

The role of small scale industry in reduction of poverty in India

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Introduction

Poverty is one of the most serious problems faced by developing countries like India. The role played by the small scale industry in the economic activity of advanced industrialized countries like Japan, Germany, Great Britain and the United States of America is significant. Many Nations, both developed and developing exteriorized that the small industry sector is a useful vehicle for growth, in the later for the creation of new employment opportunities on a wide scale in the shortest possible time. Employment creation is one of the most viable ways of reducing poverty levels in the country. Indian economy is a developing economy. Its vast resources are either unutilized or underutilized. A major section of man power is lying idle. The per capita income is low. Production is traditional and the technique is outdated. The output is insufficient and the basic needs of the people remain unfulfilled. In both developed and developing countries, the government is turning to small and medium scale industries, as a means of economic development. The present study focused on the role of small scale industry in reduction of poverty in India.

The concept of poverty is associated with socially perceived deprivation with respect to human needs. In almost all underdeveloped countries where per capita income is very low, income inequality has resulted in a number of evils, of which poverty is certainly the most serious one. In India, even now in spite of all the development during the period of planning, 41.6 per cent of the population was getting less than \$ 1.25 (PPP) a day. This percentage of population was considered to be poor on an international criterion suggested by World Development Report. In all India poverty line so defined in 1973-74 was Rs. 49.63 for rural areas and Rs.56.64 for urban areas. In 2004-05 the poverty line has been adjusted for prices were Rs.356.30 for rural areas and Rs.538.60 for urban areas. According to a recent Indian government committee constituted to estimate poverty, nearly 38 per cent of India's population is poor.

Definition of Small Scale Industry in India

The definition of small scale industries has undergone changes over the years in terms of investment limits is as follow as, In 1977, small scale industrial unit having investment of less than Rs. 10 lakh were defined as small scale industrial undertakings, while for ancillary units, the investment limit was Rs. 15 lakh. Units with investment of less than Rs.1 lakh were defined as tiny enterprises. In 2000, the investment limit for small scale industries was Rs. 1 crore, for ancillary units Rs. 1 crore, and for tiny enterprise Rs. 25 lakh. The new definition for micro

enterprises, where the investment in plant and machinery does not exceed Rs. 25 lakh, small enterprises, where the investment limit was more than Rs. 25 lakh but does not exceed Rs. 5 crore and a medium enterprises, where the investment in plant and machinery is more than Rs. 5 crore but not exceed Rs. 10 crore.

Objectives

The main objectives of the study are,

- a) to analyse the growth of small scale industry in terms of number of units and investment in fixed capital.
- b) to evaluate the performance of small scale industry to eradicate the poverty in terms of employment generation and to investigate the labour productivity.

Methodology

The data has been collected from secondary sources comprising of micro small and medium enterprises annual reports and Ministry of Commerce, Government of India from the period 1990-91 to 2009-10. The collected data has been classified and analysed in a systematic manner. For analysis, statistical tools like Simple Linear Regression Model, Semi- log model and Annual growth rates have been used in this study. The linear trend equation of the form, $Y_i = \alpha + \beta X_i$ Where, Y is the number of units/ investment/employment/ production/ exports. X_i is the time periods (where $i = 1, 2, 3, \dots, n$) and $\beta = \frac{\sum X_i Y_i}{\sum X_i^2}$. To estimate the compound growth rate using the semi-log functions of the form $Y = \alpha \beta^t e^u$ have been estimated, the compound growth rate is given by $\{(\text{anti log of } \beta) - 1\} \times 100$. The labour productivity is measured by taking the ratio of output at constant prices to the number of employee. In other words, it is output per employee.

The labour productivity = $\frac{\text{Production at constant price}}{\text{Number of employees}}$

The growth rate of labour productivity has been measured by computing, $\frac{Y_t - Y_{t-1}}{Y_{t-1}} \times 100$

The Role of Small Scale Industry in Economic Development

Employment generation:

The basic problem that is confronting the Indian economy is increasing pressure of population on the land and the need to create massive employment opportunities. This problem is solved to larger extent by small-scale industries because small- scale industries are labour intensive in character. They generate huge number of employment opportunities. Employment generation by this sector has shown a phenomenal growth. It is a powerful tool of job creation.

Mobilisation of resources and entrepreneurial skill:

Small-scale industries can mobilize a good amount of savings and entrepreneurial skill from rural and semi-urban areas which are remain untouched to the clutches of large industries and put them into productive use by investing in small-scale units. Small entrepreneurs also improve social welfare of a country by harnessing dormant, previously overlooked talent. Thus, a huge amount of latent resources are being mobilised by the small-scale sector for the development of the economy.

