
Structure and Performance of Small Scale Industries - An Empirical Study

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ABSTRACT

In this paper an attempt is made to examine the category wise growth, structure and performance of small scale industries in Kurnool district of Andhra Pradesh. It also deals with the capacity utilization of different sample industrial units and the reasons for the under utilization of their installed capacity. The study also focuses on the relationship between output, investment and employment of different categories of small scale industries in the district.

Introduction

In a developing country like India small scale industries have been assigned a significant role in the industrialization and economic development. The small enterprises have now established their competence to manufacture a wide variety of sophisticated goods in different product lines. Small scale industries play an important role in the developing economies like India. Apart from providing employment they help in the reduction of regional disparities and improvement of living standards of lower strata of population. Small scale industries can bring the benefits of modern technology as well as effectively tackle the problem of unemployment, under employment, regional and economic disparities. The small scale sector contributes nearly 35 percent of gross value of output in the manufacturing sector. Its contribution to employment is next to agriculture in India. It has been estimated that a lakh rupee of investment in fixed assets produces Rs.4.62 lakh worth of goods and services and also generates employment for four persons⁽¹⁾ Per unit employment is also estimated at 6.3 persons⁽²⁾ Low capital cost, less infrastructural facilities, short gestation period, high potential of

employment generation, decentralization of industrial base dispersal of industries to rural and semi urban areas etc. are the advantages of small scale industries⁽³⁾ The present study is an attempt to examine the structure and performance of small scale industries in Kurnool District of Andhra Pradesh.

Hypothesis

1. The small scale industries in Kurnool district are depending more on own funds than borrowed funds.
2. The small scale industrial units in Kurnool district are utilizing their full installed capacity,
3. There is significant relationship between labour, output, investment and employment of small scale industries in Kurnool district, and
4. The small scale industries in Kurnool district are earning a good rate of return on their capital investment.

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Methodology

There were 4245 small scale industrial units in 1992-93 which were registered with District Industries Centre, Kurnool⁽⁴⁾ The classification adopted by District Industries Centre, Kurnool is adopted for stratification of small scale industrial units. Accordingly the registered small scale industrial units are classified into 8 categories as shown in Table-1.

Objectives of the study

The study has the following specific objectives:

1. To study the growth of small scale industries in the district,
2. To examine the cost and capital structure of sample industrial units and
3. To evaluate the performance of small scale industries in Kurnool district.

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Table 1: Number of Small Scale Units Registered with District Industries Centre, Kurnool

Category of Industry	Number of Regd. Units	Sample Units
1. Agro based	1131	24
2. Mineral based	1048	27
3. Engineering based	582	20
4. Forest based	364	15
5. Food based	38	6
6. Chemical based	99	3
7. Textile based	271	3
8. Miscellaneous	712	22
Total	4245	120

Source: The General Manager, District Industries Centre, Kurnool

Sample units are selected by using convenience random sampling technique. The present study is confined to 120 units. A systematic record of small scale industries in Kurnool district does not exist. Many small scale industries are operating without registration as registration of small scale industries is not compulsory. The present study is confined to those small scale industrial units which were registered with the District Industries Centre, Kurnool by the end of March 1993. The study is based on primary data. The data relating to working, borrowing, financial and production aspects of small scale industrial units in Kurnool district are drawn from primary sources i.e., from the small scale industrial units with the help of a structured schedules of a questionnaire. The data collected from primary sources are subjected to statistical treatment for clear analysis and interpretation. Statistical tools like averages, ratios, tables, simple and compound growth rates and t-test have been used to analyse the performance of small scale industries for a period of one year (2002-03). The concept of Modern small scale industrial units as used by the Government of India is adopted in this study⁽⁵⁾

Limitations of the Study

1. The sample units which have not been traced, or the units closed down and the units which were denied to give information were dropped from the analysis.
2. The information collected from the most of the units was from the vagaries of the memory as the owners of sample industrial units have not maintained proper books of accounts. All efforts were made, however, to extract correct information through informal discussions with the owners of the industrial units.

Growth of Small Scale Industries

There were 15169 small scale units working with a capital investment of Rs.11782 lakhs and generated employment of 33,239 persons by the end of March, 2002. The information relating to the growth of small scale industries in Kurnool district is presented in Table 2.

