CHAPTER- II

RESEARCH METHODOLOGY AND REVIEW OF LITERATURE

2.1 Statement of the Problem:-

It would be too much to expect modern management to adopt the Nanded district approach in its totality. This study is merely exploratory, the aim being to find out how current management thinking and practice could be remodeled. The plantation industry, being highly labour intensive, was selected as a testing ground for this radically new approach to human resource management. There is a constant effort made to develop a worker’s skills and aptitude. In all this, however, the total structure of his personality is hardly ever taken into account. While technical competence can be produced by the right kind of training, no amount of training could bring forth dedication and commitment.

For this to happen there must be scope for creativity and initiative. The worker needs to feel a keen sense of partnership and involvement. The cardinal principle is that man ought to be the center of all developmental ventures. Therefore, a reorientation of human resource management theory towards the ideals of justice, equity and humanity is felt to be the crux of the problem. When a human being as worker comes into industries he does not merely bring his two hands and some calories of energy, but a live personality with potentiality for growth. He is capable of participating in business activity in his own right. Participative management is critical to an economic system run on democratic lines. In this system man is not viewed as a resource but as an active partner in business. However, management functions as practiced at present give little heed to
these needs. Invariably, this leads to strained relations between management and labour with repercussions on general social welfare.

In general the labour force in Kerala is unionized, politicized and enlightened. They are aware of their individuality and rights. A more integrative relationship in which the dignity and freedom of the individual is respected could improve industrial peace. For their part, the unions need to adopt a positive approach, too.

A good number of statutory laws have been enacted to protect the industry and the interests of the labour force. Yet, the living and working conditions and the life-style in general has not improved much compared to modern developments in other sectors. The management practices and systems are more or less the same as those of the earlier British proprietors in which a very strict hierarchical order and feudal elements prevailed. Trade union activities are limited to certain spheres only. Union leaders are politically motivated, and often work in collision with the management to the detriment of the labourers. The plight of women workers seems to be even worse.

A humanistic approach, particularly of the Nanded district conception, could go a long way towards easing tensions in the industrial sector and improving the quality of life of the people concerned. Hence, the problem is stated: “Human Resource Management Practices in Small and Medium Scale Industries”.

2.2 The Rationale of the Study:-

Ever since the Hawthorne experiment of 1930 extensive research has been undertaken to determine whether better employee care increases productivity in different national settings as the political, social, cultural and economic situations vary greatly in
different countries. The outcome of the studies conclusively demonstrates that concern for employees on the part of management remains the outstanding factor in furthering productivity even under varying environmental conditions. Modern management theory increasingly focuses attention on the welfare of employees as the cornerstone of organizational success. But the present developmental culture turns man into an object.

His skills are developed; his efficiency is enhanced, so that the industry may reap fat profits. The individual may gain some material benefit in the process. Making man into an object amounts to degrading and dehumanizing him. Man ought to be the center and subject of all developmental culture. Hence, a reorientation of developmental culture that would take account of the centrality of the human person is of the utmost importance. The present study is meant to highlight the need for just such re-orientation of HRM theory and practice.

India is justly proud of a very ancient and rich cultural and spiritual heritage. But the cultural, spiritual dimensions are not reflected in the professionalization of personnel management in this country though Chakraborty and others have done some pioneering work in this line. India with its spiritual heritage could contribute to a new thinking in this area and perhaps set a model of holistic development to the whole world. The management profession in India needs to be sensitive to this need of the nation and of the time. Development in skills and technology may provide short-term competitive advantages, increase productivity, but it may not be sustainable in the long run. Moreover a good many problems created by developed and industrial nations and the developing nations such as the ecological problem, neo-colonialism, and spiritual stagnation etc. are
the products of one-sided and unbalanced development. Business institutions, therefore, have to include the person, his family and the society, in their development strategy. Such development could not confine itself to the secular and mundane dimension only but must incorporate ethical, moral and spiritual values. The present study is an attempt to examine these issues, to find a new direction and a new management formula incorporating spiritual and cultural values.

The Human Resource Management of Small and Medium Scale Industries in Nanded District way of management with its focus on the values of nonviolence, truthfulness, trusteeship and dignity of labour could be an answer to the complex problems confronting the business community and the society at large. It is distinctively humanitarian in approach. This could go a long way towards sustainable growth of the economy. It would be truly Indian, fully incorporating the culture and heritage of the country. India has a distinctive tradition of upholding the divine nature of man. The cornerstone of his thinking on non-violence and devotion of truth. The area of industry with its peculiar socio-economic structure seems to offer an ideal testing ground for the application of Nanded District notions of personnel management. The problems of practical application need also to be looked into.

The present system of labour relations is mainly an outcome of the tripartite committee involving the management, government and workers. This Committee ironout the differences on wage and related matters. Other issues are governed by statutory laws and standing rules. Still, the quality of life and living conditions of workers have not changed much compared with other industrial sectors. The Human Resource
Management of Small and Medium Scale Industries in Nanded District ideology could perhaps be a more efficient means of achieving this as it could empower the workers and promote a healthier inter-personal relationship.

Hence the modern human resource management system could be extended and enriched with the incorporation of Nanded District ideals. How this integration could be achieved is also to be studied. This has not received sufficient academic attention. An attempt is made here to fill this gap. Human Resource Management of Small and Medium Scale Industries in Nanded District have been selected for the purpose of the present study for the following specific reasons:

1. It is the largest Employment industry in the country providing employment to 05 lakh people directly and to an equal number indirectly in ancillary activities.

2. It contributes substantially to the total value of industrial production, making maximum use of locally available input. Small and Medium Scale industry is, in fact, the least import content industry.

3. It has throughout occupied a prominent position in the trade union movement of the state. At the same time, management associations are equally strong and the scope of interaction between the two is quite high. A new proactive management style is the need of the time in order to ensure the sustainable development of the industry as a whole.

4. The plantation industry occupies a prominent position with respect to area, income, volume, export and taxes collected.
2.3 Pilot Study:-

The first step in the process of data collection was a pilot study undertaken to collect preliminary information regarding the scope for carrying out the study.

The researcher’s concern was to gain insight into the psycho-social attitudes of the workers and managers in Nanded District. The Small and Medium Scale Industries in Nanded District was selected for the study.

