REVIEW OF LITERATURE
CHAPTER 2

REVIEW OF LITERATURE

The rubber-based industrial sector has got considerable attention from academicians, statesmen and researchers considering its importance. Hence, a lot of literature is available regarding its historical, institutional and analytical aspects. Detailed studies regarding location, yield response, trends in input prices, rubber marketing, technology adoption in rubber sector, capacity utilisation, employment absorption, productivity were attempted by many scholars.

This chapter attempts to review literature on the following areas.

- Studies on rubber and rubber-based industries.

- Capacity utilisation studies.

- Studies on Productivity.

- Studies on small-scale industries.
2.1. Studies on Rubber and Rubber-Based Industries

Bauer (1948) made one of the earliest, systematic and comprehensive studies on rubber. The study covered almost all areas on rubber including the growth of the industry, distribution of the area under rubber, establishment of international rubber regulations, plantation labour and prospects of the industry in general.\(^1\)

Reddy (1950) an officer of the former Madras government examines the problems of marketing of rubber, particularly those of smallholdings.\(^2\)

Schidrowitz and Dawsen (1952) examined the history of rubber industry in the world. They tried to examine the origin of the industry, raw materials, and scientific and technological developments in the rubber manufacturing industry in the world.\(^3\)

In 1956, there was a study conducted by the plantation inquiry commission on the development of the rubber cultivation in India (Menon, Madha), capital structure, marketing of rubber, area under small holdings and labour employed in this sector.\(^4\)

Donnithrone (1958) conducted an economic study of innovations in British rubber manufacturing. He traced the developments in the British rubber manufacturing industry before 1958.\(^5\) The Tariff Board\(^6\) (Dey, 1951) and its successor, the Tariff Commission\(^7\) (Bhat, 1953; and Pai, 1968) had made a
number of studies in connection with the fixation of rubber prices. They had primarily dealt with the cost of production of rubber.

The Government of India 1967 had appointed the small holding Economic Inquiry committee to study the problems of the rubber plantation sector. (Abdulla, 1968) had studied some general problems of the industry, the inquiry was mainly confined to the conditions of the small holders.8

Steifel (1975) traced the efficiency of sheet rubber marketing system in Thailand in the framework of the structure-conduct-performance model from the field of industrial organisation. This analysis indicates that government can make competition more workable by measures to increase the producers' bargaining strength to increase the efficiency of the capital market, to encourage the standardisation of product quality and by continuing to push feeder roads into remote producing areas to increase the size of effective markets.9

Dowling (1977) analysed the supply response of rubber in Thailand. He concluded that the response in the short-run is comparatively inelastic. However, the long run response is fairly elastic and is somewhat higher in the post war period.10

A study on the measurement on the cycles of natural rubber prices has been made by Kanbur and Morris (1980). The core of the study was to analyse
the short-term fluctuations in natural rubber prices prevailing in the important market in the world. The study reveals that the cycles may exist 30 months.\footnote{11}

NCAER (1980) has conducted a study of demand and supply of rubber and estimated a demand and supply prospects of rubber for some future decades in India. The demand and supply balance worked out for each of the ten years also takes into account the additional rubber required to maintain the desired level of stocks.\footnote{12}

Daud (1983) illustrates a statistical approach using Box and Jenkins technique to forecast RSS 1 (Ribbed Smoke Sheet) prices. The technique developed begins with a generalised forecasting model followed by model specification namely, identification, estimation and diagnostic checking.\footnote{13}

Chew (1984), measured the rate of technological change in Chinese rubber holdings. In this study he estimated the rate of technological change from a micro economic point of view. A coob-douglas production was fitted to two sets of cross sectional data collected at different points of time. The study shows that the rate of technological progress in rubber smallholdings was the capital augmenting type at about 1.2 percent per year.\footnote{14}

Tan Suan (1984) examined the world rubber market and stabilisation. The objective of the study was to estimate an econometric model of the world natural rubber price and consumption over time. This study has developed a model of the world rubber market with explicit treatment of the synthetic
rubber industry and oil price, the latter being a key variable about which there is a great uncertainty.  

In rubber study one must mention the studies of Wharton (1963), Bauer (1959), Chan (1962) and Stern (1965). Their studies pertain to analyse, and they use mainly Nerlovian partial adjustment model for estimating the supply response of rubber. (Nerlove, 1956, 1958).

George Tharian (1986) has made a study on the international commodity agreements, with special reference to natural rubber. He observed that there exists a higher degree of instability in natural rubber prices in the international market and this exposes the fragility of the framework in which many of the commodity agreements are operating.

