CHAPTER 2
LITERATURE REVIEW

For understanding the different studies that have been undertaken with reference to small scale industries as well as light engineering industry, a thorough review of the literature on the topic was carried out by the researcher. Though literature on small scale industries are available in books and journals, in large numbers, study about light engineering, especially about the units in North Malabar region was not found. Some academics have studied the small scale enterprises from employment point of view, some from the point of view of its role of balanced regional development; some viewed these units as the incubators for industrial growth and some others stressed the economic and political reasons behind promoting small scale sector. Studies of some scholars highlight the importance of small enterprises because of its simple technology, flexibility, some observed the problems associated with this industry, and others approached it from the point of view of the opportunities available to such enterprises in the globalised scenario.

Literature review is done from the point of view of the easiness of carrying on small scale industries. It is easy to start with a small business, with lower investment. An efficient, small industry sector can substantially enhance the efficiency of large factories by producing components or providing some ancillary services for large concerns. Thus large sized enterprises pave the way for the growth of small scale sector. At the same time small scale industries needn’t worry about the marketing problem and thus they can also concentrate on production which will bring the cost curve down.

In the study, Rana Zehra Masood\(^1\) opined that the pre independence view that the cottage and small industry faced direct competition from the big
industries stood revised. The big is not a substitute for the small and vice versa. Both were to grow; in a mutually supportive manner. The growth of small scale industries will result in the diffusion of entrepreneurial and managerial abilities and skills as well as technology throughout the country. There has been an enhancement of both production and exports along with the improvement in the quality of industrial products manufactured in the cottage industry sector thereby providing employment facility and source of income to the low income group living in rural and urban areas of the country.

An analysis made by Parande P.S\(^2\) stated that in the changed business environment, the concern of the small scale units about the competition from Multi National Companies (MNCs) is not well founded because the nature, quality and quantity of their products as well as their production pattern is different from products of foreign companies. In fact, MNCs may actually help the small scale industries through greater demand for spare parts, components, semi finished products etc. which the larger foreign firms won’t find economic to produce on their own.

According to Staley and Morse,\(^3\) a modern manufacturing economy is not complete and not as it should be, unless it has both large units and small. Large plants should not have to build into their own production structure all subsidiary operations that enter into their products. The study projected that an alert, efficient, small industry sector can substantially enhance the efficiency of large factories by relieving them of the necessity of making certain parts or performing certain operations. Economic growth requires more and more men with personal qualities of initiative and leadership, combined with skills in organizing and managing. Small scale enterprises are one of such channels for motivated and talented individuals for economic achievement.
In his study, O.P. Jain\(^4\) indicated that 52 percentage of the total industrial output in the country was the contribution of small scale industries in 1965-66. Almost the entire production in a number of manufacturing lines, viz., clinical thermometers, spindle inserts, hair clippers, plaster board, bifurcated rivets, hosiery, photographic and optical goods, metal products except machinery leather products, fruit products etc. was the contribution of small scale firms. These industries have also been moderately successful in undertaking sub-contract business for large factories in the public and private sector. Some public undertakings and few private undertakings have established ancillary units for manufacture of parts and components needed by them. Of the private large concerns, an outstanding instance is the Jay Engineering works, Calcutta, which engaged about 5000 workers for manufacture of parts and components of sewing machines and electric fans.

The following literature reviews highlights the role of small scale industries as the tool for creating employment which leads to social transformation. Compared to large scale, with lower amount of investment, small industries create more employment.

According to the study by H.S. Mehla\(^5\), small scale industries can more easily be decentralized than the large scale industries. There should be a drive to spread out small scale industries in the rural areas so as to provide the local people decent jobs without their having to move to big cities. He also observed from the survey conducted in Bombay that small scale industrial units tap sources of capital especially from family savings which wouldn’t have readily contributed to the country’s capital formation and industrial growth.

E. Bhaskaran\(^6\) analysed the performance of MSMEs in Tamil Nadu for the period from 1991-‘92 to 2008-‘09 based on important variables like total factory units, employment generation, investment, production and subsidy...
The study revealed that there is an increasing pattern in the number of units, employment, investment, production and subsidy. MSMEs have exhibited a good performance in the recent years. The analysis of data by the researcher clearly reveal that the increase in production is due to the increase in the number of units, investment and employment and increase in employment is due to increase in number of units and subsidy given. The study concluded that MSME manufacturing and service sector will be constrained to meet the expectations of the planners in future years, as far as employment generation is concerned and MSMEs should make use of announcements made in MSM Industrial Policy 2008 on infrastructure support, direct catalytic subsidy support, technical support, information and marketing support.

A research study, conducted by Christopher (et.al.) revealed that economic gains, followed by own ambition, social prestige and social responsibility are the important reasons for starting the small industry units. High demand for the product, experience in the line, encouragement and advice from friends and family are the factors which motivated them to set up the units. Capital shortage and Governmental red-tape were the most discouraging factors. Office of the Directorate of Industries and Small Industries Service Institute assisted in starting the small industry units.

