ASSESSMENT OF PRACTICAL IMPLEMENTATION OF SAFETY CULTURE IN DIRE TANNERY

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Abstract

The purpose of the study was to assess practical implementation of safety culture in Dire Tannery PLC beginning from September 2007 to March 2012. Although the concept of safety culture has continued to attract more attention in the field of organizational management, the practical implementation of safety culture in different business firms in various contexts remains unsystematic, sporadic, fragmented and underspecified. In any organizations, safety management system has to be in place to provide healthy and safe working environment for employees in line with acceptable indicators for organizational safety culture. In specific terms, the study aimed to examine Dire Tannery Factory's practical safety culture design and implementation; to identify causes of workplace accidents and injuries or illnesses in the Company; to investigate the major types of accidents and injuries; and to explore types of compensation package provided for injured employees in the Tannery .This study also used descriptive sample survey, semi-structured interviews and formal interviews using structured questionnaire, interview guide in order to collect quantitative and qualitative data from a sample of 120 respondents and about ten informants. The sample was selected and drawn from 450 target population through multi-stage stratified simple random sampling. The quantitative data were analyzed using descriptive statistical techniques, while the qualitative data were analyzed using content analysis. The employees were found to work in occupational hazardous environment which emanated from the nature of work and then resulted in body injuries and other types of illnesses. In the Factory, there was low level and weak Safety Culture Policy which was sometimes implemented. However, it was not properly communicated to the employees and even they were not aware of its presence. There was also provision of medical cost compensation for those injured employees. It can therefore be concluded that there is poor practical implementation of Safety Culture Policy in the Company. Finally, it is recommended that Dire Tannery should carefully design based on internationally acceptable standards and properly implement Comprehensive Safety Culture in all Departments.

Introduction

Hendrick (1991) argues that the rapid development of new technology has fundamentally changed the nature of work and has increased the complexity of systems within a variety of industries. Catastrophic breakdowns of these high-risk systems may create serious threats for those within the organization and for the surrounding public at large. For those highly dangerous systems, this risk can extend far beyond and even "have adverse effects upon whole continents over several generations" (Reason, 1990).

Cognizant of the potential for enormous damage those failures of high-risk systems may inflict, the investigation of the causes of system failures is crucial to prevent the occurrence of damage in the future. Accident causation theories, toward this end, have progressed through several stages of development for the past several years in the professionals' efforts to identify the root causes of system failures (Wilpert, 2000).

The first stage is referred, according to Wiegmann and Shappell (2001), as the technical period during which developments in new mechanical systems were rapid and most accidents were caused by mechanical malfunctions, particularly in the design, construction, and reliability of equipment. The second stage is known as the period of human error, where faults of the human operators, rather than catastrophic mechanical malfunctions, were seen as the sources of the system breakdown. In this case, the blame and the responsibility were assigned to the person directly involved in the unsafe act. The third stage is referred to as the socio-technical period of which human error considers the interaction of human and technical factors when exploring the causes of errors and accidents.

Finally, the fourth stage came up with the "organizational culture" period (Wilpert, 2000). The fourth approach recognizes that human operators are not performing their duties or interacting with technology in isolation, but rather they are performing as a coordinated team of organizational personnel, which is embedded within a particular culture.

At that time, the International Atomic Energy Agency (IAEA, 1986 cited in Cox & Flin, 1998) and OECD Nuclear Agency (1987 cited in Mearns & Flin, 1999) identified a "poor safety culture" as a factor contributing to the Chernobyl disaster in United States of America. Consequently, owing to this and other similar accidents, safety culture has been come to the forefront as the exclusive topic in the academic arena. Those high-risk industries and other complex business firms have recently witnessed a growing concern over the issue of safety culture.

The recognition of the importance of safety culture in preventing accidents has led to numerous studies attempting to define and assesses safety culture in a number of complex, high-risk, industries. Although there have been few attempts to examine the various definitions of safety culture available in the literature, there also exists considerable disagreement among safety culture professionals as to how safety culture means.

Therefore, while the concept of safety culture has continued to attract more attention in the field of organizational management, "the existing empirical efforts to study practical implementation of safety culture in different business firms which are located in various socio-cultural and economic contexts remains unsystematic, sporadic, fragmented and under-specified in theoretical terms (Pidgeon, 1998).

In any organizations, safety management system has to be in place to provide healthy and safe working environment for employees. Safety and health hazards are those aspects of the work environment that can immediately or cumulatively harm the employees or employee's health respectively. There should be proper implementation of any type of safety culture in such firms. However, there are some organizational safety culture indicators which could be considered to say at least there is acceptable level of practical implementation of the safety.

The purpose of the study was generally to assess practical implementation of safety culture in Dire Tannery PLC beginning from September 2007 to March 2012. In an organization, there are various types of organizational culture which is broken down into a variety of different components, including service culture, creativity culture, motivation culture, and safety culture.

Since 1986, to reiterate, different scholars in the field of management have attempted to define the term 'safety culture'. Numerous definitions of safety culture are found in the safety literature. Wiegmann, Zhang, and von Thaden (2001) argue that, when one has engaged in review of the literature on the concept, s/he could understand the presence of several diverse definitions of the concept.