Umadevi (1989) illustrates a statistical approach to examine the short-run and long run response of rubber to price movements. The attempt in this study was to fit supply functions for rubber with Indian data. She made findings that, the producers are influenced by the past six years’ prices in their planting decision and that they positively respond to price.

Mannothra (1995) in his article states that a time-bound action plan is necessary for farm research and the implementation of appropriate techniques that will yield to highest yield even within a short period. He points out that the highest productivity (1.70 tones/hectare) attained by Ivory Cost in West Africa
is mainly due to the adoption of scientific tapping system coupled with latex diagnosis among other things.\textsuperscript{23}

Ushadevi (1999) analysed the technology adoption in rubber production in Kerala. In this study, she analysed the role of institutional and organisational arrangements in the development of technology, rate of technology adoption in rubber cultivation in Kerala, effect of technology adoption in yield and cost and evolution of natural rubber marketing, its structure and implications in technology adoption. The study concluded that the diffusion and adoption of modern technology in rubber cultivation have played a significant role in the development in the Kerala economy especially simplifying the problems of small growers. She finds out that even though there are steady increases in productivity, there are many problems, which are affecting adversely the progress of the rubber economy of the state\textsuperscript{24}

2.2. Studies on Capacity Utilisation

The problem of capacity under utilisation received attention during the second plan period, when large-scale investment program was started. But the problem receives much attention only during the latter part of the third plan. The fourth five year plan was launched with an objective to bring about conditions, within which maximum utilisation of capacity already built up was achieved.
Chamberlin (1938) is one of the economists, who paid attention to the concept of capacity. In his view monopolistic competition causes inefficiency in economic organisation and thus gives rise to excess capacity. The great advantage of Chamberlin's concept is that it brings in the economic consideration of cost in defining capacity.25

In the past a number of studies had been conducted to study the concept of capacity utilisation in Indian Industry. The studies of Lobel and Das26 (1955), Morris and Samuel Paul27 (1961) are some of the earlier studies of capacity utilisation.

Simon (1963) discussed some important ways to increase plant utilisation. They are multi shift operation, reduction in machine waiting, staggered lunch period and use relief men, speed up of pace of labour through incentives with provision for rest periods, preventing idle time due to absenteeism, speed up of pace of machines, more intensive use of machines through sub contracting and removal of structural bottlenecks through process or plant modification. Based on this, he argues that individual enterprises has scope for increasing profits almost spectacularly by increasing production without increase of overhead or fixed capital. The author has found out that the capacity of many industries in India is excessive in relation to the availability of materials and/or demand.28

One of the earlier studies on capacity utilisation on India was based on a survey conducted by NCAER (1966) It is found that the over all capacity
utilisation in India in 1964 was 10.4 percent with considerable fluctuation from year to year. The estimate of capacity utilisation by NCAER is based on actual shift worked, thereby leaving out the potential of multiple shift operations in most of the firms. The overall index also showed a considerable disparity in utilisation between different industries. The causes of under utilisation of capacity found by NCAER are shortage of raw materials, shortage of foreign exchange and labor trouble.29

Klein and Priston (1967) develop an alternative measure of capacity utilisation and capacity in the industry level from production function. It provides a revised and improved set of Wharton indices. This is done for a sample of eleven of the thirty industries, which make up the Wharton index. They compare this result from this newer method with those obtained by the method described above. An adjustment for those components, Wharton indices found to be bias drift, based on the result of the sample of eleven industries specified.30

Winston (1971), attempted to investigate the importance of excess industrial capacity and the reason for its existence in underdeveloped countries through an examination of industries in West Pakistan; and to propose that capacity utilisation can be manipulated by economic planning and suggested that as a policy variable, it may have an influence on the rate of growth comparable to that of saving.31
Sing (1975) analysed the problem of underutilisation of capacity in Indian industries during the period from 1969-73. The study analyzed the constraints in the process of effective utilisation and in the light of these exercises focuses a prospective look in the near future.\textsuperscript{32}

Gupta and Thavaraj (1975) analysed the capacity utilisation and profitability of fertiliser units in India, capacity utilisation and its impacts not only on productivity of labor and capital but also on costs and profits. The study revealed that technical defects in installation, non availability raw materials of requisite quality, shortage in power supply, frequent break downs, disturbance in industrial peace, and so on had constituted to under utilisation of productive capacity in different fertiliser units in India. This has accounted for significant increase in cost of production and reduction in profitability.\textsuperscript{33}