Rana Bijoy Deb conducted a Post Doctoral Research under the UGC’s Minor Research Project Scheme in 2001, taking 55 sample modern small scale industrial units registered with the District Industries and Commerce Centre, in the Tinsukia district of Assam. The objective of the study was to identify the factors on which generation of labour employment (including entrepreneur) depends in modern small industrial units. The study revealed that:

- Rural based industrial units have proved to be more efficient in the generation of employment than their urban counterparts on different
grounds. In spite of various constraints, which stand on their way in utilizing plant capacities, the rural units are able to generate more employment with low capital as compared to their urban counterparts.

- Stronger units with higher investment in fixed and working capital generate more employment. They employ more skilled labour, pay higher wages, and procure finance from institutional sources, irrespective of their level of capacity utilization.

Dr Shankar Dayal Sharma, Late President of India\(^9\) pointed out that much importance was given to the development of small scale industries in many countries of Asia, Africa and Latin America, because of the labour intensive techniques and use of surplus manpower. In many developing and developed countries like Japan, USA, Italy, Canada, UK and Korea also the small and micro sector holds the key to industrial development. Each country has given emphasis to the development of small enterprises as an effective tool for social transformation. Thus it is remarked that the small scale sector is an important component of national industrial base and the driving force of developmental effort.

Studies have shown that SMEs in rural areas in the UK have outperformed their urban counterparts in terms of employment growth. Behind each of the success stories of rural entrepreneurship there is usually some sort of institutional support. Lu Rongsen\(^{10}\) in a study in West Sichuan highlights the important factors responsible for the rapid development of enterprises in the area. These include uniqueness of the products, local natural resources, strong and integrated policy support from the Government and a well planned marketing strategy and link up with larger companies and organizations for marketing nation-wide and abroad.

The study conducted by Partha Pratim Sahu\(^{11}\) analyzed the growth and performance of the unorganized micro and small manufacturing sector in
rural and urban India based on the data collected from NSSO for three periods of time viz. 1984 July- 1985 June, 1994 July- 1995 June, 2000 July - 2001 June. The study concluded that in terms of employment stake, the MSE sector occupies a place of great significance, both in rural and urban India. Within MSE sector, the groups of tiny and household run enterprises in the rural areas occupy an overwhelmingly dominant position, both in terms of number of enterprises and the number of workers employed. During the pre-reform decade many of the unorganized manufacturing units, most visibly the other Allied Manufacturing Enterprises (OAMES), had closed down and many workers got misemployed both in rural and urban areas. During 1994-95 and 2000-‘01, both the rural and urban areas recouped their lost ground, but qualitatively, it was much better performance in the case of urban unorganized manufacturing.

Some of the studies in the area of small scale sector have been done from the perspective of economic and political reasons behind promoting the sector.

As J.C.Verma and Gurupal\textsuperscript{12} observed, the growth of small business enterprises including small scale industries in India has been in the form of family business-or Hindu Undivided Family firms-where owners are managers and family members take on other tasks. The work atmosphere is permeated by unity, harmony, love and affection. While outsiders are employed as well, they are also treated as family and the line between their professional and social lives is usually blurred. They do not need formal rules, regulations or supervision. Blacksmiths, goldsmiths, carpenters, potters, brewers, bakers, weavers, dyers, vendors of milk products, tailors and drapers etc are examples of such small businesses operating in urban and semi-urban areas.
A study conducted by Deepak Nayyar\textsuperscript{13} highlighted that one of the aims of India’s small scale Industrial Policy was the dispersed development of units in rural areas and in less developed and backward areas. There has been only limited success in attaining this objective. The Industrial Policy regime in India exerted various disincentives to healthy development. Industrial licensing, monopoly control, exit policies and price controls are some of the features of the regulatory framework which deserve special mention. The above policies and controls actually could not help in boosting industrial development but rather remained as thorn in the way of fast development. When these controls were taken away by way of liberalisation, there has been faster development.

K.B. Suri\textsuperscript{14} in his study analysed that India has earned the rare distinction among the developing countries of having ardently supported the village and small scale industries throughout the post independence period. They have been protected from unequal competition of large scale industries through physical control on the product range and the growth of large industries, discriminatory fiscal levies on the large sector and direct financial aid and assistance and other promotional programmes for the villages and small scale industries. The small scale sector is very heterogeneous as it covers manually operated tiny house hold units widely dispersed all over the country as well as urban based relatively small large establishments using modern technology. The small units thus belong to three sub sectors (a) traditional village industries including handicrafts, (b) small unregistered household and non-household units not covered by Factories Act of 1948, and (c) registered small factories, using modern technology.

According to A.K.Sharma\textsuperscript{15} industrialisation is inevitable in a developing economy. It means an absolute and relative growth in the importance of factories, mills, mines, power plants, railways, manufacturing
and closely related activities, and activities involved in the building and operation of modern economic infrastructure and so on. An important shortcoming of industrial growth in India has been its unequal distribution between various regions. The areas which already had important industries have provided nucleus for concentration of industry. In case of goods the demand for which is uncertain, small scale enterprises can find favourable atmosphere. In large industries, bulk production is inevitable. When the nature of job is such that no division of labour is needed, small industries are good. It is also observed that in the case of small enterprises the social costs are low. Experience of China and Japan bears testimony to the fact that with the use of power and small machinery, many costs can be considerably reduced even in small enterprises.

