Chapter 6

Causes of Industrial Sickness of Small Scale Units of Kamrup District

In Chapter 3, we have included a detailed theoretical analysis of the issues related to industrial sickness which formed the basis of the empirical study included in Chapter 5. On the basis of the empirical study and a field survey carried out over the period from 2001 to 2010 in three segments, we present here a detailed analysis of the different factors related to industrial sickness observed in Kamrup district.

6.1 Introduction

The industrial sickness observed in Kamrup district has been created and sustained due to a range of factors. Though there are efforts in different levels to regulate the phenomenon, the results have not been found to be satisfactory. This is primarily due to the fact that rarely such efforts have considered the underlying factors for which small scale industries have gone through different stages of industrial health. Here, we provide a detailed analysis of the primary factors responsible for industrial sickness found in small scale sector of Kamrup district. The factors though are traditionally known, are found to be strongly related to a picture created out of the field survey covering nearly the different types of industrial units. In the subsequent sections, we describe and analyze the assimilated data covering thirty two small
scale industrial units visited during 2001-10 in three different periods namely 2001-03, 2004-06 and 2007-10.

In Section 6.2, the basic steps followed during the study has been described. The factors related to industrial sickness as observed during the study are described in Section 6.3. A detailed analysis of the outcome of the field study constitutes the Section 6.4. The chapter is concluded by Section 6.5.

### 6.2 Process of the Data Collection, Analysis and Interpretation

The study has been based mostly on primary data generated out of field work. Some sick industrial units have been selected randomly for intensive study. The study based on our own investigation has been supplemented by official and non-official reports prepared by the Commissioner of Industries and Commerce, Assam and various financial institutions.

The study has primarily been confined to the sick industrial units of Kamrup District where a large number of small scale industries of different types are located. Further, only the small industrial units reported sick are covered by the study. The units have then been stratified on the basis of types of products like (1) Agro-Based, (2) Forest-Based, (3) Textile-Based, (4) Chemical-Based, (5) Engineering-Based, (6) Electronic-Based, (7) Mineral-Based, (8) Leather, (9) Rubber/Plastic, (10) Miscellaneous. The number of sick units in the types of industries mentioned have already been shown in Table 1.1. The methodology of the study can be summarized by the following steps:

1. Detailed theoretical study (as done in Chapter 3).
2. Communication with government and related agencies.
3. Identifying industrial health of certain units in Kamrup district.
4. Visit to small scale industrial units covering ten different types.
5. Collection of data using verbal communication and verification of available data.

6. Analysis of the data.

7. Identifying the factors relevant to local conditions.

8. Establishing the link of identified factors with traditional factors.

9. Exploring possible measures to combat sickness and initiation of rehabilitation measures.

A schedule is used to collect the data. A snapshot of the schedule is shown in Figure 6.1. The distribution of the sample unit types used for the study is depicted in Table 6.1.
Table 6.1: Number and types of units covered during the period of study

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Types of Industries</th>
<th>2001-03</th>
<th>2004-06</th>
<th>2007-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agro-Based</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Forest-Based</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Textile-Based</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Chemical-Based</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Engineering-Based</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Electronic-Based</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Mineral-Based</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Leather</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>Rubber/Plastic</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Miscellaneous</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>9</strong></td>
<td><strong>11</strong></td>
<td></td>
</tr>
</tbody>
</table>

6.3 Factors Related to Industrial Health of Small Scale Units of Kamrup District

A range of factors are related to industrial health. The detailed description of these are included in Chapter 4. Here, we briefly describe the specific factors which are found to be related to the industrial health of small scale units covered as part of the study. As already mentioned in Chapter 4, the different factors affecting health of industrial units can be classified into two categories. First, internal factors and the other external factors. The factors included are in reference to the summary schedule shown in Figure 6.1. Among the internal factors the following are related to the functional areas mentioned below.

