

# St. Mary's University

Faculty of Business

*Department of Management*

***An Assessment of Safety Culture  
Practice: The case of Weyra Transport  
Share Company (Saris Branch)***

**By**

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**June,2014  
Addis Ababa**

**AN ASSESSMENT OF SAFETY CULTURE PRACTICE : THE  
CASE OF WEYRA TRANSPORT SHARE COMPANY**

**(SARIS BRANCH)**

**A SENIOR ESSAY SUBMITTED TO THE DEPARTMENT OF  
MANAGEMENT**

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THE DEGREE OF BACHELOR OF ARTS IN MANAGEMENT**

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# Table of Content

## Chapter One: Introduction

Page

1.1 Background of the study.....	1
1.2 Statement of the Problem.....	2
1.3 Objectives of the Study .....	2
1.4 Delimitation of the study.....	3
1.5 Significance of the study.....	3
1.6 Definition of terms and concepts.....	3
1.7 Research Design and methodology.....	4
1.8.1 Research design.....	4
1.8.2 Population and Sampling technique.....	4
1.8.3 Types of Data collected.....	4
1.8.4 Method of Data collection.....	5
1.8.5Data Analysis Method.....	5
1.9 Organization of the study.....	5

## Chapter Two: Review of Related Literature

<b>2.1Organizational safety.....</b>	<b>6</b>
2.1.1Good Safety Culture.....	6
2.1.2 Benefits good safety Culture.....	8
2.1.3 Bad Safety Culture.....	8
2.1.4 Costs of poor safety Culture.....	8
<b>2.2 Work Environment.....</b>	<b>9</b>
2.2.1 Why should we evaluate the workplace environment?.....	9
2.2.2 What work environment factors should be assessed?.....	9
2.2.3 Noise.....	10
2.2.4 Lighting.....	10
2.2.5 Ventilation.....	10
2.2.6 Vibration.....	10
2.2.7 Radiation.....	10
2.2.8 Unsafe Acts.....	10

2.9 Costs of Accidents.....	11
2.9.1 Direct Costs.....	11
2.9.2 Indirect Costs.....	11
2.9.3 Accident Prevention Strategies.....	11
2.9.4 A safe Work place.....	11
2.9.5 Safe Persons at work.....	12
<b>2.3 Workplace transport Safety.....</b>	<b>13</b>
2.3.1 Safe site design.....	13
2.3.1 Safe site Activity.....	14
<b>2.3.2 Safe Vehicle.....</b>	<b>14</b>
2.3.3 Safe Driver.....	15
2.4 Driver Management.....	15
2.4.1 Drivers' Recruitment.....	15
2.4.2 Driver Training.....	16
2.4.3 Drivers Monitoring.....	16
2.4.4 Seat Belt Policy.....	16
2.4.5 Mobile Phone Policy.....	16
2.4.6 Drug and Alcohol Policy.....	16
2.5 What is Journey Risk Management?.....	17
2.5.1 The benefits of journey management.....	17
2.5.2 Journey safety and Risk Management procedure and plans.....	18
2.5.3 Guidelines of Driving.....	19
2.5.4 Driving Hours Guidelines.....	19
2.5.5 General Principles of Driving.....	19
<b>2.6 Safety Management.....</b>	<b>20</b>
2.6.1 Planning.....	21
2.6.2 Senior Managements' Commitment to safety.....	21
2.6.3 organization.....	21
2.6.4 Hazard identification.....	22
2.6.5 Risk management.....	22
2.6.6 Safety investigation .....	22
2.6.7 Safety Analysis.....	22
2.6.8 Safety Promotion and Training.....	22
2.6.9 Safety Information Management.....	23
2.6.10 Safety Oversight and Monitoring.....	23
<b>2.7 Barriers to effective Occupational Safety Management             system.....</b>	<b>23</b>

### **Chapter Three: Data Presentation, Analysis .Interpretation**

3.1 Table 1.1.....	24
3.2 Table1.2.....	25
3.3 Table 2.....	26
3.4 Table 3.....	28
3.5 Table 4.....	29
3.6 Table 5.....	31

### **Chapter Four: Summary of Major Findings, Conclusions and Recommendations**

4.1 Summary of major findings.....	33
4.2 Conclusions.....	35
4.3 Recommendations.....	36

- Bibliography

- Appendices

Appendix A”= Questionnaires for Employees in English

Appendix "B"= Interview Questions for managers

Appendix" C” =Questionnaire for employees in Amharic

# LIST OF TABLES

## PAGE

<b>Table 1:- Background of the respondents,.....</b>	<b>24</b>
<b>Table 1:1:- Characteristics of the respondents.....</b>	<b>24</b>
<b>Table 1:2:- Employees' position and their Experience.....</b>	<b>25</b>
<b>Table 2:- Respondents' response about the general implementation of safety culture.....</b>	<b>26</b>
<b>Table 3:- Respondents' response about the suitability of the working area</b>	<b>28</b>
<b>Table 4:- Respondents' response about the safety of vehicles.....</b>	<b>29</b>
<b>Table 5:- Respondents' rating of the management of safety in the company .....</b>	<b>31</b>

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the study

Safety culture is the ways in which safety is managed in the workplace and often reflects "the attitudes beliefs, perceptions and values that employees share in relation safety" Organizations with a positive safety culture are characterized by communications founded on mutual trust, by shared perception of the importance of safety and by confidence in the efficacy of preventive measures. There is trend for safety culture to be expressed in terms of attitudes or behavior.( Glendon , 2006: 36) highlight that concerning safety culture, the premise of some researchers is to focus on attitudes, where others emphasize safety culture being expressed through their behavior and work activities.