Table 2 : Growth of Small Scale Industries in Kurnool District for the period 1983-84 to 2001-02									
Particular	Category of Industry								Total
	Agro	Mineral	Engg	Forest	Food	Chemical	Textile	Misc.	
Number of Units									
1983-84	335	251	197	173	-	-	25	273	1254
1991-92@	1134	1048	582	364	38	99	271	704	4240
	(29.81)	(39.69)	(24.43)	(13.80)			(123.0)	(19.73)	(29.76)
2001-02*	2987	1155	1767	1810	294	29	276	6851	15169
	(16.34)	(1.02)	(20.36)	(39.73)	(67.37)	(-7.07)	(0.18)	(87.32)	(25.78)
Capital Investment (Rs. in lakh)									
1983-84	404.1	126.3	331	14.7	-	-	29.9	227.2	1193.2
1991-92@	1768.8	1560.3	576.8	114.8	-	600.9	120.7	809.2	5551.5
	(42.21)	(141.92)	(9.28)	(85.12)			(37.96)	(32.02)	(45.66)
2001-02*	1434	2498.3	1170	(90.44)	517.8	179.34	922.24	945.3	11782.24
	(-1.89)	(6.01)	(10.28)	1153			(66.40)	(51.11)	(11.22)
Employment (Number)									
1983-84	5562	5268	1942	562	-	-	900	3648	17582
1991-92@	9360	13563	3818	1365	59	909	1876	5523	36473
	(9.73)	(19.68)	(12.08)	(17.86)			(13.56)	(6.42)	(13.43)
2001-02*	6229	5619	6238	2424	3158	735	2135	6701	33239
	(-3.35)	(- 5.86)	(6.34)	(7.76)	(525.3)	(- 1.91)	(1.38)	(2.13)	(- 0.89)

Note: @ Figures in brackets indicate percentage annual simple growth rates over the year 1983-84

*Figures in brackets indicate percentage annual simple growth rates over the year 1991-92

Source: The Chief Planning Officer, Hand Book of Statistics, 2002-03.

The above table 2 shows that the over all growth rate for small scale industrial units decreased from 29.76 percent in 1991-92 to 25.78 percent in 2001-02 over the previous years 1983-84 and 1991-92 respectively. The highest growth rate is noticed in case of Miscellaneous industries (87.32 percent) in the year 2001-02 and is followed by Food based industries and Forest based industries by 67.37 percent and 39.73 percent respectively during the same period. The lowest growth rate is at 0.18 percent in the case of Textile based industries during the year 2001-02. The overall growth rate of investment in small scale industries is highest at 45.61 percent in 1991-92 over the previous year 1983-84. But it decreased to 112.2 percent in 2001-02. The growth rate of investment is the highest at 141.92 percent in Mineral based industries and the lowest growth rate is recorded at -7.02 percent in case of Chemical industries in 1991-92 and 2001-02 respectively. Per unit investment is worked out to Rs.95152, Rs.13093 and Rs.77673 in 1983-84, 1991-92 and 2001-02 respectively. Small scale units in Kurnool district have created employment of 17582 persons, 36473 persons and 33239 persons in 1983-84, 1991-92 and 2001-02 respectively. Per unit employment is 14.02 persons in 1983-84. But it decreased to 8.6 persons in 1991-92 and 2.19 persons in 2001-02. It is noticed that the highest growth rate of employment is marked at 525.3 percent in 2001-02 in Food based industries. There is also negative growth

rate of employment in the case of Agro, Mineral and Chemical based industries during the same period. It is also observed that there is decrease in the over all growth of small scale industrial units as well as in the growth rate of investment and employment. This may be due to the closure of many small scale units or adoption of capital intensive technology in the small scale industrial units in Kurnool district.

The compound growth rates of small scale industries in terms of the number units, investment and employment is worked out and given in table 3. The growth in small scale industrial units is 16.45 in 1991-92 and 13.59 in 2001-02 over the years 1983-84 and 1991-92 respectively. It was the highest in the case of Textile based industries (34.70 percent) in 1991-92. The compound growth rate in case of capital investment and employment is worked out to 21.19 and 9.55 in the year 1991-92 while it was 7.82 and -0.92 in 2001-02 respectively. The highest growth rate of capital investment is noticed in Mineral based industry (36.92 percent) in 1991-92 and it is followed by Forest based industry (29.29 percent) during the same period. It is observed that here is a marginal decline in the compound growth rate of employment in 2001-02 over the previous year 1991-92. Table 3 gives details of compound growth rates of small scale industries by category wise in respect of number of units, capital investment and employment.