In the words of Vasanth Desai in increasing and diversifying the base of industrial production as well as for increasing employment opportunities, the small scale industries have been playing important role in India. The time has come when small scale industries have to improve their productivity and efficiency by adopting modern technology and thereby reduce their cost of production and produce quality goods at competitive prices. There is ample scope for the existing small scale industries to double their plan and register three fold increases in exports. What is lacking is organisation, professionalisation, planning and co-ordinated efforts. Small sale enterprises are the beehives of entrepreneurship, innovation, growth and development. Of late, most of the Asian countries have adopted debate on policy of promoting and encouraging small enterprises as a strategy for accelerated industrialization. India has also given highest priority for fostering the development of the small scale sector.

Studies of some other scholars highlight the importance of small enterprises because of its simple technology, local resources, adaptation to
new technology and markets, flexibility in operation, etc. Components of large sized machineries and products can be contributed by the Micro and Small Enterprises using simple technology.

While evaluating the reasons behind promoting the growth of small scale sector, Hrishikes Bhattacharyya\textsuperscript{17} observed that both political and economic connotations can be traced for this. Economically, it aims at providing a greater degree of competition and free entry into business which will keep the price level steady and encourage the units to bring down the marginal cost curve through innovative techniques of production. Politically, the preservation and extension of competitive atmosphere is necessary for the survival of a democratic system. Concentration of economic power in the hands of a few large corporations squeezes the elbow room for independent political action, which in the long run tells upon the security of the nation. He also observes that small unit is always in a better position to change to new technology and embark upon product development at a much faster rate. The speed is the strength of small business. Speed coupled with flexibility of workers and capital enable a small unit to quickly switch over to new markets and diversify its product lines when the existing market dries up or a product loses its importance. He also adds that the mass production scale of large industrial units affects the motivation of workers and thus affects industrial relations negatively. Workers of a small unit are highly motivated because they see both the owner and the product from close range. The high morale of workers and a sense of belonging reduce conflict and friction in a small unit. As a result, incidents of strikes and lock outs are reduced and absolute productivity is increased.

A study was conducted by M.H. Balasubrahmanya (et.al.)\textsuperscript{18} to have a comprehensive view of R&D in SSI which covered the extent and magnitude of R&D and technology innovation activities, in the non tiny SSI on a sample
basis taking 1358 non tiny and 648 tiny units across the state of Karnataka during Nov. 1999 to April 2001. Information about the casual factors and objectives of R&D, personnel devoted to R&D, sources of technological support to the units etc. are collected. Major findings:

- External factors like competition, technology change and customer requirements and internal factors like management motivation are the primary motivating factors for SSI to engage in R & D.
- R & D in SSI is performed informally due to internal technological capability. Utilisation of external technological and technical support is only complementary and confined to friends/consultants. Institutional technological support is negligible and not easily accessible in SSI.
- SSI units which have performed R & D have larger scale of production, higher exports, higher capital productivities and higher output as compared to units which have not done R & D.

As observed by Dr. C.S. Prasad, Indian small enterprises have certain inherent strength which helped them to raise their share in total exports to 35 percentage even in the face of tough global competition. The sector possesses the advantage of immobility and flexibility. Their inventories are low and have weathered many adverse situations successfully and boldly. Indian SMEs have also had the advantage of local raw material and world class cheap labour which could be harnessed to the advantage.

Report of the Expert Committee on small enterprises chaired by Abid Husain, which addressed the need for the reforms in the existing policies, pointed out that efficiency and growth objectives of small scale industries would be seriously jeopardized if small industries are allowed to grow in a protective environment without exploiting economies of scale or attaining technical efficiency. Simple technologies could be more appropriate in the production of the basic attributes meeting with demand from low income
consumers. Micro and small enterprises may be able to use such technologies successfully with low capital-labour ratios, while larger capital intensive firms which cater to the high income segment of the market may use more mechanized technologies to produce the attributes demanded by the wealthier consumers. On the other hand small enterprises sometimes produce luxury products, making intensive use of skilled labour, which essentially cater to the luxury segment of the market and which the large firms cannot supply.

Few studies made by scholars who acclaim the importance of Micro and Small Enterprises as the incubators of industrial growth are reviewed hereafter.

As observed by S.K. Tuteja\textsuperscript{21} new SMEs are emerging worldwide; at the same time at a very rapid rate, some other SMEs close down. Viewed dispassionately, the high rate of entry and exit reflect the dynamism in the sector and indicates why it is often seen as an industrial incubator. SME’s contribution should be seen not only in terms of output, employment, income, investment or exports but also in terms of the more qualitative indicators such as synergies they promote with large industries, their contribution towards balanced regional growth, and their contribution in nurturing entrepreneurial spirit, innovation and in providing a nationwide pool of skilled and trained manpower.

Staley and Morse\textsuperscript{22} in their study opined that small industries are capable of giving learning by doing experience to more people and to a broader range of social classes in more parts of the country than large industries. The small scale sector open opportunities for people to rise by their own ability and hard work and create an atmosphere of self-reliant initiative, channel for social mobility etc. Much of the capital saving potentiality of small industry and of small factories in particular is sacrificed by inefficiencies of various kinds – in the management of the firm, the
irregularity of material supply, lack of adequate external service. They also observed that the gap existing between small factories and large ones in these and other aspects of operation is less in the industrially advanced countries than in the newly-industrializing ones. If a good part of industrial development can take place in smaller increments, through a dynamic and efficient small scale sector, there is better chance to discover the mistakes before the waste of resources has gone too far. A case study was undertaken in Jay Engineering Works, Calcutta, manufacturer of sewing machines and electric fans and it was found that it sub contracted to 150 small units, mostly within 5 miles of the sewing machine plant. The company representatives stated that they found the results highly satisfactory. The reviews revealed that larger firms are desirous of increasing their output and wish to use their equipments most economically and are prepared to give sub contracting orders to smaller firms if they can deliver the desired goods of the required quality at the scheduled time and at economic prices. This can be taken as an opportunity for small scale industries.

A field investigation conducted by Partha Patrim Sahu highlighted that the rate of absorption of improved technology is relatively poorer in rural areas for each component of improved technology. But there are no differences in the policy support extended to technological innovations in rural and urban areas. The barriers observed to adopt improved technology are problems connected with training and skill, raw material, non availability of technological changes, lack of awareness, desire to avoid risk in adoption of improved technology, low level of indigenous R&D, inadequate management skills and non availability of technically qualified persons to understand the complexities of and operate with the new technology. The study was conducted by collecting data from 399 small scale industries in the three Indian states viz. West Bengal, Haryana, and Maharashtra during 2000 April to June.
Micro and Small Enterprises play a very important role in the balanced regional development by reducing the concentration of economic power in the hands of few. Most of the Micro and Small Enterprises are self owned ones which employ few persons, distributing the income among themselves. Many studies have addressed this point in serious ways.

Smt. Neeta Prasad\(^{24}\) pointed out that the micro small and medium enterprises had lent a major hand in catapulting India to the position of one of the fastest growing world economies. Forty five percentage of the country’s manufacturing output and almost 40 percentage of its exports come from this sector. More important in this age of “inclusion” centric growth mantra is the fact that micro, small and medium enterprises generate huge employment – the present figure is around 42 million and can promote balanced regional development along with more equitable distribution of wealth. The thirteen million strong Micro Small and Medium Enterprises sector produces more than 6000 products and boasts of a total size of ` 5,60,000 crores. Having maintained a higher growth rate than the overall industrial sector, MSMEs contribute about 6 percentage to the GDP. With the progressive opening up of the Indian economy, several leading manufacturers in the automobile and other sectors are establishing their production facilities in India and sourcing their inputs and supplies from the MSMEs.

A comprehensive analysis made by Devendra Thakur and Siv Sankar Prasad\(^{25}\) exposes that the current economic conditions are conducive to the development of small scale sector. The socio economic policy of the country is to reduce progressively the concentration of economic power in few hands and to exchange decentralization of the industrial enterprises so that those living in remote place and backward regions can also share the benefits of economic development in the country. It is well known that per capita income generated by the growth of small industries is more than by other means.
Punjab in India, compared to other states or to the international states of Japan which is coming close to being the leading nation, achieved tremendous growth rate, through real encouragement of her small trade and industries. Importance of SSI (now MSME) is also due to the inter-industry relationships and inter-dependences in the economic system as a whole. The input of one industry is the outputs of another industry and vice versa. A major part of economic activity consists in producing intermediate goods for further use in producing final goods.

With the opening up of market in 1991, small scale enterprises are exposed to global competitiveness and business units maintaining quality and flexibility are cropping the benefits of globalization. Globalisation is increasing interdependence between people of all nations. In this era of globalization SMEs too have to internationalise.

According to K.K.Dwivedi\textsuperscript{26} Special Secretary and Chairman, Central Board of Excise and Customs, the term small scale sector is a misnomer. Only individually it is small in its size and operation, but cumulatively, it plays a major and significant role in the country’s industrial progress. In terms of production, value addition, exports etc. this sector matches the combined medium and large scale sectors. Despite this crucial role, the contribution of small scale sector is not widely known.

A study was conducted by Narendra Nath Akhouri and Radha R.Sharma\textsuperscript{27} taking 7 SMEs producing and exporting auto components based in Delhi region, and interviewing 21 CEOs and 41 Middle level Managers to bridge the knowledge gap and to explore the factors that contribute to high productivity in SMEs in the auto sector. The study concluded that there is statistically significant difference between professional of high performing units and low performing units on account of engaging leadership, employee engagement, cultural intelligence and positivity and negativity. This is very
specific to the auto SMEs since they are export oriented and the overseas clients are very demanding in terms of quality, speed and consistency of delivery.

A case study conducted by Preethi and Jeet\textsuperscript{28} throws light on the challenges faced by SMEs and presents strategies to come out from the tough times. Different industries such as chemicals, electronics, castings, fabrication, bottling plants, machining and processing industries in Jaipur and Moradabad region are selected as the sample for the study.

Important challenges include:

1. Capital is the single most important challenge factor that was holding back the growth of the SMEs in India. They lack access to private equity and venture capital and have a very limited access to secondary market instruments.
2. Understanding WTO agreements and their implications.
3. Fragmented markets in respect of their inputs as well as products, are vulnerable to market fluctuations. They also find difficulty to access inter-state and international markets.
4. Outdated technology and lack of awareness of global best practices.
5. Delay in settlement of bills by large scale buyers.

Strategies recommended:

- Leverage collective strength and jointly bid for projects and execute them based upon their expertise.
- Look at ways to increase production through upgradation of technology and updating skill of employees.
- Optimize operations, change their outlook and closely adhere to responsible business practices.
- HR development and management activities should be focused and the challenges that they face on their HR front should be addressed.
- To be successful in marketing, focus their business development efforts towards faster growing customers than on larger ones.

Maruthi Rao in a study carried on with objective of measuring the impact of Global Financial Meltdown (GFM) on small business and the practices to be adopted to mitigate the impact, found that as large number of small business units are ancillary units, depending on a single buyer for sales, most of them are in trouble due to GFM. Small businesses who heavily depend on overseas markets for business are also victims.

Regarding the practices to be adopted for mitigating the impact, he suggested that rework and rejection should be reduced through technology upgradation. Units can look for related diversification by producing products which meet the need of the industry which they are not serving regularly at present. The sample included 100 units consisting of automobile, petrochemicals, chemicals, and water treatment plants in various industrial areas in Karnataka during 2008-09.

M.P. Sivakumar observes that in the highly competitive environment, Government schemes for providing support for the growth of SMEs are proactive and are playing an effective facilitative role. Foreign Direct Investment flows into sectors such as infrastructure, telecommunication, transportation, electrical and electronic equipments and automobiles have opened up avenues to SMEs to emerge as a vibrant sector. As participants in the global value chain, the SMEs can gain entry into large avenues, expand their markets, find new niche markets for their products and become strongly visible in the global arena. Promotion of inter firm linkages has opened up new avenues for sub contract outsourcing and are used as a strategic measure for SME development.
K.K.Subrahmanian and Abdul Azeez\textsuperscript{31} stated that the industrial units facing the challenges of globalization could be large as well as small. In the Kerala context, the impact of globalization on small scale units is of critical concern because small scale industries sector is the source of bulk of employment in the modern industrial sector with less capital investment. As the economic reforms give room for the greater play of market forces and for the large scale units to enter into some of the areas earlier reserved for the small scale sector, there is erosion of advantages enjoyed by the small scale sector. Besides, the spirit of ongoing economic reforms lies in the reduction/removal of Government subsidies and assistances and facilities. The liberalization of foreign trade and foreign investment policies has put the small scale units in to struggle for survival in the vortex of global competition. So the small scale industrial units have to transform themselves to move slowly from protection towards healthy competition. For this they have to adopt a strategy of flexible specialization (clustering) to introduce technological changes and organizational innovations and to achieve efficiency based growth.

K.R.Pandit\textsuperscript{32} opines that most of the Indian small scale enterprises are under illusion that WTO and its implications affect only those units which are in international trade and undertake either imports or exports and do not affect those producing and selling domestically. But in reality any serious international happening or problem will have cascading effect on all industries and services. The government needs to take bold steps to increase competitiveness of Indian industries. High transaction costs, poor infrastructure and inefficient service sector are going to further erode competitiveness when small scale enterprises are exposed to global competitiveness. Global competition is based not only on product or process based advantages, but also on co-relative increase in profitability, information advantages and reduction in transaction costs.
Bibek Debroy (et.al)\textsuperscript{33} conducted a study to evaluate the impact of de-reservation of the small-scale industries (SSIs) in India. There is a presumption that small scale industries producing reserved items will be performing better than their counterparts, as they do not have to compete with larger manufacturers. The study revealed that from 1991 onwards, General Economic Policy moved towards openness of the economy both for investment and imports. Consequently, de-reservation process began in 1997. Contrary to this presumption, the researchers found that capacity utilization in 1987-88 and aggregate change in production in 1987-88 were both lower for reserved than for unreserved items. They also suggest that lackluster performance of the reserved industries might be attributed to excess entry of small firms into these protected sectors.

**Kerala Scenario:**

People from Kerala state have started and succeeded in business activities in different parts of the country. They are noted for their commitment to work, knowledge, flexibility etc. The high rate of educated unemployment in the state warrants expansion of industrial activity. Compared to other Indian states, industrial development in Kerala is not up to expectation. Also there is wide disparity in industrial growth. The views of different scholars from different angles on the small scale enterprises in Kerala are reviewed hereafter.