During the study the investigator contacted the company managers, estate managers, trade union leaders and workers. It was found that the study was flexible. The various agencies and personnel operating in the field assured their full co-operation for the successful conduct of the study. Further, the pilot study helped the researcher in defining the elements and limits of the universe and sample to be selected for the study.

The number of respondents to be covered by the study was also fixed during the study. The pilot survey and the consultations helped the researcher to gain preliminary insights into the variables of the study and the particulars to be included in it.

2.4 Collection and Source of Data:-

The data required for the study consisted of both primary and secondary items. Primary data pertained to such variables as the nature of empowerment, effectiveness of trade union, viability of the Human Resource Management of Small and Medium Scale Industries in Nanded District model etc. These were to be collected directly from the respondents placed at different estates. Respondents consisted of workers, managers and trade union leaders.
A major share of necessary data on the problem was lacking because no detailed, in-depth study had been made on the key variables of a Human Resource Management of Small and Medium Scale Industries in Nanded District management. Hence, primary data was collected to analyze the problem.

The original works and questionnaires of Human Resource Management of Small and Medium Scale Industries in Nanded District are treated as a primary source of data. The ideas and attitudes of experts in the field of management, both practitioners and academicians, and the researcher’s own observations are treated as primary data.

The secondary data for the study covered the theories of human resource management, the methods of Small and Medium Scale Industries management, relevance of Nanded District ideals etc. These were collected from the existing literature on the subjects. The various statutory laws and standing rules of Small and Medium Scale management, judicial pronouncements, proceedings of the tripartite committee, District Gazette, Annual Report of Industries etc. were consulted for the purpose. Reports in the dailies and weeklies were also considered and treated as secondary data.

2.5 Methods and Tools of Data Collection:-

Observation, interview and study were the major methods used in the present study. Data regarding the different variables of the study were collected using different tools. An interview schedule consisting of 100 items (50 for Small Scale industries and 50 for Medium Scale Industries) were selected items was prepared for the workers
keeping in view of the objectives and hypotheses of the study. Following is the sample selection from overall Distract.

**Table No.2.1**  
Sample Selection from Nanded District

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Selected Taluka</th>
<th>Small Scale Industries</th>
<th>Medium Scale Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Nanded</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>02</td>
<td>Bhokar</td>
<td>02</td>
<td>01</td>
</tr>
<tr>
<td>03</td>
<td>Degloor</td>
<td>08</td>
<td>06</td>
</tr>
<tr>
<td>04</td>
<td>Dharmabad</td>
<td>05</td>
<td>09</td>
</tr>
<tr>
<td>05</td>
<td>Kandhar</td>
<td>02</td>
<td>00</td>
</tr>
<tr>
<td>06</td>
<td>Loha</td>
<td>01</td>
<td>02</td>
</tr>
<tr>
<td>07</td>
<td>Hadgaon</td>
<td>02</td>
<td>01</td>
</tr>
<tr>
<td>08</td>
<td>Kinwat</td>
<td>03</td>
<td>02</td>
</tr>
<tr>
<td>09</td>
<td>Billoli</td>
<td>03</td>
<td>04</td>
</tr>
<tr>
<td>10</td>
<td>Ardhapur</td>
<td>02</td>
<td>03</td>
</tr>
<tr>
<td>12</td>
<td>Himayatnagar</td>
<td>02</td>
<td>00</td>
</tr>
<tr>
<td>13</td>
<td>Umri</td>
<td>03</td>
<td>04</td>
</tr>
<tr>
<td>14</td>
<td>Naigaon</td>
<td>03</td>
<td>03</td>
</tr>
<tr>
<td>15</td>
<td>Mukhed</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>16</td>
<td>Mudkhed</td>
<td>03</td>
<td>02</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>50</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>
There were both positively keyed and negatively keyed statements. The likert type of five point and three point scales were used to get the responses of the respondents. The attitudes and opinions of respondents were thus assessed giving a scale value to each of the responses. All positive statements were scored as shown below. For a statement opposing this point of view, the items were scored in the opposite order:

<table>
<thead>
<tr>
<th>Positive Statements</th>
<th>Opposite order</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scale value</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>5</td>
</tr>
<tr>
<td>Agree</td>
<td>4</td>
</tr>
<tr>
<td>Undecided</td>
<td>3</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
</tr>
</tbody>
</table>

Similarly an interview schedule was prepared for the managers also. The schedule contained 50 items regarding the viability of the industries approach to autonomy in estate management, possibility of setting up a self sufficient of district, etc. Several field visits were made to study the working and living conditions of industries workers, and to get a first hand information regarding their problems. As a part of the study, consultation on key issues with experts were also done for getting an authentic and in-depth understanding on the theoretical, methodological and practical aspects of the study. Selected case studies were conducted to get practical insights into certain aspects of the life workers.
2.6 Pre-testing of the Tools of Data Collection:-

After preparing the tools of data collection, they were *pre-tested* on an actual sub-sample of the universe in the study to test its applicability. Fifty people from three estates were selected for the purpose. During the pre-test it was found that some questions were irrelevant and hence they were deleted from the final draft. The questions on industries way of management were unfamiliar to the workers and had to be explained to them. The schedules were originally prepared in English but they were explained in the vernacular, i.e., Marathi, Hindi. Research assistants’ help was made use of for this. The interview schedule was finalized on the basis of the findings of the pre-test and the recommendations of the experts in the field.

2.7 Reliability and Validity of Research Tools:-

Reliability in research is one of the most important things in research. Reliability simply means consistency in measuring degree of instruments. The tests have a high coefficient of reliability, and errors of measurement are reduced to a minimum. Reliable tests are stable in whatever they measure and yield comparable scores upon repeated administration. The reliability of the interview schedule was established by the split-half method. The reliability co-efficient was determined by correlating the scores of two half-tests. The reliability on the full-length test was estimated using Spearman.

The split half reliability was found to be 0.58 (N=50). This is an indication that the interview schedule is reliable for measuring human resource management practices in Small and Medium Scale industry. The consistency of the responses was estimated by
repeating the interview at another time (two weeks duration). The correlation between the responses of both the interviews were estimated and it was found to be 0.51(N=50).

