CHAPTER 1

INTRODUCTION
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The life of industrial workers is full of risks and hazard. Every year innumerable workers are injured in factories, mines, railways, ports and docks, leading to acute ailments or permanent handicaps. The injuries may be due to any unsafe activity, or act on their part or as a result of some unsafe work conditions or unsafe act of employees themselves or defective plant or shop layout, inadequate ventilation, unsafe and insufficient lighting arrangements or insufficient space for movement inside the plant.

An Accident means occurrence of any sudden, unplanned and unfortunate event resulting in the loss of manpower, machinery and assets. An industrial accident is an expected event which is neither anticipated nor designed to occur. It arises in the course of employment in a factory or industrial establishment. The nature of an accident may differ from industry to industry. It may injure an employee, may result in disablement or death. Accidents are a menace to the community from all points of view, individual, industrial and national. Industrial accidents whenever they arise lead to physical, financial loss to the worker and his family, loss to the economy. Unfortunately the accident toll in Indian industries is comparatively higher than in industrially advanced countries. Extensive provisions have, therefore, been made in India for the prevention of industrial accidents. Safety of the working personnel in must, with due care and precaution occurrence of the accidents can be prevented or reduced to a considerable extent. This thesis is an attempt to study the impact of industrial accidents and the role and responsibilities of the employees, union, management and society in the reference to selected Public Limited Companies in and around Pune during 1996 – 2000.

OBJECTIVES OF THE STUDY

The following are the main objectives of this thesis:

1. To study the impact of industrial accidents.
2. To analyse the role and responsibilities of the employees, union, management and society in the prevention of the accidents.
3. To find out the causes of industrial accidents in selected Public Limited Companies.
4. To study the preventive and punitive actions taken by the industry to reduce the number of accidents.
5. To know the number of serious accidents taken place in the industry.
6. To suggest the measures which will be helpful in avoiding or reducing the number of industrial accidents and safety can be ensured.

HYPOTHESIS

1. Industrial accidents is occurrence of sudden, unplanned and unfortunate event which creates long-term problems or sudden loss of manpower, machinery and assets.

2. In order to prevent such occurrences an awareness about industrial safety is required to be created. If there is proper and positive response towards industrial safety by the management of the workers, it will definitely help to reduce the percentage of accidents and can increase longevity of life.

The Hypothesis has been tested and proved correct.

TESTING OF HYPOTHESIS

Non-parametric tests are used to test hypothesis with nominal and ordinal data. Non-parametric tests are the only ones usable with nominal data, they are the only technically correct tests to use with ordinal data. Non-parametric tests achieve an efficiency as high as 95 per cent.
Parametric tests are not used to test this hypothesis as they are derived from ratio measurements and they include certain assumptions such as populations should have equal variance and the measurement scales should be at least interval so that arithmetic operations can be used with them. Statistical software programmes are not used for checking assumptions as the data does not involve analysis of variance or regression.

1. Industrial accident is occurrence of sudden, unplanned and unfortunate event, which creates long-term problems, or sudden loss of manpower, machinery and assets.

   This has been proved true in the survey by observation and deduction method. The number of accidents reported by 84 industries reveals that in 1996 the number of accidents taken place were 376, in 1997, 620, in 1998 large number of accidents i.e 1368 had taken place. In 1999 they were 1227 and in the year 2000, they were 24 all of these accidents were sudden and unplanned. These accidents have created problems. Six workers lost their life. Some workers lost their fingers, some were injured with iron rod. The impact of the accidents is very important. The long term problems created were loss of manpower, machinery and assets and other were mental disability, physical disability, frustration, feeling of insecurity, decrease in efficiency, problem of industrial relations, bargaining for safe working conditions, disturbance of work schedule, loss of production and loss of compensation. This has been proved true in the case of companies where actual accidents have taken place.

2. In order to prevent such occurrences, an awareness about industrial safety is required to be created. If there is proper and positive response towards industrial safety by the management of the workers, it will definitely help to reduce the percentage of accidents and can increase longevity of life.
The assumption has also proved true in survey on the basis of primary data. Almost all respondents particularly 90% of the engineering and manufacturing units have stressed the importance of creating safety awareness. The interviews of the safety officers, the workers revealed the facts. 76.2% of the total employed persons are workers which show that 23.98% of the persons were administrative staff or they belong to management cadre. 84 companies representatives have expressed their opinion that safety should be given equal important consideration with that of other factors of production. Top priority should be given in conducting safety training programme. Nearly 5 – 6 workers from each company have expressed the need of safety policy, safety educations and safety publications which should be related with legal requirements and rules and regulations also in consultation with the unions. The facts were actually verified. Frequency rate of number of accidents and severity rate has been considered.