M.A. Oommen\textsuperscript{34} in his study pointed out that the integrated facilities for development in the industrial estate provide several economies to the small-scale industries. It attempts to provide the entrepreneur with factory space and other basic facilities at reasonable prices. It also makes possible the setting up of common technical workshop, repair and other services. In many cases, it helps small units to make use of the services and goods mutually and thus to secure some economies in production. Economies could also be
granted through common arrangements for transportation, purchase of raw materials, publicity for sale and the like. Thus the Industrial Estate programme could be made a tool of integrated development, which would inevitably increase productivity of small industries. He added that unless the right composition of industries is chosen, the facilities in the estates alone are not likely to increase productivity and thereby industrialization.

S.V.S Sharma in his study on the industrial possibilities in Kozhikode district, states that there is no dearth of entrepreneurship in the district. The persons who are trained by educational institutions and who are unemployed are the source of entrepreneurship. The analysis of resources, demand and infrastructural facilities points out the potential existing in the district for further industrialization. Demand based industries such as auto components, electrical goods, consumer goods and ancillary products for steel complex and textiles are suggested as feasible options.

Dr. Sudhajkar Rao and P. Sambasiva Rao in their study on the industrial possibilities in Kannur district observed that modern small scale industries are not well developed and existing industries are facing a lot of problems both in terms of competition as well as higher cost of production. Because of these problems, potential entrepreneurs are not coming forward to establish industries, even though there is no dearth of personnel either in technical or professional fields. Entrepreneurs are to be motivated for taking up modern demand based industries.

M.M.Thampy’s study tested the wage-cost hypothesis and the psychic cost hypothesis with respect to the small scale sector. According to the study, the wage-cost hypothesis holds good at least in the case of large number of industrial groups in Kerala’s small scale sector. His study shows that although there has been a decline in the number of disputes, the high intensity of industrial disputes in the past has increased psychic cost of small
entrepreneurs. The trade unions in the state had showed that even with a few number of strikes or disputes they can prolong the effect of it on the entire sector. It is said that militancy of labour has resulted in pushing up wages unmatched with productivity increase and this has led to the forming of psycho phobia among the entrepreneurs which has stood in the way of Kerala’s industrial development.

A detailed review made by Parameswaran Nair\textsuperscript{38} stated Kerala’s reputation for bad industrial relations as one of the most commonly mentioned reason for the industrial backwardness of Kerala. Organized workers in the state had at one time shown a certain degree of militancy and consciousness of their rights in comparison with workers elsewhere who were relatively more docile and unorganized. This resulted in better service conditions for workers within the state, but even then all statistics show that the average rates of wages for workers in Kerala are not that much higher than what they are elsewhere. Another cause he observed was the geographic remoteness of the state from the major business and industrial centres in the country. This results in certain disadvantages. Goods become costlier and less competitive because of the heavy transportation cost incurred for transportation of raw materials and finished goods. As regards engineering industry is concerned, the abolition of the freight equalization scheme for steel has also come as a severe blow to the state.

On analyzing the problems of small scale sector, P. Mohanan Pillai and Santha\textsuperscript{39} found that the capacity utilization both for the reserved and unreserved products was low. More so for the resource based products, thereby raising doubts about the relevance of a reservation policy for promoting small industry. In terms of per unit employment Kerala’s performance was better than the all India average but was far below that of many other states. The wage share in value added in Kerala was very high
compared to all India level and other states. Again both capital and labour productivity was very low though the reasons for these couldn’t be empirically verified. Sickness was less serious in Kerala compared to all India particularly in the engineering industry.

Ahluwalia M.S. and Kurian N.J\textsuperscript{40} points out the widening regional disparities especially in industrial growth across states during the post reform period. They observed that the slow growth rate of industry in Kerala to some extent is due to the inadequate response of that state to the ongoing economic reforms. On the whole, the response of Kerala state to the ongoing economic reforms has not been adequate and effective in the spheres affecting industrial growth as in the states that have recorded higher industrial growth. Kerala has to accelerate industrial growth for some basic reasons – the high level of consumption at present is sustained by the gulf remittances, which, being a transient phenomenon, may tape off. Hence the income has to expand. The high level of educated unemployment warrants a fast expansion of industrial activity. Being a food deficit region, the state is likely to face worsening of the barter terms of trade. This needs to be neutralized with higher income growth, which in large part must come from the rapid industrialization of the state.

As observed by K.V.Joseph and Pylee\textsuperscript{41} in their study, Keralites are people with necessary skill and resources, but they are eager to invest their capital mainly in the plantation sector, or in areas which render quick returns, in speculative activities, or in land. One noteworthy aspect of the development pattern of Kerala is the transformation of the State as consumer state by which expenditure on consumer durables of posh varieties is pretty high compared to the all India level. Increasing tempo of expenditure on such items cannot be maintained without the availability of sufficient funds. Funds which can be invested industry flow to other sectors. They also observed that
entrepreneurs of Kerala origin are stated to be migrating to other states like Tamil Nadu and Karnataka. Many of them have been able to display their indelible mark as entrepreneurs in areas outside the State. Their study also revealed that non availability of metallic minerals and insufficiency of state action contributed towards industrial backwardness of Kerala.