2.8 Validity:-

Validity of test depends upon the measure for which that test applies. It is also important to achieve content validity of the data. It can be achieved through specifically used tests which are designed to test the validity. Asking the right questions phrased in the least ambiguous way is basic to verifying content validity. The investigator received suggestions from colleagues and experts in the filled of enquiry and the items that revealed ambiguities and those which did not contribute to the investigator’s purpose were removed. A panel of experts rated the instrument in terms of how effectively it samples significant aspects of its purpose, providing estimates of content validity.

2.9 Data Collection:-

The investigator visited the Small and Medium Scale Industries during the free time of the workers and on holidays. Local educated youngsters were also involved in the process. The low level of education of the workers was a major impediment in collecting data. Data collection was done during the study period. The researcher has collected primary data during 2006-07 to 2011-12.
2.10 Editing, Coding and Statistical Treatment of Data:-

This was done through computer applications using the SPSS package. In the computer processing of the data and in selecting the statistical tools of analysis the investigator was generally assisted by experts in the field. Statistical tools like tabular analysis, ratios, percentages etc. were applied for analytical purposes. The Z-test was applied to find out whether a significant relationship exists between various characteristics. The Likert type scale was adopted to measure various attributes of workers.

2.11 Z Test for Equality of Means:-

In order to ascertain whether there is a significant difference between the mean levels of satisfaction, the normal test using the Z-statistics was applied. Here

\[ Z = \frac{M_1 - M_2}{\sigma D} \]

M1 = Mean level of satisfaction for Industries 1
M2 = Mean level of satisfaction for Industries 2
\( \sigma_1 \) = S.D. for Industries 1
\( \sigma_2 \) = S.D. for Industries 2
N1 = Sample size from Industries 1
N2 = Sample size from Industries 2

At 5% level of significance, we reject the hypothesis of equal mean level of satisfaction if the calculated value of Z is greater than 1.96.
Mean & Median:

An average represented a whole series and such its value always lies between minimum and maximum value and generally it is located in the central of middle of the distribution. Mathematically mean can be calculated as follows:

$$\text{Mean} = \frac{\sum Y}{N}$$

Where, $\sum Y$ = Sum of series

$N$ = Number of Respondents

Mode Method:

Under this method, Small and Medium Scale Industries successive stages of Customers at values always maximum values of entrepreneurs is to be calculated for mode method.

Co-efficient of Variation:

Co-efficient of variation is worked out in the following manner:

$$\text{Co-efficient of variation} = \frac{\sigma}{X} \times 100$$

Where $\sigma$ = Standard deviation

$X$ = Average

$$\sigma = \sqrt{\frac{(X1 - \bar{X})^2 + (X2 - \bar{X})^2 + \ldots \ldots \ldots \ldots (Xn - \bar{X})^2}{N}}$$

$$\bar{X} = \frac{X1 + X2 + \ldots \ldots \ldots \ldots Xn}{N}$$

Where $X1, X2, X3$ are amount of income or expenditure

$N$ = Number of years i.e. 5
The study covers period of 05 years from 2006 to 2011.

2.12 Data Analysis and Interpretation:-

After the statistical treatment of data, tables, charts and diagrams were prepared. Using these as guideposts the data were analyzed in terms of the objectives and hypotheses of the study. The findings arrived at during analysis were then discussed in relation to the practical and theoretical insights available on the variables under consideration. On the whole the research is exploratory in nature and is based on descriptive cum analytical approach.

2.13 Limitations of the Study:-

The present study is only an explorative analysis of human resource management in Small and Medium Scale Industries in Nanded District. The vision is not an immediate purpose of this study. We are testing the tenability of some of the elements of Industries approach to management. The study is confined to Nanded district mainly because this area contains the major industrialized. The HRM structures and practices are homogeneous in nature all over the state. However, there may be some differences in these practices depending on the culture of the company running the industry.

Sampling technique is adopted for identifying representatives of workers and managers. Small Scale Industries owning less than 25 are not included in the sample. They are few in numbers and alternative HRM practices may be possible with them.

Low level of education of the workers was a limiting factor. They were to be apprised of a different style of functioning in the estate. Some of the managers were reserved in expressing their opinion, as they were too much preoccupied with the
interests of the company. Time constraint was another limiting factor. The workers were to be contacted either before 7 a.m. or after 5 p.m., or on holidays only. Paucity of available literature on the topic was a limiting factor.

2.14 Review of Literature

Various macro as well as micro level studies small scale industries and their impacts on economic development in India have been conducted by different social scientists and economists. Their main findings have been discussed in this chapter and it also presents bird’s eye view of the study.

In recent past a few studies have been carried on industries from the Sociological, Economic and psychological perspectives. Some are examined and presented below.

**G. Balakrishnan**(2010) analyzed the financial experience of joint stock companies in the small-scale sector and found that these had a low profit-earning capacity due to higher cost of production and higher rate of interest."" Various research studies revealed the inadequacy of institutional sources of finance also.

**P.N. Dhar**(1985) had a survey in Delhi. The said survey there is only one source of finance available in the hands of small scale unit holders and that is saving by him. The survey also revealed that relatives and friends are one of the most important sources of external finance to them. Another survey was undertaken in Karnataka and Solapur among the handloom industries. In the survey it is found that master weavers and money-lenders are important sources of funds in this industry.

**D.T. Lakdawala and J.C. Sandesara**(2001) in their study in Bombay found that 342 firms had 391 cases of borrowing; in 259 or two-thirds of the cases loans had come
from traders—in 250 cases against raw materials and in 9 in the form of cash." Baljit Singh in his study in Moradabad that of the indebted establishments 33 per cent were indebted o o traders and dealers.27 per cent to relations and friends and 21 per cent to money-lenders.

Inderjit Singh and N.S. Gupta (2005) in their survey in Jammu and Kashmir also pointed out the inadequacy of institutional credit, it accounted for only 5.1 per cent of the borrowings. The Working Group on Small-scale Industries set up by the Administrative Reforms Commission stated on the basis of a survey conducted by the Central Small Industries Organisation that on an average only 20 per cent of the credit needs of the small-scale sector were being met by institutional sources." The highest contribution by financial institution was found in Mysore in a study undertaken by the National Council of Applied Economic Research : 41 per cent of the total loan had come from commercial banks." Bureaucratic procedures constituted one of the important impediments to the utilization of institutional resources.

J.N. Mishra(2001)undertook a survey in the Sagar District of Madhya Pradesh. During the survey it is found that Bania (private money lenders) are one of the important sources to the industries to procure funds. The reason for approaching private money lenders is only because of complicated procedures of banks to issue short term loan to the industries.