1. Internal Factors

   (a) Production (F1)- As already described in Chapter 4, this is related to the internal factors hindering the production of a unit. The different sub-classes considered are-

   - **Improper Selection of Site (F1A)-** Improper Selection of site is considered as one of the important factors which adversely affects the functioning of an industrial unit and can lead to its failure.
• *Inappropriate Plant and Machinery (F1B)* - The use of obsolete, uneconomical and inefficient plant and machinery causes decline in both quality and quantity of output, raises costs and ultimately leads to sickness of the industrial units.

• *Lack of Product Diversification (F1C)* - Several problems like decline in demand, competition, scarcity of raw materials, increase in the prices of raw materials etc. encountered by an industrial unit which depends on a single product without diversification, finally attains sickness.

• *Faulty Production Programme (F1D)* - Faulty production programme hampers full utilization of plant, equipment and labour and thus disrupts the functioning of the unit.

(b) **Finance (F2)**

• *Lack of financial planning (F2A)* - Absence of financial planning/control and budgeting leads to sickness of the industrial units.

• *Improper utilization of assets (F2B)* - Improper utilization of assets leads to unused installed capacity of the industrial units and hence falls sick.

• *Inefficient working capital management (F2C)* - Inefficient working capital management stands as an obstacle in meeting the day to day requirements and in raising additional funds for immediate needs of the industrial units and leads eventually to sickness.

• *Lack of ploughing back of profit (F2D)* - It obstructs the industrial units to fight against depression as well as seasonal fluctuations.

(c) **Marketing (F3)**

• *Lack of market research (F3A)* - This factor fails to meet the wishes of the consumers for different products and ultimately disrupts the functioning of the industrial units.
• *Inappropriate sales promotion (F3B)*- Policies related to this factor may cause failure to industrial enterprizes.

• *Inept demand forecasting (F3C)*- Inept demand forecasting like over estimation of future demand of products by the industrial units faces the problem of selling the products produced and thus causes sickness.

• *Absence of product planning (F3D)*- This leads to reduction of profits for which the industrial unit may turn sick.

(d) **Management (F4)**

• *Overstaffing (F4A)*- Overstaffing leads to financial crisis of the industrial units as it adversely affects both production and leads to waste of money.

• *Poor managerial talent (F4B)*- This creates disorders in all forms of operations of the enterprizes.

• *Infighting (F4C)*- Infighting among various groups of management is responsible for huge waste of valuable resources of the enterprizes and leads to business failure.

• *Inappropriate wage and salary administration (F4D)*- It reduces the productivity of the industrial units.

2. **External Factors**- These factors are pertained to the same functional areas as cited above.

(a) **Production (F5)**

• *Shortage of Inputs (F5A)*- Shortage of inputs like power, raw material, fuel etc severely affects the health of the industrial units.

• *Restriction on imports (F5B)*- This is sometimes imposed by the government on certain materials and machineries which causes problems.

(b) **Finance (F6)**
• Lack of credit (F6A) - Lack of adequate industrial credit both of short and long terms creates major operational problems for industrial units.

• Delay in disbursement of loans/ unfavourable investment climate (F6B) - This problem due to bank and other financial institutions retards industrial growth and leads to sickness. Further, unfavourable investment climate like deterioration of law and order situation, continuous existence of natural calamities like floods, droughts etc. increases the risk of investment in the industrial units and leads to scarcity of funds.

(c) Marketing (F7)

• Demand recession (F7A) - Demand recession by increasing huge unsold stock of the industrial units affects their smooth functioning.

• Heavy taxes (F7B) - This raises the cost of production of the enterprises on one hand and contracts the demand of their products on the other.

(d) Management (F8)

• Non-availability of skilled manpower (F8A) - It reduces the production of the industrial units.

• Labour unrest (F8B) - Labour unrest like strike, lockouts etc. is responsible for decline in productivity, utilization of available resources and the profitability of the enterprises.

