	123	89	795	1776	4312	17711
Metal product	283	183	1569	1378	29073	34714
Machines and parts in groups including transport and electricals	248	259	1460	2167	27020	64798
Repair and servicing	45	62	148	198	993	1164
Miscellaneous	07	14	46	39	185	1160
<b>Total</b>	<b>1726</b>	<b>1505</b>	<b>9808</b>	<b>12059</b>	<b>169161</b>	<b>470375</b>

*Source:* Compiled on the basis of data collected from Directorate of Cottage and Small Scale Industries, Government of West Bengal, Kolkata.



**Table 2: Change in Number Employment, Investment in the Registered SSI units in North 24-Parganas and Medinipur district during 1988-2001**

Districts	Number of units registered		Employment (Number)		Investment in fixed capital (Rs. 000)	
	Total change	Annual average change	Total change	Annual average change	Total change	Annual average change
<i>North 24-Parganas</i>						
1988-1993	1726	288	9808	1635	169161	28193
1994-2001	1505	188	12059	1507	470375	58797
1988-2001	3231	231	21867	1562	639536	45681
<i>Medinipur</i>						
1988-1991	1396	349	8225	2056	84598	21149
1992-1997	743	124	3650	608	79533	13255
1998-2001	75	19	756	189	56395	14098
1988-2001	2214	158	12741	868	220526	15752

Source: Directorate of Cottage and Small Scale Industries, Government of West Bengal, Kolkata



**Table 3: Capital Labour Ratio in SSI Sector of North 24-Parganas, 1988-2001**

Product group	Capital per worker (Rs. 000)		Additional employment 1988-93 to 1994-2001 (%)	Additional investment 1988-93 to 1994-2001 (%)
	1988-93	1994-2001		
Food processing and related products	35.8	69.2	14.4	16.3
Textile products	11.3	34.0	27.7	14.1
Wood products furniture	08.8	11.1		
Paper printing	24.2	49.0		4.4
Leather product	08.2	27.8		
Coal products chemical products	17.9	65.4	6.3	56.3
Brick-tile, construction and related products in non-metal group	05.4	10.0	43.6	5.0
Metal product	18.5	25.2		2.1
Machines and machine parts group including transport and electrical	25.7	29.9	31.4	10.2
Repair and servicing	} 6.1	7.3	1.9	0.2
Miscellaneous				
Total	18.3	37.0		

*Note:* Employment declined between 1988-93 and 1994-2001 in wood-paper-leather and metal groups.

*Source:* Directorate of Cottage and Small Scale Industries, Government of West Bengal, Kolkata



**Table 4: Fixed Capital and Employment per Unit in the SSI Sector in North 24 Parganas, 1988-2001**

Product group	Fixed capital per unit (Rs. '000)		Employment per unit (number)	
	1988-93	1994-2001	1988-93	1994-2001
Food processing and related products	206.0	509.8	5.7	7.4
Textile products	63.9	240.6	5.7	7.1
Wood products furniture	46.2	61.2	5.3	5.5
Paper printing	135.9	388.3	5.6	7.9
Leather product	59.8	215.7	7.3	7.7
Coal products chemical products	100.0	483.9	5.6	7.4
Brick-tile, construction and related products in non-metal group	35.1	199.0	6.5	19.9
Metal product	102.7	189.7	5.5	7.5
Machines and parts in groups including transport and electricals	98.5	250.2	3.8	8.4
Repair and servicing	22.1	18.8	3.3	3.2
Miscellaneous	26.4	40.4	6.6	2.8
Total	96.6	296.8	5.3	8.0

Source: Directorate of Cottage and Small Scale Industries, Government of West Bengal, Kolkata.



**Table 5: Product group wise distribution of Registered of units, Employment and Fixed Capital in SSI sector of North 24-Parganas from 1988 to 2001**

Product group	(Percentage)					
	Registered units		Employment		Investment in fixed capital	
	1988-93	1994-2001	1988-93	1994-2001	1988-93	1994-2001
Food processing and related products	5.9	8.6	6.4	7.9	12.6	14.8
Textile products	6.8	12.6	7.3	11.2	4.5	10.2
Wood products furniture	4.2	4.2	4.2	2.9	2.0	0.9
Paper printing	6.9	4.4	7.3	4.3	9.7	0.6
Leather product	2.5	1.9	3.4	1.8	1.5	1.3
Sub total	26.3	31.7	28.6	28.1	30.2	27.8
Coal products chemical products	28.5	27.9	30.2	25.8	29.5	45.5
Brick-tile, construction and related products in non-metal group	6.6	5.9	8.1	14.7	2.4	4.0
Metal product	15.2	12.2	16.0	11.4	16.2	7.8
Machines and machine parts group including transport and electricals	20.5	17.2	14.9	18.0	20.9	14.5
Sub-total	70.8	63.2	69.2	69.9	69.0	71.8
Repair and servicing	2.5	0.2	1.5	1.6	0.5	0.3
Miscellaneous	0.5	4.9	0.7	0.4	0.3	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Directorate of Cottage and Small Scale Industries, Government of West Bengal, Kolkata.