Ramakrishnan(2003)in his study in Delhi found that there are many entrepreneurs who are ready to pay high rate of interest to non-banking sources only because of complicated and time consuming banking procedures. In a study of
Hyderabad, Rajkot, Delhi (Okhla Estate) and Ludhiana undertaken by the Unesco Research Centre on Social and Economic Development in Southern Asia, it was found that entrepreneurs had an attitude of "scepticism" towards Government policy. In Hyderabad none of the surveyed units had borrowed from the Government or a bank; in Okhla 9 per cent had obtained loans from one of these sources and 45 Per cent in Rajkot.

**H.S. Pareek, (1999)** in his study in Rajasthan analyzed the contribution of institutional sources in financing industry? Several studies highlighted the problem of competition box industry in the match with large-scale industries.

**Ram K.(2001)** found that despite a well developed institutional frame work there are many traders who prefer to approach private money landers. Only the urban-based and comparatively bigger entrepreneurs are getting advantages of banking and other financial institutes. It makes small scle unit holder in a disadvantageous position.

**G. RaghavaSivakasi(2001)** emphasized the same thin Reddy pointed out that village and small-sed. industries contributed 49 per cent of the net domestic Production the manufacturing sector but received only 24 per cent of the reedit going to this sector. He advocated that the bank credit available to them should at least be equivalent to their contribution  

K.T. Ramakrishna analyzed the causes of the prejudice of financial institutions against small industries in the matter of lending. The Society for Social and Economic Studies26 and the International Perspective Planning Team were of the view that India had most of the institutional framework for credit the need was for a changed outlook and some improvements in techniques of making advances.
The Administrative Reforms Commission recommended the establishment of an apex financial institution at the Centre to cater exclusively to the needs of the small-scale sector. These studies, thus, indicated that one of the most important problems was that of finance. However, very little attention had been paid to the policy followed by the Government lending institutions, and even less to the procedures. It was decided to examine these aspects in the present study Marketing Assistance. The significance of marketing was brought out.

Paul Hoffman (2009), former Administrator of the United Nations Industrial Organization as follows: "It is illusory to think that a country can be industrialized by building factories—industrialization means building markets."

Peter F. Drucker (2001) in his article pointed out that marketing was generally the most neglected area in the economic life of developing countries." A study undertaken by the National Council of Educational Research and Training emphasized that the optimal functioning of an economic system depended upon the even matching of the capability and efficiency levels attained by its productive and distributive systems. The National Council of Educational Research and Training suggested that marketing was probably the least developed aspects of the Indian economy and that there had been very little systematic attempt to study its problems in India.

A.P. Sharma (2001) classified the marketing 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 profitably.

**J.M.L. Tambi (2005)** emphasized that large-scale units an edge over small-scale ones in the matter of marketing because of economics of scale, financial strength to face setbacks and competence to hire specialized professional managers. Various survey studies indicated that small manufacturers depended on dealers for marketing their products and, therefore, did not get a fair price. Some studies pointed out the problem of waiting capacity of small units. Several studies emphasized the need for market research and information.

The International Labour Office suggested that co-operative societies or Government-aided agencies should undertake market surveys and market research since these would be too expensive for individual small firms. The Working Group on Small-Scale Industries for the Third Five Year Plan also recommended similarly.

**N.N. Wanchoo (2001)** emphasized the need for quality control. Some studies suggested that small-scale industries should function as ancillaries to large-scale ones. K.N. Sapru, however, was of the view that unequal partnership between the major unit and the ancillary would be to the dis-advantage of the small industry. The importance of the Government purchase programme in the U.S.A. had been recognized.

**E.T. Grether** wrote that Government procurement—federal, state and local—was such a sizeable proportion of total production and marketing that the ways in which it was handled had important, often strategic, impact upon numerous private industries and in fact upon the general functioning of the marketing system. Marketing was, thus found to be of much significance in earlier studies. The role of Government policy in
providing assistance in this regard had, however, not been examined in detail. Raw-materials Assistance several problems related to the supply of raw-materials were indicated by earlier studies.

**D.T. Lakdawala and J.C. Sandesara (2005)** reported that 224 or one-fifth of the surveyed small-scale units in Bombay had some difficulties in the supply of raw-materials. 146 had problems due to small purchases and dependence upon retailers and trade credit, and similar restrictions and inferior CO 56 due to import cont. indigenous materials, and 22 due to fluctuating prices." A study of small engineering units in Howrah and other units in Saugor District" found that middlemen were the predominant source of supplies and that raw-material purchases were generally made on credit, extending up to three months. A study in Amaravati District emphasized the non-availability of quality raw-materials. The International Labour Office pointed out that small firms were seldom able to obtain the discounts that went with buying in bulk and that small firms could not employ scientists and set-up laboratories to test the quality and suitability of different materials." A study of Delhi also pointed out that small units faced problems because they could not make bulk purchases.

**Baljit Singh (2005)** analyzed the problems of credit purchases of raw-materials in Moradabad." A study of Hyderabad, Rajkot, Okhla and Ludhiana found that almost half of the Hyderabad manufacturers had to resort to the black-market to secure raw-materials; in Ludhiana, hosiery units suffered more than the cycle and sewing-machine parts industries. Some of the studies dealt with the problems of Government controlled materials. It was found that of the 16 entrepreneurs who applied for quota raw-materials
in Howrah, only one got them. Of the remaining ones, complained of procedural
difficulties, the time consumed and financial problems since they would have to buy the
quota allotted in one installment and pay for it in cash in full. Lack of Government
attention to this aspect was also brought out.

Krishan Lal Sharma (2001) expressed the view that sometimes, quotas were given
to those who never manufactured; that the capacity of the firms was not taken into
account and that officials were irresponsible and negligent. On the other hand

L.K. Jha (1998) was of the opinion that at times the liberal and blanket assistance
given to the small-scale sector had resulted in mal-practices and that scarce raw-materials
were sold in the black-market.

P.N. Dhar and H.F. Lydall (2009) also pointed out that all sorts of personal and
political influences were brought to bear in order to obtain raw-materials and that some
persons who received allocations of raw-materials made an easy living by selling them in
the open market."