6.4 Analysis of the Study Related to Industrial Health of Small Scale Units of Kamrup District

Here, we present the analysis of the data collected from field survey during the period of study. We first present the normalized representation of the responses
Figure 6.2: Percentage distribution of the factors affecting industrial health of the surveyed units

of all the units covered irrespective of the types. The percentage depiction of the responses shown is calculated by considering the total number of sample units (i.e., 32) of which relevant data has been collected. Figure 6.2 shows the percentage distribution of the factors affecting industrial sickness of the units covered during the period of study. From Figure 6.2 we see that the maximum respondents (87.5%) have identified the factor $F_{5A}$ i.e. shortage of inputs as the most common factor affecting industrial health. Next to this, the factor $F_{1B}$ i.e. inappropriate plant and machinery has caused industrial sickness. It has been found that 66% of the respondents have confirmed that $F_{1B}$ i.e. inappropriate plant and machinery, is a factor common to all the units visited. The third factor with a respondent response of 63% has been found to be $F_{8A}$ i.e. non-availability of skilled manpower which has been contributing towards industrial sickness. This factor is found to have affected all the units covered during the period of study. The factors least affecting found from the study are $F_{1C}$ i.e. lack of product diversification, $F_{4C}$ i.e. infighting and $F_{4D}$ i.e. inappropriate wage and salary administration. This may be due to prevailing socio-economic and related cultural factors.

We now present the analysis with respect to the types of the units covered. First, the total responses obtained from the agriculture-based units are presented. Figure 6.3 shows the distribution of responses obtained from the survey in case of agriculture-based units. Here, we see that inappropriate plant and machinery ($F_{1B}$)
Figure 6.3: Percentage distribution of the factors affecting industrial health of the agro-based units

and shortage of inputs (F5A) like power, raw materials, fuel etc are the primary reasons behind sickness. It has been found that 100% of the respondents agree that these are significant contributors to industrial sickness. This is mainly due to technological backwardness and under developed infrastructure facilities. Further, lack of adequate industrial credit (F6A) is another major factor behind sickness of agro-based units. From the survey it has been found that 75% respondents consider this to be a factor of industrial sickness. The least contributing factors are inept demand forecasting (F3C), absence of product planning (F3D), poor managerial talent (F4B), delay in disbursement of loans (F6B) and heavy taxes (F7B). About 25% of the respondents consider these factors to be contributors to the poor industrial health. In case of forest-based units (Figure 6.4), inefficient working capital management (F2C) and shortage of inputs (F5A) have contributed most towards industrial sickness. The survey results show that 100% of the respondents agree that these two factors are significant contributors to industrial sickness. This is perhaps due to lack of investment in this sector which has created a liquidity crunch. The frequent power breakdowns that have been reported by units of this sector reflect the poor state of infrastructure development in the state in general. The least contributions towards industrial sickness are from inept demand forecasting (F3C), absence of product planning (F3D), over staffing (F4A), poor managerial talent (F4B), lack of adequate industrial credit (F6A) and heavy taxes (F7B). The findings of
the survey reveal that 25% of the respondents consider these to be contributors to industrial sickness.

The observations found in case of textile-based units (Figure 6.5) show that the factors with highest percentage response are inappropriate plant and machinery ($F_{1B}$) and delay in disbursement of loan ($F_{6B}$). The survey shows that 100% of the respondents agree that these are significant contributors to industrial sickness. Most of these units have remained in the traditional form and have not used modern methods of production. Further, due to such state, financial institutions find it difficult to disburse loans at the earliest for which productivity suffers and sickness strikes.
Figure 6.6: Percentage distribution of the factors affecting industrial health of the chemical-based units

In case chemical-based units (Figure 6.6), improper utilization of assets \((F2B)\), shortage of inputs \((F5A)\) and non-availability of skilled manpower \((F8A)\) have been contributing the most towards sickness. It has been found that 100% respondents give consent to this observation. Due to lack of properly trained manpower, most units have failed to fully utilize the machinery and other related assets. Further, shortage of inputs like raw material, power, fuel etc. have also contributed significantly towards generation of sickness in these units.