**Table 6: Employment and Investment of the SSI Units Registered in Medinipur District during 1988 and 2001**

Product group	Registered units (Number)			Employment (Number)			Investment in fixed capital (Rs. 000)		
	1988-91	1992-97	1998-01	1988-91	1992-97	1998-01	1988-91	1992-97	1998-01
Food processing and related products	320	225	27	2144	989	241	35298	40477	21599
Textile products	65	36	5	291	152	32	1194	1096	99
Wood products furniture	81	55	1	367	224	2	1924	1910	3
Paper printing	24	24	0	187	145	0	1690	1972	0
Leather product	4	3	0	11	9	0	16	27	0
Coal products chemical products	116	80	20	659	542	195	11573	10978	27384
Brick-tile, construction and related products in non-metal group	138	50	5	1896	514	167	7686	7203	2185
Metal product	399	90	4	1719	371	47	6442	3333	4534
Machines and parts in groups including transport and electricals	84	54	4	287	271	16	3630	3931	250
Repair and servicing	129	99	7	373	290	24	3783	4736	116
Miscellaneous	36	27	2	291	143	32	11362	3870	225
Total	1396	743	75	8225	3650	756	84598	79533	56395

Source: Directorate of Cottage and Small Scale Industries, Government of West Bengal, Kolkata.



**Table 7a: Fixed capital and Employment per unit in the registered SSI units in Medinipur district during 1988-2001**

Product group	Fixed capital per unit (Rs. 0000)				Employment per unit			
	1988 - 1991	1992 - 1997	1998-2001	Total period	1988-1991	1992 - 1997	1998 - 2001	Total period
Food processing and related products	110.3	180.0	800.0	170.0	6.7	4.4	8.9	5.9
Textile products	18.4	30.4	19.8	22.5	4.5	4.2	6.4	4.5
Wood products furniture	23.7	34.7	3.0	28.0	4.5	4.1	2.0	4.3
Paper printing	70.4	82.2	0	76.3	7.8	6.0	0	6.9
Leather product	4.0	9.0	0	6.1	2.7	3.0	0	2.9
Coal products chemical products	99.8	137.2	1369.2	231.2	5.7	6.8	9.7	6.5
Brick-tile, construction and related products in non-metal group	55.7	144.1	437.0	88.5	13.7	10.3	33.4	13.3
Metal product	16.1	37.0	1133.5	29.0	4.3	4.1	11.7	4.3
Machines and machine parts groups including transport and electricals	43.2	72.8	62.5	55.0	3.4	5.0	4.0	4.0
Repair and servicing	29.3	47.8	16.6	36.7	2.9	2.9	3.4	2.9
Total	60.6	107.0	751.9	99.6	5.9	4.9	10.1	5.7

*Source:* Directorate of Cottage and Small Scale Industries, Government of West Bengal, Kolkata.



**Table 7b: Fixed capital per worker in the registered SSI units in Medinipur district during 1988-2001**

Product group	(Rs. 000)			
	1988-1991	1992-1997	1998 to 2001	Total period
Food processing and related products	16.5	40.9	89.6	28.9
Textile products	4.1	7.2	3.1	5.0
Wood products furniture	5.2	8.5	1.5	6.5
Paper printing	9.0	13.6	0	11.0
Leather product	1.5	3.0	0	2.1
Coal products chemical products	17.6	20.2	140.4	35.8
Brick-tile, construction and related products in non-metal group	4.1	14.0	13.1	6.6
Metal product	3.8	9.0	96.5	6.7
Machines and machine parts groups including transport and electricals	12.7	14.5	15.6	13.6
Repair and servicing	10.1	16.3	4.8	12.6
Total	10.3	21.8	74.6	17.3

*Source:* Directorate of Cottage and Small Scale Industries, Government of West Bengal, Kolkata.



**Table 8: Relative share of the product groups in employment and fixed capital in the SSI units in Medinipur district registered during 1988 to 2001 (Percentage)**

Product group	Employment					Fixed Capital			
	1988-91	1992-97	1998-2001	1988-2001	1988-91	1992-97	1998-2001	1988-2001	
Food processing and related products	26.0	27.1	31.9	27.7	48.2	53.5	38.4	47.5	
Textile products	3.5	4.2	4.2	3.7	1.4	1.4	} 0.2	1.1	
Wood products furniture	4.5	6.1	0	4.6	2.3	2.4		1.7	
Paper printing	} 2.4	4.2	0	2.8	2.0	2.5		1.7	
Leather product		4.2	0	2.8	2.0	2.5	1.7		
Sub-total	36.5	41.6	36.4	39.4	54.8	60.1	38.6	52.3	
Coal products chemical products	8.0	14.8	25.8	11.5	15.8	14.5	48.7	24.3	
Brick-tile, construction and related products in non-metal group	23.5	14.1	22.1	21.2	10.5	9.5	3.9	8.3	
Metal product	20.9	10.2	6.2	17.6	8.8	4.4	8.1	7.0	
Machines and parts in groups including transport and electricals	3.5	7.4	2.1	4.7	4.9	5.2	0.4	3.8	
Repair and servicing	4.5	7.9	3.2	5.6	5.1	6.3	0.2	4.2	
Total	100	100	100	100	100	100	100	100	

Source: Directorate of Cottage and Small Scale Industries, Government of West Bengal, Kolkata.



**Table 9: Employment in SSI units per lakh of population in North 24 Parganas and Medinipur**

*(Employment in number)*

Industry group	North 24-Parganas		Medinipur		
	1988-93	1994-2001	1988-91	1992-97	1998-2001
Food processing	8.3	10.7	25.6	10.7	2.5
Food and other consumer goods	33.2	38.0	36.0	16.4	2.9
Non-metallic minerals (brick etc.)	10.5	19.9	22.8	5.5	1.7
Metal machinery product	39.8	39.7	20.0	6.9	0.66
Coal chemical product	39.0	34.8	7.9	5.9	2.0
SSI total	129.0	135.0	99.1	39.5	7.9

*Sources:* Based on data from Census of India 1991 and 2001, and Directorate of Cottage and Small Scale Industries, Government of West Bengal, Kolkata.



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