Artus (1977), points out that there are three important methods for calculating potential output of an industry. They are survey method of firms, the fitting of trend through peaks; and the estimate of production function. The empirical study of eight industrial countries in the period of 1955-78 presents an account of various sources of economic growth. Using production function for this analysis, projections of the rates of growth of potential out put for the various countries are made for the period of 1976-78. Series of out put gaps are also derived for the historical period 1955 through the first half of 1976.\textsuperscript{34}

Christiano (1981), attempted to measure the capacity utilisation in nine industries countries. In the first part of his paper, he discussed selected
methods for arriving at numerical estimates of capacity utilisation and related statistics, comparing them from the point of view of simplicity of computation, data revision problems and the theoretical concepts to which they correspond. The second presents data on capacity utilisation for the manufacturing sectors of nine industrial countries. Historical observations on several measures are given for each country and the relationship between them are examined in the light of the discussion of part one. The evidence presented in his paper shows that capacity utilisation is not comparable in terms of agreements on concepts and methods of compilation--to say, G.N.P, production, prices etc. It was shown that, disregarding differences in data construction, there are especially for some of the nine countries studied--periods in which measures give conflicting signals regarding current short-term trends in the economy. This paper makes an investigation to why the degree of disagreement between measures of capacity utilisation varies from country to country would seem to present a fruitful avenue of inquiry.  

Sastri (1984) analysed the problem of capacity utilisation in the cotton mill industry in India for the period of 1950-73. He examined the question of capacity utilisation in the mill sector of the Indian cotton textile industry. In this study he analysed the problem of measurement of capacity and utilisation and identifying the factors influencing capacity utilisation in Indian textile industry in India. For the measurement of capacity, the Wharton index, the maximum output per spindle/loom and minimum capital output ratio method
were tested. His study shows that the actual utilisation of capacity may be around 70 percent and the important factor determining capacity utilisation in cotton mill industry is availability of raw materials. The demand factor does not to have much influence in determining capacity utilisation.\textsuperscript{36}

Rao and Gupta (1987) studied the level of capacity utilisation in NTC group of mills and identified the poor capacity utilisation. It was found that NTC subsidiaries were showing better capacity utilisation performance as compared to private sector units, public sector consumer goods group and public enterprises in India. The study concluded that in spite of better position there was very scope for improvement.\textsuperscript{37} The main reason for under utilisation of capacity was identifies as follows:

- Old and obsolete machinery,
- Crisis of raw material and power shortage,
- Demand constraints,
- Strained employer-employee relations,
- Multiplicity of products, and,
- Sickness of units.

Fare (1989) develops measures of plant capacity, plant utilisation and technical change based on observed best practice performance in a given
industry. These measures are calculated as solution to linear programming problems. An example using electric utility data is included.\textsuperscript{38}

Nandamohanann (1989) analysed capacity utilisation in manufacturing sector of Kerala, during the seventies and early eighties. The study established the fact that the traditional and small-scale industries in the state kept capacity grossly underutilised and the under utilisation became highly significant in the eighties. The regression analysis also made explicit the negative association of capital intensity of an industry and its utilisation. The most significant determinant of capacity utilisation was found maintenance expenditure. Capital was found not properly maintained in the state.\textsuperscript{39}

Goldar (1991) analysed the influence of market structure and government policies on capacity utilisation, using cross-industry multiple regression technique. The study showed a positive relationship demand pressure and capacity utilisation. The study identified 39 industries with less than 60 percent capacity utilisation and 14 industries with more than 75 percent of capacity utilisation. In most of the years of the periods from 1974 to 1984, the linear probability model was estimated. The growth rate of production and the growth of number of factories during 1974-84 were taken as the explanatory variable. The estimated equation indicates high growth rate as production, improve capacity utilisation, and while a higher growth rate in the number of firms in the industry depress capacity utilisation.\textsuperscript{40}
Taking capacity utilisation as a yard stick for industrial growth Deb (1993) has in his study made an attempt to measure the extend of the capacity utilised by small scale industries units in utilising their full capacities. In his study he has also made an attempt to measure the industrial sickness in small-scale industrial sector. The study reveals that, though marketing problem, financial problem and material problem are the apparent causes, the real causes of sickness are high cost of production, lack of attitude on the part of entrepreneurs, unhealthy competition arising out of defective registration policy of the District Industrial Centers and malpractice of some of the entrepreneurs, etc, which are stand in the way of small-scale units in utilising their full capacities.

