

Competitiveness of Small-Scale Industries of India

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Abstract

The Small-Scale Industries (SSI) gathered momentum along with industrialization and economic growth in India. It started growing due to the vision of our late Prime Minister Jawaharlal Nehru who sought to develop core industry and have a sustaining sector in the form of small-scale enterprises. Being a labor-intensive sector, they offer a higher productivity of capital than capital-intensive enterprises due to low investment per worker. The SSI today constitutes a very important segment of the Indian economy as they help in dispersal of industries, rural development, and the decentralization of economic power.

The central discussion of this paper highlights the importance of small industries and their role in the economy and the impact of economic reforms on growth pattern and productivity performance of small-scale industries. However, this is not to say that there are no shortcomings within the industry, or in public policy relating to it. Small industries are faced with numerous problems major and minor, which make them either uncompetitive, or sick. An attempt is made to address some solutions that can improve their productivity by focusing on a sustainable vision.

KEY WORDS

Small-scale industries, growth pattern of SSI, Government incentives

Biographical Note

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Key role of SSI in the Indian economic structure

India has traditionally always had a very vibrant and competitive SSI. Even after the dawn of industrialization, British producers of textiles found hand made Indian textiles such a threat that they lobbied hard to have its import banned, succeeding in the late eighteenth century (Gupta & Sharma, 1996). During pre-economic liberalization period a wide variety of incentives, concessions and institutional facilities were extended for the development of SSIs. But these socialistic promotional policy measures, in many cases resulted in protection of weak units rather than the independent growth of units under competitive business environment (Nyati, 1988). Such situation was continued up to the mid of 1991. Under the regime of economic liberalization, the focus was shifted from “protection” to “competitive promotion”(Raja & Rajashekar, 2002).

The public policy in India had been attaching lot of importance to village and SSI on the following grounds. SSI being labor-intensive, helped to increase the volume of employment, particularly in rural areas, it is estimated that about 2 crore persons are engaged in India in these industries. The handloom industry alone employs 50 lakh people. They account for 6% of GDP, 95 % of all industrial units, and 34% of total exports. Around 39 lakhs SSIs in India has emerged versatile producing over 8000 products, from traditional handicrafts to high-end technical instruments.

In developed OECD economies, about 60 % of GDP is generated by small enterprises, i.e., enterprises with a maximum of 50 employees. The reason being large number of small enterprises guarantees a high degree of competition, and variety of economic activities that require millions of enterprises to be reasonable competitive and efficient. The indirect jobs created through forward and backward linkages are no less important. In real terms, the SSI recorded a growth rate of 10.1% in 1994-95 as against 7.1% in 1993-94 and 5.6% in 1992-93. By the year 2025, if not controlled, this sector will grow even more rapidly (Parthasarathy, 1996).

Generalizations are also difficult because though there are firms which are growing rapidly, there also exist 1,38,000 sick units within the sector in India. The contribution of SSI in India to national development was meager as compared to the contribution of SSI in other countries of the world. India's SSI shared 95 % of all establishments, 40 % of output, 45% of employment and 35 % of exports. But Taiwan ranked first with a share of 97% of establishments, 81 % of output, 7% of employment, 48 % of exports followed by Japan contributing highly with 99 % of establishments, 52 % of output, 72 % of employment and 13 % of exports (SIDBI Report, 2000).

Methodology and data sources

For the purpose of the study the required information relating to number of SSI units, labor employed, production and exports at all India level were compiled from various issues of Economic Survey and of Annual Survey of Industries. The data on number of sick SSI units were compiled from Report on currency and Finance, RBI bulletin, various issues.

The average annual growth rates, growth patterns and the number of times increase in growth of SSIs, their employment, production and exports are calculated for the reference period.

Definition and historical context

The small companies are defined as those with less than US \$180,000 in capital equipment (US-AEP, 1996). In India the definition of SSI has undergone changes over the years in terms of investment limits in the following manner.

Table-I Investment limit of SSIs

| Year | SSI | Remarks |
|------|---|---|
| 1950 | Gross Investment in Fixed Assets: not Exceeding Re. 0.5 Million | Employment less than 50 Workers Per Day (with the Use of Power) or Less than 100 Workers Per Day (Without the Use of Power) |
| 1958 | Gross Investment in Fixed Assets: Less than Re. 0.5 Million | Employment less than 50 Workers Per Day (with the Use of Power) or Less than 100 Workers Per Day (Without the Use of Power) except that the Criteria based on the employment 'per day' was henceforth replaced by a 'per shift' provision |
| 1959 | Gross Investment in Fixed Assets: Value of Machinery (Original) | Employment less than 50 Workers Per Day (with the Use of Power) or Less than 100 Workers Per Day (Without the Use of Power) except that the Criteria based on the employment 'per day' was henceforth replaced by a 'per shift' provision |
| 1960 | Gross Investment in Fixed Assets: Value up to Re. 0.5 Million | The employment condition was dropped from the definition |
| 1966 | Up to Re. 0.75 million | No condition |
| 1975 | Up to Re. 1 million | No condition |
| 1977 | Up to Re. 1 million | No condition |
| 1980 | Up to Rs. 2 million | No condition |
| 1985 | Up to 3.5 million | No condition |
| 1991 | Up to Rs.6 million | No condition |
| 1997 | Up to Rs. 30 million | No condition |
| 1999 | Up to Rs. 10 million | No condition |

Source: SIDBI Report on Small Scale Industries Sector 2000, Small Industries Development Bank of India.