Seenivasagalu (2000) examines the importance of the socio economic background
of the potential Industries in determining the success and sustainability of the venture.
The author further reveals that SMI seem to prefer many other reasons such as to fulfill
ambitions become part success stories or role models, so that they can enjoy some
authority independent and dynamic. But for some it could be an alternative for
unemployment or just an accidental event of self-indulgence.
Bill Bolton (2001) points out that the success of SMI depends on the EVR congruence model. The blending of the three forces namely Environment, the personal values and the available resources will give rise to selection of a successful enterprise.

Mali (2001) has focused on the steps undertaken by government for promoting Industries in India. Further gives a detailed note on the various training organizations and institutions which develop and provide support to Industries. Institutions such as training institutes, small development corporations, marketing organizations, consultancy organizations and banks and financial institutions have a vital role in the development of Industries in the region.

The Global Industries Monitor (www.gemconsortium.org 2002) study established that levels of Industries vary sharply across major countries and account for significant differences in economic growth by applying parametric relationship test of Karl Pearson’s Coefficient of Correlation. A thirty-seven country study carried out in 2002; found that the highest level of entrepreneurial activity within these countries is ten times greater than the lowest level. Thailand ranks first with an Entrepreneurial Activity Index (EAI) of 18.9 %; while Japan ranks the lowest with an EAI of 1.8 %. India occupies the second slot on overall EAI rankings with an EAI of 17.88%.

Kalyan Singh (2001) emphasized that “empty hands will surely lead to empty pockets and empty pockets will lead to empty homes” stressing the need to find an alternative model for development that will come in the form of micro finances for the poor to survive to save and to thrive in and through the economic activities and states that developing micro finance for the rural SMI is the need of the hour.
Biplab Moitra (2001) narrates the success story of SMI Industries in islands of Sunderbans of West Bengal. The author states that the story of rural development with SMI participation has brought about rural and urban equilibrium.

Keith D Brothers and George Nakos (2005) studied the relevance of transaction mode choice of a sample of two hundred and seven Dutch and Greek SMI having business interest in Central and Eastern Europe. They found that transaction cost theory could successfully explain the SMI entry mode choice and concluded that SMI using transaction costs were able to predict their mode choices and performed better than SMI using other entry mode choices. The Logistic Regression Analysis found that transaction costs variables to be significantly related to the entry mode choice. The study showed that Dutch firms preferred more of non-equity investment, as compared to Greek firms. They conclude that the managers, for making international business decisions, could use entry mode choice as an effective tool kit.

Lissa John Irimpar (2001) analyses the role of the micro financial institutions in the development of the poor in India. The author in the article evaluates the development of micro enterprises financed by micro financial organizations and the benefits arising to the SHGs through the bank linkages. Finally the author states ’that the moment arranging for funds is not the key issue in SMI.

William R. Pendergast (2006) through a literature review describes the early stage of entrepreneurial experience arising from opportunity, uncertainty, lack of structure, resource scarcity and fluid or dynamic quality. According to the study, certain beliefs, attitudes and behaviors are functional within the context of the entrepreneurial
processes. He concludes that the traits form a cluster in which the ability to deal with uncertainty and a sense of personal efficacy leads to an attenuated perception of risk and a pro-active disposition.

**Hareram Hajra (2002)** notes the role of venture capital funds in India to encourage industrialization through industries development by providing start up finance or seed capital to the new ventures having expertise and special acumen in the management and other technical areas.

**Padma (2002)** lays down six important resources essential for running the venture

- Evaluating strengths and weaknesses.
- Being Committed.
- Having desire, drive, determination and discipline.
- Believing in own product/venture and working hard to make our own people believe in it too.
- Creating a business plan (after the prerequisite market research)
- Having a great backup to get advice and encouragement needed to keep going.

**Richard Bolen (2007)** examined twenty Small and Medium Enterprises’ Directors and Partners in the South West of England on the need for leadership development. By applying the mean and standard deviation the study highlights that to survive industries should embrace change within their organization, maintain a committed and motivated workforce, combine elements of both leadership and management in their role, choose an ideal location, quick and prompt information gathering, exploit external support and
legislation. Rapid changes and increased competition are making it increasingly necessary to develop a strategic approach and plan for effective succession in the organization. The study concludes that important skills such as delegation, time management and strategic thinking and training, should be delivered through an informal, flexible approach for success of an enterprise

**Vipin Gupta, NeeluRohmetra, Dinesh Sharma (2002)** by ascertaining managerial data from Jammu, constructs and provides a sound characterization of the relationship between contextual conditions and the opportunities for the entrepreneurial strategy.

**Susan Johnson and Thalia Kidde (2002)** have proposed a new concept relating to the poor, the ‘need for patient capital’. Subsidies may continue for long as a social imperative response to the local concerns: NGOs should continue to play a strategic role in their development. The more important concern according to the authors is to increase the availability of resources for SMI.

**Gaikward V. R. and Tripathi R.N. (1970)** studied the small Industries of Tanuku region of West Godavari District in Andhra Pradesh. It is an attempt to bring out the pre-requisites for successful Industries. According to them, bold, dashing and pragmatic personality, managerial competence, high motivation, dominant socio-economic power enjoyed by the family and contacts at higher social and Governmental level lead to Industries development.

**Oamen M.A. (1972)** examined the emerging pattern of Industries in small-scale sector of Kerala. His study focused attention on origin and growth of firms in light
engineering industry and impact of government programmes on Industries. The study of forty-five units revealed that single largest group of Industries consisted of engineers and technicians and most of them were Muslims by the Weighted Average Mean.

**Bhatia B.S. (1974)** investigated the situation of fifty manufacturing firms having less than fifty workers functioning in Punjab. He studied the socio-economic background of Industries, their attitudes towards industry, the way in which they have made the transition to industry and the problems encountered by them by establishing a parametric relationship by applying Karl Pearson’s Coefficient of Correlation. He did not find any relationship between the growth of the firms and the socio-economic background of the Industries. However, he notes that the firms that continuously expanded had gradual growth and were started with a relatively favorable capital base and merchants established most of them. The Industries showed the tendency to diversify instead of expanding after a particular point since they lacked vital information about wider markets.

**William Heinecue (2003)** offers general rules for Industries and business managers. General guidelines are given as to what to do and what not to do in starting and sustaining a venture and especially while facing a crisis.