While visiting the engineering-based units, it has been found that (Figure 6.7) non-availability of skilled manpower \((F8A)\) is the main contributing factor towards industrial sickness. All the respondents agree that this is a fact in case of engineering-based units. The second most significant contribution has come from inappropriate plant and machinery \((F1B)\) and delay in disbursement of loans \((F6B)\). Here, 80% of the respondents consider these to be important contributors to industrial sickness. The reasons are lack of appropriate industrial climate and inadequate infrastructure growth. The least contributions have come from improper selection of site \((F1A)\), lack of financial planning \((F2A)\), improper utilization assets \((F2B)\), inept demand forecasting \((F3C)\), over staffing \((F4A)\), lack of adequate industrial credit \((F6A)\) and heavy taxes \((F7B)\). In this case 20% respondents agree to this observation.

In case of electronics-based units (Figure 6.8), inappropriate sales promotion \((F3B)\) and shortage of inputs \((F5A)\) are found to be the primary contributing
Survey results show that these two factors are regarded by 100% of the respondents to be factors behind industrial sickness in case of all the units visited of this type. The scarcity of trained manpower, lower demand for local produce and inadequate infrastructure are the primary reasons behind this occurrence.

The primary contributors towards industrial sickness in case of mineral-based units (Figure 6.9) are improper selection of site ($F_{1A}$) and shortage of inputs ($F_{5A}$). In this case, 100% respondent agree to this observation. This is due to lack of proper managerial and planning capability of the entrepreneur and inadequate infrastructure. The next contributors are poor managerial talent ($F_{4B}$) and unfavourable
investment climate ($F6B$) with 75% respondents agreeing. The least contributions are from lack of market research ($F3A$), inappropriate sales promotion ($F3B$), inept demand forecasting ($F3C$), absence of product planning ($F3D$), lack of adequate industrial credit ($F6A$) and labour unrest ($F8B$). All these are considered to be least contributory factors as per 25% responses from the respondents.

The analysis of the miscellaneous, leather, rubber/plastic categories reveal (Figure 6.10) that shortage of inputs ($F5A$) is the single largest contributor towards sickness. Out of the total surveyed units, 83% of the respondents consider this to be the primary contributor to industrial sickness in this case. Due to lack of adequate infrastructure growth and failure to create a conducive atmosphere for industrialization in the state, shortage of inputs has always been a contributing factor towards industrial sickness not only for the miscellaneous category discussed here but also for the rest of other types of units about which relevant discussion have already been included above. The least contributions have come from inefficient working capital management ($F2C$), inappropriate sales promotion ($F3B$), inept demand forecasting ($F3C$), absence of product planning ($F3D$), over staffing ($F4A$), in-fighting ($F4C$), inappropriate wage and salary administration ($F4D$). Here, 17% respondents consider these factors to be related to industrial sickness. Further, after the field study and analysis of the collected data, certain additional factors are found to be instrumental in creating industrial sickness. These are normally not included in
Figure 6.10: Percentage distribution of the factors affecting industrial health of the miscellaneous, leather and rubber/plastic units

literature and are also not regarded as essential factors, yet these have been found to play decisive roles. These are outlined below:

1. **Year of Commencement of Unit**- Out of the total sampled units, 43.75% have started their business during the period 1995-2000. Among these, 25% have commenced their units during 2000-2005 and the rest 31.25% during the period 2005-2010.

2. **Percentage of Sickness in Different Periods of Study**- Among the surveyed units, 37.5% of the sick units are found in the period 2001-03 followed by 28.125% during the period 2004-06. The rest 34.375% of units are found to be sick during the period 2007-10.

3. **Age of entrepreneurs**- Out of the units covered, 53.125% of the entrepreneurs whose units have fallen sick, started their units during the age 21 to 30 years. The percentage of entrepreneurs who started during the age 31-40 years and whose units have fallen sick is 37.5%. Only 9.375% of the entrepreneurs encountered sickness of the units which have been started during the age 41-50 years.