Growth patterns of SSI during the reference period

Small firms are often said to grow faster than large firms. However, empirically it is observed that though they have high growth rates, they as a group have a high death rate, that is, many firms do not last very long. This means that the total effect on the economy may not be much greater than that of relatively larger firms. This section attempts to study the direction of growth in various aspects of SSI.

Table: II Growth pattern in the number of establishments of SSIs (in lakhs)

| Year | No. of SSIs | Growth rate |
|---------|-------------|-------------|
| 1980-81 | 8.74 | - |
| 1981-82 | 9.62 | 10.07 |
| 1982-83 | 10.59 | 10.08 |
| 1983-84 | 11.55 | 9.07 |
| 1984-85 | 12.4 | 7.36 |
| 1985-86 | 13.53 | 9.11 |
| 1986-87 | 14.62 | 8.06 |
| 1987-88 | 15.83 | 8.28 |
| 1988-89 | 17.12 | 8.15 |
| 1989-90 | 18.23 | 6.48 |
| 1990-91 | 19.48 | 6.86 |
| 1991-92 | 20.82 | 6.88 |
| 1992-93 | 22.46 | 7.88 |
| 1993-94 | 23.88 | 6.32 |
| 1994-95 | 25.71 | 7.66 |
| 1995-96 | 26.58 | 3.38 |
| 1996-97 | 28.03 | 5.46 |
| 1997-98 | 29.44 | 5.03 |
| 1998-99 | 30.8 | 4.62 |
| 1999-00 | 32.12 | 4.29 |
| 2000-01 | 33.7 | 4.92 |
| 2001-02 | 34.6 | 2.67 |
| 2002-03 | 35.1 | 1.45 |
| 2003-04 | 38.6 | 9.97 |

Source: Ministry of SSIs Annual Reports of SIDO, Govt. of India New Delhi

During License Raj there was 2.6 times increase in the number of SSIs with the highest growth rate of 10.08 % in the year 1982-83 and with a annual growth of 8.35 % in the country. The post-reform period obtained average annual growth rate of 5.42% with the highest growth rate of 9.97 in 2003-04 but obtained only 1.84 times increase in the number of establishments of SSIs. Thus, it is clear that the government protection in many cases resulted in protection of weak units rather than the independent growth of units under competitive business environment (Nyati, 1988).

Table III: Industry wise growth pattern of SSI

| Description of Industry Employ/Unit | Working Units | Working Units | Working Units | CGR |
|--|-----------------------------------|------------------------------------|------------------------------------|-------|
| | 1 st Census 1972-73 | 2 nd Census 1987- 88 | 3 rd Census 2001- 02 | |
| Food & Food Products | 6577 | 96123 | 104489 | 14.82 |
| Beverages, Tobacco & Tobacco Products | 469 | 3669 | 5851 | 13.44 |
| Cotton Textiles | - | 1451 | 10876 | |
| Wool Silk & Synth. Fibre Textiles | - | 1158 | - | |
| Jute, Hemp & Mesta Textiles | - | 219 | - | |

| | | | | |
|--|--------|--------|--------|-------|
| Hosiery & Garments | 6178 | 39778 | 107565 | 15.35 |
| Wood Products | 12188 | 54975 | 77110 | 9.66 |
| Paper Products & Printing | 8332 | 33320 | 26104 | 5.87 |
| Leather & Leather Products | 5040 | 24028 | 17027 | 6.27 |
| Rubber & Plastic Products | 7688 | 25819 | 18228 | 4.41 |
| Chemical & Chemical Products | 11837 | 25941 | 11177 | -0.28 |
| Non-Metallic Mineral Products (Glass & Ceramic) | 7794 | 315891 | 25128 | 6.02 |
| Basic Metal Products | 5073 | 14937 | 7876 | 2.22 |
| Metal Products | 34011 | 65868 | 80636 | 4.41 |
| Machinery & Parts Except Electrical | 12701 | 40802 | 8776 | -1.83 |
| Electrical Machinery/Apparatus | 4409 | 12283 | 5626 | 1.22 |
| Transport Equipment & Part | 6049 | 11325 | 2100 | -5.15 |
| Misc..Manufacturing Industries | 3489 | 8852 | 4726 | 1.52 |
| Repair Services | 7197 | 80412 | 75385 | 12.46 |
| Services not e.c. | - | 613 | 1200 | |
| Other Services & Products | - | 9206 | 160222 | |
| Total | 139577 | 582368 | 750102 | 8.77 |

Source: Small Scale Industries in India, Ministry of SSI, Govt. of India.

A highest growth rate was observed in Hosiery & Garments following the Food & Food Products Beverages and the Tobacco Products. The growth in these sectors was mainly due to export oriented production rather than domestic sales.

Table: IV Growth Rates of SSI Sector and Total Industrial Sector in India

| Year | SSI Sector Growth Rate (%) | Total Industrial Sector Growth Rate |
|---------|----------------------------|-------------------------------------|
| 1991-92 | 3.1 | 0.6 |
| 1992-93 | 5.6 | 2.3 |
| 1993-94 | 5.65 | 6 |
| 1994-95 | 10.44 | 9.1 |
| 1995-96 | 11.49 | 13 |
| 1996-97 | 11.29 | 6.1 |
| 1997-98 | 9.19 | 6.7 |
| 1998-99 | 7.84 | 4.1 |
| 1999-00 | 7.09 | 6.7 |
| 2000-01 | 8.04 | 5 |
| 2001-02 | 6.06 | 2.7 |
| 2002-03 | 7.7 | 5.7 |
| 2003-04 | 8.6 | 6.9 |
| 2004-05 | 9.96 | 8.4 |

Source: SIDO's Half Century, History of Small Industries Development Organization 1954-2004 and Ministry of Small Scale Industries, Govt. of India.