Having critically considered these definitions of safety culture which have originated from various contexts, there appears to be several commonalities among these definitions regardless of the particular industry being considered. Considering these commonalties among the definitions of safety culture, it can be defined as:

> *Safety culture is the enduring value and priority placed on worker and public safety by everyone in every group at every level of an organization.*

It refers to the extent to which individuals and groups will commit to personal responsibility for safety, act to preserve, enhance and communicate safety concerns, strive to actively learn, adapt and modify (both individual and organizational) behavior based on lessons learned from mistakes, and be rewarded in a manner consistent with these values (Pidgeon, 1998).

One should notice that the aforementioned definition of safety culture implies that organizational culture exists on a continuum and that organizations can have either a good or poor safety culture. However, not all definitions in the available literature make this assumption. Some suggest that safety culture is either present or absent within an organization. Thus, quoting different sources, Cox and Flin (1998) state that safety culture has been assumed to be a component of an organization within various operational environments. Safety culture is also the enduring value and prioritization of workers and public safety by each department and in every level of an organization (Thaden & Gibbons, 2008). It is therefore viewed as an enduring characteristic of an organization that is reflected in its consistent way of dealing with critical safety issues. Scholars in the safety management have reached at consensus on at least five global components or indicators of safety culture (Zohar, 2000). They include: organizational commitment, management involvement, employee empowerment, reward systems, and reporting systems.

Organizational commitment to safety refers to the extent to which upper-level management identifies safety as a core value or guiding principle of the organization. An organization's commitment to safety is therefore reflected in the ability of its upper-level management to demonstrate an enduring, positive attitude toward safety, even in times of fiscal austerity, and to actively promote safety in a consistent manner across all levels

within the organization. When upper-level management is committed to safety, it provides adequate resources and consistently supports the development and implementation of safety activities (Eiff, 1999). An organization's commitment to safety is thus ultimately reflected by the efforts put forth to ensure that every aspect of its operations (such as equipment, procedures, selection, training, and work schedules) are routinely evaluated and, if necessary, modified to improve safety.

Through participation in the day to day operations, according to the same source, both upper- and middle-level management communicate to their employees an attitude of concern for safety that subsequently influences the degree to which employees comply with operating rules and with safe operating practices (Eiff, 1999). Within the context of safety culture, "management involved in critical safety activities within the organization. Therefore, management involvement in safety is reflected by managers' presence and contribution to safety seminars and training, their active oversight of safety critical operations, their ability to "stay in touch" with the risks involved in everyday operations and the extent to which there is good communications about safety issues, both up and down the organizational hierarchy.

Errors can originate at any level within an organization. However, frontline employees often represent the last defense against such errors, thereby preventing accidents. Organizations with a "good" safety culture empower their employees and ensure that employees clearly understand their critical role in promoting safety. Specifically, empowerment refers to an individual's perceptions or attitudes as a result of a delegation of authority or responsibility by upper-level management. An empowered attitude can also lead to increased motivation to "make a difference," to

go beyond the call of duty for organizational safety and take responsibility for ensuring safe operations (Geller, 1994). Employee empowerment, within the context of safety culture, means employees have a substantial voice in safety decisions, have the leverage to initiate and achieve safety improvements, hold themselves and others accountable for their actions and take pride in the safety record of their organization.

One of the key components of an organization's safety culture is the manner in which both safe and unsafe behaviour is evaluated and consistency in which rewards or penalties are doled out according to these evaluations (Reason, 1990 cited in Yule, Flin, & Murdy, 2001). Eiff (1999) argues that a fair evaluation and reward system is needed to promote safe behaviour and discourage or correct unsafe behaviour. An organization's safety culture is thus reflected by the extent to which it possesses an established system for reinforcing safe behaviors (e.g., through monetary incentives or public praise and recognition by management and peers), as well as systems that discourage or punish unnecessary risk taking and unsafe behaviours. An organization's safety culture is however signified, not only by the existence of such reward systems, but by the extent to which the reward systems are formally documented, consistently applied, and thoroughly explained and understood by all of its employees as well.

One of the foundations of a true safety culture is that it is a "reporting culture" (Flin et al., 2000). An effective and systematic reporting system is the keystone to identifying the weakness and vulnerability of safety management before an accident occurs. The willingness and ability of an organization to proactively learn and adapt its operations based on

incidents and near misses before an accident occurs is critical to improving safety.

Another important facet of a good reporting culture is "the free and uninhibited reporting of safety issues that come to the attention of employees during the course of their daily activities" (Eiff, 1999). Therefore, it is important to ensure that employees in the organization will not experience negative outcomes as a result of using the reporting system, as well as to have a structured feedback system to inform the employees that their suggestions or concerns have been reviewed and what kind of action will be taken to solve the problems.

In summary, an organization with a good safety culture should have a formal reporting system in place and one that is actually used comfortably by employees. A good reporting system allows and encourages employee to report safety problems, and it also provides timely and valuable feedback to all employees.

The organization has to engage in assessing the practical implementation of safety culture. There are a variety of methods that have been used to assess safety culture. There are no standardized tools that can be used across domains or even within a single domain (Cox & Flin, 1998). Nonetheless, approaches to assessing safety culture should take into account several critical issues, including the measurement method, level of analysis, and implementation constraints.

Research methods for assessing safety culture can be classified as either quantitative or qualitative methods. Quantitative approaches attempt to numerically measure or score safety culture using procedures that are often highly standardized and calibrated, such as highly structured

interviews, surveys and questionnaires (Wreathall, 1995). In quantitative measurement strategies, according to Rousseau (1990), organization members usually serve as respondents who react to a standard set of stimuli or questions provided by the researcher. Quantitative methods are relatively easy to use in cross-sectional comparisons, generally simple to implement in different organizations and by other researchers, and straightforward to interpret according to a common, and articulated frame of reference (Wreathall, 1995).

