Chapter V

METHODOLOGY

5.1 Objectives and Scope of the study  
5.2 Operational definitions of the concepts  
5.3 Sources of information  
5.4 Collection of data  
5.5 Techniques followed in the study  
5.6 Limitations of the study.
METHODOLOGY

5.1 OBJECTIVES AND SCOPE OF THE STUDY

Realising the importance of the 'Human factor' of all the resources available in the industries the study was aimed at evaluating the quantity and quality of the manpower in the industries and analysing the adequacy of this manpower in relation to the variables, investment, production, productivity, technology adopted, capacity utilisation, wage levels and the resource utilisation.

The following were the objectives of the study.

1. To study the adequacy of the manpower with regard to production.
2. To observe the adequacy or inadequacy of investment in relation to the quantity and quality of manpower and production.
3. To study the adequacy or inadequacy of the manpower in terms of quality, with regard to the technology employed.
4. To assess the productivity of manpower and examine the influencing factors.
5. To analyse the relationship between the wage and the skills of the manpower.
6. To examine the extent of utilisation of the available resources by the manpower in terms of technology, and capacity utilisation.

The study intents to analyse the adequacy of the manpower employed during the study period (1995 to 2001), in the identified rural units of study, in terms of quantity and quality, their skill levels and the extent to which they match with the present technology, investment and the manpower productivity factor. It does not include the manpower in the unorganised segment of the rural industries sector.
5.2. OPERATIONAL DEFINITIONS OF THE CONCEPTS USED IN THE STUDY

5.2.1 MANPOWER RESOURCE INVENTORY:

"Manpower Resource Inventory' in this study includes the available persons or personnel competent to perform physical effort or in other words it would include the labour available in the identified Rural Industries.

5.2.2 RURAL INDUSTRIES:

"The term 'Rural Industries' for the study would include the organised manufacturing units in the Village and Small Industries Sector (VSI sector) in the 'rural areas' of Tiruchirappalli district.

The Village and Small industries sector, as the Planning Commission describes, consists and would, include the Khadi and Village Industries, The Handlooms, sericulture, Handicrafts and the coir Industries along with the "Modem small scale sector which in turn includes the "Tiny units' and the Small Scale Industry units.

"Rural area according to the KVIC would include "an area which comprises any village or includes an area outside the municipal limits, the population of which does not exceed' 20,000.

5.2.3 THE KHADI AND VILLAGE INDUSTRIES:

The "Khadi and Village Industry' units (KVI units) for the study includes those units coming under the Khadi and Village Industries Board, Tiruchirappalli district, and those units which satisfy the definition of the Khadi and Village Industries Commission and have obtained support from the institution. Those which come under the purview of the KVIC would include the list of 119 categories of industries furnished as annexure 1.1 and in which the fixed capital investment per head of an artisan or a worker does not exceed Rs.50,000/-.
5.2.4. HANDLOOM INDUSTRY:

The "Handloom Industry' would include the organised sector of the Handloom Industry in the district consisting of the Handloom societies.

5.2.5. THE COIR INDUSTRY

The "Coir Industry' in the study would include the coir units of the organised sector that have been registered in the Districts Industries Centre, Tiruchirappalli, involved in the coir activities, extraction of fibres from husks and production of coir fibre products like yarn, rope, mats etc.

5.2.6. HANDICRAFTS INDUSTRY:

" Handicrafts Industry under die study would include the organised Handicrafts units registered under the District Industries Centre. This would consist of the units that commercially transacts with the 'Poompuhar' - the district's Government Handicrafts showroom.

5.2.7 SERICULTURE INDUSTRY:

The sericulture industry for the study would include the units involved in the reeling process of extracting silk, yam from the cocoons of the silk worms, in the district. This consist of the single, government owned, reeling units in die district.

5.2.8. THE SMALL SCALE INDUSTRIES:

The Small Scale Industries for the study would include the organised units registered under the District Industries Centre, Tirucliirappalli, withstanding the Rs.1 crore ceiling limit definition of the small scale Industries and located in the 'Rural areas' of die district.
5.2.9 AREA OF STUDY:

The study area would mean the Tiruchirappalli district of the state of Tamil Nadu, from which data were collected.

2.2.10 "STUDY":

By the term "Study is meant (i.e.) categorisation and enumeration (i.e.) quantification of the workers in the identified rural industries by their sex, education, age, nature of employment - permanent, temporary, trained or untrained, and skilled, unskilled and semi-skilled categories, the ascertaining of the quality of these workers and going into detailed study of the adequacy of these manpower in terms of production (output), investment, technology, capacity utilisation, productivity, wages and the demand for the product.

5.2.11. "INVENTORY":

The term 'Inventory' would mean the complete enumeration or listing of the manpower in their various categories in the various types of industries included for the study.

5.2.12. RESOURCE:

The term "resource' is applied to "manpower' to emphasise that nature of manpower by which it can be developed and conserved and utilised well, like other resources of a Nation or a firm, if suitable efforts are taken.

5.2.13 SKILL:

By 'skill' is meant the competency to perform die work-related activities to die expected level. It is mostly related to (he perfection attained in psychomotor activities involving linger dexterity.
5.2.14 TECHNOLOGY:

'Technology' means a method of operating on the environment for mass benefit.

5.2.15 INVESTMENT:

The term investment' in this study would denote the amount invested in fixed assets including those invested in land & building, plant and machinery and other installations.

5.2.16 CAPACITY UTILISATION

'Capacity utilisation' in this study denotes the utilisation of machine capacity by the manpower and is expressed in percentage ratio in this study.

5.2.17 EXPENDITURE ON LABOUR

The expenditure on labour in this study would denote all expenditure on labour including wages. It would include other than wages, the other non-wage monetary benefits allowed and the welfare and social security benefits expended on the labour. It would not include the benefits availed by the artisans / workers and the rural units through the various supportive schemes provided by the state and Central Governments.

5.2.18 EXPENDITURE ON RAW MATERIALS:

The expenditure on raw materials would include the expenditure on all raw materials and fuel used in the process of producing the output.

5.2.19 MANPOWER PRODUCTIVITY:

Productivity mathematically represents the ratio of the inputs to the outputs. Manpower productivity in this study denotes the per capita output (measured by value of output produced per year by a single person).
5.2.20 PRODUCTION:

The production process is evaluated by the output, which in the case of the 'Rural industries' consist of the products produced by the identified industries. In the case of Khadi & Village Industry units it would consist of the hand spun hanks, the hand spun cloth (both cotton and polyester) and the village industries products consisting of carbolic soap, leather (tanned) and leadier goods and steel and wood works including furniture and die like. In the case of coir units it would include the types of coir and the coir-based products produced like the mats, matting etc. In the case of sericulture it would be the raw silk produced from the reeling of cocoons and in the case of Handicrafts units include all the aesthetic and value added products made by the efficient artisans out of cheap materials available locally like the clay, mud, cotton, metal sheets etc. The output of the Handloom units would be the handwoven textiles including sarees, dhodiis, towels, bed materials and others. In the case of SSI units the output would include a huge list of items, based on which these industries were classified, as like, food, beverages, chemicals etc. For practical purposes the value of the goods produced (in rupees) has been used to denote production.

5.3 SOURCES OF INFORMATION:

The analysis of the manpower in the various selected industries of Tiruchirappalli district required enormous informations and data which called for utilisation of vast sources of informations, both recorded and unrecorded.

The sources included 1. documentary sources, official and unofficial statistics, census and other publications from which statistical and descriptive informations were obtained. 2. personnel sources included the professionals and experts in the field, (both organisational and from the field) and the "manpower" or the labour
themselves. It also included the library sources which guided in the collection of the pertinent data.

Informations contained in the published and unpublished documents, reports, statistics, manuscripts, pamphlets and hand-outs were the documentary sources utilised. These sources could be generally divided into primary sources, which provide data gathered at first-hand, and secondary sources, which provide data that have been transcribed or compiled from original sources. Data from personal sources were obtained through visits to the industrial units and households of artisans. Informations were obtained by participant observation, personal interview, discussions, correspondence and follow-up by telephone wherever possible and by questionnaire. The sources of secondary data are cited in the references and in the bibliography.

The official documents and statistics were obtained from primary and secondary sources. It included the references and accumulation of informations from the following:

The reports and statistics published by the concerned Boards and autonomous bodies of the various industries involved like the Coir Board, the Khadi and Village Industries Commission, The Tamil Nadu Handicrafts Development Corporation, and the Central and State Government were utilised for the study.

Reports and statistics of the District statistics office and the District Collectorate were also used. The official Sources of informations and statistics that were utilised have been listed below:

The Gazette of India, Ministry of Industry, Department of Industrial Policy and promotion.

Reports of The Planning Commission (Five Year Plans).

Directorate of Industries and Commerce, Government of India.

The Ministry of labour, Government of India.

The Directorate of Census (Chennai),

Directorate of Economics and Statistics, Chennai

Industries Commissioner and Directorate of Industries and Commerce.

Director Khadi and Village Industries Commission, Chennai

Central Silk Board

Central Coir Board

Directorate of Handloom and Textiles, Government of Tamil Nadu.

The National Informatics centre, Chennai,

Assistant Director, Survey-Nucleus cell.

Survey and Land Records of die Collectorate, Tiruchirappalli

Assistant Director, Department of Statistics, Tiruchirappalli.

Assistant Director, Handlooms and Textiles, Tiruchirapalli

Director of Sericulture, Salem,

Assistant Director of Sericulture, Tiruchirappalli.

Regional Deputy Director of Sericulture, Tiruchirappalli,

The Regional coir Training and Development Centre, Coir Board, Thanjavur,

The District Industries Centre, Tiruchirappalli,

The Deputy chief Inspector of Factories, Tiruchirappalli.
The Deputy Director, Khadi and Village Industries Board, Tiruchirapalli.

The Manager, TamilNadu Handicraft Development Corporation showroom-Poompuhar.

The Village Administrative Officer, Tiruchirapalli.

Panchayat officials and

The Tiruchirapalli Municipal Corporation officials.

Apart from these official sources in the rural areas which were limited the researcher was compelled to rely on personal, approach involving observations, interviews and discussions with die concerned authorities, inspite of the pitfalls in these methods.

5.4. COLLECTION OF DATA:

5.4.1 AT THE STATE LEVEL

The officials of die Directorate of census, Chennai. The Industries Commissioner and Director of Industries and commerce and Director, Khadi and Village Industries Commission, Chennai were personally interviewed and wherever necessary their subordinate officers were also interviewed to obtain informations and details required.

5.4.2 AT THE DISTRICT LEVEL

The Assistant Director Statistics, The District Statistics officer, The Deputy Director Khadi & village Industries Board and other officials of die Board, The Director of Sericulture (Salem), The Inspector of sericulture (Salem), The Assistant Director, Sericulture, The Regional Deputy Director, sericulture, The Manager-District Industries Centre, The Assistant Director, Textiles and Handlooms, The Textile and Handlooms control officer and die officials of the Regional coir training
and Development Centre of the Coir Board (Thanjavur) were personally interviewed. Considerable amount of informations were supplemented from follow-ups by telephone.

5.4.3. AT THE ORGANISATION LEVEL

The informations regarding the unit pertaining to expenditure and resource utilisation etc. were obtained from either the entrepreneur or the ‘manager’. In the household units the informations were supplied mostly with much hesitation and apprehension.

These were the informations pertaining to the plans and programmes of the State and Central Government and the autonomous bodies for the development of Rural Industries.

5.4.4 Informations about the manpower that were more personal and required the personal feedback from the workers themselves were obtained through a second questionnaire that was specifically set to be very simple and direct, to enable the mostly illiterate labour respond well. Informal discussions on-the-spot (at the workplace) helped the researcher understand and accumulate a lot of informations about the labour-job match in these rural units and the techniques that helped in this labour-job liaison which required, most of the time a high class of dexterity and skill.

5.4.5 Information regarding the facilities and technological improvement available in the various sub-sectors of the Rural Industries were obtained from the officials of the respective Boards and institutions responsible for their development.

The researcher had visited the workplace and also the centres in the field, where • training inputs in new methods and technologies were provided to the manpower.
The Regional Training and Development centre, Coir Board, Thanjavur, the sericulture Demonstration farms and Service centres of the department of sericulture were some of them.

5.4.6 Officials in the field of operation in the various sub-sectors like, the field officers of the training and service centres and other Training and development centres, where actually the rural labour interface with the effects of the plans and programmes were interviewed to obtain first hand information on how, and how far the rural labour were able to utilise these progress-facilitating-benefits provided to them. For example die officers in the Regional coir Training and Development centre, Coin Board, Thanjavur could explain how the concept of using a 'Motorised-ratt' in place of a manually operated ratt in die production of yam or rope from coir fibre was acceptable by the coir artisans. The confirmation whether it was technically feasible or whether it required more psychological mind-setting in the artisans, or whether it was financially not feasible was his role. The researcher could obtain practical modalities of the plans and programmes and how far they were successful from these on-the-field officials who were directly dealing with the transformation or the expected transformation in the rural industrial sector.

5.4.7 Substantial informations were obtained from the research studies and research programmes conducted at Gandhigram Rural Institute, Gandhigram, The TamilNadu Agricultural University, Coimbatore, The Madurai Kamaraj University, Madurai, The Madras University, Chennai, The Bharathiar University, Coimbatore, The Bharathidasan University, Timchirappalli, The Institute of Social and Economic Change, Bangalore, The Institute of social sciences, Loyolla College, The Madras Institute of Development studies, Chennai and The Regional Training and Development Centre, Coir Board, Thanjavur.
5.5 TECHNIQUES FOLLOWED W THE STUDY

5.5.1. OBSERVATION TECHNIQUE:

Observation technique though highly credible cannot individually substantiate the requirements of a study, since all phenomena are not open to observation. This technique involves systematic viewing with certain considerations or hypothesis of the seen phenomena. Hence the researcher had developed a set of formulations in mind before entering the process of observation.

5.5.1.1. OBSERVATIONS BASED ON HYPOTHETICAL FORMULATIONS:

The following are some of the formulations for which the answers were to be obtained from the process of observation.

a. The levels of skill involved in performing the job.

b. Whether the operator or worker was able to perform the job well (i.e) die dexterity of the workers.

c. Whether die technology adopted was in line with those prescribed by the concerned Industry development Institution, like the Training centre, Coir Board, for the coir industry.

d. What were die effects of adopting a particular technology like heavy physical stress, dust accumulation, etc., on the workers.

e. Whether the rural work-force were convinced of the technology change prescribed, (ie) whether tiiey had adopted the technology change fully convinced and sincerely with full fledged efforts.

f. Whether any training inputs were given at the organisational level.

g. The extent of involvement of family labour, especially in household units.
h. The contribution of each worker towards the total output and whether it was up to the expected standard.

Answer to all these questions which cannot be obtained through questionnaires or schedules could be collected only through non-controlled observations, where the researcher observes the phenomena as it progresses, without interference or involvement by the researcher.

5.5.1.2. Non-controlled and Non-participant observation made by the whole family.

A separate questionnaire was prepared to ensure collection of all the required data for the study. Lack of proper information recording in these rural units was a setback in this collection of data.

5.5.2 QUESTIONNAIRE AND INTERVIEW SCHEDULES.

A questionnaire is a formal list of standardised inquiry, aiding in the collection of quantitative cross-sectional data.

As mentioned earlier two formal questionnaire/schedules were prepared. The first one to elicit unit level informations and the second one to obtain the informations about the manpower. The former was used to elicit informations from the entrepreneur or the manager of the Industrial units, and the latter was used to obtain informations from the workers in the rural units.

Both the schedules were comprehensive, containing carefully prepared questions to elicit the necessary informations. Care was taken to see that the questions were simple and were asked for straight answers, excepting certain questions, where there were possibilities of a vast opinion feed-back from the respondents, especially the workers. The questions were made simple, so as to leave no room for ambiguity. But in more than a few cases the researcher had to fill-in the
schedule in the case of the worker groups, as they were illiterate and were also in most cases not willing to take the risk of committing in written statements. Since they felt more comfortable in answering the questions orally, the researcher had attempted to complete the schedules by obtaining the answers orally from the worker respondents. Both the schedules contained, both open-ended and closed questions. Close-ended questions in certain cases becomes inevitable, since it would be necessary to get a free, un-biased opinion or feed back from the respondent. It is obvious and accepted that the close-ended questions would, to a considerable degree have the draw-back of the bias of the question setter or the researcher.

Interview schedules consisting of unstructured questions were prepared to obtain informations from die officials and authorities of the various institutions involved. These unstructured tools would have the advantage of flexibility and also unlike other mechanical interrogations be more easy to obtain attitudes and opinions and also may show the inter correlation between the data.

The questions in these schedules and questionnaires were grouped based on the variables analysed in the study such as those, related to 'Man and Machine', "Technology, "capacity utilisation', and so on. The questionnaires were pre-tested to ensure the collection of the required data and also to weed out the unnecessary questions. The pre-tests also helped in opening-up new problems which were not anticipated during the conception stage.

In certain cases where the details seemed to be more descriptive, additional transcription sheets were used to record the extra informations supplied other than those asked in the questionnaire/schedule.

A' comprehensive note was prepared combining the data obtained from the above methods before tabulation, to ensure complete utilisation of all the informations effectively.
5.5.3. GUIDELINES ADOPTED IN INTERVIEWING:

Interviews stand the unique advantage of face-to-face communication between the researcher and the respondent enabling the study of the gestures, facial expressions, the spontaneous responses to questions which might be contained sometimes only for a flicker of time, like the tensing of a muscle, or a minute hesitation or a hesitant few seconds silence before answering a question. The choice of words by the respondents are also equally effective in obtaining substantial informations like the body languages mentioned above. These observations help immensely, especially in the cases where opinions and inner attitudes and mind sets needs to be evaluated. For example, the interviews with the worker respondents to elicit their opinion on their wages, technology adaptation and changes in production process in adaptation to the market requirements.

The interviews with the workers and most of the officials were structured and hence controlled unlike some of the interviews were both uncontrolled and unstructured, especially when situations call for unanticipated meeting with higher officials. The interview with the Deputy secretary, Rural development, The Deputy Chief Inspector of Factories and the State Labour Commissioners were some.

Focused Interviews like those with the entrepreneurs, managers, and the supervisors were also utilised to enable the researcher to secure very important details of personal reactions to the stimulus or the issues projected before them. The non-directive nature of these interviews help in obtaining such personal reactions.

Inspite of all these unique advantages of the interview technique they cannot independently suffice the informations requirements and has to be supplemented by other means of Information collection. It has been accepted that this technique eliciting informations is highly subjective, influenced by the guesses and interpretations of the researcher which may be biased. Thus this technique demands a
experienced interviewer to be successful and also requires a convenient place and time for the conduct of the interview.

5.5.4 CASE STUDIES AS INFORMATION RESOURCES.

Case studies can prove to be highly resourceful in providing detailed informations and is more suitable when the sample for study is almost homogenous. For example the handloom societies in the district, were all in the red and struggling to recover due to fastidious sticking to traditional weaving methods. The researcher had hence taken a detailed history of two societies, one successful (though at loss, was reviving by resorting to exports) and another heavily losing society with a continuous decline in performance. Similarly since almost all weavers were found to be reluctant to go in for more new designs and methods of weaving two representatives, the president of a society and a member weaver were selected as representative cases to obtain detailed informations.

5.5.5 SAMPLING PROCEDURE-DERIVATION OF THE APPROPRIATE REPRESENTATION FOR ANALYSIS.

It is more economical and efficient to base studies on samples, and for most practical purposes the conclusion drawn from a sample can be just as valid as conclusions drawn from the analysis of the entire universe of cases. A statistical sample is a miniature picture or cross section of the entire group or aggregate from which the sample is taken.

To ensure reliable results, a representative sample is one that contains enough cases. But what should be the proportion of the universe, in order to obtain an adequate sample? The answer always depends on what degree of reliability is required for the purpose of the research and on the amount of dispersion in the distribution of the characteristics studied if it is quantitative, or on the proportion of incidence if it is non quantitative. If the universe is very homogenous with respect to
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Subsector of the Rural Industries</th>
<th>Name of the administrative Industries / Authority</th>
<th>Number of units registered</th>
<th>Number of units functioning</th>
<th>Number of units in the &quot;Rural areas&quot;</th>
<th>The universe of the study</th>
<th>Sample Industries units</th>
<th>Percentage of the sample on the universe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Modern small scale sector (SSI)</td>
<td>The District Industries centre Tiruchirapalli</td>
<td>2439</td>
<td>81*</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>2.</td>
<td>Handloom</td>
<td>The Assistant Director, Textiles and Handlooms, Tiruchirapalli</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>22</td>
<td>100%</td>
</tr>
<tr>
<td>3.</td>
<td>Coir</td>
<td>The District Industries centre, Tiruchirapalli</td>
<td>43</td>
<td>19</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>100%</td>
</tr>
<tr>
<td>4.</td>
<td>Khadi &amp; Village Industries (units coming under KVIB and KVIC)</td>
<td>Khadi &amp; Village Industries Board, Tiruchirapalli and The Khadi and village Industries Commission, Chennai.</td>
<td>35**</td>
<td>17***</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>100%</td>
</tr>
<tr>
<td>5.</td>
<td>Sericulture</td>
<td>The Assistant Director, sericulture Tiruchirapalli</td>
<td>02</td>
<td>01</td>
<td>01</td>
<td>01</td>
<td>01</td>
<td>100%</td>
</tr>
<tr>
<td>6.</td>
<td>Handicrafts</td>
<td>The District Industries centre</td>
<td>455</td>
<td>16</td>
<td>08</td>
<td>08</td>
<td>08</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>2991</strong></td>
<td></td>
<td><strong>77</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Obtained from the production Returns as on Sep. 1998, District Industries Centre Tiruchirapalli

** Includes 25 KVIB units and 11 KVIC units

*** Includes 11 KVIB units and 6 KVIC units.
certain quantitative characters quite small sample may yield more reliable results in the estimation of the parameters describing this distribution. Since the number of industries located in the 'rural area' of the district was not very large, census survey method against survey method was adopted to ascertain the 79 units for study as shown in table 5.5.1 and 5.5.2. 6% of the manpower in the identified industries in aggregate were contacted for obtaining their responses. Thus 2 or 3 respondents at random were selected to form the sample of 170 respondents. Tiruchirapalli district in Tamil nadu state was chosen, since it had the profuse resource base for the rural industries.

Table 5.5.2

**Categorisation of the sample units into types for analysis – Stage II**

<table>
<thead>
<tr>
<th>Sample units Sector-wise</th>
<th>No. of units</th>
<th>Sample units categorised into the type of Industries</th>
<th>No. of units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modern small Scale Sector</td>
<td>20</td>
<td>Tiny sector</td>
<td>32</td>
</tr>
<tr>
<td>Handloom</td>
<td>22</td>
<td>Small Scale Industries Sector</td>
<td>8</td>
</tr>
<tr>
<td>Coir</td>
<td>11</td>
<td>Khadi and Village Industries Sector</td>
<td>17</td>
</tr>
<tr>
<td>KVI</td>
<td>17</td>
<td>Handloom Sector (Societies)</td>
<td>22</td>
</tr>
<tr>
<td>Sericulture</td>
<td>01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handicrafts</td>
<td>08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>79</td>
<td>Total</td>
<td>79</td>
</tr>
</tbody>
</table>
5.5.6 ANALYTICAL TOOLS

This study is a diagnostic / analytical study using primary data collected from various units of the different types of sectors. The data obtained are compiled and analysed using the techniques of descriptive analysis, ratio analysis and statistical analysis carefully. To analyse the data the technique of descriptive analysis is applied to bring out the realities in the different sectors. For comparative purpose and checking the validity of various results die inferential analysis is applied. Thus ratios, percentages, averages, t-tests, multiple regressions, analysis of variance and chi-square tests among others, were used as tools for analysing the data.

5.6 LIMITATIONS OF THE STUDY

Since the study area is limited to Tiruchirapalli district of Tamil Nadu and the study period to 1995-2001 the findings cannot be generalised. The study is subject to the recall bias of the rural entrepreneurs managers, and artisans, who were all mostly illiterate and much reluctant to part with data relevant for the study. Especially informations pertaining to profit and total investments involved, were carefully retained by most of them. Lack of proper maintenance of records and accounts of their family business was also a set back.