**Aruna Kaulgud (2003)** tries to identify business opportunities, to propose a training module, and suggests possible ways of market development. Various kinds of SMI who go into roaring success are those with the following important aspects “Desire, Discipline, Determination, Dedication, Devolution-all leading to Dignity” of being an entrepreneur and states that the present challenge is whether these traits can be imbibed or imparted through training programmes.
Prime Minister (AtalBihari Vajpayee) in his speech at the Asian Summit said that Change in India is visible not only in a high-visibility sector like IT-enabled services. Industries, employment and self-employment are also growing in India’s rural and semi-urban economy.

Stephanak and Prien (1950) depicted to raise capital from many small-scale units than for a few large ones, because, the small scale industries may involve those who have little savings and may satisfy their instinct of creativity. Lewis (1954) concluded that development works might be done by human labour with very little capital. Surplus labour may be used to make even capital goods without using any scarce factor. The industrial Policy Resolutions of 1948 and 1956 highlighted the importance of small scale sector in the generation of an additional employment opportunities with lower capital investment.3 Raj (1956) revealed that the value added per employee in the large sector is no doubt around double that in the small sector has been around six to seven times higher than the organized sector.

Jain (1971) observed that financial agencies have developed a preference of investing their funds in the medium and large scale and the bigger ones among the small-scale units.

Benjamin et al (1971) emphasized that one of the main aspect of the practice of rural industrialization through group action is the development of relatively large-scale industries on a region basis.

Patnaik (1990) revealed that the small-scale industries sector occupies a strategic position of unique importance in the Indian economy.
Singh (1990) found that traditional industries such as the leather group alone recorded a significant rise, in term of employment and production in non-traditional goods have shown an upward trend.

According to Subbaraman (1991) job generating capacity of village industries cannot be over emphasized. Unemployment breed poverty and it can be eradicated by spreading the network of village industries in every nook and corner of the country.

Goyal (2006) revealed that there have been a variety of new trends in Indian Corporate Sector, in general, and the small-scale sector in particular. Rao (1991) revealed that industrial estates and industrial areas in less developed and least developed regions put up superior social performance compared to those in a developed region.

Heggade Odeyar D. (1981) has suggested that Industries of SMI could be developed through encouraging self-employment and by organizing SMI co-operatives. He recommended that educational system should be modified to create increasingly diversified skills among SMI and that a separate policy should be formulated for promoting Industries among SMI.

Deshpande M.U. (1982) in his study on entrepreneurial development in Marathwadas has observed that backwardness of the Marathwada region is mainly due to lack of prospective Industries in the region. According to him the policies of the government, the upper strata of society, social and political leadership, occupational background, family aspirations, and general infrastructure, are important factors that contribute to the development of Industries. His study also indicates that the emergence of Industries is not merely a psychological or socio-psychological phenomena but it is
also conditioned by the political milieu and the administrative system and the commitment to economic development.

**Tiwari (1992)** revealed that industrialization is a highly complex and important phenomenon. The concept has helped in making choice of the important factors that determine the process. Pace and pattern of industrialization in evaluating various measures which can be made use of the assessing and analyzing the inter regional pattern of industrialization of appropriate place in the dissertation.

According to **Kochhar (1993)** the import (of capital goods, of which machinery and transport equipment are a major segment) serves twin purpose while it serves the immediate need of augmenting the indigenous capacity to produce consumer goods which may otherwise face a shortfall, it also leads to technological upgradation in the long run.

**The Management Development Institute (1983)** in its study on the assessment of institutional assistance in the states of Uttar Pradesh, Punjab and Himachal Pradesh, found that the facility of institutional finance had a nominal impact in Himachal Pradesh, but was quite significant in Uttar Pradesh. The study team also found that about 98% of the Industries did not receive any training in Punjab and yet most of them were successful mainly due to the natural entrepreneurial skill of the Punjabi community. But in Uttar Pradesh and Himachal Pradesh there seemed to be greater need for expanding training programmes to generate entrepreneurial motivation.

**GudiSavithri M.(1984)** has listed out the type of assistance provided by the Karnataka state Social Welfare Board for SMI. She has recommended the establishment
of a marketing advisory center for SMI that would provide information regarding marketing trends; consultancy services and also organize trade fairs to market their products. She has also called for the establishment of a separate industrial estate/ complex for SMI which would include servicing centers, training facilities, testing facilities for quality control, research and development support and marketing and counseling center.

E Van Auken and Lynn Neeley (2004) in his study try to compare the problems of 78 small firms during the pre-launch planning. The study mainly concentrates of acquisition of capital during the initial stages of the unit. The study tries to find out difficulties in raising initial capital for the small scale firms. The results show that the firms that perform pre-launch planning and begun with a smaller initial capitalization use lower levels of equity and higher amounts of boot strap financing and perceive a greater difficulty of raising initial capital.

Gary Knight (2004) studies the need of entrepreneurial orientation in small scale industries. He specifically mentions that there is acute need of entrepreneurial orientation in the era of globalization as there is a cut throat competition of small scale units with multinational companies. To test this situation Markey survey of small and medium firms from industries such as electronics, textiles and apparel related products was undertaken. The author with the results suggest the importance, managers give to the tactical maneuvers, while responding to changes in the environment under globalization. At the operating level, managers use various tactics to maintain and enhance their performance. Innovation arising from technology acquisition helps the firms to compete more effectively with the competitors in a turbulent environment and produce goods that
satisfy specific needs of the customers in foreign market and finally have suggested that firms that are responding to globalization by modifying their marketing strategies perform better than firms that don’t.

**Giinter Faltin (2004)** in his study gave details about different techniques in the modern times with examples regarding how to generate entrepreneurial ideas. The study reveals that as there is increase in the consumer spending which created many opportunities to the innovative entrepreneurs.

**Hadimani R.N. (1985)** conducted a survey of two hundred traditionally trading Industries belonging to the weaving and non-weaving castes, in the handloom industry of Mahantapur. His study indicates that castes’ attachment to the caste occupation was strong, but interestingly it promoted Industries in the case of the trading caste and hindered it in the case of the weaving caste. He is of the view that, this dual role of caste in Industries is mainly due to the presence or lack of several social, economic, political, educational and human resource factors.

