Chapter - II

DESIGN AND METHODOLOGY
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Statement of the Problem

During the last three decades, many countries of the world have resorted to the development of enterprise as a means to achieve rapid economic development resulting in certain gainful employment for masses. The myth that entrepreneurs are born and not created seems to be slowly fading away.

The entire change and development of the civilization, to a large extent is the result of trade and Commerce and industrialization. In this development, human resources in general and entrepreneurs in particular play a pivotal role. McClelland has rightly hypothesized that the need for achievement in individual, i.e., entrepreneurial potential is a psychological factor, which engenders economic growth and decline. The sense of motivation and innovations introduced by entrepreneurs brings about the required changes in the society transforming the perception of economic thinking, which is necessary for achieving economic development.

Small Scale Industries and Employment Generation: Creating sustainable and gainful employment opportunities to absorb the ever-increasing unemployed labour force especially in rural areas has been a key issue. Focus of all developmental strategies adopted by most developing nations for development of any economy, the role of small scale industries in India have been playing an important role in pursuing social agenda and are of late, adopting them to meet the growing needs of the economy. In the changing scenario, they will have to re-position their business strategies and develop new lines of products and approaches which are suited to facilitate employment generation and also with the expansion of small / rural industries and activities in services sector.

It is a known fact that the small scale industries play an important role in the economic development of the country. The contribution of this sector in India is phenomenal. It is one of the major sectors contributing to GDP, industrial production, employment generation and exports. Small scale industries account for 40 per cent of gross value of output in the manufacturing sector and provide employment to over 25 million people. In addition, it accounts for about 39 per cent of the total national exports and 7 per cent of GDP. Small scale industries in India produce more than 750
products of all types and constitute 95 per cent of industrial units. Summary results of the third census revealed that there are over 10.5 million SSI units working in India and have acquired prominent place in the socio-economic development of the country.

Keeping pace with the higher global and domestic economic growth, the SSI Sector recorded an accelerated growth rate of 13.0 per cent during 2006-07 on top of the higher growth rate of 12.3 per cent achieved during 2005-06. The exports from the SSI sector increased by about 21 per cent during 2006 to Rs. 1, 50,242 crore, constituting almost 33 per cent of total Indian exports in 2006. Similarly, by the end of 2007, the total number of SSI units increased to 128.4 lakh units, employing 312.5 lakh persons, which is second only to agriculture.

With the emergence of WTO in 1995, the sector was exposed to the world and started facing challenges like increased competition, lack of finance, lack of infrastructure, obsolete technology, lack of proper marketing set-up and poor managerial ability. Globalization has some far-reaching implications for the small scale sector. The removal of QRs (Quantitative Restrictions) and reduction in tariff rates on imports, removal of TRIMS (Trade Related Investment Measures) and strengthening of TRIPS has made this sector face a do or die situation.

Considering the growing importance of the SSI sector to the overall economic development of the country, the Government of India initiated a number of policy measures during the year, such as, enactment of MSMED Act, 2006 which, inter alia, revised the SME definition to enable technology upgradation, brought out the concept of micro enterprise and services sector into focus and renewed the thrust on delayed payments. To give further impetus, the Government of India also announced on February 27, 2007 a new policy package for Promotion of Micro and Small enterprises, containing therein a number of significant proposals, such as, early enactment of a law on Limited Liability Partnership, augmentation of SIDBI’s Portfolio Risk Fund to enable the Bank to cover more micro enterprises, raising the credit guarantee limit to Rs.50 lakh, increasing the corpus fund for CGTSI, a technology mission for MSME, etc. These policy measures are expected to put SME sector on a high growth trajectory.

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Constraints of entrepreneurs: It has been increasingly recognized through various studies that the small scale industries have various constraints, which inhibit their access to international markets. Some of the major constraints are:

1. Lack of financial support.
3. Inability to scale up production and services due to inadequate working and fixed capital.
4. Inability to adopt sophisticated technology to meet the quality standards required by the market.
5. Lack of standards and standardization.
6. Lack of adequate infrastructural support.
7. Absence of what is called ‘Brand Equity’ to enter “niche markets”, and
8. Tendency to remain small.

Need for the study

Even though the country completed 50 years of Independence, the unemployment problem is increasing day by day. According to the Planning Commission, the labour force was 37.4 percent of the total population in the country. About 18.7 million persons remained unemployed at the end of March 2005. A Job opportunity generated during 1991 to 2005 was only 2.1 percent and still 5.7 million people were jobless. The Small scale industrial units are aimed at to provide employment opportunities to overcome the unemployment problem of the country the present study is designed to evaluate the impact of SSI in employment generation.

Review of Literature

Nirankar Srivastav and Ricky A.J. Syngkon (2007), stated that the number of SSI’s are growing in the state in a significant manner. Meghalaya’s economy has begun to join the process, which is known as preliminary stage of “Industrialization”. At this stage, it is not possible to take full advantage of technology and economics of scale by the existing SSI’s and the economy at large. As a result, in the present form, this sector is not in a position to contribute to the growth of state economy in a big

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way. It appears that unexploited sources, scale of economies/positive-externalities, technology applications and research and development could become the key factors for the further growth of the economy of Meghalaya. It is recommended to develop additional industries in the state that lead to the full exploitation of economies of scale and technical advances to lead the state to a solid, stable and sure progress.\(^2\)

CUCTs International (2006)\(^3\) study on globalization and small scale industry examined implications of liberalization policy on sick industry. In order to become competitive, the Indian Small and Medium Enterprises (SME) sector needs to move up to higher value added outputs and attract more investment in terms of Foreign Direct Investments (FDI). As ‘faster will eat slower’ rather than ‘big well eat the small'; SME sector requires facilities in terms of infrastructure, raw material, linkages with machinery supplies and credit facilities, regional markets, entrepreneur-friendly policy with respect to excise duty, Value Added Tax (VAT) and abolition of octroi tax.