Salim (1999) makes a theoretical and empirical contribution to economic analysis and economic modeling in order to address the neglected issues of productive capacity realisation and the determinants of productive capacity realisation. This study provides an empirical analysis of the productive performance of the of manufacturing firm of the three industrial groups before, and after economic reforms in Bangladesh. These key industry groups are textiles and garments, food processing and chemical industries. For this he develops an appropriate methodology using the varying coefficient frontier production function model to estimate capacity realisation indices of manufacturing firms, and estimated and identified determinants of capacity
realisation including the recent trade and industrial policy reforms. Empirical results indicated substantial unutilised productive capacity across the firms.\textsuperscript{42}

Abdul (2000) attempts to estimate theoretically a series of economic capacity utilisation for the Indian non-electrical machinery manufacturing sector over a period of 1974-96. Using an interactive version of Zellner's seemingly unrelated regression technique, a translog short-run cost function is estimated, imposing the conditions for economic optimising behavior of firms to calculate the optimal output. Such a measure assumes that variations in capacity utilisation, defined as the ratio of actual to optimal output, are the systematic result of rationale optimisation procedures, depending on price cost conditions of the firms. A comparison of the new series with the conventional engineering measures of capacity utilisation figures clearly underestimates the true economic utilisation levels, mainly due to definitional problems.\textsuperscript{43}

2.3. Studies on Productivity

Most of the past studies on productivity in Indian manufacturing were based on the data provided by the Annual Survey of Industries (ASI).

Sing (1966), in his study "Productivity Trends and Wages" analysed productivity trends for 1951-63 when, he computed partial productivity estimates. He found out a steady rise in labour productivity and a decline in capital productivity, which caused an insignificant improvement in overall productivity. This is because most of the growth in labour productivity is
attributed to capital deepening i.e., an increase in capital employed per unit of labour.\textsuperscript{44}

Reddy and Rao (1962) in “Functional Distribution in the Large-Scale Manufacturing Sector in India” tried to estimate the Solow index of Total Factor Productivity. This study was done for the period 1946–57 and, during this period the Total Factor Productivity index showed a decline of 9.5 percent.\textsuperscript{45}

Hashim and Dadi (1973) are the first to emphasise the need for accurate measurement of capital stock in India in their “Capital Output Relations in Indian Manufacturing (1946–64)”. The period covered was 1946–64 and necessary data adjustments were made to make Centre for Monitoring Indian Economic (CMIE) and Annual Survey of Industries (ASI) series comparable. The contribution of total Total Factor Productivity growth to output growth was found to be about 50 percent. The study observed rising trend in both capital productivity ad labour productivity.\textsuperscript{46}

Banerji (1975) undertook an extensive analysis of productivity trends in the Indian Manufacturing as well as for five selected industries. In this study he observed a significant trend in Total Factor Productivity for the period of 1959–64; for the entire period 1946–64, the study showed a decline in Solow index by 40 percent, at the average annual rate of 1.6 percent. This showed a much steeper fall in capital productivity.\textsuperscript{47}
Gujarati (1967) fitted the Cobb-Douglas production function to the data on Indian manufacturing. He observed that for 28 industries taken together, the contribution of technological progress, during 1946–58, was rather small. 48

Though there have been wide differences in the actual estimate of productivity in all these studies almost all found a decline in capital productivity during the period of their study. The only exception is the work of Hashim and Dadi (1973).

Goldar (1986) in this study on “Productivity Growth in Indian Industry” estimated that the average annual growth rate for Total Factor Productivity Growth (TFPG) is 1.3 percent during the period of 1951–65. He used both Solow and Translog Indeces. His estimates for the period for 1959–79 for large-scale manufacturing sector reveal that in average annual growth rate of TFPG was 1.3 percent during this period also. He observed a significant rising trend in labour productivity ad capital intensity and a significant declining trend in capital productivity. Estimates of productivity for these small-scale sector revealed that the performance of the small-scale sector was not better than the large-scale sector with respect to TFPG. To summarise, Goldar’s estimates of productivity for the two periods 1951–65 and 1959–1979 brought out that the total factor productivity growth in Indian manufacturing during 1951-79 was rather sluggish and the relative contribution of TFPG to output was quite small. Another interesting finding of Goldar’s study was that there was a
marked decline in the growth rates of labour productivity and capital intensity and a reversal of the declining trend in capital productivity after 1970.\textsuperscript{49}