Equitable distribution of income:

The small-scale industries ensures equitable distribution of income and wealth in the Indian society which is largely characterised by more concentration of income and wealth in the organised sector keeping unorganised sector undeveloped. This is mainly due to the fact that small industries are widespread as compared to large industries and are having large employment potential.

Regional dispersal of industries:

There has been massive concentration of industries in few large cities of different states of India. People migrate from rural and semi urban areas to these highly developed centers in search of employment and sometimes to earn a better living which ultimately leads to many evil consequences of over-crowding, pollution, creation of slums, etc. This problem of Indian economy is better solved by small- scale industries which utilise local resources and brings about dispersion of industries in the various parts of the country thus promotes balanced regional development.

Provides opportunities for development of technology:

Small-scale industries have tremendous capacity to generate or absorb innovations. They provide ample opportunities for the development of technology and technology in return, creates an environment conducive to the development of small units. The entrepreneurs of small units play a strategic role in commercialising new inventions and products. It also facilitates the transfer of technology from one to the other. As a result, the economy reaps the benefit of improved technology.

Promotes exports:

Small-scale industries have registered a phenomenal growth in export over the years. The value of exports of products of small-scale industries has increased from Rs. 393 crores in 1973-74 to

Rs. 23, 87.5 crores in 2009-10. This contributes about 35% India's total export. Thus they help in increasing the country's foreign exchange reserves thereby reduces the pressure on country's balance of payment.

Supports the growth of large industries:

The small-scale industries play an important role in assisting bigger industries and projects so that the planned activity of development work is timely attended. They support the growth of large industries by providing, components, accessories and semi-finished goods required by them. In fact, small industries can breathe vitality into the life of large industries.

Better industrial relations:

Better industrial relations between the employer and employees help in increasing the efficiency of employees and reducing the frequency of industrial disputes. The loss of production and man-days are comparatively less in small- scale industries. There is hardly any strikes and lock out in these industries due to good employee-employer relationship. Of course, increase in number of units, production, employment and exports of small-scale industries over the years are considered essential for the economic growth and development of the country.

Table 1: Number of Units and Investment of Small Scale Industry in India

year	Number of Units (in Lakhs)	Investment (Rs.in lakhs)	Growth rate of Investment
1990-91	6.79	935555	-
1991-92	7.06	100351	7.26
1992-93	7.35	109623	9.23
1993-94	7.65	115795	5.63
1994-95	7.96	123790	6.90
1995-96	8.28	125750	1.58
1996-97	8.62	130560	3.83
1997-98	8.97	133242	2.05
1998-99	9.34	135482	1.68
1999-00	9.72	139982	3.32
2000-01	10.11	146845	4.90
2001-02	10.52	154349	5.11
2002-03	10.95	162317	5.16
2003-04	11.40	170219	4.87
2004-05	11.86	178699	4.98
2005-06	12.34	188113	5.27
2006-07	26.10	207307	10.20
2007-08	27.28	197046	-4.95
2008-09	28.52	203149.3	3.09
2009-10	29.81	209252.6	3.00

Source: RBI Hand Book of Statistics on Indian Economy 2009-2010.

The estimated equation for number of Units in India during 1990-91 to 2009-10 has been

$$y = 9.618 + 1.75x$$

$$R^2 = 0.60$$

(-8.45) (5.48)

The slope coefficient is statistically significant as the calculated value exceeds the table value at 18 degrees of freedom (2.31) and 5 percent level of significance. The explanatory variable x could explain nearly 60 percent of the variation in Y. The rate of increase per year on the average has been one lakhs and seventy five thousand units during the periods 1990-91 to 2009-10. The number of units in the small scale sector stood at 6.79 lakh in the year 1990-91 and this number rose to 29.81 lakhs in 2009-10.

Table 2: Estimated Trend equation for Number of Units in Small Scale Industry in India

Year	Constant	Estimated Co-efficient	t value	Standard error	R ²	Compound Growth Rate
1990-91 to 1999-2000	-6407.868	3.252	-53.476 54.158	119.82 8.060	0.99	16.8
2000-2001 to 2009-10	-47119.4	23.578	-4.676 4.692	10077.846 5.025	0.73	9.6
1990-91 to 2009-10	-19117.2	9.618	-8.445 5.480	3511.157 1.755	0.60	35.2

Source: computed using table 1

The estimated equation for Investment in India during 1990-91 to 2009-10 has been

$$y = 6103.29 + 222.27x$$

$$R^2 = 0.98$$

(-27.119) (27.459)

The slope coefficient is statistically significant as the calculated value exceeds the table value at 18 degrees of freedom (2.1) and 5 percent level of significance. The explanatory variable x could explain nearly 98 percent of the variation in Y. The rate of increase per year on the average has been 222.27 lakhs investment during the periods 1990-91 to 2009-10. The investment is Rs. 935555 lakhs in the year 1990-91 and roses to Rs.209252.6 lakhs in 2009-10.