Ramachandra Rao, et.al (2006)\(^4\) in their study found that there is declining share of commercial bank credit to the SSI vis-à-vis the non-SSI sector in the post-reform period. These results indicate the high incidence of bad loans. The pronounced decline in SSI advances is interpreted to the declining share of SSI loans of commercial banks.

The study of Ramappa and Basavaraja (2006)\(^5\) on “the impact of liberalization on SSIs” observed that the government of India had put the whole SSI sector into hot water due to the new economic policy. The study made comprehensive picture of the data before liberalization (from 1980-1981 to 1990-1991) and post-liberalization period (from 1991-1992 to 2002-2003). The study suggested evolving a policy of easy credit, marketing, increase in tax free period, reservation of products for manufacturing, de-licensing and upgradation of technology to liberate the SSI units in the country.

Fuxin Jiange and Chunping Zhou (2006)\(^6\) studied that the small enterprises have pushed China’s Economic transition forward, but felt China’s small enterprises are also still in a transition themselves. The study concluded that the prospects of SSI in China are positive with the process of China’s economic transitional reforms in
terms of factor endowment structure, industries structure, specialized cooperation and support from China's Government.

Balasubramanya (2005)⁷ mentioned that due to globalization and liberalization, SSI in India finds itself in an intensely competitive environment. This resulted in decrease in growth rates in terms of units, employment, output and exports. The declining trend is attributed to reduced economic infrastructure and credit and technology obsolescence, inferior quality and low productivity of SSI units compared to large scale industrial units.

According to Luken and Stares (2005)⁸ many developing countries see small and medium sized enterprises (SMEs) that are in the field of exports facing a dilemma. They do not know how to respond to the rising social and environmental requirements of global supply claims.

Rana Bijoy Deb (2004)⁹ in his case study on employment generation in small units opined that rural-based industrial units have proved to be more efficient in generation of employment with low involvement of capital as compared to their urban counterpart. Also the stronger units with higher investment in fixed and working capital generate more employment.

Jaya Krishna (2004)¹⁰ In his study on “World Trade Organization and its Implications on Small Scale Industries in Karnataka”, assesses the entrepreneurs’ awareness of both qualitative and quantitative information, from 30 randomly selected entrepreneurs during May-June 2002, in and around the rural and urban areas of Bangalore. His conclusions are: a) Perennial activity dominates over seasonal activity. b) Young generation entrepreneurs employ more managerial staff than the old generation entrepreneurs. c) Entrepreneurs are facing sanitary and phytosanitary problem. d) Small Scale industries are facing competition from large and medium scale industries outside the state rather than within the State. e) Entrepreneurs are experiencing the impact of WTO and its agreements across the year of establishment and generations. However, their awareness of the WTO agreements and their implications is poor.
Dutta A and Singh M.K (2003)\textsuperscript{11} stated that the small scale industry is a key to India's growth and a tool for alleviation of poverty and unemployment in the country.

Yamawaki (2002)\textsuperscript{12} examined the various aspects of the evolution and structure of clusters in Japan, namely, what has given rise to cluster and what benefits are acquired by small firms from participating in clusters.

Kimura (2002)\textsuperscript{13} made an empirical analysis of the choices made by Japanese firms with respect to subcontracting status.

Berry et al (2002)\textsuperscript{14} discussed the role of clusters and subcontracting as factors in the evolution of small and medium firms in Indonesia during the past quarter century.

Valsamma Antony (2002)\textsuperscript{15} in her article titled "Prospects and Growth of SSI s in India: An overview", observes that adequate and timely availability of working capital and marketing avenues for the SSI products should be ensured for improving their competitive strength in the domestic and global markets. There is a need for providing better information and an efficient networking for the SSIs besides development of quality infrastructural facilities.

Audretsch (2002)\textsuperscript{16} provided a conceptual and empirical account of the dynamic role of SMEs in the US economy.

Nugent and Yhee (2002)\textsuperscript{17} gave an overview of the evolution of the small and medium enterprises sector in Korea during the past quarter century.

Bhavani (2002)\textsuperscript{18} looks at firm level process of diffusion of new technologies for the small enterprises in the developing economies.

According to Narasimham (2002)\textsuperscript{19}, the Small industrial sector certainly has an important role to play in the economy and a proactive policy that is aimed at providing infrastructure and encouraging technology development and marketing would have a greater chance to succeed because of the present policies of reservation and subsidization.
A.U. Khan and Zaquallah Shaikh (2001)\textsuperscript{20}, in their paper on the financing of small scale industries in Maharashtra, pointed out that the primary objective of the industrial policy of Maharashtra is making small scale industries more competitive domestically as well as internationally. This policy should be well supported through a wide range of promotional interventions to achieve economic priorities of employment generation, technological change and export promotion, to bring about transparency in the system and thereby, reduce corruption. With changes in demand patterns and consumer preferences and a wider range of choice for most products, marketing is likely to become a key factor for enhancing industry’s competitiveness.

Joseph Xavier, S. (2000)\textsuperscript{21}, conducted a study on the contribution of commercial banks in the development of small scale industries in Tirucharapalli district of Tamil Nadu. The performance efficiency of SSI units was studied with the help of financial ratios with a view to analyze whether financial assistance from commercial banks had helped them improve their net worth and profit.

According to a report of the Planning Commission\textsuperscript{22}, small enterprises, which cover a large part of the service sector, have to be targeted for generating desirable high level of employment with limited capital investment.

Mathew (1999)\textsuperscript{23} found that small enterprises are almost equated with poverty and deprivation in the modern world.

M.G. Basavaraja (1999)\textsuperscript{24}, focussed on “Role of small industries: a study of Karnataka”, and stated that the small industrial entrepreneurs should collectively fight for a swadeshi movement and try to create public opinion in favour of indigenous goods. In Karnataka there were about 2,361 lakh registered small industrial units with a capital investment of about 3,000 crores. They manufactured more than 8,000 items. The total output was estimated at about Rs. 20,000 crores per annum. Small industrial units contribute nearly 39.00 per cent to exports from Karnataka units.