**Singh P.N. (1986)** study was based on some cases of successful Industries’ aim at identifying factors for success and for developing Industries for economic growth in a country. He examines the social values related to Industries, impact of Industries in economic development, government efforts to encourage Industries, factors influencing Industries, and suggests a model for entrepreneurial development.

**Sarngadharan (1994)** emphasized that the reasons for underutilization of production capacity indicated that competition from large-scale firms and similar type of small-scale units in the local area ranks the most important reasons for underutilization of
capacity of small-scale industries of Trivandrum District. Lack of demand for the product and shortage of finance can also be considered as crucial problems faced by the small-scale industries in the district.

**Kulkarni (1994)** raised various controversial issues such as ownership and control, subsidiary, control management control and brand name etc., relating to small-scale industries.

**Das Gupta (1994)** emphasized that management of the resources available within an organization is the best and the cheapest way of arranging resources. In this regard, SSI units should pursue with the suppliers for extending 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 as 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 substantial amount of funds to the SSI units for utilization in higher yielding avenues.

Fifty one Industries of the Krishna and Guntur districts were studied by **Lakshmana Rao V. (1986)** with a view to find out how far programmes and policies of the government fostered industrial Industries. He was of the view that the government schemes did certainly give a boost to Industries in Andhra Pradesh.

**Gupta M.C. (1987)** recently studied entrepreneurial performance of sixty small Industries, taking twenty each from Kanpur, Allahabad and Gorakhpur in Uttar Pradesh. In his study he deals in detail with the essential qualities and functions of Industries,
policy framework and support systems to develop Industries in the small sector. He makes recommendations for framing policies in future and outlines the role of the government in developing Industries in the small Industry Sector.

Lynne Butel and Alison Watkins (2004) talk about Ant Colony Optimization (ACO) techniques in detail. The said technique is an appropriate means of modeling the patterns of entrepreneurial activity all over the world. This activity is defined by the authors as the search for opportunities for value creation and exploitation in a changing environment. The present study tries to find out the different initiatives taken by managers which distinguish the unit from its competitors. The study tried to distinguish units where entrepreneurial activities are carried out by successful and unsuccessful entrepreneurs. And finally the author concludes that it is impossible to study the individual entrepreneur in isolation from the community and environment in which he or she operates.

Jayabal & Nagarajan (2004) explains how an entrepreneur can reduce his project cost by applying a systematic zero-based approach to project formulation. This not only reduces the initial investment considerably but also improves the financial viability of the project and specially focuses on investment in land and building, plant and machinery, choice of electrical installations etc.

In the vast territory of India there are certain areas, particularly the rural areas, which possess enormous untapped resources in the form of hoarded capital and underutilized human skills. Moreover, the rural areas possess considerable potential for market channels of raw material as well as finished products. The establishment of small
enterprises in the rural areas and small towns by the first generation Industries through resources mobilization their own is an achievement of the promotional policies. As such the development of small units builds a stronger middle class and taps capital investment from family saving this was examined in a study conducted by Hashim and others in Vadodara and Kheda districts of Gujarat. It was observed that from the total number of units covered under the sample survey; nearly 83 percent units in Baroda and 68 percent units in Kheda were started by their present owner.

Tuteja (2002) studied on the origin and growth of firms in the developing countries concluded that the firms always started their activities at small-scale with low amount of capital drawn from the saving of the Industries and their friends or relatives as neither the credit system nor the government programmes appeared to have plays a significant role.

Bhanushali S.G. (1987) has made a study of one hundred and twenty-five light engineering industries of Kolhapur in the Maharashtra State, with particular reference to the economic, social, educational and occupational backgrounds of the Industries. He has also examined the organizational set-up, personnel, production, finance, marketing and entrepreneurial creation on the basis of which the development of Industries’ personality is charted. The study concludes that the persons who are from the minority or marginal groups and those who are trained in the art of engineering are seen with better capabilities to achieve success.

Sharadadevi K. (1989) maintained that the active encouragement of Government and emergence of different official and non-official agencies at Central and State levels
coupled with new schemes, departments and institutions have greatly facilitated the emergence of SMI. She recommended that efforts should be directed towards encouraging SMI in rural areas.

Small enterprises are important in diffusing the concentration of economic power of large firms and the resultant benefits are shared by the large number of Industries. As the SMI are less capital intensive, they encourage first generation Industries having limited resources. In 1965, the monopolies inquiry commission had stated that small business concerns are a good training ground for business talent and managerial skill. As the small enterprises are either partnership or proprietary concerns where the owners or their relatives also work along with other labour forces, the relation between the employer and employee are more harmonious in the smaller enterprises compared to the large firms.

Dhrupad Mathur (2004) in his study tries to find out ways and means to technically upgrade the system of small scale industries. He suggested technically upgrades system such as e-application like Technical and Entrepreneurial Research Information System (TERIS). These types of applications may help interaction among academic, industries and various agencies related to researchers for sustainable Industries development.

Sarah Dinga-Nyoh (2005) studied the place of Small and Medium Scale Industries in the economy. She tried to associate role of these industries with the application of human rights concepts. She pointed out that the growth of these industries depends upon levels of economic development of different countries.
Arundhati Chattopadhyay (2005) notes that Economic empowerment is a sine qua non for elevating the status of SMI in our society. And finally states that one possible approach towards achieving this end could be through Industries development.

Khanka S.S. (1990) studied fifty Small Scale Industries in a notified background region of the Kumaun division of Uttar Pradesh regarding the emergence, performance and problems of Industries. A guiding assumption of this study is that true display of the entrepreneurial role and attributes can be well seen only in the case of Small Scale Industries. The study brings under its purview entrepreneurial setting, entry into Industries, financing of Industries, entrepreneurial performance and their problems. Khanka lays stress on the policy implications to provide liberal incentives and concessions to the Industries to encourage, promote and strengthen the Small Scale units in backward areas.

Subhash J. Rele (2004) emphasized that it was often found that a unit had obsolete machinery and equipment or land and buildings which were not actually required. The International Labour Office also emphasized that small firms had traditional methods of production which had not been adopted by taking advantage of new tools, new materials and new markets and that such adaptation was often a necessary condition for their survival; it was of the view that they needed outside help. A study of Bombay revealed that of the 1960 interviewed entrepreneurs, 634 or 60 per cent saw no way of improving their technique of production. The difficulties were: lack of finance, lack of adequate demand, government restrictions, lack of space, lack of power supply and inferior quality of product. The Unesco Research Centre on Social and Economic
Development also found that in many small units the methods of production were traditional; adoption of modern techniques was either disliked by the entrepreneurs or was not feasible."