Table 3: Compound Growth of Small Scale Industries in Kurnool district for the period 1983-84 to 2001-02 (In Percentage)

Category of	Number of Units			Capital Investment (Rs. In Lakhs)			Employment (In number)		
	1983-84	1991-92*	2001-02**	1983-84	1991-92*	2001-02**	1983-84	1991-92*	2001-02**
1. Agro		16.47	10.17		20.27	-2.08		7.46	-3.99
2. Mineral		19.56	0.98		36.92	4.82		12.55	-8.43
2. Engineering		14.50	11.75		7.19	7.33		8.82	5.03
4. Forest		9.74	17.40		29.29	25.95		11.73	5.91
4. Food		-	22.70		-	-		-	48.89
5. Chemical		-	11.55		-	-11.39		-	-2.10
6. Textile		34.70	0.18		19.06	22.55		9.62	1.30
8. Misce..		12.57	25.55		17.21	19.84		5.32	1.95
Total		16.45	13.59		21.19	7.82		9.55	-0.92

Note: *Figures in brackets indicate percentage annual Compound growth rates over the year 1983-84
 ** Figures in brackets indicate percentage annual Compound growth rates over the year 1991-92
 Source: Compiled from the data given in Table 2

Cost Structure

Cost structure shows element wise distribution of total cost. The cost structure of sample industrial units in Kurnool district reveals that raw material is the most important cost among different elements of cost. In total it accounted for 68.0 percent of the total cost. It is the important cost in all categories of industries excluding Chemical based industries. It is as high as 90 percent in case of Food based industries and is followed by Agro based industries (86.7 percent), Miscellaneous industries (55 Percent), Forest based industries (53.0 percent), and Mineral based industries

(47.1 percent). Labour cost is the second most important element of cost. It accounted for nearly 14.3 percent of the total cost. Raw material and labour accounted for 82.4 percent of the total cost. It seems that Textile industries, Engineering industries, Mineral industries and Forest industries are most labour intensive industries compared to Food, Agro, Miscellaneous and Chemical based industries. Power, depreciation, taxes, repairs and renewals, transport and miscellaneous expenses are the other notable elements of total cost. Table 4 shows category wise and element wise distribution of cost of 120 sample industrial units.

Table 4: Cost Structure of Small Scale Industrial Units, 2002-03 (Rs. in '000)

Category of Industry	Raw material	Labour	Power	Transport	Deprn.	Taxes	Repairs & Renewal	Mis.	Total	Average cost of Production per unit
1. Agro based	18043.0 (86.7)	1251.3 (6.0)	202.0 (1.0)	578.8 (2.8)	316.5 (1.5)	108.3 (0.5)	183.2 (0.9)	137.4 (0.7)	20821 (100)	867.5
2. Mineral	4361.5 (47.1)	2137.7 (23.1)	1112.4 (12.0)	250.3 (2.7)	148.3 (1.6)	437.5 (4.7)	463.5 (5.0)	266.1 (2.9)	9270 (100)	343.3
3. Engineering	15308.8 (63.5)	616.4 (25.6)	482.6 (2.0)	24.1 (0.1)	726.2 (3.0)	97.0 (4.0)	439.1 (1.8)	12.1 (0.1)	24128 (100)	1206.4
4. Forest	1288.8 (53.0)	545.7 (22.4)	1052.0 (4.4)	232.5 (9.6)	46.2 (2.0)	73.0 (3.0)	710 (2.9)	66.1 (2.7)	2432 (100)	162.1
5. Food	9169.7 (90.0)	305.7 (3.0)	354.6 (3.5)	22.4 (0.2)	203.8 (2.0)	75.4 (0.7)	30.6 (0.3)	26.5 (0.3)	10189 (100)	1698.2
6. Chemical	1500.2 (21.9)	549.3 (8.0)	686.6 (10.0)	12.4 (0.2)	480.6 (7.0)	686.6 (10.0)	454.5 (6.6)	265.0 (3.9)	6866 (100)	2288.7
7. Textile	302.9 (55.6)	149.3 (27.4)	27.2 (5.0)	3.3 (0.6)	10.9 (2.0)	5.5 (1.0)	19.1 (3.5)	26.7 (4.9)	545 (100)	181.7
8. Misc.	4241.5 (55.0)	308.5 (4.0)	1542.4 (20.0)	385.6 (5.0)	7712.2 (10.0)	192.8 (2.5)	115.7 (1.5)	154.2 (2.0)	7712 (100)	350.6
Total	54216 (68.0)	11412 (14.3)	5460 (6.9)	1510 (1.9)	2704 (3.4)	1676 (2.1)	1777 (2.2)	954 (1.2)	79708 (100)	664.2

Note: Figures in bracket indicate percentages to total
 Source: Data collected from sample industrial units

The average cost of production of small scale industries is worked out to Rs.6,64,200. Per unit production is highest in the case of Chemical based industries

followed by Food based industries, Engineering based industries, Agro based industries, Miscellaneous industries and Mineral based industries.

Investment

The total capital employed by the sample industrial units is worked out to Rs.5,09,97,000. On an average, the capital per unit is Rs.4,25,000. But there is wide variation among different categories of industrial units in the case of capital employed per unit. It ranged between Rs.1,05,000 to Rs.54,46,000. Capital employed per unit is the highest in the case of Mineral based industries and lowest in the case of Forest based industries. There are two elements in the total capital employed. They are fixed capital and working capital. In the case of all categories of industries the share of fixed capital is significantly greater than that of working capital. In an aggregate the share of fixed capital in

total capital is 67.5 percent. The share of fixed capital in the total capital is highest in Chemical based industries (82.9 percent). It is followed by Forest based industry (78.4 percent), Miscellaneous industry (73.7), Engineering industry (72.2 percent), Food based industry (69.0 percent), Textile based industries (65.9 percent), Agro based industry (62.4 percent), and Mineral based industries. On an average fixed capital is worked out to Rs.2,87,000 and working capital is worked out to Rs.1,38,000. There is wide variation in the composition of the total capital among different categories of industries. Table 5 exhibits the details of capital employed by sample industrial units at the end of March, 2003.

Table 5: Capital Employed by Sample Industrial Units, 2002-03

(Rs. in '000)

Category of Industry	Total Fixed Capital	Total Working Capital	Total Capital	Capital employed per Unit		
				Fixed	Working	Total
1. Agro	8040(62.4)	4851(37.6)	12891(100)	335(62.4)	202(37.6)	537(100)
2. Mineral	7194(59.7)	4856(40.3)	12050(100)	266(59.7)	179(40.3)	5446(100)
3. Engineering	6110(72.2)	2354(27.8)	8464(100)	306(72.2)	118(27.8)	423(100)
4. Forest	1230(78.4)	338(21.6)	1568(100)	82(78.4)	23(21.6)	105(100)
5. Food	2310(69.0)	1040(31.1)	3350(100)	385(69.0)	173(31.1)	558(100)
6. Chemical	1980(82.9)	410(17.2)	2390(100)	660(82.9)	137(17.2)	797(100)
7. Textile	270(65.9)	140(34.1)	410(100)	90(65.9)	47(34.1)	137(100)
8. Miscellaneous	7280(73.7)	2595(26.3)	9875(100)	331(73.7)	118(26.3)	449(100)
Total	34414(67.5)	16584(32.5)	50997(100)	287(67.5)	138(32.5)	425(100)

Note: Figures in bracket indicates percentage to total.

Source: Data Collected from Sample Industrial Units.

There are five sources of capital for small scale industrial units in Kurnool district. They are: own funds, commercial banks, development banks, friends

and relatives and money lenders. Source wise capital employment by sample industrial units is given in Table 6.