Robin Mukherjee and Pranab Kumar Bhattacharya (1999)\textsuperscript{25} made an attempt to examine the growth performance of small industrial units in West Bengal over the last 25 years. For this purpose, alternative measures of growth rate presented the same picture.
Jeans (1999)\textsuperscript{26} suggested that, instead of supplying equipment and designs, if the government can introduce them to local business environment from which small producers could master new technical and organizational skills thus strengthening their ability to introduce other products and process innovations indigenously.

Vepa (1998)\textsuperscript{27} discussed in his study the organizational issues and suggested setting-up of a department for small scale industry in the ministry of industries and to include all organizations that look into issues relating to small scale industries in that department.

According to Nath (1998)\textsuperscript{28}, persistent efforts have been made to promote small scale industries in India as a source of large-scale employment generation and equitable distribution of income.

According to Kalcretty Eresi (1998)\textsuperscript{29}, “Small Scale Industries have come to occupy a pivotal role in the industrialization of the economy”. They are engines of economic progress and act as catalytic agents for the Trans formation of a traditional society in to a modern one. Their success depends upon capable persons running the show. Good entrepreneurs can make a sick unit viable whereas an incompetent one can make even a successful unit sick. It is therefore suggested that management development programmes be organized by the district Industries centre (DIC). Such programmes would prevent sickness and ensure growth of small scale units on a stable basis.

Vepa (1997)\textsuperscript{30} focussed on the importance of the small scale sector not only for providing jobs at reasonable cost but also as a dynamic engine of growth for the national economy.

Veena Bhatnagar (1995)\textsuperscript{31} observed that the Importance of SSI has undergone a change with the expansion traditional industries, modern manufacturing, electronics and service sectors.” Growth of the SSEs in the latter two categories is indicative of coming of age of the economy as also the emergence of a skilled and educated entrepreneurial class. The new concept is the establishment of SSEs not as competitors to the large scale enterprises but as supplementary supporting units. Thus we see the emergence of a section of SSEs which have the patronage of large scale enterprises and yet have a rational for their independent existence.
“Emerging Industrial policy reforms: Implications for small size enterprises” (1995)\textsuperscript{32} by SP. Kashyap, found that the small industrial sector helped in generation of large scale employment, wage foods and incomes in a fairly dispersed manner, and in mobilizing dormant skills and resources. It also enhanced entrepreneurship, engaged village economics and aided the process of backward area development. It played an important role in the overall process of industrialization and economic development.

Das Gupta (1994)\textsuperscript{32} argues that the management of the resources available within an organization is the best and the cheapest way of arranging resources. In this regard, small industrial units should persuade the suppliers to extend their terms of payment which helps. Such arrangement should be made ahead of the time when the additional credit will be needed. Similarly, customers can often be persuaded to finance a large order, ensure part payment with the order also through progressive payment as the job proceeds. A better inventory management ultimately leading to ‘just in time’ system of management of inventory would release a substantial amount of funds to the small industrial units for utilization in higher yielding avenues.

According to Sarma and Diwan (1994)\textsuperscript{34}, the government has put in sustained efforts in terms of monetary and fiscal instruments, to assist the development of healthy and dynamic small industries. It is pointed out that entrepreneurial culture is required for the development of the sector.

Sanjey Kumar Goil\textsuperscript{35} in his work, “Management of small scale business”, suggested that the Indian entrepreneurs can adopt the Japanese model by adopting just-in-time and quality circle approaches so that they can avoid waste of time and money and improve the quality of their products. By being less Indian in terms of character and more considerate, they can change the attitude of the workers and make them more duty conscious.

According to Malcom & Adiseshaiah (1992)\textsuperscript{36}, the small and cottage industries have an important role in India’s industrial development. It has been estimated that they contribute about fifty per cent of gross value of output originating in the manufacturing sector. These industries are established, Inter alia, to create immediate and permanent employment on a large scale at relatively small costs to
ensure equitable distribution of the national income to effect decentralization of the industries by creating industrial estate and to raise the standard of the people.

Like in other states, central investment subsidy scheme had been implemented in several notified Panchayat Samithies in different backward district of Andhra Pradesh. According to Sathyanarayana & Ramakrishna (1991) the scheme covered seven district of Telangana region, all the four districts of Rayalaseema region and only two districts of Coastal Andhra, namely, Srikakulam and Prakasam. In regard to size capital intensive units set up in a few district accounted for disproportionately higher share in the total amount of subsidy. For example, 50 units set up in Medak district accounted for 36.83 per cent of total subsidy disbursement under the scheme by 1977. Industry-wise analysis of the scheme revealed that non-agro industrial groups received 61.24 per cent of the total subsidy disbursed by 1977. Since the subsidy was related to capital investment, it can be inferred that the pattern of subsidy distribution among industrial groups reflects the pattern of industrial development in the state.

Subbaraman (1991) mentioned that the job generating capacity of village industries can not be over emphasized. Unemployment breeds poverty and it can be eradicated by spreading the network of village industries in every nook and corner of the country.

Rao and Nagaiah (1991), studied various aspects of small scale industries such as the new official policy, incentives, programmes made under five year plans, organizational support, role of IDBI, infrastructural planning and sickness. They make several suggestions for strengthening small scale sector.

According to Rao & Nagaiah (1991) various policy measures were taken over the year to promote employment and investment in this sector. The various agencies set up by the government and the financial institutions have been rendering consultancy services mainly technical consultancy to the small industry.

Kaveri (1990) concluded that small industrial sector has acquired greater importance in Indian economy. In terms of employment generation, this sector is next only to agriculture and accounts for about one fourth of the total exports of the
country. The importance of small Industry in the Indian economy was recognized at the beginning of the plan period itself.