On examining the role of Small scale enterprises in Kerala, A. Raghurama observed that in Kerala, after globalization, there has been a decelerating trend in the number of units registered, investment made and employment generated, despite the fact that the state is gifted with abundant natural resources and favourable industrial climate. He concluded his study stating that for the actual development of small scale industries, commitment, dedication and hard work are required on the part of entrepreneurs and motivation and incentives from the government. Small scale industries must be competitive in the context of globalization for their survival and growth.

S. Muraleedaran observed that there are two phases of industrialization in Kerala during the pre- independence period. The first was characterized by thrust less insignificant growth of small and cottage industries which are dominated by agro-based industries. The second phase started with certain policy initiatives of Government of Travancore. The process of modern industrialization in the state started in the last quarter of the 19th century. The industrial units were small in size. The government of Travancore was also in the line to promote small units till the mid 1930s. The scale of operation changed to large and medium scale by 1940s. Agro-based industries continued its domination, which accommodated more than 50 percentage of the number of companies and employment in Kerala in 1947.

In the collection of reports on Small industries and economic development, V.Ambili kumar analysed that besides the large number of village and small scale industries, the industrial sector of Kerala consists of a
few large and medium units, mainly in the public sector. The village and small scale industries sector consists of traditional industries like handloom, coir, beedi and cashew and modern industries like printing, wood, metal products and chemicals. Considering the growing population and unemployment, it is very essential to develop the industrial sector of Kerala mainly through the development of small scale industries.

**Engineering Industries**

Studies specific on engineering industries with a socio economic perspective are very rare and of the studies available majority are technical in nature. The limited reports on engineering industries are reviewed hereafter.

**National Scenario**

Shashi Bala\(^4\) in a study focused on the marketing problems of small scale industries, classified the problems of small scale industries into those associated with the product and those with the market for the product. The former arose from lack of standardization, differences in the quality of materials used and lack of precision. The latter stemmed from inadequate resources at the disposal of small scale industries for identifying market outlets and tapping them profitably. He also pointed out that a study of small engineering units in Howrah and other units in Saugor District found that problems related to supply of quality raw materials is another problem. The International Labour Office pointed out that small firm couldn’t buy in bulk; they couldn’t employ and set up laboratories to test the quality and suitability of different materials.

V. Murugesan and A. Sankaran\(^4\) provided a detailed review of the entrepreneurial perception of problems in tiny, small, medium and large industries in the Puthukkottai district of Tamil Nadu. Among the sample units in tiny and small scale industries, majority were light engineering units. For
the study, entrepreneurs were divided into business community and non
business community. Their study revealed the following:

- All the entrepreneurs in the tiny and small scale sectors perceived raw
  materials as the major problem. Between the business community
  entrepreneurs like Chettiyars, Brahmins, Naidu and Muslims and non
  business community entrepreneurs there was no marked difference in
  perception.
- The business community entrepreneurs in medium and large scale
  sector felt marketing as the major problem.
- The experienced entrepreneurs have perceived raw material as the most
  serious problem while marketing as well as raw material were
  considered serious by the relatively less experienced entrepreneurs.

A case study conducted through in-depth interviews with the
entrepreneurs by Peeyush Bajpai in five different small scale units in
different parts of India for finding the problems of units becoming sick,
revealed the following handicaps of small Scale Industries in the
country.

- Lack of entrepreneurship, financial constraints, rapid response to
temporary opportunities and lack of professionalism in management.
- Banking Regulations which draw the entrepreneurs back from getting
ample credit and inability of the entrepreneur to sell his idea to the
financial institutions for getting credit
- Dependence on a single client to sell the product which reduces their
bargaining power.

Out of the five units studied, three are engineering units producing
boring tools, bars for holding boring tools, process control instruments,
industrial heating equipments and engineering components required for
BHEL and allied industries. Another one was a leather unit and the
fifth one, a textile unit.
A comprehensive study conducted by S. Muralikrishna randomly selecting 80 entrepreneurs from Autonagar, Visakhapatnam, on the factors influencing the socio-economic origins of small scale engineering enterprises, concluded that:

- Different socio-economic factors such as age, education, occupation of father, caste system etc, influence the entrepreneurial behavior.
- Majority of the entrepreneurs started their ventures at a relatively early age and were still continuing as entrepreneurs.
- The level of technical education as well as previous job experiences prompted many of them to start up an industry.
- Most of them, finding it difficult to secure their livelihood in their native place, migrated to places where they could find better business opportunities.

Raj conducted an empirical study on “CSR practices among the SMEs -- Issues and Concerns” with the objective of understanding the level of awareness and interest on CSR activities among the SMEs and to find out reasons lagging in the implementation of CSR practices. The sample consisted of 125 units located in Madras Export Processing Zone. The major findings are:

- Majority of the SMEs are aware of limited scope of CSR such as waste minimization, reduction of usage, emission control, and community services.
- CSR practices like technology upgradation, environmental reporting and award winning environmental schemes, brand building practices which are important for sustainable development are not found any significance in the SME agenda.
Investing in people, creating good work life, social events for staff etc. are the top priority activities of CSR related to employee benefits and the level of involvement in local community activities are high.