Among the studies of Total Factor Productivity in Indian Industry, Ahluwalia’s (1991) study is an important one. Based on the ASI data, using Trans log index of pooled cross-section and time-series data, she found that there was a marked increased in the growth rate of Total Factor productivity in Indian Manufacturing in the period of 1980-81 to 1985-86 (3.4 percent per annum) as compared with the period 1965 to 1979-80 (-0.3 percent per annum). She argued the “turnaround” in productivity growth in Indian manufacturing in the 1980 was due to the liberalisation of economic policies.\textsuperscript{50}

A study on productivity growth was carried out by the ICICI (1994) for companies to which it provided assistance. The growth rate of Total Factor Productivity Growth was estimated as -2.7 percent per annum for the 1970s, -0.9 percent per annum for the period of 1982-83 to 1986-87, and 2.1 percent per annum for the period of 1987-88 to 1991-92.\textsuperscript{51}

Balakrishnan and Pushpangathan (1994) questioned the ‘turnaround’ growth rate of productivity in Indian manufacturing in the 1980s. By using double –deflated value added, they have shown that Total Factor Productivity Growth rate in 1980 was not any higher than that in the 1970s. Instead of the acceleration of the total factor productivity growth, their study showed a downward trend in total factor productivity in Indian manufacturing in the 1980s.\textsuperscript{52}
Dholakia and Dholakia (1994) estimated Total Factor Productivity Growth based on double deflated value added method. Their estimate of Total Factor Productivity Growth rate for the period 1980-81 to 1988-89 is higher than that for the period 1970-71 to 1980-81. Their study showed that the Total Factor Productivity Growth in 1970-80 was 0.56 percent per annum, whereas in 1980-88, it was 2.86 percent per annum.\(^{53}\)

Another recent study of Total Factor Productivity Growth in Indian manufacturing by using the Two-Input Framework and Double Deflated Value Added is taken as a measure output. Mitra (1999) presented estimates of total factor productivity growth for two sub-periods 1976-77 to 1984-85 and 1985-86 to 1992-93, and for the whole period 1976-77 to 1992-93. The estimate of Total Factor Productivity Growth at the aggregate level is 0.76 percent per annum during the period 1976-77 to 1984-85; it was 5.57 percent per annum during 1985-86 to 1993-94, showed a marked acceleration in total factor productivity growth.\(^{54}\)

The Total Factor Productivity of Indian Manufacturing in 1990, the estimate is presented by Trivedi, Prakash and Senate (2000), indicate that growth rate of total factor productivity of Indian Manufacturing was positive in the 1990s, but it was lower than that in the 1980s. They used Value Added Single Deflation (VASD), Value Added Double Deflation (VADD) and Gross Output Function (GOF) for estimating Total Factor Productivity Growth of Indian manufacturing. Based on VASD, the growth rate was 3.6 percent per
annum in 1980-90 and 1.97 percent per annum in 1990-97. Using VADD, the
growth was 7.63 percent in 1980-90 and in 1990-97 it was 3.76 per annum. By
using GOF method they estimated that the growth rate is 1.66 percent per
annum in 1980-90 and in 1990-97 it was 0.95 percent per annum.55

Goldar (2001) in his study of Total Factor Productivity in Indian
manufacturing for the period of 1981-82 to 1997-98 reveals that the Total
Factor Productivity Growth rate is positive but decreasing throughout the
period of 1980-81 to 1997-98. By using VASD, VADD and GOF for
estimating Total Factor Productivity Growth, the estimated value of Total
Factor Productivity Growth by using VASD during the period 1981-82 to 89-
90 was 4.52 percent per annum, whereas it is 1.83 percent per annum during
the period of 1990-91 to 1997-98. By using VADD, the estimated growth rate
was 8.97 percent per annum in 1981-82 to 1989-90 and 2.92 percent per
annum in 1990-91 to 1997-98 and based on the GOF method, the growth rate
was 2.13 percent per annum in 1981-82 to 1989-90 and 0.90 in 1990-91 to
1997-98. The overall growth rate by using VASD was 3.36 percent per annum
and 5.79 percent per annum by using VADD and 1.49 percent per annum by
using GOF method.56
2.4. Studies on Small Scale Industries

The studies under this category are based on the works done in the areas of traditional and modern small-scale industries, studies on industrial estates, governmental programmes and growth aspects.