4. **Form of Organizations**- The proprietorship form of organization constitutes the maximum number of the sampled sick units. It is 75%. Next, partnership
form of organization is found to be 18.75% and the rest is 6.25% in case of private limited companies.

5. **Types of Industries**- The maximum of sampled units are textile-based and engineering-based (31.25%) followed by agro-based, forest-based and miscellaneous (12.5% each) and chemical-based, electronic-based (6.25% each). The minimum of sampled units are leather and plastic/rubber (3.125% each).

6. **Educational Qualifications of the Entrepreneurs**- The failure of the industrial units to a great extent depends upon the educational qualifications of the entrepreneurs. The study reveals that the entrepreneurs whose units have become sick are high school drop-outs. Their percentage is 25. Further, 37.50% comprised of under-graduates followed by 31.25% graduates while only 6.25% has been post-graduates.

7. **Generation of Entrepreneurs**- It has been found that 62.5% of the total sampled entrepreneurs are first generation entrepreneurs. The percentage of second generation entrepreneurs is 25 while only 12.5% belongs to third generation entrepreneurs.

8. **Technical Qualifications**- Out of the 32 units, 22 entrepreneurs i.e. 68.75% do not have any technical qualifications. The rest numbering 10 entrepreneurs i.e. 31.25% have technical qualifications.

9. **Attendance in Entrepreneurship Development Programmes**- Out of the units covered, it has been found that 59.38% of the sampled entrepreneurs attended some type of Entrepreneurship Development Programme conducted by different agencies like SISI, IIE etc. But 40.62% did not attend any such programmes.

10. **Red-tapism**- It has been observed in the study that red-tapism also plays a role in causing sickness in some industries. Among the units covered, 43.8
% of the entrepreneurs have expressed their views of facing red-tapism while setting up the units and conducting their business.

6.5 Conclusion

Here, we have included the detailed analysis of the outcome of the field study covering certain number of units of nearly ten different types of industries. The study covers the period from 2001 to 2010. In case of all the units covered, we see that the maximum respondents (87.5\%) have identified shortage of inputs as the most common factor affecting industrial health. Next, inappropriate plant and machinery and non-availability of skilled manpower have contributed significantly and lack of product diversification, infighting and inappropriate wage and salary administration have contributed least towards industrial sickness. In case of agriculture-based units, inappropriate plant and machinery and shortage of inputs like power, raw materials, fuel etc are the primary reasons behind sickness. In case of forest-based units, inefficient working capital management and shortage of inputs have contributed most towards industrial sickness. It is found that in case of textile-based units inappropriate plant and machinery and delay in disbursement of loan are the primary reasons behind sickness. Improper utilization of assets, shortage of inputs and non availability of skilled manpower have led to sickness in case of chemical-based units. For engineering-based units, it has been found that non-availability of skilled manpower is the main contributing factor towards industrial sickness. In case of electronic-based units, inappropriate sales promotion and shortage of inputs are found to be the primary contributing factors. The primary contributors towards industrial sickness in case of mineral-based units are improper selection of site and shortage of inputs. The analysis of the miscellaneous, leather and rubber/plastic categories show that shortage of inputs is the single largest contributor towards sickness. Due to lack of adequate infrastructure growth and failure to create a conducive atmosphere for industrialization in the state, the detrimental factors have accumulated a negative scenario preventing industrial growth in the areas of the study in particular.
and the state in general. Further, certain others factors are also found to be instrumental in creating sickness. These are - year of commencement of unit, percentage of sickness in different periods of study, age of entrepreneurs, form of organizations, types of industries, educational qualifications of the entrepreneurs, generation of entrepreneurs, technical qualifications, attendance in entrepreneurship development programmes and red-tapism. We next provide a series of rehabilitation measures (adopted by both central and state governments and RBI) through which industrial sickness can be arrested. These constitute Chapter 7.