Sandesara (1988)\textsuperscript{42} observed that the small industry was promoted very fastly in India over the last four decades, based on official report and empirical studies. The industrial sector grew faster relative to other activities but within this, the slower growth of the small industrial sector as compared to the large scale industrial sector has meant a declining share of the former within the industry. In the small industrial sector, the more modern and large factories grew faster than the traditional and smaller ones.

Ganguly (1988)\textsuperscript{43}, studied the performances, policies, problems and prospects of the small industrial sector. In spite of vigorous efforts being made to promote the small industrial sector as a matter of conscious policy decision, the small industrial sector does suffer from, certain problems such as inadequate availability of raw materials, inadequacy of financial assistance, lack of effective marketing and encroachment of the areas reserved for small industrial sector by the medium and large scale sector etc.,

Hina Sidhu (1988)\textsuperscript{44} revealed in his study the relative importance of small industrial sector in employment generation had increased over a period of time. The other findings of the contribution of large-scale sector to employment in the household industries, a decline in the contribution of the large-scale sector to employment generation, a substantial contribution by the five industry groups namely, chemicals, non-metallic mineral products, basis metal products and machine tools to employment generation in Gujarat and inadequate evidence on the application of the stylized model in Gujarat as the structural changes in the industrial sector we accompanied by rather emphasis on the small-industrial sector.

The basic objective of giving assistance in the form of incentives is to improve the efficiency of the small scale industry and to promote a healthy, viable small scale sector. Sandesara\textsuperscript{45}, while reviewing the experience of small scale industrialization in India, concluded that the programmes of assistance made the small scale sector more attractive and entry-conducive than it was before. As the criteria employed to judge the effectiveness of assisting agencies are the units assisted and the amount of
assistance given. There was a temptation to assist the new units rather than the established units and to give more assistance to the units once selected than was absolutely necessary. The financial assistance was wasted in the sense of investing more capital than was actually required and also using the cheap capital for substituting labour. The waste of capital manifested in different forms: Creation of excess capacities which were not fully utilized, high capital intensity, high interest costs and promotion of ghost firms to get the assistance which was ultimately sold in the market to other units.

The Indian Experience of promoting small scale industry over the last four decades was reviewed by Sandesara (1988) based on official reports and academic studies on the subject.

Financial assistance to the small scale sector was also studied by Patvardhan (1988), based on the data made available from the same RBIs study. According to him, outstanding loan was of Rs.30802 on an average per assisted unit in the backward districts, as against Rs.138897 in other districts. The institutional loans constituted 72.5 per cent of the average loan outstanding in the backward district and 70.5 per cent in the in the non-backward districts. At all India level, 28.2 per cent of the units are reported to have non-institutional borrowing with an average outstanding of Rs.26,313. Access to even non-institutional credit was limited in industrially backward areas of the country as revealed the study. The average outstanding non-institutional credit was Rs.17692 and Rs.9,050 for industrially backward states of Bihar and Madhya Pradesh respectively, as against the average outstanding non-institutional credit of Rs.61,665 and Rs.97,381 for industrially forward Maharashtra and Mumbai Metropolis. Unmistakably, the access advantage of finance from the banks or the outside agencies increased with the increasing size of units, as reflected in the study. The poor reach of financial institutions was brought into sharp focus when their advances on a long-term basis were merely 10.6 per cent against the net fixed assets of the small units, though these institutions could advance upto 75 per cent of the fixed assets.
As per the analysis of the data of Annual Survey of Industries (ASI), Surendar (1988) concluded that smaller the increase in the size of the industry, the smaller would be increase in the average size of the units and vice-versa. This is more so if the increase in the size of industry is a consequence of technological development.

Biswanath and Goldar (1988) used an index of relative efficiency based on the total factor productivity. Relative efficiency between small scale and large scale industrial units was presented for selected industrial categories. Relative labour productivity, capital productivity and relative efficiency of small scale industries were less than unity indicating that they were less efficient than large scale industry, except one. They concluded that small units could not be relied upon in generating employment efficiently as capital intensity and relative efficiency were positively related. Negative relationship was reported between short-term bank borrowing and relative efficiency.

While reviewing the empirical evidence related to small scale industries, J.C. Sandesara (1988) presented a summary of main findings under policy premises, industrial estates, long-term financing, reservation and location. The potential of small scale industry in India is based on the policy premise that it is more capital-output ratio and more employment promoting in relation to capital. The empirical evidence casts doubts on this proposition. Small scale units located in the industrial estates enjoy infrastructural facilities and locational advantages through different linkages. It is hypothesized that the units in the estate perform better than those outside. Here also only limited number of investigations supported this hypothesis. Coming to the efficiency of units which are provided long term finance by the concerned State Financial Corporations, it was concluded that assisted units showed more efficient use of and better rewards to labour whereas non assisted units showed more efficient use of and better rewards to capital. Small scale units operating in reserved categories are expected to show better performance in exports than general category units for the former are immune to the competition from more efficient large industries. The general findings show that reserved industrial units did not outshine the performance of others. Modern small scale industrial units, despite the Government’s best efforts to decentralize them, were located in the vicinity of large units with a few exceptions.
like those in Punjab and Haryana. Such locations were linkage-based as large units were either exclusive or principal customers of small scale industrial units.

Ram K. Vepa\(^{51}\) (1988) reviewed the progress of the small scale industrial sector in India over the last three decades and identified some key areas like, technology, support, credit flow and market assistance which, in his opinion, needs greater attention on the part of policy makers if the small industry had to meet successfully the challenges posed by modern technologies.

Using National Accounts Statistics, Sandesara\(^{52}\) (1988) reported that for the period 1950-1951 to 1983-1984 both large (factory sectors) and small (non-factory sectors) sectors grew over a period of time in terms of manufacturing, income generated by them, but the latter grew at a slower pace. As a result, the share of small industry in the total industrial income declined from 46 per cent in 1950-1951 to 37 per cent in 1983-1984. Having identified the major and minor small industries, the study reported that major industries suffered a decline in their aggregate share which slid from 84 per cent to 81 per cent and the minor industries improved their share from 16 to 19 per cent during the period 1970-1971 and 1982-1983.