In the field of traditional small-scale industries, which includes village and cottage industries like Khadi, Handloom, Edible oil, Coir tannery etc., that are mainly concerned with the processing of raw materials for local markets and also non-factory sector earning both artisans and household units, fact finding studies have been made both by official and non-official agencies. The official studies have been mainly concerned with studies of their performance and progress, for example, Karve Committee Reports.

A large part of unofficial studies have been in the nature of survey reports based on case studies of selected industries of different localities with a view to collecting information on existing structure and development potential. The studies differ in coverage and concepts used. Significant among them are those studies conducted by Sing (1961), Lakhadawala (1960) etc. Most of these studies made a strong concern for modernisation.

Basu (1957) has made an attempt to examine the financial problems of the small-scale industries and assess their place in the country's second Five-Year Plan. The study highlights the role of the State Financial Corporation in financing small-scale industries.
Dhar and Lydall (1958) compared the output-capital ratio for a number of reasonably homogeneous industry groups, each depicting size variation. They concluded that for factories, which employ twenty or more persons, output capital ratios increased with size of the units. Compared to unregistered small-scale enterprises also the relative position of the modern small-scale industries was noticed to be unfavourable. For enterprises employing less than twenty workers, the output-capital ratio was more favourable than those immediately above them, but not necessarily favorable than large enterprises.60

Thus Dhar and Lydall found that small-scale industries using modern machinery and having upto 40 workers are the most capital intensive. However, since the size criteria is labour employed, it does not tally with the government’s latter classification of small industry on the basis of capital employed. In which case the findings may not be valid, since it need not mean less capital also and so the frequency distribution of the unit studied would change.

Shetty (1963) in his study of the rational, structure and operative conditions of small scale and house hold industries disproves misconceptions about their role in the planned development in the country.61

Rao (1965) in his study on “Small Scale Industries and Planned Economy” strongly favoured the development of cottage and small industries for rural industrialisation. The study also discussed various aspects of small industries and its relevance particularly to Indian economic development.62
Sandesara (1966) extending the analysis studied the scale and efficiency correlation over a period of time. Sandesara examined the relationship between size and capital intensity (capital-output ratio) and also between size and other economic characteristics, like output, wages and surplus each per worker, and output and worker per unit of capital. Sandesara’s study revealed lack of positive association between size and capital intensity, but size and output-capital ratio, size and surplus-capital ratio and size and wage were seen to be positively associated. The findings Dhar and Lydall and Sandesara were opposed to each other.63

Oomman (1967) has made an attempt to examine the extent to which the various objectives of small-scale industrial developments have been fulfilled in the state of Kerala. The study has revealed that, the development program for the promotion of the small scale industries, especially with regard to the creation of employment utilisation of local resources and dispersal of industrial growth, have not been able achieve their assigned objectives, mainly due to the defects in their design, strategy and implementation.64

An inquiry is conducted by Sharma (1976) to understand the role and problem of small-scale industries and to find out how far industrial strategy is influenced by the special problems of different regions.65

Hull and Hjern (1987) argues that small firms’ growth is frequently impeded by problems that could be resolved, if firms made greater use of public and private assistance to support their own, often inadequate, problem
solving resources. However, national government policy on small firms faces key problems of implementations. It set out in detail just how local intermediaries should operate reporting on original research in European Union, where such local intermediaries are already in existence.  

Wandenberg (1988), in his study of small leather making units show that, with an increase in size and labour intensity decreases very sharply without any significant increase in capital intensity. Among the factors aiding the co-existence of different size of units, variations in factor proportions, costs of production, quality, price of products, and the caste factor might be playing an important role.  

Banerjee (1988), in her study on electric fan industry in Calcutta, had focused on the co-existence of a mall and large units, the former operating as ancillaries, to the large firms in the face of certain specified process. The large firms are faced uncertain demand form the domestic and foreign markets, use the small unorganised units to meet the sporadic excess demand without investing to expand capacity.  

Desai (1999) analysed deeply all aspects of small-scale enterprises in India. He analysed the need for industrialisation and the significance of small-scale industries in industrialisation in India and also analysed the issues, problems and prospects of small-scale enterprises in India.
After a brief survey of the above mentioned research studies, it is noticed that often conclusions on the same aspects of the study have been conflicting.

The differences in conclusions, however, can be attributed to complications about definitions, inadequacy of treatment given, statistical tools applied, inherent limitations of statistical analysis and different valuations of capital (because of different depreciation practices, or different age span of capital and because a large part of capital of small factories may consists of working capital). Thus differences in conclusions point to the need for more accurate and specific studies.

REFERENCES:


