Mahatma Gandhi and his followers favoured small-scale industries because these would provide employment without the need of much investment, would help in the dispersal of industry to rural areas, produce much needed consumer-goods (whose increased supply would also deal with the distortions caused in the process of capital accumulation) and avoid the concentration of economic power, dehumanization and pollution inherent in large-scale industries.

It was recognised by the Government of India after Independence in the Industrial Policy Resolution of 1948 that small-scale industries were particularly suited for better utilization of local resources and for the
achievement of local self-sufficiency in respect of certain types of essential consumer goods. In the First Five Year Plan, it was emphasized that "small industries derive part of their significance from their potential value for the employment of trained and educated persons". For developing and protecting these industries, the importance of reserving spheres of production was recognized. The Karve Committee also made a case for small industry on grounds of their helping in providing employment and in moving towards decentralised society. The Industrial Policy Resolution of 1956 stressed that "some of the problems that unplanned urbanisation tends to create will be avoided by the establishment of small centres of industrial production all over the country...Therefore, the aim of State policy will be to ensure that the decentralised sector acquired sufficient vitality to be self-supporting". The Third Five Year Plan stated that "with improvement

---


in technique and organisation, these industries offer possibilities of growing into an efficient and progressive decentralized sector of the economy providing opportunities of work and income all over the country. Assistance in the adoption of improved techniques was declared to be the principal aim of planning in this field. In the Fourth and Fifth Five Year Plans also, the role of small-scale industries in obtaining increased supplies of consumer goods, and in reducing unemployment and underemployment was referred to. The Government stated that "it would be necessary to organise a system for identification of such fields and processes and adopt policies whereby smaller units of operation and less capital intensive methods could be promoted". The Industrial Policy Resolution of 1977 emphasized the importance of small-scale industry for dispersal of industrial activity away from the large urban concentrations and for removing the distortions of the past. It was, thus, claimed on behalf of

---


the Governments at different levels in India that their
policy was one of promoting small-scale industries. This study
was undertaken to examine this policy and the way it had worked.

SURVEY OF THE LITERATURE

Most of the studies of small-scale industries
are based on sample surveys and have an economic orientation.
An early contribution was made by the Stanford Research
Institute of the International Industrial Development Centre
of the United States of America. There are as many as eight
publications of this Centre. These studies were taken up with
the aim of assisting development planners and administrators
to promote growth in the newly industrialising countries. The
Unesco Research Centre on Social and Economic Development in
Southern Asia has three publications on the social implicat­
ions of small-scale manufacturing in India. The Research
Programmes Committee of the Planning Commission financed
three studies of small scale units of Bombay, Moradabad and
Saugor districts. The National Council of Applied Economic
Research studied the small-scale units of Mysore. The Council
also made a study of proposed industrial programmes in certain
states in the Fourth Five Year Plan. There are two studies of
the Institute of Economic Growth and one of the Economic and
Scientific Research Foundation. The Banking Commission also
financed a survey of the small artisans and small-scale industries of Kashmir to highlight the pattern and problems of finance and the possibilities of improvement in institutional finance specially banking. The Society for Social and Economic Studies also conducted a study on financing. There are some publications of the Small Industry Extension Training Institute. There are also a number of publications of the Small Scale Industries Board and the Office of the Development Commissioner, Small-Scale Industries. There are several reports of working groups, commissions and ad-hoc committees. There are nine monographs by individual authors. There are three publications based on doctoral theses dealing with financing of small-scale industries. There are a number of research articles published in periodicals.

The present work aims at the study of the Government policy and administration relating to small-scale industries. In the following, we shall examine the contribution relevant to our focus in these earlier studies.

Financial Assistance

Most studies pointed out that finance was one of the major problems of small-scale industries. The International Planning Team, which visited India in 1954, concluded that there was a severe lack of capital as well as credit largely because of low productivity and "over-population" in
many branches of small industry.8 The Society for Social and Economic Studies emphasized that the dearth of capital resulted from a low income level, a small capacity to save and hence a lack of capacity to invest.9 G. Balakrishnan analysed 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.10

Various research studies revealed the inadequacy of institutional sources of finance also. P.N. Dhar in his survey in Delhi found that the only source of external finance consisted of relatives, friends and traders.11 In the survey of handloom industry in Karnataka and Sholapur also, it was found that on the whole, master

---


weavers and money-lenders constituted the major source of funds both in urban and rural centres. \(^{12}\) D.T.Lakdawala and J.C.Sandesara 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. \(^{13}\) Baljit Singh in his study in Moradabad found that of the indebted establishments 33 per cent were indebted to traders and dealers, 27 per cent to relations and friends and 21 per cent to money lenders. \(^{14}\) Inderjit Singh and N.S.Gupta 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. \(^{15}\) 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 in his study in Saugar district found that industrialists preferred a bania (private money lender) to a co-operative bank for meeting their needs because of complicated formalities, cumbersome procedure and undue delay. Ramakrishnan in his study in Delhi found that

---


entrepreneurs were prepared to pay or had paid a much higher rate of interest to non-banking sources to avoid bank formalities. 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 "skepticism" 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, in his study in Rajasthan analysed the contribution of institutional sources in financing industry.

Several studies highlighted the problem of competition with large-scale industries. Ram K. Vepa found that despite a well-developed institutional framework, it was the urban-


based and comparatively bigger entrepreneurs who obtained the bulk of the advances made to the small-scale sector. A survey of the match box industry in Sivakasi and Sattur emphasized the same thing. G. Raghava Reddy pointed out that village and small-scale industries contributed 49 percent of the net domestic product in the manufacturing sector but received only 24 percent of the bank credit going to this sector. He advocated that the bank credit available to them should at least be equivalent to their contribution.

K.T. Ramakrishna analysed the causes of the prejudice of financial institutions against small industries in the matter of lending. The Society for Social and Economic Studies 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.²⁸

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 (Chapters III and IV).

Marketing Assistance

The significance of marketing was brought out by Paul Hoffman, 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".²⁹ Peter F. Drucker 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 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 standardisation, differences in the quality of materials used and lack of precision. The latter stemmed from inadequate resources at the disposal of small-scale industries for identifying market outlets and tapping them profitably.


32 Ibid., p. 16.

33 A.P. Sharma, "Marketing Problems of Small-Scale Industries", in S. Neelamegham (ed.), op. cit., p. 159.
J.M.L. Tambi emphasized that large scale units had an edge over small-scale ones in the matter of marketing because of economies of scale, financial strength to face set backs and competence to hire specialised 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 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 disadvantage of the small industry. The importance of the Government purchase programme in the U.S.A. had been recognised. E.T.Grether wrote that Government procurement - federal, state and local - was such a sizeable proportion of

---

38 International Labour Office, op. cit., p. 29.


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. 43

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. It was decided to do so in the present study (Chapter V).

Raw-Materials Assistance

Several problems related to the supply of raw materials were indicated by earlier studies. D.T. Lakdawala and J.C. Sandesara 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, 56 due to import control and similar restrictions and inferior quality of indigenous materials, and 22 due to fluctuating prices. 44 A study of small engineering units in Howrah 45

45. Unesco Research Centre on Social and Economic Development in Southern Asia (1962), op. cit., p. 82.
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 analysed 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.

---

46 J.N. Mishra, op. cit., p. 47.
49 P. Ramakrishnan, op. cit., p. 36.
50 Baljit Singh, op. cit., p. 100.
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, 11 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 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 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 also pointed out that all sorts of personal and political influences were brought to bear in order to obtain raw-materials and that

---

52 Unesco Research Centre on Social and Economic Development in Southern Asia (1962), op. cit., p. 82.


54 Krishan Lal Sharma, op. cit., pp.139-40.

some persons who received allocations of raw-materials made an easy living by selling them in the open market. It was decided to study this aspect of the policy in detail in the present study (Chapter VI).

Technical Assistance.

The International Planning Team pointed out that Indian industries used obsolete tools and machinery and that without modernization these were condemned to mediocrity and eventual elimination. Subhash J. Rele 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, 63% 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 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 industrialist 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.

61 Unesco Research Centre on Social and Economic Development in Southern Asia (1962), op. cit., p. 18.
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 (Chapter VII)

Provision of Electricity

None of the studies has dealt with the power problems of small-scale industry in detail. Some studies only made a mention 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 (Chapter VIII) 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(Okhla estate), Rajkot, Hyderabad and Ludhiana undertaken by the

---


68 Baljit Singh, op. cit., p. 76.

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 were 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.\textsuperscript{70}

The International Labour Office pointed out that small firms had some advantages in the matter of labour relations because the personal-face-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.\textsuperscript{71}

\textsuperscript{70}Unesco Research Centre on Social and Economic Development in Southern Asia (1966), \textit{op. cit.}

\textsuperscript{71}International Labour Office, \textit{op. cit.}, p. 31.
P. Ramkrishnan 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.\textsuperscript{72} Hein Streefkerk in his 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.\textsuperscript{73} U. Kalpagam in his study of women workers in export garments industry of Madras emphasized the same thing.\textsuperscript{74} A study of labour in Bombay also described the unsatisfactory conditions of work.\textsuperscript{75} Satya Deva 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."\textsuperscript{76} Bagaram Tulpule emphasized

\begin{itemize}
\item \textsuperscript{72} Ramakrishnan, op. cit., p. 36.
\item \textsuperscript{73} Hein Streefkerk, "Too Little to Live on, Too much to Die On - Employment in Small-Scale Industries in Rural South Gujarat", \textit{Economic and Political Weekly}, April 11, 1981, pp. 659-668.
\item \textsuperscript{75} Anonymous, "Working Class in the Small Sector", \textit{Economic and Political Weekly}, vol.XII,No.12 (March 19,1977), pp.497-98.
\end{itemize}
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. Ravinder Verma 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 (Chapter IX) attempts to examine how far labour policy was applicable to small-scale units.


78 Eugene Staley and Richard Morse, op. cit., p. 383.

From the survey of the literature, we find that the problems of small-scale industries were highlighted from time to time. Our 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.

OBJECTIVES

The following aspects of Government policy with regard to small-scale industries were sought to be studied:

(i) financial assistance in the form of loans, subsidies, concessions and incentives;
(ii) assistance in marketing;
(iii) provision of raw-materials;
(iv) technical assistance;
(v) provision of power; and
(vi) regulation and welfare of labour.

Determination of the Scope of the Study

The Indian Constitution is quasi federal; powers have been divided between the Union and State Governments. Industries constitute a State subject except for those which have been declared by Parliament by law to be necessary for the purpose of defence or for the prosecution of war, or whose control by the Union has been declared to be expedient in the public
interest. Industrial policy, however, was mostly formulated by the Union Government in consultation with those of the States, and could be discerned from authoritative documents. Its implementation, however, could best be studied by going to the field. It was decided to choose for the purpose the most developed State in India and, within it, to make a sample survey in the District where small-scale industries had developed the most, since it was here that the problems of implementation could be studied best. In less developed areas small-scale industries also were likely to be small in number and so underdeveloped as not to be able to take advantage of programmes of assistance. The most developed State in India was Punjab. While the per capita income in India as a whole in 1977-78 was Rs.1,189, in Punjab it was 1,966. Within Punjab, small-scale industries had developed most in Ludhiana District. There were 38,652 registered small-scale units in Punjab (which had 12 districts). Of these, more than one fourth (10,507) were located in Ludhiana District. Also, of the total employment in this sector in the State (2.62 million), Ludhiana District provided for a little less than half (1.09 million). Of the total exports of the products of small industries from the State, Ludhiana District contributed 63 per cent amounting to Rs.365.44 million. Hence, the Ludhiana District in Punjab was chosen for the field survey. The universe consisted of all registered working small
Industrial units with the Ludhiana District Industries Office on March 31, 1979. The field survey was made during the year 1980. The definition of a small industrial unit as adopted by the Government at this time was one having an investment in plant and machinery of Rs. one million or less. Units which were not registered with the District Industries Office, were left out because they were not receiving the full impact of Government policy. The universe, thus, consisted of all units in rural as well as urban areas of Ludhiana District covered by the Government's then definition of small-scale industries and to which the policy as evolved by the Union and Punjab Government was uniformly applicable.

CHARACTERISTICS OF THE UNIVERSE

Ludhiana is the third largest District of the State of Punjab with a population of about 1.80 million. The origin of the town can be traced to the year 1481 A.D. when the Lodis built a fort here. Lodiana or Ludhiana was called after the Lodi dynasty which ruled over a large part of northern India from 1451 to 1526 A.D. It is situated in the south-east portion of the Jullundur Division. It is bounded on the north by the river Satluj which separates it from Jullundur District. On the east, it adjoins the Ropar district and the Union Territory of Chandigarh and on the west Ferozepur
district, while on the south and south-east, it is bounded by Sangrur and Patiala districts respectively. The District is roughly rectangular having a length of about 96 kilometres and a breadth of about 39 kilometres.

The District is divided into ten Community Development Blocks, namely; Jagraon, Sidhwan Bet, Sudhar, Samrala, Macchiwara, Ludhiana, Doraha, Mangat, Dehlon and Pakhowal. For the collection of revenues the District is divided into three sub-divisions - Ludhiana, Samrala and Jagraon; and six towns - Doraha, Samrala, Raikot, Khanna, Jagraon and Ludhiana.

TOPOGRAPHY

Ludhiana District is centrally located in the Punjab plain region. The Punjab plain is the product of the deposits of the river Satluj, Beas and Ravi. The plain is marked for its flatness and featurelessness. The topography of the District is a typical representative of an alluvial plain and owes its origin to the aggravational work of the Satluj. The alluvium deposited by this river is worked over by the wind, giving rise to a number of small dunes and sand mounds in this otherwise level area. The summer monsoon with its south-westerly direction plays an important role in determining the direction of these sand-dunes. In the Ludhiana
plain, the elevation ranges from about 268 metres in the east to about 216 metres in the west, that of Ludhiana town being 246 metres. The District forms a part of the widespread Indo-Gangetic alluvial plain. The area is entirely covered by alluvial deposits which consist of clay and sand with kankar. The only mineral product of the District is kankar which is quarried in many places and is found in sufficient quantity and at convenient sites, so that there is no difficulty in obtaining a supply for all the metalled roads and for lime.

CLIMATE

Climatically, the District experiences extreme cold and scorching heat. The temperature rises to about 46–47°C in June and drops to nearly freezing point in December and January. Average annual rainfall during the five years from 1975 to 1979 in the District was 66.11 centimetres, whereas in the State, it was 52.0 centimetres. About 75% of the rain is received generally during the three months from July to September.

---

<table>
<thead>
<tr>
<th>Sex</th>
<th>Total Workers</th>
<th>Cultivators</th>
<th>Agricultural Labourers</th>
<th>In Household Industries</th>
<th>Other Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Hinda</td>
<td>4,95,116</td>
<td>31936</td>
<td>5,28054</td>
<td>1,33,888</td>
<td>2895</td>
</tr>
<tr>
<td>(100.00)</td>
<td>(25.9)</td>
<td>(18.6)</td>
<td>(6.1)</td>
<td>(49.4)</td>
<td></td>
</tr>
<tr>
<td>Punjab</td>
<td>45,98,093</td>
<td>241723</td>
<td>50,40,031</td>
<td>17,32,039</td>
<td>24,195</td>
</tr>
<tr>
<td>(100.00)</td>
<td>(36.3)</td>
<td>(22.9)</td>
<td>(3.4)</td>
<td>(37.4)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Director of Census Operations (Punjab), Census of India 1981, Series-17, Punjab, p. 17.

Figures parenthesis show percentages to total.
DEMOGRAPHIC FEATURES

According to the census of 1981, Ludhiana District has a total population of 1.80 million of which 57.88 per cent resides in rural areas as against the State average of 65.21 per cent. Decennial growth rate of population has been quite high. It was 29.67 per cent during 1951-1961, 28.24 per cent during 1971 and 27.07 per cent during 1971-81 whereas the national average during 1971-1981 was 24.75 per cent. Table 1.1 gives the occupational distribution of the population. It shows that the farm sector employed 44.5 per cent of the workforce as cultivators or agricultural labourers in the District as against 59.2 per cent in the State. The percentage of workers employed in household industries in the District was 6.1 and in the State 3.4. About half (49.4 per cent) of the workers were employed in activities like manufacturing, trade and commerce. In the State, 37.4 per cent were employed in such activities. The fact that a relatively large proportion of workers in the District was engaged in secondary and tertiary sectors, indicates the diversified nature of the District's economy.

AGRICULTURE

Table 1.2 shows the classification of area in Ludhiana District and Punjab State. The total geographical area of the District is 378 thousand hectares of which 326
### Classification of Area

**Source:** Statistical Abstract of Punjab, 1980, p.113

<table>
<thead>
<tr>
<th>Geographical Area</th>
<th>Reporting Area for Land Utilisation</th>
<th>Forests</th>
<th>Land not available for Cultivation</th>
<th>Other Un-cultivated land excluding Fallow Land</th>
<th>Fallow Land</th>
<th>Current Fallow</th>
<th>Total Fallow</th>
<th>Net Area Sown</th>
<th>Percentage to Total Area</th>
<th>Area Sown more than once</th>
<th>Total Cropped Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iana</td>
<td>379</td>
<td>378</td>
<td>9</td>
<td>41</td>
<td>2</td>
<td>a</td>
<td>a</td>
<td>326</td>
<td>86</td>
<td>236</td>
<td>562</td>
</tr>
<tr>
<td>Rohtak</td>
<td>5038</td>
<td>5033</td>
<td>218</td>
<td>531</td>
<td>52</td>
<td>52</td>
<td>52</td>
<td>4580</td>
<td>83</td>
<td>2356</td>
<td>4536</td>
</tr>
</tbody>
</table>

**Source:** Statistical Abstract of Punjab, 1980, p.113

*a* = shows less than 500 hectares.
thousand hectares or 86 per cent is under cultivation. Of
the total cultivated area, 236 thousand hectares or 72.4 per
cent is double or triple-cropped. The comparable percentage
for the State is 56.4. The District is very fertile and the
average yield for the major crops was higher than that for
the State. For instance in the year 1979-80, the average per
hectare yield of paddy in Ludhiana was 3443 kg. while in the
State, it was 2606 kg. In case of wheat the two averages were
3436 kg. and 2715 kg. respectively. The average wheat yield
touched 3160 kg. during 1967-1977 which was the highest in
the country. For jowar the average yield in the District was
twice as high as in the State. The District had the largest
number of tubewells (36026) in the State. Apart from the high
soil fertility and assured irrigation the factor contributing
to the high yield in the District was the extensive use of
chemical fertilizers - 82,000 nutrient tonnes annually.

ROADS AND RAILWAYS

The District is well linked both by road and rail.
It is served by the Grand Trunk Road, part of which is the
National Highway No.1. This includes a bye-pass of around 8
kilometres, constructed near Ludhiana City to avoid the
congested areas of the town. The State highways passing
through the District are: (i) Ludhiana-Samrala section of the
Chandigarh-Ludhiana road, (ii) Samrala-Morinda road,(iii)
Ludhiana-Ferozepur and (iv) Ludhiana-Malerkotla road. These State highways pass for a length of 2104 kilometres in the District. The total road length in the District is 2636 km. and the road per 100 square km. of area is 70 km. Besides, there is 155.51 km. of road length per lakh of population; almost all villages are linked by road. Ludhiana is an important junction on the Northern Railway. It is connected with Jullundur and Amritsar in the north and the north-west, with Ferozepur in the west, and with Hisar, Jakhal and Ambala in the south.

**ELECTRIFICATION**

All towns of the District were electrified. All the 969 villages of the District had also been electrified by 1976. We may note from table 1.3 that more than 48 per cent of the electrical energy was consumed by the industrial sector in Ludhiana District. In the State this percentage was 35.9.

**INDUSTRIES**

The District could not boast of any well-established old time industry. After the annexation of Punjab in the year 1849, Ludhiana and Jagraon emerged as notable towns. Macchiwara and Bahlalpur were also old time centres responsible for maintaining trade and commerce in the area. In Ludhiana, woollen goods industry had a start on a very small-
### TABLE 1.3

**Consumption of Electricity by Uses**

(Million K.W.H)

<table>
<thead>
<tr>
<th>Place</th>
<th>Domestic (X%)</th>
<th>Commercial (X%)</th>
<th>Industrial (X%)</th>
<th>Agricultural (X%)</th>
<th>Others (X%)</th>
<th>Total (X%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ludhiana District</strong></td>
<td>67.51 (10.25%)</td>
<td>22.31 (3.59%)</td>
<td>318.33 (48.32%)</td>
<td>239.84 (36.41%)</td>
<td>10.78 (1.63%)</td>
<td>658.77 (100.00%)</td>
</tr>
<tr>
<td><strong>Punjab</strong></td>
<td>420.69 (10.32%)</td>
<td>136.80 (3.35%)</td>
<td>1462.81 (35.90%)</td>
<td>1903.41 (46.70%)</td>
<td>151.40 (3.72%)</td>
<td>4975.11 (100.00%)</td>
</tr>
</tbody>
</table>

scale. Woollen shawls were manufactured by Kashmiri refugees who had migrated and settled there consequent upon acute economic distress in the Kashmir valley in the thirties of the 19th century. Superior pashmina shawls were also manufactured at Ludhiana and these were exported outside the District and even to foreign countries, like France. Lungis and patkas were also manufactured at Ludhiana. Embroidery work was done on patkas and pieces of clothes. Owing to the stationing of the military at Ludhiana, the requirements of items of equipment such as laces and badges were met locally.

Early in the present century, machines for knitting socks were installed. This step facilitated the localisation of hosiery industry at Ludhiana. After the 1st World War, the foundry industry also made some headway. For casting work, Ludhiana was earlier dependent on Lahore but the number of units engaged in foundry work increased after the setting up of hosiery industry for which foundry units did minor and major repair work. Ludhiana was also well-known for the manufacture of shoe which were famous for lightness and durability.

Table 1.4 shows the registered working units of our universe, their employment and production. It is notable that during nine years (1971-80) the number of units multiplied to become 1.9 times, employment 1.7 times and production 3.22 times (Fig. 1). The most important industry for the
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacture of food products</td>
<td>126</td>
<td>209</td>
<td>93.00</td>
<td>148</td>
</tr>
<tr>
<td>Beverages</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Manufacture of cotton textiles</td>
<td>51</td>
<td>645</td>
<td>315.10</td>
<td>73</td>
</tr>
<tr>
<td>Wool, silk, &amp; synthetic textiles</td>
<td>632</td>
<td>7,836</td>
<td>566.47</td>
<td>648</td>
</tr>
<tr>
<td>Manufacture of textile products</td>
<td>2,762</td>
<td>22,599</td>
<td>2,750.00</td>
<td>1,900</td>
</tr>
<tr>
<td>Paper products &amp; printing</td>
<td>72</td>
<td>93</td>
<td>100.00</td>
<td>76</td>
</tr>
<tr>
<td>Textile products</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Non-ferrous metal products</td>
<td>18</td>
<td>306</td>
<td>306.00</td>
<td>296</td>
</tr>
<tr>
<td>Basic metal industries</td>
<td>87</td>
<td>352</td>
<td>352.00</td>
<td>350</td>
</tr>
<tr>
<td>Metal products</td>
<td>73</td>
<td>793</td>
<td>793.00</td>
<td>793</td>
</tr>
<tr>
<td>Machinery &amp; parts</td>
<td>99</td>
<td>954</td>
<td>954.00</td>
<td>954</td>
</tr>
<tr>
<td>Electrical machinery</td>
<td>131</td>
<td>533</td>
<td>533.00</td>
<td>533</td>
</tr>
<tr>
<td>Transport equipment &amp; parts</td>
<td>1,472</td>
<td>17,021</td>
<td>1,464.00</td>
<td>1,241</td>
</tr>
<tr>
<td>Misc. manufacturing industries</td>
<td>33</td>
<td>362</td>
<td>104.00</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>9,380</td>
<td>78,626</td>
<td>7,008</td>
<td>78,006</td>
</tr>
</tbody>
</table>

| Source: Compiled from Records of the Department of Industries, Punjab. |
## Table of Employment and Production in Year X

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
<th>Production</th>
<th>Year</th>
<th>Employment</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974-75</td>
<td>68</td>
<td>475</td>
<td>174.00</td>
<td>1976</td>
<td>367</td>
</tr>
<tr>
<td>1975</td>
<td>91</td>
<td>331</td>
<td>1977</td>
<td>431</td>
<td>315</td>
</tr>
<tr>
<td>1976</td>
<td>1,106</td>
<td>763.96</td>
<td>1978</td>
<td>1,196</td>
<td>817</td>
</tr>
<tr>
<td>1977</td>
<td>96,000</td>
<td>3,139.80</td>
<td>1979</td>
<td>1,108</td>
<td>775.54</td>
</tr>
<tr>
<td>1978</td>
<td>115</td>
<td>51.00</td>
<td>1980</td>
<td>102.60</td>
<td>48.00</td>
</tr>
</tbody>
</table>

*Note: The table continues with similar entries for subsequent years.*
District was hosiery, followed by transport equipment and parts. In 1979-80, there were 3,444 units of hosiery which provided employment to 51,784 workers and the production was of the value of Rs.761,85 lakh. Transport equipment and parts units numbered 2,880. These provided employment to 36,747 workers and their production was of the value of Rs.6916 lakh.

THE SAMPLE FRAME

A stratified random sample of small industrial units was chosen from the universe as defined earlier. The units in the universe were divided into nine strata according to the size of investment in plant and machinery at the time of their registration. Size was chosen as the basis for stratification since this was the most important independent variable. However, it involved some problems also. In a developing economy investment pattern might have undergone some change due to varying rates of inflation. Depreciation would also vary with the period of use but it was difficult to determine the effective investment in real

81 Data relating to medium and large-scale units of the District and that of small, medium and large-scale units of Punjab are given in Appendix I.
terms for all the 11,423 units registered in different years, at one point of time. Table 1.5 shows the sample consisting of 150 units as follows.

**TABLE 1.5**

**Distribution of Units in the Universe and the Sample by Investment Groups**

<table>
<thead>
<tr>
<th>Investment Group (In Rupees)</th>
<th>No. of Units in the universe</th>
<th>No. of Units in the Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 500</td>
<td>354</td>
<td>5</td>
</tr>
<tr>
<td>500-999</td>
<td>574</td>
<td>7</td>
</tr>
<tr>
<td>1000-1999</td>
<td>1,032</td>
<td>13</td>
</tr>
<tr>
<td>2000-3499</td>
<td>1,152</td>
<td>15</td>
</tr>
<tr>
<td>3500-4999</td>
<td>1,224</td>
<td>16</td>
</tr>
<tr>
<td>5000-9999</td>
<td>2,486</td>
<td>33</td>
</tr>
<tr>
<td>10,000-24,999</td>
<td>2,597</td>
<td>35</td>
</tr>
<tr>
<td>25,000-99,999</td>
<td>1,589</td>
<td>21</td>
</tr>
<tr>
<td>100,000 and above</td>
<td>415</td>
<td>5</td>
</tr>
</tbody>
</table>

**Total** 11,423 150

The sample units were distributed amongst different industries as follows: hosiery - 43, cycle and cycle parts - 23, agricultural implements - 12, machine tools -11, autoparts - 10, sewing machines and parts -5, soap -4, shoes -3, re-rolling and bar-drawing -3, pulp boxes and board -3, casting and forging -3, wooden furniture and fixtures -2, publishing and allied industries -2, candles-2,
oil-mill machinery and parts - 2, metal containers - 2, nuts and bolts - 2, electroplating - 2, radio and components - 2, dyeing of wool - 1, wooden containers and allied goods - 1, rubber products - 1, drugs and pharmaceuticals - 1, cement products - 1, surgical and medical instruments - 1, combustion engines and diesel engines - 1, textile machinery - 1, cleansing powder - 1, steel balls - 1, readymade garments - 1, attache case - 1, iron chains - 1, cage bar set - 1.

The selected units were located within Ludhiana District as follows: Ludhiana(city) - 128, Dhandari Kalan (Focal point) - 4, Khanna (town) - 4, Samrala(town) - 3, Jagraon (town) - 2, Doraha Mandi (town) - 2, Raikot (town) - 1, Lehra (village) - 1, Ghudan Kanon(village) - 1, Macchiwara(village) - 1, Allore (village) - 1, Dhat(village) - 1, Burwall (village) - 1.

**DATA COLLECTION**

The study of Government policy and programmes and their implementation was based on published documents, correspondence and records maintained by the concerned Government Departments at the Central, State and District levels and the field data based on interviews and observation.

---

82 Classification of these places as city, town or village follows the Ludhiana District Gazetteer, Government of Punjab.
At the Central Government level, the published documents studied were the Five Year Plans, Industrial Policy Resolutions, reports of ad-hoc committees and commissions and working groups, annual reports of the Central Small Industries Organisation and publications of the Small-Scale Industries Board and the Development Commissioner, Small-Scale Industries. Relevant laws and rules were also studied. The unpublished documents included the minutes of the meetings of the Small-Scale Industries Board; reports of ad-hoc committees - Standing Committee on Credit Facilities, High Powered Committee on credit, Committee on Modernisation, Committee on Drafting Legislation for Small-Scale Industry, Steering Committee for Export Promotion, Committee on Scarce Raw-Materials; and reports of working groups - Working Group on Marketing, Working Group on Five Year Plan for Small-Scale Industries, Working Group on Development of Village and Small Industries in the Sixth Five Year Plan.

Information regarding assistance extended by the National Small Industries Corporation Limited was obtained from its annual reports and other publications. State-wise and district-wise information regarding assistance under the hire-purchase programme and the Government purchase programme
bad to be collected from the records maintained by the Corporation. Information regarding the Government purchase programme operated by the Directorate General of Supplies and Disposals was collected from its publicity material. However, districtwise information could not be collected as no such record was maintained by the Directorate.

Information about the assistance extended by the Small Industries Service Institute, Ludhiana was obtained from its annual reports. More specific information was collected from the records maintained by the modernisation section, sub-contracting exchange, economic investigation and the entrepreneurial programme section. Information about the Extension Centres (the Mechanical Engineering Research and Development Organisation and the Centre for Food Technology and Research Institute of the Indian Council of Scientific and Industrial Research) located in Ludhiana was also obtained from the records maintained by these Centres. Information regarding labour policy was collected by going through relevant acts and rules. The publications of the Labour Bureau, Ministry of Labour were studied. Some of the published and unpublished reports of surveys on labour conditions in different industries were also studied.
At the State headquarters, industrial policy was discerned from the State Five Year Plans, Industrial Policy Statements, annual reports, relevant laws and rules, and publications containing information for entrepreneurs. General information about the universe was obtained from the District Gazetteer, the Statistical Abstract and the records maintained in the office of the Economic Advisor to the Punjab Government. Further unpublished documents like market survey of Industrial products of Punjab, annual administrative reports of the Department of Industries, quarterly progress reports of the State plan schemes were also studied. Data were also obtained from the records of the statistical section of the Department of Industries. More specific information relating to planning, grant of loans, recovery of loans, marketing assistance, raw-materials, technology and modernization was obtained from the concerned sections of the Department. Various application forms for seeking assistance were studied.

In the Punjab Financial Corporation, some information was collected from its annual reports and publicity materials. However, information regarding agency loans disbursed by the Corporation was obtained from the disbursement registers, and that regarding defaulters from the records maintained by the Corporation. For the assistance extended
by the Punjab State Small Industries Corporation Limited, annual reports—published and unpublished—were consulted. Data regarding the applicants for raw-materials and distribution of raw materials, assistance provided under the programmes of seed/margin money and hire-purchase were obtained from the records and disbursement registers maintained by the Corporation. Records were also consulted in the office of the Punjab Industrial Consultancy Organisation to get information about the consultancy services provided by the organisation. Records were also consulted in the office of the Controller of Stores to obtain information about the State Government purchase programme.

Further, information regarding the Quality Marking Centres, the Industrial Development-cum-Service Centres and the Punjab Test House, all located in Ludhiana, was obtained from the records maintained by these centres. Information about the Central Tool Room and the Knitwear Facility was collected from the publicity material. Information regarding power assistance was collected by studying the Sales Manual—a book of rules published by the office of the Punjab State Electricity Board, Patiala. Relevant acts governing the supply of electricity were also read. Further data were collected by going through the records maintained by the Board. Labour policy was discerned by
going through the relevant acts and rules. Annual reports of the Labour Commissioner were also studied. Information regarding unions and their membership was collected from the records maintained in the office of the Labour Commissioner.

At the District level, data were collected by consulting correspondence and records in the District Industries Centres. Some of these were: register for registration of units; application receipt register for loans under the State Aid to Industries Act, 1935; correspondence regarding sanction of loans under the Act; loan and subsidy disbursement register; files of cases of interest free loan, and files maintaining statements of position of recovery under loans; records of capacity assessment, application receipt register for demand of cement and register of records about the demand and allocation of coal wagons. The Action Plan of the District Industries Centres was also studied.

Information regarding power was collected from the office of the Sub-divisional Engineer at Ludhiana. Information regarding labour was obtained from the Labour-cum-Conciliation Officer and the Employment Exchange.

Data regarding assistance extended by banks was collected from the issues of the Bulletin of the Reserve Bank of India and Monthly Review of the State Bank of India, the records of the District and Divisional Branch of the United
Commercial Bank and the Regional Branch of the State Bank of India. Proceedings of the State-level work-shop on the lead bank scheme were also examined.

**Interviews**

Informal interviews were made at New Delhi, Chandigarh, Ludhiana and in rural areas of the Ludhiana District with Government officials concerned with relevant programmes, politicians, entrepreneurs and trade union leaders for developing hypotheses. Later, two structured schedules were prepared, one for the entrepreneurs and the other for the workers. Of the proposed sample of 150 units, only 117 units could be located, others had disappeared and might have gone into liquidation; hence 117 entrepreneurs were interviewed. The interviews were conducted in the premises of the industrial units. It was also proposed to interview one worker from each of the selected units. However, of the 117 units which were located, 18 did not have hired labour. Therefore, only 99 workers were interviewed.

---

83 English translation of the schedules being given in Appendix II. They were originally in Panjabi.
Various Government officials at the Union, State and District levels were also interviewed. In the office of the Development Commissioner, Small-Scale Industries, the Directors concerned with policy making were interviewed. In the National Small Industries Corporation Limited, officials concerned with hire-purchase and marketing assistance programmes were interviewed. In the Directorate General of Supplies and Disposals, information was elicited from the Deputy Director concerned with the Government purchase programme and the liaison officer of the National Small Industries Corporation Limited. In the Small Industries Service Institute, the Deputy Directors concerned with various programmes were interviewed. In the Extension Centres of the Council of Scientific and Industrial Research, their top officers were interviewed. In the office of the Labour Bureau, the Joint Director and the Deputy Directors were interviewed.

At the State headquarters, officers concerned with various assistance programmes - loans and their recovery, marketing (internal and export), modernisation and supply of raw-materials were interviewed. Information was also obtained from the Senior Technical Officer, the Joint Director (Administration), the Deputy Director (Planning) and the Industrial Advisor. In the office of the Punjab Financial Corporation, the Manager was interviewed. Interviews were also
held with the Managers (raw-material, marketing and finance) in the Punjab State Small Industries Corporation Limited. Officers of the Quality Marking Centres and the Industrial Development-cum-Service Centres were interviewed. The Executive Engineer and the Administrative Officer were interviewed in the office of the Punjab State Electricity Board, Patiala. In the office of the Labour Commissioner, the Deputy Directors, the Law Officer, the Scrutiny Officer, and the Investigators were interviewed.

At the District-level, in the office of the District Industries Centre, the General Manager and the Functional Managers (Marketing, Raw-Material, Credit, Modernisation and Economic Investigation) were interviewed. The Sub-Divisional Officer, Electricity, was also interviewed. The Labour-cum-Conciliation Officer, Labour Inspector and Factory Inspectors were also interviewed.

Further, managers of the banks and the Lead Bank Scheme Officer were also interviewed.

DATA PROCESSING AND ANALYSIS

Data were processed with the help of a manual calculator. For the sake of analysis, sample units were classified into three groups on the basis of investment in fixed assets (plant and machinery) as on March 31, 1980.
The sample units were distributed as follows:

**TABLE 1.6**

**Distribution of Effective Sample Units in Investment Groups**

<table>
<thead>
<tr>
<th>Investment Group</th>
<th>Number of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-investment group (less than Rs.25,000)</td>
<td>57</td>
</tr>
<tr>
<td>Medium-investment group (Rs.25,000 to 200,000)</td>
<td>46</td>
</tr>
<tr>
<td>High-investment group (above Rs.200,000)</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>117</strong></td>
</tr>
</tbody>
</table>

The units were classified by investment since size was our most important independent variable. This method of classification was aimed at identifying the differential impact of Government policy on industrial units of different sizes.

In each group, there was a wide variety of industries. The low investment group comprised industrial units as follows: hosiery - 21, cycle and cycle parts - 7, agricultural implements - 4, soap - 3, auto-parts - 3, casting and forging - 2, shoes - 2, nuts and bolts - 2, and one each of sewing machines and parts, oil-mill machinery and parts, candles, cleansing powder, attache case, publishing and
allied industries, machine tools, tin-plating, furniture, welding, hand-tools, cage-bar sets and chains.

The second group consisted of units as follows: hosiery - 12, cycle and cycle parts - 10, machine tools - 5, autoparts - 4, sewing machines and parts - 3, re-rolling and bar drawing - 2, electroplating -2, agricultural implements -2, pulp boxes and board -2, and one each of textile machinery, candles, rubber and electrical machinery.

The high-investment group comprised units as follows: cycle and cycle parts -4, machine tools - 3, and one each of the re-rolling and bar-drawing, steel balls, hosiery, dyeing, sewing machines and parts, autoparts and diesel engines and parts.

Form of Organisation

The form of organisation in our sample is shown by table 1.7. It may be noted that the form of business organisation was chiefly of two types: (i) units owned by single proprietors and (ii) partnerships. Partnerships were further of two types: (i) partnership with relatives and (ii) partnership among non-relatives. On the whole, partnership with relatives was the most common form, 65.2 per cent of the units were in this category. However, in the low-investment
### TABLE 1.7

**Distribution of Units by Form of Organisation**

<table>
<thead>
<tr>
<th>Investment Group</th>
<th>Total No. of Units</th>
<th>Proprietorship</th>
<th>Partnership with relatives</th>
<th>Partnership among non-relatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-investment group</td>
<td>57 (100.00)</td>
<td>25 (43.85%)</td>
<td>25 (43.85%)</td>
<td>7 (12.30%)</td>
</tr>
<tr>
<td>Medium-investment group</td>
<td>46 (100.00)</td>
<td>5 (10.90%)</td>
<td>37 (80.40%)</td>
<td>4 (8.70%)</td>
</tr>
<tr>
<td>High-investment group</td>
<td>14 (100.00)</td>
<td>1 (7.15%)</td>
<td>12 (85.70%)</td>
<td>1 (7.15%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>117 (100.00)</strong></td>
<td><strong>31 (26.50%)</strong></td>
<td><strong>74 (63.20%)</strong></td>
<td><strong>12 (10.30%)</strong></td>
</tr>
</tbody>
</table>

Figures in parenthesis show percentages to the total.

*This table and tables in subsequent chapters are based on interviews with entrepreneurs unless otherwise specified.*
group, the number of units which had single proprietors was equal to those which had partnerships with relatives. Apparently, one entrepreneur, all by himself, could make only a small investment. This is also indicated by the small number of single proprietorships for units in the other groups.

Entrepreneurship might be induced by several factors. One of these could be the experience acquired either in the family business or as an employee. In our sample 17 of the entrepreneurs had an experience of more than 20 years before setting up their own business, 53 of 10-20 years, 28 of 5-10 years, 12 up to 5 years and 7 none. Thus a majority, that is about 60 per cent, had an experience of more than 10 years.

Problems of Data Collection

Studies in under-developed societies face certain problems. In the course of present study, it was found, for example, that important published or mimeographed reports were not available in the offices of high level functionaries such as the Development Commissioner, Small Scale Industries, Government of India and the Director of Industries, Government of Punjab. Records also could sometimes not be found, particularly in District Offices of Government agencies. The entrepreneurs often did not have proper records; many
of them could not afford the necessary clerical staff. The figures provided by them, particularly those of investment and sales, might not be fully dependable due to fears related to the liabilities. As indicated earlier, some of the selected units could not be found, thus reducing the effective sample. Even the units which were found sometimes did not have signboards - the entrepreneurs wanted to escape inspectors. Some of them were suspicious and did not permit interviews with workers - these had to be conducted later outside the premises of the unit.