The same author argues that organizational researchers can also employ qualitative methods which include employee's observations in their workplace settings, focus group discussions, historical information reviews, and case studies. With qualitative measurement strategies, organization members usually serve as informants, who interact directly or indirectly with researchers, using their own terms and concepts to express their point of view, as in focus group discussions (Rousseau, 1990). Therefore, through qualitative measurement, intensive and in-depth information can be obtained using the focal group's own language style of expressions.

There, in contrast, appears to be agreement among researchers that both qualitative and quantitative methods have unique potential for assessment and theory testing and that there is a benefit to combining methods to gain a comprehensive understanding of safety culture. However, Wreathall (1995) strongly confirms that quantitative approaches (especially surveys of individuals' responses) are often more practical in terms of time and cost-effectiveness As a result, surveys and questionnaires have been widely used to assess safety culture within a variety of firms, such as

manufacturing industries. Here, one may pose the following questions for research:

- Has Dire Tannery practically implemented safety culture since its establishment?
- What are the major types of accidents and injuries that happened due to poor practical implementation of safety culture in the Tannery?
- What are causes of workplace accidents and injuries or illnesses in Dire Tannery Factory PLC?
- Does the Tannery have safety design and implementation mechanisms in place?
- What are the different types of compensation package provided for injured employees at workplace in Dire Tannery?

In order to answer the above-stated research questions, this study intended to address the following specific questions:

- To examine Dire Tannery Factory's practical safety culture design and implementation which has been in place since its establishment in Addis Ababa, Ethiopia;
- To identify causes of workplace accidents and injuries or illnesses in Dire Tannery;
- To investigate the major types of accidents and injuries which have happened due to poor practical implementation of safety culture in Dire Tannery Factory; and
- To explore types of compensation package provided for injured employees at workplace in the Tannery.

Review of Related Literature

As this study is not deductive by its nature, it mostly focuses on research about safety culture, the researcher simply got an idea from those scholars. Safety programs may be designed to accomplish their purpose in two primary ways.

The first approach is to create a psychological environment and attitudes that promotes safety. Accidents can be reduced when workers consciously or subconsciously think about safety. This attitude must permeate the firm's operations, and a strong company policy emphasizing safety and health is crucial. For example, a major chemical firm's policy may state as follows: "It is the policy of the company that every employee be assigned to a safe and healthful place to work. We strongly desire accident prevention in all phases of our operations. Towards this end, the full cooperation of all employees will be required." As the policy indicates, no one person is assigned the task of making the workplace safe. It is everyone's job, from top management to the lower level employee, and everyone should be encouraged to find solutions to safely problems.

The second approach to safety program design is to develop and maintain a safe physical working environment. Here, the environment is altered to prevent accidents. Even if a machine operator has been awake all night and barely keep his eyes open, the safety devices on his machine will help protect him. Attempts are made to create a physical environment in which accidents cannot occur.

To develop appropriate organizational safety programs, it requires planning for prevention of workplace accidents. Plans may be relatively simple for a small firm but complex for a large firm. Regardless of the

organization's size, the support of top management is essential if safety programs are to be effective. The organization's management supports a safe and healthy working environment to prevent the occurrences of personal loss, financial loss to injured employee, lost productivity, higher insurance premiums and social responsibility. These reasons show that the lost productivity of a single insured worker is not the only factor to consider while developing safety program in an organization. Every phase of human resource management is involved.

One way to strengthen a safety program is, on the other hand, to include employee input, which can be viewed as a move that provides workers with a sense of accomplishment. To prevent accidents, each worker must make a personal commitment to safe work practices. A team concept, wherein employees watch out for each other as a moral obligation, is a worthy goal. Participation in such terms helps them to form positive attitudes, and employees develop a sense of ownership of the program.

Accidents can happen, even in the most safety conscious firms. Each accident, regardless of whether or not it results in an injury, should be carefully evaluated to determine its cause and to ensure that it does not recur – it should be properly investigated and managed.

For Thomas (1989), safety management is "…embracing the health of people at work and the communities in which industry and commerce operate and the management of the environmental impacts of business operations." The author continues, as he states that, safety management includes: a concern for safe equipment and process design; safe work method design, promotion of safety awareness from an individual; and an organization standpoint; education in safety at all levels in the organization; and financial and managerial support of the morale and

ethical responsibilities that underlie any successful safety program. The term safety management can generally be described through accident prevention.

An accident or hazard is explained as unintended occurrence arising out or connected with plant operations that hinder efficient operation of the system, be it an industry or any operational organization. Since accidents are generally happening to people and not to equipment and processes, the focus of accident prevention begins with the organization as a whole. Accidents can be of different types, such as imminent danger, danger, serious conditions, and non-serious dominium.

There are several causes of accidents in industries or work places. These include: unsafe mechanical or physical conditions which include unsafe acts, inadequate supervisor's safety programme, and illiteracy. These accidents, whatever their forms may be, and have negative impact, i.e. cause illnesses.

Some of the causes of industrial accidents which cause illnesses have implications in negatively affecting an organizational performance. The major impacts of the accidents, according to Birttle (1980) are occupational injury, lost work days, non-fatal case without lost work days, and death. In addition to these, production delay decrease, property or machinery damage, cost of wage paid to injury employee, and cost of time lost by foremen, supervisors and other executive in assisting an injured employee; arranging the replacement for the injured one; and training of a new worker to replace the injured one are the other consequences of the accidents or illnesses.