METHODOLOGY / PROCEDURE

Thesis has utilized both primary as well as secondary data. The primary data has been collected for this purpose on the basis a field survey. The questionnaire had been prepared for this purpose has been filled upon the basis of interview and free discussion which selected respondents and through observation method. In order to conduct the field survey, interview and questionnaire filled in by the personnel managers and safety welfare officers has been taken as the study area.
The sample includes interview of the workers also. A reasonable number of respondents from each category has been selected for interview. Their views and opinions have been taken into consideration. Various statistical techniques have been used to interpret the data as per requirement.

In order to conduct the research, use has been made of important contributions in the subject, important journals, magazines, survey materials, periodicals, reports, booklets, newspaper published in India and abroad.

SCOPE OF THE STUDY

This study is mostly related to the labour accidents and their safety in the Public Limited Companies. Since long, Pune is the city of cultural and educational activities. Now it became a city of industries also. This became possible because of rapid industrial development in and around Pune. There are number of Public Limited, Government and Private Companies situated in and around Pune. These companies have provided large number of employment opportunities to the people living in Pune District and also to the people in rural areas in other Districts of Maharashtra. Large number of people from Latur, Osmanabad, Ahmednagar, Beed and other parts of the Nation migrated to Pune for their daily bread, but now this situation has created many problems like overpopulation, poverty, pollution etc. The standard of living of the people particularly labourers and workers in Pune region has affected by depression occurred after economic reforms introduced in 1991.

In this study, an attempt has been made to analyse the causes of accidents in Public Limited Companies in Pune region and few suggestions have been advocated regarding safety of labour. The importance of the study can be explained as under:

1. Public Limited Companies have provided employment to the people coming from rural areas of Maharashtra. So this study will provide actual information about accidents in the industries and safety precautions.
2. Industrialisation is one of the factors of development of nation and labour is an important factor of industrialisation and accidents, safety, labour relations, development of society. Thus, this study will provide information regarding the importance of safety to the Government.

3. The problems of the workers working in the small companies may be similar to all over India. This study will help to solve such types of problems particularly those which are related with the safety of labour. In short, the finding and suggestions of this study may be useful in applying in other states also.

4. This study contributes to the area of research concerning responsibilities of management, society, union and safety of the workers. The main focus of this study is on the analysis of accidents safety of the workers.

5. The study would be most useful to the research scholars, particularly to those who are interested in safety provisions.

6. This study will provide new information and dimension to the policy makers and the Government in order to determine safety provisions.

7. This study would provide a clue to the social reformer and the policy makers to prepare or develop appropriate labour safety policy in future.

ORGANISATION OF THE THESIS

The study has been arranged as under:

CHAPTER 1: This chapter begins with the introductory aspect such as scope, significance of the topic, objectives of the study, Sources of data, methodology and the chapter design.

CHAPTER 2: This chapter deals with the nature of accidents, cause of accidents, accidents cost, accidents reports and record importance of prevention of accidents and maintenance of safety the statutory provisions for safety in India.

CHAPTER 4: This chapter contains guidelines for safety, details about safety equipments, Accident report from the employer, Accident Investigation Report etc.

CHAPTER 5: This chapter presents the Maharashtra Factories Rules, 1963, Functions and duties of the sub-committee, Safety organisation and Administration, Safety Department, Safety activities, Safety officer, Safety Committee etc.

CHAPTER 6: This chapter contains analysis of causes of accident cases, The type of business, Type of accident, Number of victims etc.

CHAPTER 7: This chapter deals with Ninth Five Year Plan, Human and Social Development wherein details regarding labour and labour welfare, Social security etc. has been presented.

CHAPTER 8: In this chapter an attempt has been made to present details with regard to Research Methodology adopted. It contains sampling method, selection of companies, interviews, period of study, method of data collection, types of data collected, coverage and limitations of the study.
CHAPTER 9 : This chapter presents the evaluation of Questionnaire on industrial accidents. This part has been based on the result and the discussion. It highlights the result of the data analysed for this study alongwith the charts.

CHAPTER 10 : This chapter presents findings of the study as well as the recommendations made by the researcher.

THE THESIS ALSO CONTAINS

(i) List of Companies where Survey and Interviews were conducted.

(ii) Questionnaire on Industrial Accidents and Safety.

(iii) Accident Report and other details such as safety guidelines.

(iv) Bibliography.