Bishwanath Goldar (1988)\(^{53}\) compared 37 industries at the three-digit level the technical efficiency of small and large-scale industries for the year 1976-1977. He presents estimates of relative labour productivity (relative efficiency) of the modern small industrial units. Goldar finds that the small industrial units (compared to the large scale industries) generally have low labour productivity, high capital productivity, low capital intensity (measured as capital per employee) and low total factor productivity. He infers that the modern small industrial sector is inefficient relative to the large sector in a large number of industrial units. As such the small industrial units cannot be relied upon as a source of efficient employment generation.

Using Central Statistical Organization (CSO) data, Sandesara's\(^{54}\) study analyzed industry-wise net value added at 1970-1971 prices for unregistered manufacturing (equated to SSI) for two benchmark years 1970-1971 and 1982-1983. Between these two years the share of unregistered manufacturing in total net value added in manufacturing declined from 37.3 per cent to 36.3 per cent. Employing above percentage shares as cutoff points, nine industries were identified as major
industries in both the years and the remaining minor. The major industries were: Food products non-metallic mineral products, metal products, other manufacturing and repair services. Other seven industries were called minor industries. The major industries lost their share in unregistered manufacturing from 84 per cent to 81 per cent whereas minor industries improved their share to 16 per cent between 1970-1971 and 1982-1983.

Focusing attention on the structural aspects of the modern small scale industry, the study by Ramakrishna Sarma\(^5\) revealed that consumer goods industries had an insignificant place in the state as they had 28.66 per cent share in the total number of units, 23.79 per cent in employment, 20.84 per cent share in fixed capital and 23.15 per cent share in output in 1972. For every 1 lakh rupees of investment, employment created was 32 persons in consumer goods industries, which were about 21 persons in capital goods industries for the same magnitude of investment. Size-structure of small unit in each state in 1972 brought to light that 5,950 units/having individual fixed capital investment of Rs.50, 000 and below belonged to tiny sector I, each on an average employing not more than 9 workers.

Saxena (1987)\(^6\) focussed on “regional input-output model for SSIs”, observes that the sectors that create more value added per rupee of output also create more wage incomes and generate more output. Similarly, sectors that create more employment per rupee of increased output also generate more wages income. But such a significant correspondence was not observed between the sector during more employment and sector generating higher output or value added. Therefore his conclusion upholds the thesis that the net surplus created by the small scale industries is not observed between the various types of linkage multiples. That is, the sector that generates more output through thesis linkage also induces larger employment wage and income gains along with the higher generation of income.

According to Sarkar and Mukherjee (1987)\(^7\) the direct and indirect dependence of small industrial units on organized large scale forms 404 units from three regions viz., Calcutta Municipal Corporation, Howrah Municipal Corporation and the rest of urban Municipal area coming under the jurisdiction of 37 other municipalities form the basis of the study. It is found that the growth of small enterprises is not critically department on one single big enterprise.
Using data presented in Annual Survey of Industries for 1960, 1963, 1964 and 1965, Asher (1987)\textsuperscript{58} showed that the small industrial sector is more efficient. His study shows that the small scale factory combines the largest number of workers with a rupee's worth of fixed capital; that a rupee worth of fixed assets produce almost seven times an output in small as compared to large industries and that the value added by a rupee worth of fixed investment in small factories is at least three times as large as that for a large factory.

Tarun\textsuperscript{59} in his book (1986) focused on the programmes, policies and problems of small scale industries in India. He opined that the problem of industrial development in India was the problem of transplanting scientific technology so as to raise productivity.

Mohanty (1986)\textsuperscript{60} showed that industrial units depend on advance order for carrying on production. This dependence has been more in the case of engineering, electrical, chemical and forest based industries than in the case of others. Mohanty further revealed that the proportion of skilled labour to total employment is generally high in small industries excepted in the case of agro and marine and mineral based industries, which indicates the importance of training institute in the expansion of small industries.

Committee on Credit Facilities for Village and Small Industries Sector I (1984)\textsuperscript{61}, for which A.M. Kushro was the Chairman, has drawn important conclusions and made recommendation to make credit available to VSI sector. The committee found that small units received relatively larger amount of institutional finance than the tiny, village and cottage industries. It recommended that the institutional finance had to be linked with production and turn-over. The assessment of working capital needs was not properly based on realistic norms and the banks did not keep in view the various constraints faced by the units. As a result, small units started their operations with inadequate working capital which resulted in liquidity problems and also adversely affected their viability. Another problem noted by the committee was lack of coordination between SFCs and banks in provision of term finance by the former and working capital by the latter.
N. Thanulingom (1984)\textsuperscript{62} studied small scale engineering industries in Coimbatore region and explained the inter-relationship between small scale engineering industry and the large-scale engineering industry. He examined the problems arising out of the inter-relationship between the small industrial units and the rest of industries. According to him, the factors which influenced the entrepreneurial development were previous occupation in Industry, favourable demands for their products and previous employment as worker in a large scale unit.

Page (1984)\textsuperscript{63} investigated the relationship between firm size and technical efficiency in four manufacturing industries of India, namely Printing, Machine tools, Soap and Shoes. The sample firms are drawn from a purposive sample survey of manufacturing units conducted during 1979-1981. The financial and economic data refer to the 1979-1980 financial year. The bulk of small and medium units are drawn from enterprises located in or near Bombay, Calcutta and Delhi. Large firms are drawn from all regions of India. In effect, the sample has a limited geographical spread. A Translog production function in four factors, namely capital skilled and unskilled labour and material is fit to the survey data by linear programming method. The technical efficiency measured as the ratio of actual output to potential output is found to range from 42 per cent in shoes to 69 per cent in Machine tools. Consequently, Page interprets the estimates of technical efficiency as indicating substantial scope for improvements in the total factor productivity of firms in the sample.