The SSI has grown rapidly over the years. The growth rates during the various plan periods have been very impressive. The number of SSI has increased from an estimated 8.74 lakhs units in the year 1980-81 to an estimated 31.21 lakhs in the year 1999. The performance of SSI instills confidence when viewed against the growth in the industry sector as a whole. The estimates of growth for the year 1995-96 have shown an upswing. The growth of SSI sector has surpassed overall industrial growth from 1991 onwards except for year 1993-94 and 1995-96 and augurs a bright future. However, this has to be viewed in the background of the general recession in the economy. The transition period of the process of economic reforms was also affected for some period by adverse factors such as foreign exchange constraints, credit squeeze, demand recession, high interest rates, shortage of raw material etc.

Table:V Growth patterns of production in SSIs (Rs.Crores)

| Year | Production (Rs. crore) | | Growth rate | Production (Rs.crore) | | Growth rate |
|-------------|------------------------|--------|-------------|-----------------------|--------|-------------|
| | At 1993-94 prices | | | At current prices | | |
| | 1979-80 | 66400 | - | 21600 | - | - |
| 1980-81 | 72200 | 8.73 | 28100 | 30.09 | 30.09 | |
| 1981-82 | 78300 | 8.45 | 32600 | 16.01 | 16.01 | |
| 1982-83 | 84700 | 8.17 | 35000 | 7.36 | 7.36 | |
| 1983-84 | 93500 | 10.39 | 41600 | 18.86 | 18.86 | |
| 1984-85 | 104600 | 11.87 | 50500 | 21.39 | 21.39 | |
| 1985-86 | 118100 | 12.91 | 61200 | 21.19 | 21.19 | |
| 1986-87 | 133600 | 13.12 | 72300 | 18.14 | 18.14 | |
| 1987-88 | 150500 | 12.65 | 87300 | 20.75 | 20.75 | |
| 1988-89 | 169900 | 12.89 | 106400 | 21.88 | 21.88 | |
| 1989-90 | 189900 | 11.77 | 132300 | 24.34 | 24.34 | |
| 1990-91 | 84728 | -55.38 | 78802 | -40.44 | -40.44 | |
| 1991-92 | 87355 | 3.10 | 80615 | 2.30 | 2.30 | |
| 1992-93 | 92246 | 5.60 | 84413 | 4.71 | 4.71 | |
| 1993-94 | 98796 | 7.10 | 98796 | 17.04 | 17.04 | |
| 1994-95 | 108774 | 10.10 | 122154 | 23.64 | 23.64 | |
| 1995-96 | 121175 | 11.40 | 147712 | 20.92 | 20.92 | |
| 1996-97 | 134892 | 11.32 | 167805 | 13.60 | 13.60 | |
| 1997-98 | 146263 | 8.43 | 187217 | 11.57 | 11.57 | |
| 1998-99 | 157525 | 7.70 | 210454 | 12.41 | 12.41 | |
| 1999-00 | 170379 | 8.16 | 233760 | 11.07 | 11.07 | |
| 2000-01 | 184401 | 8.23 | 261297 | 11.78 | 11.78 | |
| 2001-02 | 195613 | 6.08 | 282270 | 8.03 | 8.03 | |
| 2002-03 | 210636 | 7.68 | 311993 | 10.53 | 10.53 | |
| 2003-04 | 228730 | 8.59 | 357733 | 14.66 | 14.66 | |
| 2004-05 | 251511 | 9.96 | 418263 | 16.92 | 16.92 | |
| 2005-06 (P) | 275581 * | 9.57 | 471244 ** | 12.67 | 12.67 | |

Source: website of Reserve Bank of India.

It is evident from table V that growth rate has not been consistent through out the reference period and has decreased substantially after reform. The abolition of license-quota-permit system shifted the focus from protection to competitive promotion involving a process of de reservation of product from SSI. The anti license-raj policy along with integration of Indian market with the global market has increased the problems of various SSI. Fierce competition, natural threat to indigenous technology and disadvantage to SSI of backward regions posed several threats and challenges to SSI. In this process, various SSI flourished well and several became sick. During pre-liberalization period the highest growth rate of 13 percent was achieved in 1986-87 following 11 percent during 1995-96.

Table:VI Growth pattern in exports of SSI

| Year | SSI Exports. Rs Crore | Growth rate |
|---------|-----------------------|-------------|
| 1979-80 | 1200 | |
| 1980-81 | 1600 | 33.33333 |
| 1981-82 | 2100 | 31.25 |
| 1982-83 | 2000 | -4.7619 |
| 1983-84 | 2200 | 10 |
| 1984-85 | 2500 | 13.63636 |
| 1985-86 | 2800 | 12 |
| 1986-87 | 3600 | 28.57143 |
| 1987-88 | 4400 | 22.22222 |
| 1988-89 | 5500 | 25 |
| 1989-90 | 7600 | 38.18182 |
| 1990-91 | 9664 | 27.15789 |
| 1991-92 | 13883 | 43.65687 |
| 1992-93 | 17784 | 28.09911 |
| 1993-94 | 25307 | 42.30207 |
| 1994-95 | 29068 | 14.8615 |
| 1995-96 | 36470 | 25.46443 |
| 1996-97 | 39248 | 7.61722 |
| 1997-98 | 44442 | 13.2338 |
| 1998-99 | 48979 | 10.20881 |
| 1999-00 | 54200 | 10.65967 |
| 2000-01 | 69797 | 28.77675 |
| 2001-02 | 71244 | 2.073155 |
| 2002-03 | 86013 | 20.73017 |
| 2003-04 | 97644 | 13.52237 |

Source: Reserve Bank of India.