Table: 3 Estimated Trend equations for Investment in Small Scale Industry in India

Year	Constant	Estimated Co-efficient	t value	Standard error	R ²	Compound Growth Rate
1990-91 to 1999-2000	-9894299	5018.848	-12.779 12.935	774257.7 388.001	0.95	9.9
2000-2001 to 2009-10	-1.4E + 07	7258.139	-10.910 11.048	1317578 656.980	0.98	10.4
1990-91 to 2009-10	-1.2E + 07	6103.287	-27.119 27.459	444646.4 222.264	0.98	9.7

Source: Computed using table 1

Compound growth rate in number of units for India have been 35.2 percent and investment in fixed capital at constant price has been 9.7 percent during the period 1990-91 to 2009-10. The rate of growth of output exceeded 12 percent in 2007-08. There are 260 micro small medium enterprises in the country and they contribute 8 percent of GDP and about 45 per cent of manufacturing output.

Table 4: Growth Rate of Production, Employment and Exports of Small Scale Industry in India

Year	Production (Rs. crore)	Employment (Rs. lakhs)	Export (Rs. lakhs)	Growth Rate of Production	Growth Rate of Exports
1990-91	84728	158.3	9664	-55.38	27.16
1991-92	87355	166.0	13883	3.10	43.66
1992-93	92246	174.8	17784	5.59	28.09
1993-94	98796	182.6	25307	7.10	42.30
1994-95	108774	191.4	29068	10.09	14.86
1995-96	121175	19.79	36470	11.40	25.46
1996-97	134892	205.9	39248	11.32	7.62
1997-98	146263	213.2	44442	8.43	13.23
1998-99	157525	220.6	48979	7.69	10.21
1999-00	170379	229.1	54200	58.16	10.66
2000-01	184401	240.9	69797	8.23	28.78
2001-02	282270	252.3	71244	53.07	2.07
2002-03	306771	263.7	86013	8.68	20.73
2003-04	336344	275.4	97644	9.64	13.52
2004-05	372938	287.6	124417	10.38	27.42
2005-06	41884	299.9	450242	12.32	20.75
2006-07	471663	312.6	182538	12.59	21.49
2007-08	532979	322.3	202017	12.99	10.67
2008-09	594295	334.4	214387	11.50	6.12
2009-10	655611	352.4	238752	10.32	11.36

Source: Reserve Bank of India. (ON224)

The estimated trend equation for small scale industrial production in India during 1990-91 to 2009-10 has been

$$y = 29474.42 + 2325.9x$$

$$(12.615) (12.672)$$

$$R^2 = 0.90$$

The slope coefficient is statistically significant as the calculated value exceeds the table value at 18 degrees of freedom (2.1) and 5 percent level of significance. The explanatory variable x could explain nearly 90 percent of the variation in Y. The rate of increase per year on the average has been 2325.9 lakhs of small scale industrial production in India during the periods 1990-91 to 2009-10.

The estimated trend equation for Employment in India during 1990-91 to 2009-10 has been

$$y = 25.143 + 3.913x$$

$$(-6.386) (6.425)$$

$$R^2 = 0.70$$

The slope coefficient is statistically significant as the calculated value exceeds the table value at 18 degrees of freedom (2.31) and 5 percent level of significance. The explanatory variable x could explain nearly 70 percent of the variation in Y. The rate of increase per year on the average has been 3.913 lakhs of employment opportunity provided by the small scale industry in India during the periods 1990-91 to 2009-10. Small scale industrial sector provides direct employment to more than 19 million people in around 3.4 million registered SSI units. It is estimated that each million rupees of investment in fixed assets in the small-scale sector leads to production of goods and services worth Rs.4.62 million annually, with an approximate value addition of ten percentage points. This sector also creates the largest employment opportunities outside agriculture. It is estimated that Rs.100, 000 of investment in fixed assets in the small-scale sector generates employment for the poor people. As far as future prospects are concerned, the rural non form sector accounting for about 22 per cent of rural employment can play a crucial role in the further expansion of employment opportunities in the rural areas. In the urban areas employment potential seems to be the largest in the non- household, tiny sector segment of the manufacturing sector. Overall, it has been estimated that labour intensity in the micro and small enterprises sector almost four times higher than the large enterprises.

The estimated equation for Exports in India during 1990-91 to 2009-10 has been

$$y = 11573.08 + 960.202x$$

$$R^2 = 0.89$$

(-12.007) (12.053)

The slope coefficient is statistically significant as the calculated value exceeds the table value at 18 degrees of freedom (2.1) and 5 percent level of significance. The explanatory variable x could explain nearly 89 percent of the variation in Y. The rate of increase per year on the average has been 960.202 lakhs exported from the small scale industry in India during the periods 1990-91 to 2009-10. With the establishment of a large of modern small scale industries in the post independence period, the contribution of the small scale sector in export earnings has increases by leaps and bounds.

Table 5: Compound Growth Rate of production, Employment and Exports of SSI in India

Year	Production (%)	Employment (%)	Exports (%)
1990-91 – 2009-10	30.9	18.4	43.9
1990-91 –1999-00	21.2	9.8	53.1
2000-01-2009-10	33.5	38	42.2

Source: Computed using table 4

The compound growth rate of Production for the period of 1990-91 to 2009-10 is 30.9 per cent and the employment and exports growth rates are 18.4 per cent and 43.9 per cent respectively. Third All India Census Report on Small Scale Industry shows that the small scale industry sector is a better employment generating sector compare to the large sector. This would be clear from the fact that the employment generated by the SSI sector per Rs. One lakh investment was 1.39, as against only 0.20 in respect of the large manufacturing sector. This means that the organized sector requires an investment of Rs.5 lakh to generate employment to one person whereas the SSI sector generates employment for 7 persons with the same investment.

Table 6: Labour Productivity in small Scale Industry in India

Year	Labour Productivity (Rs. thousands)	Growth Rate of Labour productivity
1990-91	53.52	-66.29
1991-92	52.68	-1.68
1992-93	52.77	0.29
1993-94	54.11	2.54
1994-95	56.83	5.03
1995-96	61.23	7.74
1996-97	65.51	6.99
1997-98	68.61	4.73
1998-99	71.71	4.08
1999-00	74.37	4.15
2000-01	76.55	2.93
2001-02	111.88	46.15
2002-03	116.33	3.98
2003-04	123.93	6.53
2004-05	131.97	6.49
2005-06	142.04	7.63
2006-07	79.32	-44.16
2007-08	85.10	7.29
2008-09	90.13	5.91
2009-10	94.28	4.60

Source: computed using table 4.

The above table vividly shows the production per employee in India; it was 53.52 thousand in the year 1990-91 which has increased continuously up to the year 2005-06 as 142.04 thousands. Average output per employee in small scale industry in India has been declined to 79.32 thousands in 2006-07 and 94.28 thousands in the year 2009-10. The growth rate of labour productivity was -66.29 per cent in 1990-91 which shows the negative growth of labour productivity in India. But in the year 2001-02 the growth rate has been increased as 46.15 per cent, further it has declined to 4.60 per cent in the year 2009-10.

Conclusion

After implementation of 1991 new industrial policy resolution, there was a threat for the very survival of small scale industry in India during the post reform periods. The government apart from encouraging high rate of foreign investment in the Indian industries it has been also liberal in extending relatively more number of foreign good is available everywhere in India at cheaper rate. Small scale industrial sector to contribute to increase of industrial productivity, rise of exports, generate more employment opportunity and also contribute very impressive of the GDP. In view of this, the government of India has rightly recognised small scale industries as the engine of growth in the present millennium. For sustainable higher growth of the small scale industrial sector, top priority should be given to financial support state and central government should facilitate the growth of small scale industry mainly through creating conducive environment for producing and marketing of products and services of small scale sectors.

References:

1. Misra and Puri, "Indian Economy- its development Experience", Twenty Ninth Revised and Updated Edition - 2011, Himalaya Publishing House, pg no 375-387.
2. Ruddar Dutt and K.P.M.Sundaram, "Indian Economy- 61st Revised Edition", S.Chand & Company, pg no 679-695.
3. Sury .M.M and Vibha Mathur, "India: Sixty Years of Planned Economic Development 1950 to 2010", New Centuary Publication, New Delhi, India.
4. Rajkumar.S.Topandasani, "Performance of Small scale Industry in India", Southern Economist, July15, 2011, pg no.5-7.
5. Yogesh Madhukarrao Kulkarni, "Role of Small scale industry in Employment Generation", Aug15, 2011, pg no 9-11.
6. Sonia and Dr. Rajeev Kansal," Globalization and Its Impact on Small Scale Industries in India", PCMA Journal of Business, Vol. 1, No. 2 (June, 2009) pp. 135-146.
7. Vidya Suresh and P Shashidhar, "Competitiveness of Small-Scale Industries of India", Conference on Global Competition & Competitiveness of Indian Corporate, pg no 439-453.
8. Christopher J. Green, Colin H. Kirkpatrick and Victor Murinde, "Finance for Small Enterprise Growth and Poverty Reduction in Developing Countries" Journal of International Development, Published online in Wiley Inter Science.
9. Role of the Informal Sector in Poverty Reduction Economic and Social Commission for Asia and the Pacific Committee on Poverty Reduction, Third Session 2006, Bangkok.