In his book Vasanth Desai\textsuperscript{64} (1983) pointed out that problems affecting the small scale industries ranged from organization to management. He concluded that the rapid development of small scale industries solely depends upon their readiness to accept modern technology and adaptation of professional management techniques.

Japan began as a developing country in the later half of 19th century and was quick to appreciate the importance of small entrepreneurs for generating economic growth (Vepa 1983)\textsuperscript{65}.

Ramakrishna Sharma (1982)\textsuperscript{66} who made a comprehensive study on growth and problems of small scale sector in Andhra Pradesh observed that the backward districts of the state improved their relative positions in terms of units, employment
and capital between 1966 and 1975. He felt that majority of small units are facing problems of raw material and finance.

Ramakrishna Sarma\textsuperscript{67} studied Industrial Development in Andhra Pradesh (1982). He made a comprehensive study of the growth and problems of the small sector in Andhra Pradesh and observed that the backward districts of the state improved their relative position in terms of number of units, employment and capital during 1966-1975. He further observed that a majority of the small units faced problems in getting adequate raw materials and finance.

Mortality was higher among very small sized units and units located in backward districts. The share of older units in backward district was smaller than that of non-backward districts\textsuperscript{68}.

Ramakrishna Sarma's (1982)\textsuperscript{69} Study was the first comprehensive study on modern small scale industry in Andhra Pradesh using secondary data for a 15 year period from 1961 to 1975. Location quotients, which would give an idea of relative importance of different industrial categories in the small scale sector of Andhra Pradesh State, were calculated for the year 1972 in terms of units and output, using data of the all India Report on Census of Small Scale Industries\textsuperscript{70}. Food products, beverages, wood products, mineral products and repairs and services had location quotients more than unity in terms of units and output, implying that these industries were localized in Andhra Pradesh. Besides these five industries, leather products, metal products, the manufacture of electrical machinery and miscellaneous manufacture industries were also localized in the state in output terms. Low level of small scale industrial development was gauged in terms of state’s share of 5.79 per cent, 3.30 per cent, 0.35 per cent and 4.76 per cent in total number of units, output, value and employment respectively in the small sector in India as a whole, as against state share of 8.0 per cent in country’s population.

Growth dimensions of the small sector were presented region-wise, backward and non-backward districts-wise, in terms of units, employment and capital invested. Though all the districts of Rayalseema, which were industrially backward, improved their combined share in number of units, Small scale industrialization was lopsided as industrially developed districts and Andhra and Telangana regions had quotients of
industrialization having more than one. Similar was the disproportionality with respect to employment and investment. Extending the analysis further to rural-urban locations in all districts, the study concluded that a few urban areas in each district accounted for lion's share in units, employment and investment. An interesting revelation of the study was that developed districts attracted modern small scale industries, whereas non-developed districts attracted resources-based non-SIOG units.

Using RBI survey data for 1976-7977, Nagaraj attempts to discern relationship between performance variables like wages, employment, and productivity and profitability, the proportion of unskilled workers was not very large, average being 23 per cent with a range of 4 to 45 per cent. The average yearly earnings were Rs.1971. Variation in value added per worker, also called labour productivity, and variation in earnings per worker across sample small scale industries were not corrected. The coefficient of variation of labour productivity was much higher than that of wages, which implied that wages paid to the worker had not depended upon the contribution made to the output. Average wage seemed to have settled around the ruling “market rate”. It would further mean that benefits of any increment to the productivity accrued to the capital, not to labour. The study reported positive and significant relation (0.5) between variation in the productivity and fixed capital per worker. Correlation between productivity and profitability (profit divided by capital plus labour costs) was also positive and significant (0.407), which implied increase in capital cost per unit. Among the industries very high positive correlation (0.8) was noticed between productivity and share of value added by each industry. Comparing differentials of profitability (profits after tax as percentage of net worth) of small sector and corporate sector, a relative shift in the proportion of total production in favour of the small scale sector was predicated in all cases where the profitability differential was wider.

George (1982) emphasized that small industrial sector in general look for direct attacks on poverty and labour under utilization but those are unlikely to be successful without radical change in the ownership of the means of production after the industrial revolution.
According to Ramakrishna Sarma (1982), of Andhra Pradesh the impact of incentives namely central and state subsidies, on the industrial development of backward areas and on the development of different types of industries, using data available in the office of the Director of Industries, Government of Andhra Pradesh. Based on district and industry-wise review of central subsidy scheme from 1971-1972 to 1976-1977, the study observed that Telangana region had the highest share (64.03 per cent) in the subsidy, followed by Rayalaseema (34.33 per cent) and Coastal Andhra (1.44 per cent). The three districts, Medak, Chittoor and Kadapa had a combined share of 58.36 per cent in total subsidy. Analyzing disbursement of subsidy unit-wise it was reported that small scale sector, consisting of units with an investment of less than Rs.10lakh, received only 23.26 per cent of the central subsidy. Study of another incentive scheme known as the state incentive scheme (old) and sales tax refund scheme, applicable to all areas of the state and implemented during 1969 to 1975, revealed that aggregate share of the top three district was 60 per cent of the total amount of the subsidy sanctioned, with individual shares of 38.4 per cent, 11.2 per cent and 10.4 per cent accounted for by Hyderabad, Karimnagar and Guntur respectively. For the entire Andhra Pradesh state, the study reported rank correlation magnitude of 0.40 between capital quotient and incentive quotient. Yule is coefficient calculated on the basis of two attributes, namely quotient of industrialization (for which quotient of investment was used as a proxy) and quotient of incentives, worked out to 0.74. Thus the study concluded a positive correlation and association between the levels of industrialization and the amount of the incentive claimed by each state. Taking into account incentive quotient values, the study brought to light that Telangana claimed a disproportionately higher share of the incentive amount in the large scale sector, while Rayalaseema and Coastal Andhra received disproportionately higher share of incentive amount in the small scale sector.

Yet another state investment subsidy scheme, whose impact was studied, was the state investment subsidy scheme (new scheme) introduced in 1976. The districts which came under the purview of the central investment subsidy scheme and some notified industries were not eligible under the state investment subsidy scheme, 1976. The impact of the scheme was very limited because the entrepreneurs were more attracted to the central than to the state subsidy track as the former was more lucrative.

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Ojha (1982)\textsuperscript{24} reviewed the progress made in increasing the flow of institutional finance to small scale sector from the RBIs study conducted in 1977-1978 which revealed the pattern of financial assistance given to the small units. Inspite of increased flow of credit, the share of 'tiny' units in it has been insignificant. Proprietary and partnership firms formed 68 per cent and 28 per cent of the total number small units assisted by commercial banks and other financial institutions respectively and account for only 18 per cent and 51 per cent of institutional credit. Private limited companies which constituted 3 per cent of the total units with investment of Rs.2lakh in plant and machinery accounting for 94 per cent of the units availed of 48 per cent of the institutional finance. Thus the study revealed the supply of the institutional credit has been disproportionate taking into account the number of small scale units which had no access at all to the institutional finance.

Tulsi (1980)\textsuperscript{25} concluded that the scheme with its defective feature of providing benefit to all small industrial units unequally which shows it as improper method of providing incentives, the reason being since different small industrial units were subject to different levels of excise duty, those which bear higher rate of excise duty would enjoy the larger benefits and those which attract the excise duty at quite a smaller rate should receive smaller benefits.

Objectives of the Study

The specific objectives of the study are:

1. To review the status of small scale industries development and employment generation in India and in Andhra Pradesh in general;

2. To study the pattern and progress of small scale industries development in Nellore District;

3. To examine the small scale industries development and employment potential in selected units in Nellore District;

4. To identify the problems confronted by the small scale industrial units in Nellore District; and

5. To suggest appropriate policy measures for the development of small scale industries to generate employment opportunities.
Methodology

Nellore District is purposely selected for the study because of the proximity and familiarity of the researcher. The study will make use of both secondary and primary sources of data. The secondary sources include the data and information published in the Reports of Currency and Finance of RBI, RBI Bulletins, Economic survey, Statistical Abstracts, Annual Reports of planning Commission and Ministry of Industry, Annual Reports of SIDBI and Annual Survey of Industries. Reports of Directorate of Industries and SIDC, Hand book of District statistical and Annual Reports and Action plans of District and Financial Institutions in the District are also used.

Sampling

Primary data is collected from the sample small scale industries in Nellore district, one of the districts of Andhra Pradesh, by adopting stratified sampling method. All the Small scale industries in the district from 1999-2000 to 2008-2009 are listed out. A sample of 10 per cent is drawn at random covering all categories of small scale industrial entrepreneurs belonging to different social groups (SC, ST, BC and Others) and different product lines. There are 1204 small scale industrial units in Nellore District. From this 120 small scale industrial units (equal to 10 per cent) are selected for this study covering all categories, social groups and product lines.

2.1. Distribution of sample small scale units by category

The distribution of sample small scale units of different categories is presented in table 2.1.
Table 2.1

Division-Wise Distribution of small scale units by category

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Category</th>
<th>Revenue Division</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Nellore</td>
<td>Gudur</td>
</tr>
<tr>
<td>1</td>
<td>Agro based Industries</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(38.89)</td>
<td>(27.78)</td>
</tr>
<tr>
<td>2</td>
<td>Forest based industries</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(28.57)</td>
<td>(35.71)</td>
</tr>
<tr>
<td>3</td>
<td>Textile based industries</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(42.86)</td>
<td>(21.43)</td>
</tr>
<tr>
<td>4</td>
<td>Mineral based industries</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(38.89)</td>
<td>(33.33)</td>
</tr>
<tr>
<td>5</td>
<td>Engineering based industries</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(45.45)</td>
<td>(27.27)</td>
</tr>
<tr>
<td>6</td>
<td>Animal based industries</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(37.50)</td>
<td>(25.00)</td>
</tr>
<tr>
<td>7</td>
<td>Chemical based industries</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(36.36)</td>
<td>(27.28)</td>
</tr>
<tr>
<td>8</td>
<td>Other industries</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(25.00)</td>
<td>(37.50)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>45</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(37.50)</td>
<td>(29.17)</td>
</tr>
</tbody>
</table>

Note: Figures in parenthesis indicate percentages to total number of units.

Source: Field survey

From the above table, it is evident that the study has covered 120 small scale units. Out of these, 36 units (30.00 per cent) are agro based industries, 18 units (15.00 per cent) are mineral based industries, forest based industries, and textile based industries are 14 units each accounting for 11.67 per cent of the total sample units and engineering based industries, chemical based industries are 11 units each accounting for 9.17 per cent of the total sample units. The remaining 16 units belong to animal based industries and other categories each accounting for 6.67 per cent of the total sample units.

Regarding revenue division-wise distribution of sample units, 37.50 per cent of the sample units are located in the Nellore Division, 33.33 per cent are in the Kavali division and 29.17 per cent are in the Gudur division. In all the categories of units, there are more number of units in the Nellore Division when compared to the other division.
The distribution of sample units by the type of organization is presented in table 2.2.

The table 2.2 shows that out of 120 sample small scale units, 76.67 per cent are proprietary units, 16.67 per cent are partnership firms and the remaining 6.67 per cent are private limited companies. Among the 36 agro based units, 77.78 per cent are proprietary units, 16.67 per cent are partnership and remaining 5.56 per cent are private companies. Among the forest based units, 85.71 per cent are proprietary firms while 22.22 per cent are mineral based units. 18.18 per cent of the chemical based units are partnership firms. In the remaining categories, proprietary concerns are more than the partnership firms. Only 5.56 per cent of agro based units, 18.18 per cent of engineering based units, 12.50 per cent of animal based units, 25.00 per cent other categories of units are private limited. The data in the table reveals that in the case of small scale units, most of them are proprietary concerns; partnership is prevalent in the case of units involving more capital investment.