Kerala Scenario

M.A.Oommen provided a comprehensive analysis and found that out of the total 1730 registered small scale manufacturing units 780 or more than 45 percentage are light engineering industries. Agricultural implements, steel furniture and structural fabrications constitute the major proportion of light engineering small scale units in Kerala. As Kerala is in the southern most part of India, marketing outside the state would be a major problem for industries in this region. Hence it is desirable to orient the production to such light engineering products like locks, watches, precision parts, surgical and medical equipments, scientific instruments and hand tools etc. which command higher value in smaller bulk. The traditional skill and dexterity of blacksmiths, goldsmiths and other rural artisans could also be utilized effectively in making a wide variety of skill intensive light engineering products.

The psychic cost theory of M.A.Oommen highlighted that high wage rate in Kerala is considered to be a constraint to the industrial growth and this had led to the shifting of industries to neighbouring states like Karnataka and Tamil Nadu. In his study, he defined the labour cost not only in terms of wage and welfare cost, but also inclusive of the loss and inconvenience due to strikes and disputes. His study revealed that one single factor for choice of location for starting a unit is the availability of cheap labour. The high wage rate accompanied by the high incidence of strikes and lockouts adversely affected the investment in industries.

A study conducted during 2006 by K. Madanan, (et.al. on industrial promotion in the neighbouring states of Tamil Nadu and Karnataka, to
recommend measures for investment attraction, industrial promotion and simplification of procedures that can be adopted in Kerala for speedy industrialization of the State, found that:

- Present business environment in Kerala is not as investor-friendly as in the neighbouring states.
- The attitude of the Govt. officers in Local Body, Pollution Control Board, KSEB, Sales Tax etc. is generally negative.
- There is no entrepreneurial culture in the state.
- The social acceptance of industrial entrepreneurs is less compared to the neighbouring states.
- Industrial financing by banks is not positive and the approach of the banks is entrepreneur-oriented and not project-oriented.
- There is scarcity for getting developed industrial land.

The study by K.G. Sheshan (et al.) revealed that aluminum and steel based engineering industries, machine building industries, electrical industries, ancillary industries to Cochin ship yard and manufacturing industries have potential for establishment and further growth.

Ashitha Raveendran in her thesis observed the following category of problems with the engineering industries in Kerala, viz. financial, production and technical, labour, organizational, infrastructural, marketing problems and the policy of the Government. She also observed that the prospects of total industrial scenario of the state and the prospects of engineering industry are interwoven. With its forward and backward linkages, the engineering industry acts as a catalytic agent for overall development. The fluctuations seen in the engineering sector are reflections of the general up or down turns for all industries. During periods of economic growth the demand for consumer goods increase which in turn raises the demand for manufacturing equipments to produce more goods and the reverse during down turns. The revival of the
engineering industry during the upturn of the economy will be slower than the other industries because when the demand for consumer goods rise, the users first utilizes the idle capacity. Thus, the demands for engineering goods will be slow to rise and quick to fall over the course of the economic cycle.

In the study, “Structuring Industrial Linkages in a Developing Region-The Case of Kerala”, P. Mohanan Pillai observed that the present position of Kerala as an industrially backward state raises question about the role of historical forces in shaping and determining the overall structure of the industrial economy of the region. The influence of the agrarian economy, the effect of colonial capital, the impact of labour conditions and the origin and development of a nascent bourgeoisie and their role in industrial transformation has attracted scholarly attention. However, the scope of these enquiries was confined to southern Kerala, possibly because the region had demonstrated greater industrial dynamism and accelerated growth compared to Malabar, particularly in the last decades of the colonial rule, although this dynamism had petered out later. The rise of trade unionism paved the way for the widening of inter-state wage disparities. Consequently, many of the industries have been shifting across the borders in search of low cost locations. Further, there has been a tendency for fragmentation of production of traditional industries into small units to circumvent trade union pressure and labour laws. The study on the performance of the small units in the region revealed that the growth of small units was poor compared with the All India average as well as other south Indian states in terms of size and productivity. While the average size of the small units has doubled, in the structure of the industry, there is predominance of resource based products like wood and wood products, food products, rubber products and a total lack of modern engineering industries.
Mridul Eapen\textsuperscript{56} made a comparative study of Kerala’s industrial structure in relation to south Indian states, which revealed that the industrial structure of Kerala was less diversified and that it showed bias towards agro based and chemical industries and had low share of engineering industries. She examined the role of linkages in a process of industrialization. The article concludes that an excessive concentration on agriculture induced linkages has resulted in an under estimation of the potential for rural linkages for manufacturing. The fast growing service sector in the rural areas and the demand for simple intermediate goods provides considerable scope for production linkages. They could play a dominant role in generating non-agricultural employment even in rural areas, primarily through consumption linkages.

The literature reviewed and reported in the preceding pages has brought in conceptual clarity about the operations of SMSE in the country. Studies pertaining to light engineering sector, especially with reference to North Malabar is not found out. So this research is an exploratory study pursued with a review of Indian industries with succeeding chapters.
End Note

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51. ---,”Mobility of small scale entrepreneurs – A Kerala experience”, Indian Journal of Industrial Relations, Vol. 17::1 July, 1981. Print
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