Table 6: Source-wise Capital structure of Sample Industrial Units, 2002-03

(Rs. in '000)

Category of Industry	Owned Funds	Organised Sector		Un-organised Sector		Total
		Bank Credit	Development Banks(SFC)	Friends & Relatives	Other (Money Lenders)	
1, Agro	9031(70.0)	1931(15.0)	1542(12.0)	385(3.0)	-	12891(100)
2. Mineral	7639(63.4)	2610(21.7)	938(7.8)	863(7.2)	-	12050(100)
3. Engineering	5839(69.0)	890(10.5)	1015(12.0)	120(1.4)	600(7.1)	8464(100)
4. Forest	1008(64.3)	155(9.9)	150(9.6)	160(10.2)	95(6.1)	1568(100)
5. Food	870(26.0)	1460(42.6)	-	1020(30.5)	-	3350(100)
6. Chemical	1060(44.4)	110(4.6)	1170(49.0)	50(3.0)	-	2390(100)
7. Textile	260(63.4)	15(24.4)	-	50(12.2)	-	410(100)
8. Miscellaneous	5255(53.2)	100(22.2)	2075(21.0)	355(3.6)	-	9875(100)
Total	30962(60.7)	2190(18.6)	6890(13.5)	3003(5.9)	695(1.4)	50997(100)

Note: Figures in bracket indicate percentage to total.
Source: Data collected from sample industrial units.

Internal source (own funds) is the major source of capital. It accounted for nearly 61 percent of the total capital employed. The rest is obtained by borrowed sources. They accounted for about 39 percent of the total capital employed. Borrowed sources may be divided into organized sector and unorganized sector. Organized sector consists of commercial banks and development banks. Unorganized sector consists of friends and relatives and money lenders. The share of organized sector in the total borrowed funds is about 82 percent and the rest (18 percent) is accounted by unorganized sector. Borrowed sources may consist of bank credit, development banks (SFC), friends and relatives and money lenders. Bank credit accounted for about 19 percent of the total capital employed. The share of development bank in the total capital employed is 13.5 percent. The share of friends and relatives and money lenders is 7.3 percent. Money lenders provided financial assistance to Engineering and Forest based industries. The role of money lenders is negligible in the sources of funds for small scale

industrial units. The debt equity ratio of small scale industrial units in Kurnool district is 0.65:1. On the whole the industrial units are depending more on ownership capital. Thus the formulated hypothesis that **"the small scale industrial units in Kurnool district are depending more on own funds than the borrowed funds"** is accepted. It is also true in the case of all categories of small scale industries with the exception of Chemical and Food based industries.

Capacity Utilisation

52.2 percent of the sample industrial units are utilizing equal or less than 50 percent of their installed capacities. 33.3 percent of the total industrial units are working in between 50-70 percent of the installed capacity. Only 14.2 percent of the units are able to utilize the installed capacities to the fullest extent. There is necessity to increase the capacity utilization by the industrial units in the district. Table 7 shows the capacity utilization by the sample industrial units.

Table 7: Capacity Utilisation by Sample Industrial Units, 2002-03

Category of Industry	Extent of Utilisation (in percentage)				Total Units
	10-30	30-50	50-70	70-100	
1. Agro based	-	4	18	2	24
2. Mineral	-	10	11	4	27
3. Engineering	3	7	6	4	20
4. Forest	2	3	7	3	15
5. Food	-	2	3	1	3
6. Chemical	2	1	-	-	3
7. Textile	-	-	2	1	3
8. Miscellaneous	9	7	4	2	22
Total	16(13.3)	47(39.2)	40(33.3)	17(14.2)	120(100)

Source : Data Collected from Sample Industrial Units

Lack of demand, non-availability of adequate raw material, labour, financial problems and competition from other producers are the important causes for

under utilisation of the capacity in small scale industrial units in the district. Table 8 reveals the category wise causes for under utilization of installed capacity.

Table 8: Reasons for Under Utilisation of Capacity by Sample Industrial Units (Number)

Category of Industry	Lack of Demand	Problem of Raw Material	Labour Problem	Problem of Finance	Competition	Other Causes	Total
1. Agro based	3(12.5)	9(37.5)	14(58.3)	6(25.0)	8(33.3)	4(16.7)	24(100)
2. Mineral	22(81.5)	-	16(59.3)	9(33.3)	18(66.7)	15(55.5)	27(100)
3. Engineering	15(75.0)	9(45.0)	10(50.0)	3(15.0)	10(50.0)	4(20.0)	20(100)
4. Forest	12(80.0)	3(20.0)	4(26.7)	10(66.7)	8(53.3)	5(33.3)	15(100)
5. Food	1(16.7)	1(16.7)	5(83.3)	3(50.0)	4(66.7)	1(16.7)	6(100)
6. Chemical	-	1(33.3)	1(33.3)	2(66.7)	3(100)	1(33.3)	3(100)
7. Textile	3(100)	2(66.7)	-	2(66.7)	-	-	3(100)
8. Miscellaneous	10(45.5)	4(18.2)	1(81.8)	7(31.3)	12(54.5)	10(45.5)	22(100)
Total	66(55.0)	29(24.2)	58(48.3)	42(35.0)	63(52.5)	40(33.3)	120(100)

Source : Data Collected from Sample Industrial Units.

About 55 percent of the units are facing lack of demand for their products. This is a serious problem which can be solved through new promotional methods. The second important problem is labour unrest. This problem can be solved by having human relation approach in management. Cordial industrial relations are to be maintained. About 53 percent of the industrial units are facing the problem of competition. This problem is to be tackled by increasing the quality of the product and decreasing the cost of production. 35 percent of the units are facing financial problems. Industrial units should take proper steps to mobilize adequate funds both from internal and external sources. Non availability of sufficient raw material, break down of machinery, power cuts and transport bottle necks are some of the other causes of under utilizations of capacity. Therefore, the formulated hypothesis that "the small scale industrial units in Kurnool district are utilizing their full installed capacity" is rejected.

Employment

In total 120 sample units generated employment for 1192 workers. On an average employment generated per unit is worked out to 10 persons. Agro based industries, Mineral based industries, Engineering based industries and Textile based industries are more labour intensive compared to other category of industries. In aggregate capital employed per worker is worked out to Rs.42783. There is wide variation in the case of capital employed per worker among different categories of industries. Labour employed may be family labour or hired labour. The share of hired labour in total employment generated by the units is about 81 percent. In all categories of industries the share of hired labour is greater than family labour. But there is wide variation among different categories of industrial units. The details with regard to employment generation and form of employment are presented in table 9 below:

Table 9: Employment Generated by the Sample Industrial Units, 2002-03

Category of Industry	Employment generated (Number)				Capital employed per Worker (Rs.)
	Family Labour	Hired Labour	Total	Per Unit	
1. Agro based	66(19.7)	269(80.3)	335(100)	14	38479
2. Mineral	84(20.5)	326(79.5)	410(100)	15	29390
3. Engineering	22(13.6)	140(86.4)	162(100)	11	52247
4. Forest	16(24.6)	49(75.4)	65(100)	5	24123
5. Food	8(22.9)	27(77.1)	35(100)	6	95714
6. Chemical	2(9.5)	19(90.5)	21(100)	7	113810
7. Textile	6(20.7)	23(79.3)	29(100)	10	14138
8. Miscellaneous	25(18.5)	110(81.5)	135(100)	6	73148
Total	229(19.2)	963(80.8)	1192(100)	10	42783

Source: Data Collected from Sample Industrial Units

It is also tried to know the relationship between output, labour and investment. In an aggregate output per man-day is worked out to Rs.214.8. Output Labour ratio is the highest in the case of Chemical based industries followed by Food based industries,

Engineering based industry, Agro based industries, Miscellaneous industries, Mineral based industries and Textile based industries. Details with regard to output and investment, output and employment, employment and investment ratios are presented in the following Table 10.

Table 10: Relationship between Output, Investment, Employment, and profit in Sample Industrial Units

Category of Industry	Output and Investment	Production per Employee (Rs. in'000)	Employment per one Lakh rupee of Investment (Number)	Profit per Unit (Rs. in '000)	Rate of return on Investment
1. Agro based	1.62	62.15	2.61	71.70	13.35
2. Mineral	0.77	22.61	3.40	73.32	16.43
3. Engineering	2.85	148.93	1.91	23.28	5.50
4. Forest	1.55	37.42	4.15	- 4.18	- 4.0
5. Food	3.04	291.11	1.05	29.49	13.20
6. Chemical	2.87	326.95	0.88	90.24	22.65
7. Textile	1.33	18.79	7.07	11.47	8.39
8. Miscellaneous	0.78	57.13	1.36	87.76	19.55
Total	1.61	68.76	2.34	58.77	13.83

Source: Data Collected from Sample Industrial Units

The output to capital investment ratio is worked out to 1.61. The ratio is highest in case of Food based industries (3.04), followed by Chemical based industries (2.87) and Engineering based industries (2.85). The lowest ratio (0.77) is noticed in the case of Mineral based industries. The ratio between output and employment is Rs.68.76. It is the highest in Chemical industry and the lowest is in Textile industry. It is also revealed that production per employee is Rs.68.76. The highest productivity per employee is Rs.326.95 in Chemical industry while the lowest production is in case of Textile industry (Rs.18.79). The employment per one lakh rupee of investment is worked out to 2.34 persons. It is highest in case of Textile industry (7.07 persons) and the lowest is in case of Chemical industry (0.88 persons). Thus the formulated hypothesis that " **there is significant**

relationship between output, labour and employment" is accepted.

Profitability

The table 10 shows the details about the profitability of the sample industrial units during the year 2002-03. On an average the profit per unit is worked out to Rs.1,02,210. The profit per unit is highest in Chemical based industry and the lowest in the case of Textile based industries. All the units are in profit zone except in the case of Forest based industries. The rate of return on capital employed is at reasonable level. On an average it is worked out to Rs.13.83 percent per annum. Chemical based units are at the top making a return of 22.65 percent. Engineering units are at the bottom making a return of 5.5 percent. Forest based

units are at a loss of 4.0 percent per annum. All the units are earning reasonably good return on their capital investment with the exception of Forest based industries even though there is under utilisation of installed capacities. Therefore, the formulated hypothesis that “ **the small scale industries in Kurnool district are earning a good rate of return on their capital investment** ” is accepted with the exception of Forest and Engineering based industries.

Findings

- Raw material is the major cost of production. It accounts for about 68 percent of the total cost. It varies from one industrial unit to another.
- 52.5 percent of the total small scale industrial units are utilizing less than 50 percent of their installed capacities. About 14 percent of the units are only able to utilize their full installed capacities. Labour unrest, lack of demand, financial problems, competition from other producers etc. are the important causes for under utilization of their installed capacities.
- The capital employed per unit on an average is Rs.4,25,000. There are wide variations among these units. The share of fixed capital in the total capital is 67.5 percent. Own funds is the main source of capital. It accounted for nearly 61 percent of the total capital employed. The share of organized sector in the total borrowed funds is about 82 percent.
- 120 small scale units under study have generated employment for 1192 persons. Employment per unit is worked out to 10 persons. The share of hired labour in the total employment is 81 percent.
- The rate of return on capital employed is reasonably good in all categories of small scale industrial units except in Forest based industry.

Suggestions

- Industrial units have to increase demand for their products by new promotional methods. It is possible to face the competition by increasing

the quality of product and decreasing the cost of production. Labour problems are to be solved by having human relations approach in management. Non availability of adequate funds is to be tackled by taking necessary steps to mobilize adequate finance both from internal and external sources. Entrepreneurs and the government should prepare in advance a plan for regular supply of raw materials to the industrial units to over come the problem of non availability of adequate raw material. Government should also arrange for regular supply of power and transport infrastructure.

- A detailed enquiry is to be made about the quality of the raw material, price of the raw material and suppliers of the raw material. Latest techniques in inventory management are to be adopted for proper maintenance of raw material. If the raw material availability is seasonal in nature, adequate stocks are to be maintained by purchasing raw material in busy season of supply.
- The industrial units in Kurnool district should plan to borrow more funds from the organized external sector. They can approach commercial banks and development banks to borrow more funds on the strength of the ownership capital to maximize the benefits to the owners. Since most of the units are earning a good rate of return, this is not a problem for the units. The benefits for the units may be maximized at the cost of the borrowed capital. The units can reach a reasonable debt equity ratio of 2:1. There is ample scope for reaching this ratio.
- Forest based industry can come out from loss zone to profit zone by reducing cost of production, increasing the quality of the products, widening the market area through new promotional methods and utilizing its installed capacity to the fullest extent.

Conclusion

The small scale industries will have to face stiff and challenging competition from the large scale industrial sector. To compete with large scale sector it is necessary for them to introduce quality control measures. These units would have to select that

technology which would generate cost efficient and high quality optimal output. The industrial units would be required to conduct systematic and continuous market research and make tie-up arrangements with the prospective buyers to dispose of their produce immediately besides adequate publicity of their products. Government should also take steps to introduce labour intensive technology to create greater employment opportunities to over come the problem of unemployment in rural and backward areas.

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