Table 2.2

Distribution of Sample Small Scale Units by Type of Organization

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Category</th>
<th>Proprietary</th>
<th>Partnership</th>
<th>Private limited</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agro based Industries</td>
<td>28 (77.78)</td>
<td>6 (16.67)</td>
<td>2 (5.56)</td>
<td>36</td>
</tr>
<tr>
<td>2</td>
<td>Forest based industries</td>
<td>12 (85.71)</td>
<td>2 (14.29)</td>
<td>0 (0.00)</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>Textile based industries</td>
<td>11 (78.57)</td>
<td>3 (21.43)</td>
<td>0 (0.00)</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>Mineral based industries</td>
<td>13 (72.22)</td>
<td>4 (22.22)</td>
<td>1 (5.56)</td>
<td>18</td>
</tr>
<tr>
<td>5</td>
<td>Engineering based industries</td>
<td>8 (72.73)</td>
<td>1 (9.09)</td>
<td>2 (18.18)</td>
<td>11</td>
</tr>
<tr>
<td>6</td>
<td>Animal based industries</td>
<td>6 (75.00)</td>
<td>1 (12.50)</td>
<td>1 (12.50)</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>Chemical based industries</td>
<td>9 (81.82)</td>
<td>2 (18.18)</td>
<td>0 (0.00)</td>
<td>11</td>
</tr>
<tr>
<td>8</td>
<td>Other industries</td>
<td>5 (62.50)</td>
<td>1 (12.50)</td>
<td>2 (25.00)</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>92 (76.67)</strong></td>
<td><strong>20 (16.67)</strong></td>
<td><strong>8 (6.67)</strong></td>
<td><strong>120 (100.00)</strong></td>
</tr>
</tbody>
</table>

Note: Figures in parenthesis indicate percentages to total number of units.
Source: Field survey
Small scale industries for the present study have been classified into eight broad categories.

1. **Agro Based Industries**: This group includes the units engaged in rice milling, flour milling, groundnut decorticating, groundnut oil extracting, oil crushing, rice hulling, and tamarind decorticating and making starch.

2. **Forest Based Industries**: Paper boards, saw mills, wooden furniture, beedi manufacturing etc., are considered under forest industry.

3. **Textile Based Industries**: Making readymade garments, power-loom, fabrics printing, silk reeling units, monofilament yarn nets constitute this group.

4. **Mineral Based Industries**: Table moulded bricks, road metal, making cement poles, granite cutting and polishing, polishing slabs, ceramic tiles, mosaic tiles, metal crushing etc., are clubbed under this industry.

5. **Engineering Based Industries**: Because of their less numbers both engineering and electronic units are included in this group. Making type-writer shares, television assembling, nails and bolts, steel rerolling, making aluminum vessels etc., are clubbed under this group.

6. **Animal Based Industries**: This group includes dairy farming, poultry units, poultry feed manufacturing, hatcheries and cattle etc.,

7. **Chemical Based Industries**: Polythene bags manufacturing, laboratory chemicals, rigid PVC pipes, industrial alcohol moulded plastic products, chicory soaps, writing ink, etc., are considered under this industry.

8. **Other Industries**: All those not included in the above groups are brought under this category. They are making shoe tags, the servicing of motor vehicles, leather footwear, Xerox, printing and binding, etc.,
Tools for Data Collection

A pre-tested schedule is constructed to collect the primary data from the sample beneficiaries relating to their socio-economic and educational background, factors responsible for selecting trade, bank finance, financial, production, distribution, profitability, employment potential and problems encountered by them.

A pilot study is conducted to elicit data from selected small scale industries. In the light of the information obtained from pilot study, the schedule is modified accordingly and primary data is collected from the selected small scale industrial units in the district.

Tools for Analysis of Data

The collected primary data is analysed using appropriate statistical tools like percentages, ratios, multiple regression, analysis of variance, principle component analysis and coefficient of correlation. Since the magnitude of data is voluminous, use of computer is inevitable.

Significance of the Study

The present study is a micro level study and the study evaluates the various factors responsible for selecting the trade and the role of financial institutions, production, and profitability and employment generation.

Scope and Limitations of study

The present study is confined to analyse the impact of small scale industries on employment generation. This may be applicable to all the areas in all the Districts and also for creation of self-employment in India in general, that is where similar socio-economic conditions are prevailing.
Plan of the study

The study is divided into nine chapters as given below:

The introductory chapter presents the review of the origin and development of small scale industrial units for the generation of employment in India.

The design and methodology of the study includes statement of the problem. Review of literature, objectives, methodology, sampling, tools for data collection, and plan of the study incorporated in second chapter.

The third chapter deals with the performance of small scale industries and employment generation in Andhra Pradesh.

The district profile, pattern and progress of small scale industries in Nellore district are included in the fourth chapter.

The fifth chapter analyses the socio-economic profile and factors for the selection of small scale industries in Nellore District.

The sixth chapter examines the performance evaluation of select small scale industries in Nellore District.

The employment generation by select sample small scale industries in Nellore District is evaluated in seventh chapter.

The eighth chapter analyses the problems of small scale industries in Nellore District.

The summary of findings and conclusions is presented in the final chapter.
REFERENCES


22. The Planning Commission had constituted a special group "Targeting Ten Million employment opportunities per year over the tenth plan period.


46. Ibid., pp.640-654.


67. Ibid., p.161.

68. Ibid., p.178.

69. Ibid., pp.168-181.
70. Ibid., pp.186-188.

71. Ibid., pp190-192.