According to Kamat (2002), the overall responsibility for carrying out organizational safety and health of employees rests largely with the production/operation manager of the organization. But, this is a specialized area which needs the attention of specialists. Nonetheless, workers must work safety because it seems to be human nature always to expect accidents and/or hazards to happen to someone else. Most production managers recognize that carelessness has contributed to most accidents in the organization. They try to educate workers in safety culture in that workers are told of the hazards and shown how to work safety, but for the most part, educating workers in safety is a matter of developing a safety conscious frame of mind rather than teaching them specific things to do.

On the contrary, due to one reason or another, an accident may occur in the organization which necessitates measures to be taken on the part of safety management. Johan (1983) summarizes some of the steps that can be followed to reduce the frequently and severity of company accidents as follows:

> Developing effective consultative participations between management shop floor and unions, so that the best safety and health rules can be accepted or followed; adequate instruction in safety rules and measures; materials handling major causes of accidents, to be minimized and as safety desired as possible; as satisfactory standard from the safety angle for both basic plant and auxiliary fittings such guards; good maintenance with a special eye to safety. Such a safety management should create safety mechanisms which incorporate a compensation package.

For this purpose, certain amount of money and human resource are involved in compensation payment for loss of lives. As this safety design and practical implementation has benefits, it is not surprising that many organizations are trying to improve their occupational safety and health. Some of the mechanisms employed for effective implementation of the

safety culture designed include: (i) Accident prevention gives safety education for employees; motivate them for creativity accident free departments, and abandon workers who are ore accident-prone than others; (ii) Make working conditions safe by housekeeping, good machines maintenance, good plant layout, proper lightning, the provision and use of safety guards and equipments, etc.; and (iii) Awareness creation using posters and cartoons displayed on bulletin boards in the Company to create awareness through safety education.

Here one may ask the question: 'How about occupational safety in Ethiopia?" According to EPHA (1992, p. 13), many of the African countries are moving from manual labour the service mechanization in the main productive sectors. Such as manufacturing, mining and agriculture, hence the potential occupational health ramifications should be anticipated. Also the suitable desire of these countries for technical advancement has brought about the importation of sophisticated machinery and pieces of equipment not only into the industrial production sector but also to services and commerce.

This in variable has been associated with a change in the structure of labour force as a whole, including arise in the employment of women. As to be expected, the health problems would also change this creates a new challenge for occupational safety practice in most African countries because the tool to deal with such a problem, as well as the level of understanding of the problems and the expertise is not yet advanced when compared to the developed countries.

According to EPHA (1992, p. 12), at the national level, there are two organizations which are legally responsible and have the authority for the protection of health and safety to employee workers. These are the

Ministry of Labour and Social Affairs and the Ministry of Public Health. This responsibility and function of each ministry, however, is not well delineated and overlapping of responsibility exists among them. The two ministries are neither fully staffed with trained personnel nor have the necessary facility to monitor the occupational health and safety of the work places.

The activities conducted by the staff of the Ministry of Labour and Social Affairs include: OHS education to the workers and management, conducting researches, industrial licensing and collecting data on work related accidents. Activities carried out but the Ministry of Public Health's personnel are however limited to health inspection of the work place. In a nut shell, there is no occupation health service, which is provided to the workers separately.

It is integrated with the existing general health care delivery system. Hence, it can safety be concluded that the type of occupational safety and healthy service provided in the country is focused on providing curative service rather than on the protection and prevention of accidents.

As cited by Komat (2002, p. 9), the relationship of safety to modern quantity production methods should be clearly understood. Quantity production rests up on careful planning for workers. Injury occurs only as the result of faculty planning or operation and therefore a high degree of safety is a byproduct of successful quantity production.

Safety must be an essential and integral part of every operation and activity if truly successful, quantity production is also attained. The truth of this statement has been demonstrated again and again by comparing injury occurrence with the day-to-day curve of production. It might seem

that his would both apply to employees not directly in production, such as maintenance and repair forces and laborers warehouse men. It does apply to them, however, provided that their injury occurrence is compared with their production rate of example maintenance in fine operating conditions thereby enabling the production forces to win in an efficient injury free performance, but if the production of the maintenance force segregated and analyzed; it will be found to have been retarded by each injury that was suffered.

Study Design and Methods

This study used non-experimental research design. Specifically, the student researcher employed quantitative research approach which involved descriptive sample survey. Moreover, among the qualitative research approach, the researcher used such research method as semi-structured and formal/structured interviews were employed. The study was delimited to Dire Tannery Factory PLC in which the total size of the target population was 450. Having taken into consideration the constraints of resources in their various aspects, the student researcher decided to take 30% of the target population which constituted a total of 135 respondents. In order to select representative sample of employees from each Department of the Factory, multi-stage sampling technique that involved stratified and simple random sampling techniques was employed. These procedures were believed to give equal chance of being selected and drawn as a sampling element for the study.

The main data gathering instruments which were used structured questionnaire and interview guide. The questionnaires were distributed to the sample respondents in the Production, Operation and Technical

Departments of the Company. The items in the questionnaire include variables, such as age, sex, occupation, experience of employees, etc. In addition, the student researcher used the interview guide and held semi-structured interviews with key informants of the Factory (like the General Manager, the Human Resource Department Manager, the Production and Technical Manager of the Company). The interviews were used in order to cross-check the data obtained from employees and managers. These interviews were both structured and semi- structure in their nature.

Once all of the sample respondents had completed filling in the study questionnaires and all of the data were collected, the student researcher prepared the data to be analyzed. Organizing the data correctly can save a lot of time and prevent mistakes. Once the data were entered, the researcher checked the data entered for accuracy. This was accomplished by spot-checking, and a random assortment of the respondent's data groups. Having checked and cleaned the data entered, the student researcher engaged in quantitative data analysis using descriptive statistics, such as frequency distribution tables, particularly frequencies and percentages of those variables under investigation. In order to analyze the qualitative data generated through interviews, the content analysis was used.

Results of the Study

The questionnaires were distributed to employees at functional level. The total number of questionnaires distributed was 135, out of which 120 of the respondents properly completed and returned the questionnaires. Thus, the questionnaire return rate was 88.9%. It is thus possible to pursue the data analysis and interpretation.

Table 1 shows the socio-demographic characteristics of the respondents. The study participants were males in the age category 18 – 35 years and who were not yet completed their secondary high school education. As shown in Item 1 of the Table, 83(69.0%) of them were males, while the rest 37(31.0%) were females. This clearly indicates that there are more male than female employees in Dire Tannery.

Table 1: Socio-demographic Characteristics of Respondents

No.	Item	Respondents	
		f	%
1	**Sex:**		
	Male	83	69.0
	Female	37	31.0
	Total	**120**	**100.0**
2	**Age:**		
	18 – 35	66	55.0
	36 – 45	33	27.5
	> 46	21	17.5
	Total	**120**	**100.0**
3	**Educational level:**		
	Below Grade 12	91	75.9
	12 complete	17	14.2
	Certificate	0	0.0
	Diploma	4	3.3
	Degree	8	6.6
	Total	**120**	**100.0**

Source: Own survey results, 2012.

Regarding Item 2 of Table I, 66(55.0%), 33(27.5%) and 21(17.5%) of the respondent were in the age groups 18–35 years, 36–45 years, and 46 years and above respectively. This implies that the majority of the employees in the Factory are found in their adult age and productive age group.

As far as educational level is concerned, as illustrated in Item 3 of Table I, a total of 91(75.9%) of them were found to be below Grade 12, 17(14.2%) of them already completed their secondary schooling, while only 4(3.3%) of them held diploma and the rest 8(6.6 %) were first degree holders. Therefore, one can deduce that the employees in the factory do not complete their secondary high education. This shows that the Company has less educated manpower than it may be required.

As depicted in Table 2, the study also considered the office positions and work experience of the subjects.

Table 2: Employees Positions and their Work Experience

No.	Item	Respondents	
		f	**%**
1	**Position:**		
	Foreman	21	17.5
	Machinist	28	23.3
	Production operator	42	35.0
	Chemist	8	6.7
	Tremor	21	17.5
	Total	**120**	**100.0**
2	**Service period within the factory**		
	Less than 5 years	64	54.0
	Between 5 and 10 years	40	33.0
	Greater than 10 years	16	13.0
	Total	**120**	**100.0**

Source: Author's own study findings, 2012

The duration of employees' service period with the Dire Tannery is presented in Item 1 of Table 2. A total of 21(17.5%) of the employees were found to hold the position of foreman; while 28(23.3%) were found to be machinists, 42(35%) of them were production operators, 8(6.7%) of the sample employees were chemists and 21(17.5%) were working as Tremors. This shows that the employees are production operators and it is

associated with the basic framework of the Factory's establishment, i.e. the Company processes and produces leather.

Item 2 of Table 2 indicates that a total of 64(54%) of the respondents were found to serve in the Factory for less than 5 years, about 40(33%) of them were working in the Company which ranged from 5 to 10 years and the other, 16(13%) of them worked for more than 10 years. This implies that although the Tannery Factory has been operating in Addis Ababa for longer period of time, most of the employees are less experienced and they are not the first establishing workers.

Types of accident and their major causes are clearly illustrated and presented in Table 3. The Factory's workers are working in hazardous environment which, in turn, causes body injuries, illnesses, as well as lung disease among them. Generally, most of these problems occur due to the nature of work in the Tannery.

Table 3: Types of Accident and Major Causes of Accidents

No.	Item	Respondents	
		No.	**%**
3	**Is your task subjected to occupational hazard?** Yes No Neutral	91 29 0	75.8 24.2 0.0
	Total	**120**	**100**
4	**If your answer for question No. 3 "Yes," which type(s) of accident?** Illness Lung disease Body injury	45 21 54	37.5 17.5 45.0
	Total	**120**	**100.0**
5	**What do you think about the major causes of accident in the factory?** The nature of work Lack of awareness Long working hours Using old equipment Carelessness of the employees	61 12 28 15 4	50.5 10.0 23.4 12.6 3.5
	Total	**120**	**100.0**

As shown in Item 1 of Table 3, the employees' positions are subjected to occupational hazards. About seventy-six percent of the respondents were exposed to, but the rest, about twenty-four percent of them were found not to be exposed to occupational hazards. Based on these findings of the study, one can deduce that the jobs of the employees in the factory mostly have a probability of exposing them to occupational hazards or accidents. Therefore, health hazards are those aspects the working environment that have slowly and cumulatively led to deterioration of an employee's health status.

With regard to the types of accident, as illustrated in item 2 of Table 3, about 38.0% were found to be exposed to illness, the other 21(17.5%) of them were found to be suffers with lung diseases and the rest, 54 (45%) were exposed to body injury. This clearly indicates that the majority of the workers are exposed to body injury and illness.

As depicted in Item 5 of Table 3, regarding the cause(s) of accident the employees had faced, about fifty-one percent of the respondents said due to the nature of the work assigned, ten percent identified lack of awareness, about twenty-three percent of them considered performing the assigned activities for long working hours, about thirteen percent viewed failure to use safety equipment, and about four percent considered carelessness of employees as causes of occupational hazards.

The findings from interviews held with one of the Officials in the Department of Human Resource Management show that, "as most of the workers at the production level of the Company are not educated, the major causes of occupational accidents are using toxic chemicals; careless acts; and act of not using safety equipment that are provided by the company to them." The majority of the employees interviewed, however,

disagreed with what the HRM said. They stated that the major cause of accidents within the Company was the nature of the work. This implies that the Dire Tannery Company has not been discussing with the workers about the causes of accidents. From these empirical observations, one can conclude that problems related to the nature of work are the major causes of accident in Dire Tannery Factory.

Table 4: Safety Policy of the Company

No.	Item	Respondents	
		No.	%
6	**Is there any policy towards safety culture in your Organization?**		
	Yes	91	75.8
	No	17	14.2
	Neutral	12	10.0
	Total	**120**	**100.0**
7	**If your answer for question "6" is "Yes," to what extent is the Company policy implemented?**		
	Very High	0	0.0
	High	29	24.2
	Moderate	29	24.2
	Low	62	51.6
	Very Low	0	0.0
	Total	**120**	**100.0**
8	**How often is safety policy implemented in Dire Tannery?**		
	Always	41	34.2
	Sometimes	62	51.6
	No response	17	14.2
	Total	**120**	**100.0**

Source: Own study findings, 2012.

Regarding the general attitude of the Company towards employees' safety, according to one of the top management body, as sated:

The Company gives high emphasis on employees' safety because they are the ones who increase Company's profit. Due to continued efforts of the management, trainings and supervisions are conducted to prevent accidents. The Company has provided safety equipment, such as eye masks, leather gloves, uniforms, safety shoes and protective devices. In addition to these, the Factory's workers are given half liter milk and tea to relief them from the hot working environment on daily basis.

Table 4 indicates the Company has implemented Policy of Safety Culture, but its implementation is rated as low because the Policy is sometimes implemented in Dire Tannery. Item 1 of Table 4 showed that 75.8% of the responding employees recognized the availability of Safety Culture Policy, while 14.2% of the sampled workers were not aware of the presence of the Policy. Even a total of 12(10.0%) of the employees opted for neutral category of the responses. The findings of the study indicate that the employees have mostly accepted the availability of the Policy of Safety Culture in Dire Tannery Factory PLC.

However, the majority of employees said that they had not had clear information about Policy on Safety Culture and training had not given properly. Based on the student researcher's observations, practically each of these areas needs intensive training to come up with skilled workforce capable of operating them effectively to help the smooth and the safe operations in The Dire Tannery Company.

Not only has implemented Policy on Safety Culture in the Company, but also it has rules to be applied. One of the Technical Managers said, "Training is given to keep the workers' safety and health conditions. Safety equipment which is appropriate, and of the best standards are given to every staff depending upon the tasks assigned. Despite all these efforts,

if any accidents occur then the Company bears all expenses according to its Collective Agreement."

As illustrated in Item 2 of Table 4, 24.2%, 24.2% and 51.6% of the respondents rated the actual implementation of the Company's Safety Culture Policy as high, moderate, and low. This clearly indicates that the implementation of the Policy of Safety Culture in the Tannery is low. In addition, the implementation of the Policy is very weak as safety culture is practised in a few selected Departments of Dire Tannery.

Item 3 in Table 4 shows how often safety policy is implemented in the Factory. A total of 41(34.2%) respondents said always, 62(51.6%) said sometimes and the other, 17(14.2%) respondents chose no responses. This clearly indicates that safety policy is not implemented continuously and at specific interval.

The study further investigated rate of accident and different kinds of measures that have been taken in Dire Tannery since September 2007. There is moderate rate of accidents which have occurred in the Company during which the injured employees had lost of their confidence. In these connections, the concerned Officials took measures, such as they provide the workers with working clothes, give training, use better machines than the previous ones, and provide advisement to the injured employees.

Table 5 shows that a total of 29(24.2%) of the respondents had rated it as high, 70(58.3%) of them had considered it as moderate and 21(17.5%) of them had rated it as low. This implies that the moderate rate of accidents in the Tannery has put the employees at stake in a serious way.

As clearly illustrated in Item 2 of Table 5, when the problem of workplace accidents happened, 37(31%) of respondents said reduce their motivation, 12(10%) of them said argued by saying decline profit, 4(3.3%) of the respondents were in view of wastage of resources, 17(13%) of them viewed as wastage of time, and 50(41.7%) of the respondents chose for losing of confidence. From this evidence, one can conclude that when employees have become injured, their motivation is reduced and time is wasted which are relatively identified as the main problems on the part of the workers.

As shown in Item 3 of Table 5, with regard to the kinds of measure taken to solve the problems, a total of 29(24.2%) of the respondents considered giving training, 17(14.2%) of them opted for use a better machine, 41(34.2%) of the workers said by providing workplace clothes, 21(17.4%) chose continuous supervision and 12(10%) of them said by providing advisement to the workers. Thus, one can deduce that the Company has been taking measures, such as providing workplace clothes.

Table 5: Rate of Accident and Kinds of Measures taken by the Company

No.	Item	Respondents No.	Respondents %
9	**How do you rate the level of accident occurred in Dire Tannery?**		
	High	29	24.2
	Moderate	70	58.3
	Low	21	17.5
	Total	**120**	**100.0**
10	**What problem is caused when the employees become injured?**		
	Reduce motivation	37	31.0
	Decline Profit	12	10.0
	Wastage resource	4	3.3
	Wastage of time	17	13.0
	Losing of confidence	50	41.7
	Total	**120**	**100.0**
11	**What kinds of measures are taken to solve the problem?**		
	By giving training	29	24.2
	Use a better machines	17	14.2
	Provide working clothes	41	34.2
	Continuous supervision	21	17.4
	Provide advisement	12	10.0
	Total	**120**	**100.0**

Source: Own survey results, 2012.

As shown in Item 1 of Table 6, the Company's supervisors were found to follow-up their employees in order to prevent accidents. A total of 42(35.0%) of the respondents rated it as high, the other 66(55.0%) as moderate, and the rest 12(10.0%) of them considered it as low. This implies that the Company's supervisors have offered close supervision to prevent accidents in the Factory.

Table 6: Company Supervision, Training and Medical Expense Offered to Employees

No.	Item	Respondents	
		No.	%
12	How much is the Company's supervisors follow up you in order to prevent accidents? High Moderate Low	42 66 12	35.0 55.0 10.0
	Total	120	100.0
13	How often safety training is given to protect employees from work accidents? Always Sometimes Not given	42 54 24	35.0 45.0 20.0
	Total	120	100.0
No.			
14	Is there any compensation provided for injured employees? Yes No Neutral	120 0 0	100.0 0.0 0.0
	Total	120	100.0
15	If your answer for question "14" is "Yes," what type of compensation is provided? Bonus Medical cost Loan	8 112	6.7 93.3 0.0
	Total	120	100.0

Source: Own study findings, 2012.

Item 2 of Table 6 shows how often safety training has been given to protect employees from workplace accidents or injuries. A total of 54(45.0%) of the respondents had a view of sometimes, 42(35.0%) of them said it was found to be always and 24(20.0%) said that such a

training was not given to the workers in different Department of the Company. These findings of the study clearly indicate that Training on Safety Culture has not been organized and conducted for the employees properly and continuously. However, according to Daft (1991), training refers to teaching lower level or technical employees how to do their present jobs increasing the ability of individuals and groups to contribute to the organization effectiveness. Training improves the specific skills, knowledge and attitudes needed by individuals to perform the present job.

As to the methods and procedures practiced in the Dire Tannery Company when accidents occur, all of the Technical Managers were as follows:

> Before the accident occurs, the Company has put fire extinguishers everywhere in its compound. After accident has occurred, the Company offers medical care treatments to all the injured staff. If the accident is minor one, the injured workers are treated by the Company's health professionals. For those illnesses or injuries that are not related to their jobs assigned to them, the Company covers 100% of the medical treatment expenses. For job related accidents, the Company also covers 100% medical expenses.

In Item 3 of Table 6 shows that whether or not there has been any compensation payment provided for injured employees. A total of 120(100.0%) of the respondents were found to agree with this statement. Item 3 of Table 6 indicates that a total of 8(6.7%) of the respondents were found to be bonus as compensation mechanism, and 112(93.3%) of them considered medical cost. This shows that the Company has covered medical cost expenses to injured employees.

Table 7: Psychological Understanding of Employees about the Work Environment

No.	Item	Respondents	
		No.	%
16	To what extent has the freedom you are granted protected yourself from hazard(s)? Very High High Moderate Low Very Low	62 58 0 0	51.7 48.3 0.0 0.0 0.0
	Total	**120**	**100.0**
17	To what extent are you hard worker to Dire Tannery? High Moderate Low	104 8 8	86.8 6.6 6.6
	Total	**120**	**100.0**
18	What is the level of satisfaction with your work? Very satisfied Satisfied Dissatisfied	50 37 33	41.7 30.8 27.5
	Total	**120**	**100.0**

Source: Own survey, 2012.

In Item 1 of Table 7 shows that the employees have the freedom to protect themselves from hazards at workplace. A total of 62(51.7%) of the respondents said that they had very high level of freedom, and 58(41.3%) of the respondents had moderate level of freedom. This implies that the Dire Tannery's employees have had the freedom to protect their self from hazards or occupational accidents.

In Item 2 of Table 7, the employees are being hard workers to the Company. About eighty-seven percent of the respondents were found to have high level of organizational commitment, while about seven percent of them were moderately hard workers in the Tannery. This clearly indicates that the majority of the employees exert high efforts.

As indicated in Item 3 of Table 7, significant proportions of the employees in the Company have shown satisfactory level of job satisfaction in their daily routines of jobs. About forty-two percent of the respondents were found to be very satisfied, while about thirty-one percent of them were satisfied with their jobs assigned. However, a total of 33(27.5%) of them were found to be dissatisfied with their jobs. Therefore, the majority of employees feel satisfied with their jobs in Dire Tannery Company. The researcher also examined some of the documents of the Dire Tannery Company and confirmed all the aforementioned findings and considered as facts in the Setting.

On the whole, there was low level of implementation of Safety Culture in Dire Tannery Company. Specifically, there were more male workers than female employees in the company whose ages were found to be in the range of 18 to 35 years. In addition, in terms of educational level, they already achieved below Grade 12. These workers were assigned as production operators and had not more than ten years of work experience.

The workers of the Company expressed that tasks they had been assigned were subjected to occupational hazards or accidents. Consequently, the occupational hazards or accidents caused illnesses and body injuries. Generally, the major cause of occupational accidents in Dire Tannery was found to be the nature of work.

In Dire Tannery Company, however, there was Policy on Safety Culture. In contrast, there was very low level of implementation of the Policy. Thus, the Safety Policy was sometimes implemented in the Company. In addition, the workers were not well-informed about the details of the Policy. Consequently, there was moderate level of occupational accidents

in the Company which had caused loss of self-confidence on the part of injured workers.

As solutions to those problems, the concerned Officials of the Dire Tannery took such measures as provision of working clothes, give trainings, facilitate the use of better machines than the previous ones, and engage in advising the injured workers. There was generally moderate level of occupational accidents or injuries. Therefore, the Company's supervisors were moderately following up the workers in order to prevent them from workplace accidents and/or injuries. In the same vein, Training on Safety Culture was sometimes organized and given to the workers to protect themselves from workplace accidents and/or injuries.

In addition, there was the practice of compensation payment provided for injured workers at workplace in the Tannery Company. In the same framework while observing through other windows, the covering of medical cost expenses was found to be the only compensation payment to the injured workers.

There were both very high and high levels of freedom granted by the Company to the workers in order to protect themselves from occupational hazards or accidents. The workers were found to show high level of being hard workers while carrying out various tasks assigned to them. Generally, these workers were satisfied with their jobs assigned.

Conclusion and Recommendation

In order to address the problem and the basic questions formulated and corresponding objectives of the study set. Based on these objectives, questionnaires and interview guides were prepared to that end. The data gathered were processed and analyzed and then the following conclusions were drawn and, finally, possible and plausible recommendations were forwarded.

Conclusion

Based on the investigations conducted throughout the research process and the results of the analyzed data, the researcher has come up with the following conclusions:

- The finding shows that majority of the employee are elementary and high school completed be side that according to the data there is no sufficient number of professional (like mechanical engineers and chemists) in the organization this may result in improper performance and in efficient professional power.
- The main cause of accidents is the nature of the work due to this many of employees are exposed to work hazards.
- It is evident from the study that the Company's compensation (i.e. medical cost) is somehow good.
- Only short term training is given by the Organization due to these reasons, there is lack of training. Therefore, it is impossible to undertake safety culture implementation practice at the right time with a better efficiency. This implies there is poor Safety Culture Policy.

- The major types of accidents employees have suffered are body injury and illness. Therefore, employees are not secured.
- There is no scientific measure to solve the problems related to employees' injuries. This may lead to traditional way of production.

Recommendation

Based on those concussions drawn from empirical observations, the student researcher recommends the following:

- The Company should plan training program to control work accidents. As a professional Company, there is no training other than minor short term training types. The researcher believes that the Company should correct this trend and has to believe in technical development. The Company further needs to plan and implements staff development training.
- The Company should be committed in improving its practice of safety culture implementation by establishing safety department and create safety policy. Therefore, the Company can fulfill its objectives, as well as its mission.
- The Human Resource Management Department should focus on employees' recruitment and selection of employees who are at least qualified with the areas of job. The researcher recommended that the Company should put standards to attract professional and available employees.
- The Company should advise and strive to work on gender equality and work in retaining experienced workers and development of human resources.

- The supervisor should work to improve the awareness of work force concerning to hazard and follow up them to wear safety clothes.

- The Dire Tannery Company should provide rewards for those employees who are performing their jobs without injury, accidents and being absent from workplace. The researcher recommended that the Company should guarantee to employees for life insurance to protect them from workplace accidents and hazards.

- The Company is providing protective devices to those workers who are working in hazardous working areas. This is very important and is a key factor to protect and to make them productive. The researcher recommended that the supervisors in the Company should improve the awareness of workforce concerning to hazards and flowing up them to wear safety.

- The student researcher finally recommends further study. The Company should finally conduct a number of studies which may help it to acquire empirical evidence to fill in the gaps identified.

REFERENCES

Agrawl, R. D. (1994). *Organization and management* **(**7th ed.). New
     Delhi: Tata, Mc Craw-Hill.

Brittle. (1980). *The basics of supervisory management* (4thed.). Singapore:
     Graw-Hill Book Company.

Burgelman, A.R. (1996). *Strategies management of technology and
     Innovation*. USA: McGrew Hill.

Dessler, G.(2003). *Human resource management* (9th ed.). New Delhi:
     Prentice Hall of India Private.

Ivancevich, J. M. (2004). *Human resource management* (9th ed.). New
     Delhi: Tata McGraw Hill Publishing Company Limited.

Johan, R. (1983). *Safety at work***.** New York**:** Wiley and Sons Inc.

Kamat, et al. (2002), *Essential of safety management.* New Delhi:
     Himalaya Publishing House.

Locker, K. G. (1981). *Factory and production management*. London:
     Pitman GBINC.

Sudan, A., Nuveen, S. and Kumara.(2004). *Organizational effectives and
     Changes.* New Delhi: Anmol Publication.

Stevnson, B. (1999). *Production operation management*, (6th ed.). Boston:
     Irwin publishing Pvt. Ltd.

Thomas, J. (1989). *Occupational safety and health management***.**
     Singapore: Grew Hill Company.