**P.N. Dhar and H.F. Lydall(2008)** maintained that since majority of the small entrepreneurs had an insufficient technical and managerial background, and that private agencies were not able to meet the needs, there was a case for Government assistance  S. Nanjundan, H.E. Robison and Eugene Staley, and others were also of the view that an advisory service or extension service to bring the small industrialists into closer touch with modern industrial methods and with new applications of science and technology was one of the most promising devices for small industry development.

**Joseph E. Stepanek(1999)** discusses the contributions and limitations of industrial advisory services and industrial extension methods." In light of the need of technological improvement in small units and the emphasis on Government assistance, it was decided to study this aspect in the present study. Provision of Electricity None of the studies has dealt with the power problems of small-scale industry in detail. Some studies only made that small-scale units had some problems owing to power-cuts. The Punjab and Delhi Chamber of Commerce and Industry discussed at a conference some of the power problems faced by the small-scale units regarding the sanctioning of power connections, power cuts and power fluctuations. It was decided to make a detailed study of the power problems of small-scale units in the present study particularly because power was produced and allotted by the Government.
Labour Policy While, there is much literature dealing with problems of industrial labour, not much attention has been paid to problems of labour in small-scale industries. Most of the studies on small-scale industries examined matters such as the extent of self-employment. And distribution of workers by status, skill and sex: problems faced by labour were not discussed in details." Baljit Singh found that the wages of 80 per cent of the workers in Moradabad were below the prescribed minimum wage-level: the working hours were unregulated: and very few enterprises gave a paid holiday or an over-time wage." A study of Howrah found that there was an evidence of cases where the wages had not been fixed in advance and the principle of "no work, no pay" covered the system of daily wage rate, weekly holiday and sick leave." Another study of four places: Delhi (Okla. Estate), Rajkot, Hyderabad and Ludhiana undertaken by the UNESCO Research Centre found that in Delhi workers had become conscious of their rights and nearly 24 per cent of the skilled workers. 28.6 per cent of the semi-skilled and 27.3 per cent of the unskilled were union members. In Hyderabad, the trade unions were not active. In Ludhiana, 15 per cent of the total number of 13,000 workers was members of any union. In Rajkot, the pattern of industrial relations was found to be remarkable. Though. The workers were temporary in character and did not enjoy weekly off-days or holidays with pay, yet those who had been with the same unit for two years and more were entitled to privilege leave with pay. Trade unionism was virtually absent among the small industry workers. The International Labour Office pointed out that small firm had some advantages in the matter of labour relations because the personalface-to-face relationship
between the head of the firm and the workers made it easier to build up a sense of team work. However, the wages and working conditions were not attractive to best workers."

**P. Ramkrishnan (2001)** in his study in Delhi found that the industrial atmosphere was peaceful and over 70 per cent of the units had no problem with the workers. "Hein Streefkerk in his Pr study in Bulsar sub-district of South Gujarat pointed out that workers in modern small-scale industry were a largely neglected branch of the Indian industrial system and there was a complete lack of legal protection for workers in small-scale industry and their wages were low." U. Kalpagam in his study of women workers in export garments industry of Madras emphasized the same thing. A study of labour in Bombay also described the unsatisfactory conditions of work."

**SatyaDeva (2009)** in his article hypothesized that in India, which was in the early phase of industrialization "workers continue to be oppressed under the benevolent cover of trusteeship, particularly in the thousands of establishments where bureaucratization has not yet taken place". The BagaramTulpule emphasized that an important dimension of any good legislation was its enforceability. "Eugene Staley and Richard Morse were of the opinion that industrial relations should not only be viewed from the angle of social welfare but also from the view of attainment of high industrial productivity."

**RavinderVerma (2002)** also emphasized the same point that while restoring all legitimate rights of the working class the Government should not ignore that the more urgent need was to step up production and the labour legislation helped to achieve this objective." Since one of the objectives of the Government policy for promoting small-scale industry was to create employment, the importance of labour in small-scale
industries could not be overemphasized. The present study attempts to examine how far labour policy was applicable to small-scale units. From the survey of the literature, we find that the problem of small-scale industries were highlighted from time to time. Government has also devoted considerable effort in formulating comprehensive and consistent industrial development programmes. In the present study, an attempt has been made to study whether considerable efforts were made to carry out these programmes.

In view of the diversity of problems relating to the various groups in the small-scale sector, the Cottage Industries Board recommended separate organizations at the Centre for the promotion of each group of industries. Accordingly, five Boards were set up during the period 1952-53 for Handlooms, Handicrafts, Coir, Silk, and Khadi and Village Industries. During the First Five Year Plan, the Union Government identified some of the problems of small-scale industries such as paucity of requisite finance, shortage of raw-materials and power. Lack of machinery and equipment, competition from imported articles and from large-scale units within the country, and unstandardized and inferior quality of production. For giving a definite shape to the small-scale industries programme, an international team of experts on small-scale industries was invited by the Ministry of Commerce and Industry in 1954 through the courtesy of the Ford Foundation to make a study of the problems of small-scale industries. An India Board, known as the Small-Scale Industries Board with the responsibility of nation-wide planning and co-ordination of programmes for development of small scale industries was set up in November 1954. In order to carry out the programmes and policies, a Central agency known as the Development Commit stoner, Small-Scale Industries also came into
existence simultaneously to function both as a co-coordinating and exactly. The Team's major recommendations concerning vetting Regional Institutes of Technology for small singing up of industries and a Marketing Service and Small Industries Corporation were accepted by the Government. Four regional Small Industries Service Institutes were established at Delhi, Bombay, Calcutta and Madras to serve as the main centers for an industrial extension service which could provide technical assistance and guidance to small entrepreneurs. The Branch Institutes were set up at Trivandrum, Hyderabad, Patna, Ludhiana, Rajkot and Agra. The National Small Industries Corporation Ltd. was set-up in 1955 with the object of supplying machinery and equipment to small enterprises on a hire-purchase basis and assisting them to execute Government orders for the supply of various items and stores. Other important programmes initiated during the First Five Year Plan period were the establishment of industrial estates and the reservation of spheres of production for small-scale industries.