SSI Sector plays a major role in India's present export performance. SSI is contributing almost 45% of the Indian Exports. Direct exports from the SSI account for nearly 35% of total exports. The number of small-scale units that undertake direct exports would be more than 5000. Besides direct exports, it is estimated that SSI contribute around 15% to exports indirectly. This takes place through merchant exporters, trading houses and export houses. They may also be in the form of export orders from large units or the production of parts and components for use for finished exportable goods. The non-traditional products account for more than 95% of the SSI

exports. The rewarding product groups where the SSI dominates in exports are sports goods, readymade garments, woolen garments and knitwear, plastic products, processed food and leather products.

Table: VII Growth pattern of employees in SSIs

| Year | Employment (Lakh Nos.) | Production per employee (Rs. thousand) at 1993-94 prices |
|-------------|------------------------|--|
| 1979-80 | 67 | 99 |
| 1980-81 | 71 | 102 |
| 1981-82 | 75 | 104 |
| 1982-83 | 79 | 107 |
| 1983-84 | 84.2 | 111 |
| 1984-85 | 90 | 116 |
| 1985-86 | 96 | 123 |
| 1986-87 | 101.4 | 132 |
| 1987-88 | 107 | 141 |
| 1988-89 | 113 | 150 |
| 1989-90 | 119.6 | 159 |
| 1990-91 | 158.3 | 54 |
| 1991-92 | 166 | 53 |
| 1992-93 | 174.8 | 53 |
| 1993-94 | 182.6 | 54 |
| 1994-95 | 191.4 | 57 |
| 1995-96 | 197.9 | 61 |
| 1996-97 | 205.9 | 66 |
| 1997-98 | 213.2 | 69 |
| 1998-99 | 220.6 | 71 |
| 1999-00 | 229.1 | 74 |
| 2000-01 | 238.7 | 77 |
| 2001-02 | 249.3 | 78 |
| 2002-03 | 260.2 | 81 |
| 2003-04 | 271.4 | 84 |
| 2004-05 | 282.6 | 89 |
| 2005-06 (P) | 294.9 * | 93 |

Source: Reserve Bank of India.

Small firms and enterprises are an important source of employment in many developing nations, often employing a sizable share of the labor force. However it is often suggested that small firms are more labor intensive, and therefore should be encouraged as a way of generating employment. It has been estimated that a lakh rupees of investment in fixed assets in the SSI generates employment for four persons.

Table: VIII Industry-wise Distribution of Employment in SSI

| IC | Description of Industry Employ/Unit | Employment | | |
|----|--|-----------------------------------|-----------------------------------|--------------------------------|
| | | 1 st Census 1972-73 | 2 nd Census 1987-88 | 3 rd Census 2001-02 |
| | | | | |

| | | | | | |
|-------|---|---------|--|---------|---------|
| 20/21 | Food & Food Products | 131220 | | 481682 | 403113 |
| 22 | Beverages, Tobacco & Tobacco Products | 4577 | | 73375 | 35863 |
| 23 | Cotton Textiles | - | | 24725 | 79312** |
| 24 | Wool Silk & Synth. Fibre Textiles | 12314 | | - | |
| 25 | Jute, Hemp & Mesta Textiles | 2599 | | - | |
| 26 | Hosiery & Garments | 75346 | | 198387 | 374836 |
| 27 | Wood Products | 94703 | | 229061 | 290696 |
| 28 | Paper Products & Printing | 89146 | | 199389 | 119658 |
| 29 | Leather & Leather Products | 31775 | | 81667 | 65174 |
| 30 | Rubber & Plastic Products | 81690 | | 188784 | 117934 |
| 31 | Chemical & Chemical Products | 159013 | | 313986 | 96209 |
| 32 | Non-Mettalic Mineral Products (Glass & Ceramic) | 202269 | | 446218 | 258627 |
| 33 | Basic Metal Products | 109626 | | 202463 | 84830 |
| 34 | Metal Products | 300060 | | 372711 | 358629 |
| 35 | Machinery & Parts Except Electrical | 145333 | | 279292 | 37242 |
| 36 | Electrical Machinery /Apparatus | 65908 | | 137260 | 33104 |
| 37 | Transport Equipment & Part | 83492 | | 100360 | 36208 |
| 38 | Misc Manufacturing Industries | 40025 | | 65322 | - |
| 97 | Repair Services | 38995 | | 192267 | 161728 |
| 99 | Services not e.c. | - | | 2720 | - |
| OT | Other Services & Products | - | | 61228 | 895193 |
| | Total | 1653178 | | 3665810 | 3448356 |

Source: Institute of Applied Manpower Research.

Food products industry has ranked first in generating employment, providing employment to 13.1%, which was followed by Non-metallic mineral products with employment of 4.46 lakh persons 12.2% and Metal products 10.2%. In Chemicals & chemical products, Machinery parts and except Electrical parts, Wood products, Basic Metal Industries, Paper products & printing, Hosiery & garments, Repair services and Rubber & plastic products, the contribution ranged from 9% to 5%, the total contribution by these eight industry groups being 49%. In all other industries the contribution was less than 5%. Per unit employment was the highest in units engaged in Beverages, tobacco & tobacco products mainly due to the high employment potential of this industry particularly in Maharashtra, Andhra Pradesh, Rajasthan, Assam and Tamil Nadu. Next came Cotton textile products (17), Non-metallic mineral products (14.1), Basic metal industries (13.6) and Electrical machinery and parts (11.2.) The lowest figure of 2.4 was in Repair services line. Per unit employment was the highest (10) in metropolitan areas and lowest (5) in rural areas. However, in Chemicals & chemical products, Non-metallic mineral products and Basic metal industries per unit employment was higher in rural areas as compared to metropolitan areas/urban

areas. In urban areas highest employment per unit was in Beverages, tobacco products (31 persons) followed by Cotton textile products (18), Basic metal industries (13) and Non-metallic mineral products (12). Non-metallic products contributed 22.7% to employment generated in rural areas. Food Products accounted for 21.1%, Wood Products and Chemicals and chemical products shared between them 17.5%. As for urban areas, Food Products and Metal Products almost equally shared 22.8% of employment. Machinery and parts except electrical, Non-metallic mineral products, and Chemicals & chemical products between them accounted for 26.2% of employment. In metropolitan areas the leading industries were Metal products, Machinery and parts except electrical and Paper products & printing (total share being 33.6%). Tamil Nadu (14.5%) made the maximum contribution to employment. This was followed by Maharashtra (9.7%), Uttar Pradesh (9.5%) and West Bengal (8.5%) the total share being 27.7%. Gujarat (7.6%), Andhra Pradesh (7.5%), Karnataka (6.7%), and Punjab (5.6%) together accounted for another 27.4%. Per unit employment was high - 17, 16 and 14 respectively - in Nagaland, Sikkim and Dadra & Nagar Haveli. It was 12 in Maharashtra, Tripura and Delhi. Madhya Pradesh had the figure of 2. In all other cases it was around the average of 6 (exim.indiamart.com).

Table:IX Expenditure on R&D by Industry Groups for SSI

| Industry Group | No. of R&D Units | R&D Expenditure (Rs. Lakhs) | | | R&D Expenditure as % of S.T.O. | | |
|---|------------------|-----------------------------|---------|---------|--------------------------------|---------|---------|
| | | 1996-97 | 1997-98 | 1998-99 | 1996-97 | 1997-98 | 1998-99 |
| Metallurgical Industries | 4 | 120.62 | 131.61 | 136.44 | 2.68 | 2.66 | 3.14 |
| Fuels | 2 | 37.35 | 44.44 | 80.09 | 0.2 | 0.21 | 0.37 |
| Boilers and Steam Generating Plants | 3 | 73.77 | 81.41 | 81.79 | 11.04 | 12.9 | 11.49 |
| Prime Movers | 3 | 48.56 | 49.15 | 50.18 | 0.56 | 0.57 | 0.58 |
| Electricals and Electronics Equipment | 64 | 1653.44 | 1810.63 | 2036.31 | 2.23 | 2.43 | 2.47 |
| Telecommunications | 23 | 460.5 | 590.5 | 536.37 | 0.46 | 0.51 | 0.79 |
| Transportation | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Industrial Machinery | 9 | 295.8 | 240.58 | 236.27 | 2.93 | 2.01 | 2.5 |
| Machine Tools | 4 | 88.77 | 54.14 | 201.01 | 2.01 | 1.16 | 4.86 |
| Agricultural Machinery | 2 | 19.4 | 31.72 | 11.18 | 2.69 | 4.58 | 2.03 |
| Earth Moving Machinery | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Misc. Mechanical Engineering Industries | 7 | 108.43 | 160.95 | 183.82 | 0.69 | 1.11 | 1.32 |
| Commercial Offices, Household Equipment | 2 | 10.62 | 11.13 | 12.39 | 0.62 | 0.64 | 0.87 |
| Medical and Surgical Appliances | 3 | 12.5 | 21.6 | 29.42 | 0.91 | 0.22 | 0.25 |
| Industrial Instruments | 11 | 243.17 | 399.16 | 401.49 | 3.83 | 5.29 | 5.34 |
| Scientific Instruments | 9 | 91.13 | 71.58 | 81.27 | 3.13 | 2.42 | 2.64 |
| Math. Surveying & Drawing Instrument | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fertilisers | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chemicals (Other than Fertilizers) | 32 | 546.62 | 572.22 | 483.32 | 0.23 | 0.29 | 0.26 |
| Photographic Raw Film and Paper | 2 | 40.66 | 29.45 | 40.15 | 0.63 | 0.38 | 0.69 |
| Dye- Stuffs | 2 | 14.86 | 14.02 | 14.12 | 0.29 | 0.21 | 0.21 |
| Drugs and Pharmaceuticals | 37 | 802.87 | 940.16 | 1486.01 | 0.53 | 0.51 | 0.67 |
| Textiles (Dyed, Printed, Processed) | 2 | 15.03 | 19.15 | 143.2 | 0.09 | 0.09 | 0.68 |
| Paper and Pulp | 1 | 4.94 | 10.86 | 7.87 | 0.41 | 0.92 | 0.64 |

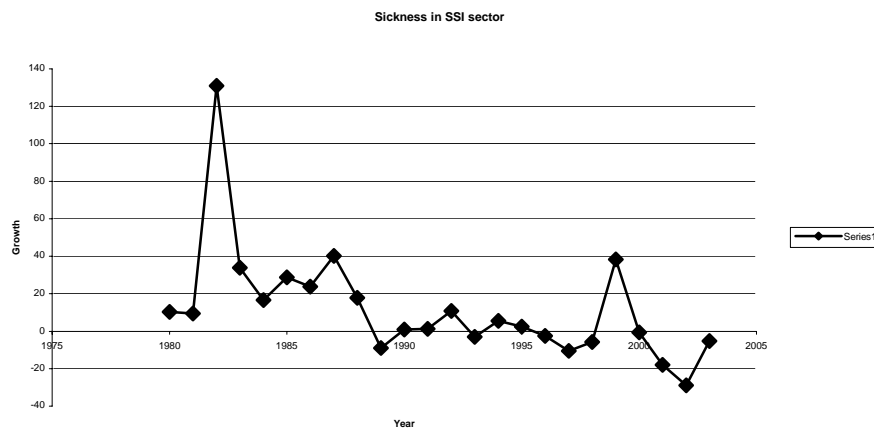
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|--|-----|---------|---------|---------|-------|-------|-------|
| Sugar | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fermentation Industries | 1 | 127.2 | 104.96 | 138.54 | 4.3 | 2.74 | 3.8 |
| Food Processing Industries | 7 | 1502.98 | 1876.13 | 1863.49 | 17.41 | 19.16 | 16.16 |
| Vegetable Oil & Vanaspathi | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Soaps, Cosmetics and Toilet Preparations | 1 | 22.74 | 76.94 | 88.44 | 2.04 | 5.17 | 4.05 |
| Rubber Goods | 1 | 4.84 | 5.09 | 2.84 | 2.57 | 2.81 | 1.7 |
| Leather, Leather Goods and Pickers | 1 | 233.3 | 143.5 | 282.78 | 0.92 | 0.44 | 0.94 |
| Glue and Gelatin | 3 | 52.09 | 37.52 | 59.62 | 1.26 | 0.82 | 1.21 |
| Glass | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ceramics | 1 | 3 | 3 | 3 | 5.17 | 5.17 | 5.17 |
| Cement and Gypsum Products | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Timber Products | 1 | 1.56 | 1.12 | 1.94 | 0.98 | 0.54 | 1.28 |
| Defence Industries | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Information Technology | 6 | 324.14 | 376.72 | 449.6 | 2.37 | 2.79 | 3.22 |
| Biotechnology | 11 | 378.38 | 430.51 | 518.84 | 0.44 | 0.6 | 0.59 |
| Consultancy Services | 2 | 12 | 16.5 | 15 | 0.58 | 0.64 | 0.58 |
| Miscellaneous Industries | 8 | 214.34 | 172.8 | 136.61 | 1.47 | 1.12 | 0.79 |
| Total | 265 | 7565.61 | 8529.25 | 9813.4 | 0.91 | 1 | 1.15 |

Abbr.: S.T.O: Sale Turnover. Source: Research and Development in Industry 2000-01, Ministry of Science and Technology, Govt. of India.

Competitiveness in SSI could be achieved through technological innovation, which will enable SSI to manufacture new-fangled products and achieve various economies of scale that basically accrues to large-scale sectors. The tenth plan lays emphasis on enhancing information flow about technology sources, facilitating such transfers, and funding up gradation activity through capital subsidy scheme of SIDBI- Govt. of India pattern. The Electrical and electronic sector has more number of R&D units with comparatively low expenditure in relation to its total sales. The SSI like industries transportation, sugar, vegetable oil, cement and fertilizer has absolutely no R&D activities taking place.

Considering the above facts, the cluster approach helps industries to introduce innovative marketing. The facilities in cluster may include information dissemination, establishment of design center, quality awareness programmes, testing facilities technology up gradation etc which becomes a part of R&D and the diffusion of innovation takes place at a faster rate in cluster form.

Chart: I Growth pattern of sick SSI units



Source: CMIE database.

During the pre reform period there was 10.56 times increase in the number of sick SSI units in the country. After the liberalization period the number of sick units has decreased to .68 times. India's obligation as a member of WTO to bring down tariff and non-tariff barriers gave another competitive environment for SSI (C Francis 1997). Thus after reform SSI has been exposed to intense competition both in domestic and international levels. The SSI, which was not able to withstand competition, has gradually become sick. According to the report of RBI (III census of SSI) the criteria to measure sickness was: delay in repayment of loan over one year; decline in net worth by 50%; and decline in output during the last three years. According to the census of RBI nearly 15% of registered SSI were identified to be sick. Lack of demand, shortage of working capital, non-availability of raw material, power shortage, labor problems and marketing problems are the main reasons for incipient sickness in SSI. The chart II & III below depicts the cause and the magnitude of the problems faced by SSI (Economic Survey,2004).

Chart: II Reasons for sickness in registered SSI

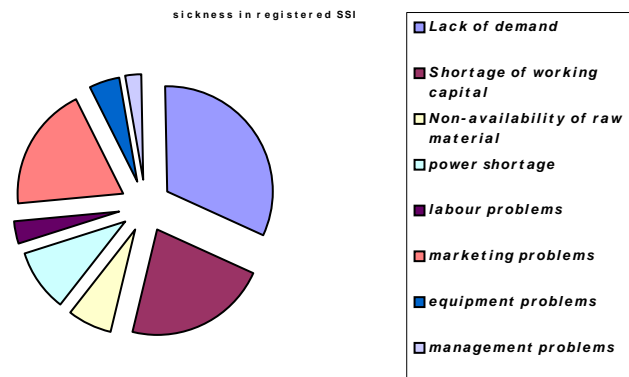
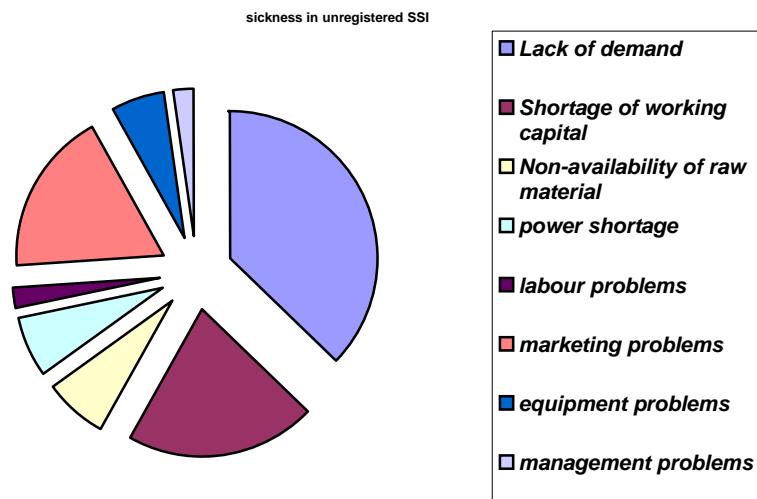


Chart: III Reasons for sickness in unregistered SSI



The role of government towards SSI

After independence, Indian planners and policy-makers felt that protection was essential to the development of a strong and indigenous economy. The Indian state played an integral role in the industrial and economic development of the country resulting in a dominant public sector and heavily regulated private sector. Viewing this, the protection was also extended to SSI as it was an important

tool in employment generation, value creation and poverty alleviation. These SSI also support entrepreneurial talent and skills, stimulate personal savings, and help in developing innovative and appropriate indigenous technology, providing dynamism and contributing to competition (Rajendran, 1989). Over 800 products were exclusively reserved for SSI, where some of the products produced were purchased by government agencies. Apart from this, supply of scarce materials, input price concessions like lower interest rates and numerous fiscal measures such as excise duty exemptions and other tax concessions were also given (Source-Business Today, September 10, 2006). Government has reserved certain products for manufacture in the small scale sector in areas where there is techno-economic justification for such an approach. Large/Medium units can; however, manufacture such reserved items provided they undertake to export 50% or more of their production. As on March 2005, the total number of items reserved for small-scale sector is 506.

In the second plan (1956-61), the SSI was given priority due to its consequence in creation of diversified employment opportunities and wide dispersal of industrial production. The policies proposed then, were, and remain the main backbone of public policy relating to the SSI. What we see however is that this policy has been largely unhelpful, if not detrimental to the development of the sector. The policy regulations relating to the SSI are such that they ensure that units stay just small.

Promotional measures aim to increase the efficiency and economic viability of small units by providing infrastructure facilities and improving access to markets. On the other hand, protective measures give small units preferential treatment. Continuous measures are those benefits which a small unit may avail of as long as it falls under that category, while one-shot are those which may be availed of only once, and tends to be discretionary in nature. Most policies like preference in government purchases; lower interest rates etc. are continuous in nature. Discretionary measures are those, which require an examination on a case-by-case basis and are not blanket measures available to all units, which fall under the definition of small. Non discretionary, by implication, are those measure which are based on some objective criteria and are applicable to all units that meet the criteria.

The government has also provided measures such as greater infra-structural support, more and easier availability of credit, lower rates of duty, technology up-gradation, assistance to build entrepreneurial talent, facilities for quality improvement, and export incentives (Parthasarathy, 1996).

The Ministry of Small Scale Industries (MoSSI) designs policies, programmes, projects and schemes in consultation with its organizations. It also performs the function of policy advocacy with other Ministries/Departments of the Central Government and the States and Union Territories. Implementation of the policies and programmes/projects/schemes for providing various support services to the MSEs is undertaken through its attached office, namely, the Office of Development Commissioner (Small Scale Industries) also known as Small Industries Development Organisation (SIDO) and the National Small Industries Corporation (NSIC) Ltd., a public sector undertaking of the Ministry. There are three national level Entrepreneurship Development Institutes supported by the Ministry viz. National Institute of Small Industry Extension Training (NISIET), Hyderabad, National Institute of Entrepreneurship and Small Business Development (NIESBUD), NOIDA and Indian Institute of Entrepreneurship (IIE), Guwahati.

Financial aid for SSI

Credit is the prime input for sustained growth of SSI and its mobilization for meeting fixed and working capital needs poses the foremost problems. Credit provided for creation of fixed assets like land, building, plant and machinery is called long term credit. Credit provided for running the industry for its day-to-day requirement for purchasing raw material and other input like electricity and water etc. and for payment of wages and salaries is called short-term credit or working capital.

The Laghu Udyami (small enterprise) Credit Card Scheme has been provided to SSI where they can credit up to Rs.10lakhs. Apart from this, credit facilities up to maximum of Rs.25lakhs are provided through Credit Guarantee Fund Trust in collaboration with SIDBI and Govt. of India.

Table X provides further insight into credit related information. The SSI is provided working capital by commercial banks and in some cases by cooperative banks and regional rural banks. Term loans are provided by State Financial Corporations (SFCs), Small Industries Development Corporations (SIDCs), National Small Industries Corporation (NSIC) and National Bank for Agriculture and Rural Development (NABARD). Financial assistance from NSIC and to some extent from SIDCs is available in the form of supply of machinery on hire purchase basis/deferred payment basis. Small sized SSI and tiny units also get some term loans from commercial banks along with working capital in the form of composite loans.

The Small Industries Development Bank of India (SIDBI) provides refinance to these institutions. Such refinance comprises assistance provided to State Financial Corporation Bills, Finance Scheme, Special Capital/Seed Capital Scheme, and new debt instruments and to National Small Industries Corporation. Long-term loan are provided to the smalls scale industrial units by SFCs mainly through Single Window Scheme and National Equity Fund as also direct assistance provided to State Financial Corporations in the form of refinance. Some part of working capital for pre-operative expenses is also provided by State Financial Corporations to Small Scale Industrial Units under the Single Window Scheme.

Table:X Credit Guarantee Schemes for SSI

| Year (As at end-March) | Credit Guarantee Scheme Cover for Small Industries | | Credit and Guarantee Scheme Relating to Small Scale Borrowers | | Total Guaranteed Advances | | Claims Received | | Claims Disposed off | |
|------------------------|--|--------|---|--------|---------------------------|--------|-----------------|--------|---------------------|--------|
| | No. | Amount | No. | Amount | No. | Amount | No. | Amount | No. | Amount |
| 1981+ | 1 | 2 | - | - | - | 3716 | - | - | - | - |
| 1982\$ | 4 | 9 | 31 | 2 | - | 1509 | 25 | 1055 | 15 | |
| 1983\$ | 9 | 33 | 7 | 13 | - | 147 | 28 | 127 | 20 | |
| 1984\$ | 18 | 54 | 10 | 14 | - | 255 | 62 | 237 | 32 | |
| 1985\$ | 22 | 72 | 23 | 25 | - | 454 | 115 | 467 | 114 | |
| 1986\$ | 34 | 105 | 30 | 67 | - | 630 | 141 | 644 | 176 | |
| 1987\$ | 45 | 132 | 40 | 88 | - | 1071 | 255 | 767 | 148 | |
| 1988-89** | 94 | 217 | 81 | 157 | 10465 # | 1528 | 364 # | 1291 | 281 | |
| 1989-90 | 75 | 193 | 102 | 368 | 14094 | 1503 | 356 | 1599 | 347 | |
| 1990-91 | 84 | 244 | 76 | 249 | 16826 | 2088 | 505 | 1901 | 427 | |
| 1991-92 | 78 | 217 | 81 | 256 | 17362 | 1652 | 410 | 1591 | 360 | |
| 1992-93 | 130 | 260 | 118 | 243 | 19162 | 3681 | 883 | 2492 | 566 | |
| 1993-94 | 144 | 323 | 123 | 288 | 15503 | 4673 | 1168 | 3359 | 1026 | |
| 1994-95 | 190 | 379 | 193 | 409 | 14177 | 4793 | 1348 | 3912 | 1100 | |
| 1995-96 | 191 | 524 | 155 | 308 | 13847 | 6265 | 1841 | 3510 | @ 1031 @ | |
| 1996-97 | 118 | 270 | 101 | 292 | 11271 | 5997 | 1842 | 1312 | 403 | |

| | | | | | | | | | |
|---------|----|-----|----|-----|------|-----|-----|------|------|
| 1997-98 | 32 | 120 | 52 | 221 | 3376 | 541 | 184 | 1179 | 401 |
| 1998-99 | 14 | 34 | 44 | 225 | 2813 | 757 | 218 | 4245 | 1188 |
| 1999-00 | 14 | 26 | 71 | 139 | 39 | 889 | 219 | 4536 | 1195 |
| 2000-01 | 3 | 14 | 17 | 54 | 5 | 75 | 22 | 679 | 171 |
| 2001-02 | 1 | 1 | 4 | 5 | 1 | - | - | 5 @@ | 1 @@ |
| 2002-03 | 2 | - | 2 | 1 | - | - | - | - | - |
| 2003-04 | - | - | - | - | - | - | - | - | - |

(No.in ' 000, Amount: Rs. in Crore)

Source: Handbook of Statistics on Indian Economy, Reserve Bank of India, 2003.

Table XI gives the position with regard to flow of credit to SSI Sector. It depicts that there is a marginal increase in share of credit to SSI sector as a percentage of net bank credit.

Table:XI Credit to SSI Sector from Public Sector Banks

| | At the end of March 1995 | At the end of March 1996 | At the end of March 1997 | At the end of March 1998 | At the end of March 1999 |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Net Bank Credit | 1,69,038 | 1,84,381 | 1,89,684, | 2,18,219 | 2,46,203 |
| Credit to SSI | 25,843 | 29,485 | 31,542 | 38,109 | 42,674 |
| No. of SSI Accounts (in lakhs) | 32.25 | 33.77 | N.A. | 29.64 | N.A. |
| SSI Credit as percentage of Net Bank Credit | 15.29 | 15.99 | 16.6 | 17.5 | 17.33 |

Source: Handbook of Statistics on Indian Economy, Reserve Bank of India, 2003.

Conclusion

Small industry sector has performed exceedingly well and enabled our country to achieve a wide measure of industrial growth and diversification. By its less capital intensive and high labor absorption nature, SSI sector has made significant contributions to employment generation and also to rural industrialization.

Under the changing economic scenario, SSI has both the challenges and opportunities before them. The business can compete on cost, quality and products at domestic and international level only if ideal investment in technology production process, R&D and marketing are made. Infrastructure bottlenecks are not completely solved. The promotional activities for SSI in India need to concentrate on improved credit flows, human resource development, appropriate technology and funds for modernization.

So, this is the appropriate time to set up projects in the small-scale sector. It may be said that the stance is optimistic, indeed promising, given some protection. This expectation is based on an essential feature of the Indian industry and the demand structures. The variety in the demand structures will ensure long-term co-existence of many layers of demand for consumer products / technologies / processes. There will be flourishing and well grounded markets for the same product/process, differentiated by quality, value added and sophistication. This characteristic of the Indian economy will allow complementary existence for various diverse types of units.

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