It is important to identify the perception of the organization's safety culture as it represents a critical factor influencing multiple aspects of human performance and organization safety. One of the most succinct and useable definitions of safety culture can be found in von Thadon and Gibbons (2008) "safety culture is the enduring value and prioritization of worker and public safety by each member of each group and in every level of an organization".

Safety and health hazards are those aspects of the work environment that have the potential of causing immediate and sometimes violent harm on employees. Potential injuries include loss of hearing, loss of eyesight or body parts, cuts, sprains, burns, bruises , broken bones and electric shock, time loss, measurable costs, moral loss and psychological problem. Loss can be on account of variety of reasons such as lack of proper instruction by boss, employee's negligence, poor supervision method, unsafe machinery, exposure to hazardous chemicals and so on.

According to the profile of the company the Weyra transport share company was established in 1986E.C with a capital of 9.24 million birr together with other four enterprises after the dissolution of the grand Ethiopia load transport Corporation. IT had 580 permanent employees and 31 employees of contract by then. Currently it is found under the privatization and government development organization monitoring agency. It is the only governmental company that renders fuel transportation service from the port to the central and other regions of Ethiopia. The Weyra transport share company has four branches with its main office located in saris. It has also deployment office in Djibouti and Mile.

The vision of the company is to satisfy customers by rendering quality and fast service and materializing safety rules and regulations so that the company will be the first and foremost one in fuel transportation sector. The mission is to render fuel transportation service to oil companies, washing service to small, medium and heavy vehicles, crane service for customers and to do related and income generating activities.

## **1.2 Statement of the problem**

An organization's safety culture is ultimately reflected in the way in which safety is managed in the workplace. It is important to note that an organization's safety management system is the manner in which safety is handled in the workplace and how those policies and procedures are implemented into the workplace (Kennedy and Kirwin, 1998) Kennedy and Kirwin (1998) also assert that the nature by which safety is managed in the workplace (i.e resources, Policies, Practices and procedures, monitoring etc) will be influenced by the safety culture/climate of the organization.

As opposed to the above mentioned fact poor safety management system causes occupational injury, property damage and medical cost. The study is aimed at implementation of safety culture in Weyra Transport Share Company. According to the company's magazine (2004, 2005), oral information from safety officer, mentor, researcher's observation and group discussion there exists safety related problems of varying intensity. Thus on such basis I would like to address the following research questions.

### **Research Questions**

1. What are the good and bad safety cultures in Weyra Transport Share Company?
2. How is the suitability of the working area for safety?
3. What measures are taken by the company to avoid problems related to safety of vehicles?
4. What are the major problems related to safety management?

## **1.3 Objectives of the study**

### **1.3.1 General Objective**

The general objective of the study was to assess the safety culture implementation of weyra Transport Share .company.

### **1.3.2 Specific Objective**

The specific objective of the study was:-

- .Identify the good and bad safety cultures in Weyra Transport Share Company.
- .Figure out how far the working area is suitable for safety.

- .Find out the measures taken to avoid problems related to safety
- .Explain the major problems related to safety management.

## **1.4 Delimitation of the study**

The Weyra transport share company is engaged in rendering fuel transportation service and other garage service .It has four branches operating in the areas of Saris, Bulgaria Embassy, Nifas Silk and Mile.The Student researcher focused on the Saris branch as it is a place where deployment of employees to other sites takes place and the main maintenance center is found there. .The Company has been in operation from 1986E.C - 2006E.C. Due to time constraints the period of data for this research was the last three years from September 2003 to 2006.

## **1.5 Significance of the Study**

The study contributed a lot for Weyra transport Share Company to check its internal safety problems and bring about change or improvement on the basis of the recommendations and possible solutions as put forward by the student researcher. In addition to this the study would help readers to compare their safety culture in relation to the safety culture strategy of the Weyra Transport Share Company after making an in-depth analysis. Moreover the study would serve as a ground for successive researchers who would like to work on the same issue in wider range. Because safety culture is an important concept that makes up the environment within which individual safety attitudes and beliefs develop and persist and safety behaviors are promoted. Last but not least by completing the study the student researcher would be enabled to get research experience.

## **1.6 Definition of Terms and Concepts**

1. Safety ;- The state of being safe and protected from danger.(Jeynes, 2002:14)
2. Hazard ;-Something with the potential to cause harm or injury.(Jeynes,2002:1)
3. Accident :- An unplanned and uncontrolled event which has led to or could have caused injury to persons, damage to plant or other loss. (Stranks, 2006:37)
4. .Occupational injury :- Harm or damage that takes place in a person's job or profession.(stranks,2006:38)

## **1.7 Research Design and Methodology**

### **1.7.1 Research Design**

In order to answer the basic questions, descriptive research design was used. Descriptive research design helps to describe the research setting and the use of quantitative and qualitative approach. It seeks to determine the answers to who, what,

when, where and how questions. Accuracy is of paramount importance in descriptive research.

### 1.7.2 Population and sampling Technique

The weyra transport share company currently has a total of 386 employees. Since the population in the company from which a sample is to be drawn did not constitute a homogeneous group, stratified sampling technique would be applied. The population would be divided into several sub population called strata and a simple random sampling technique would be used for the selection of items from each stratum.

<b>Department</b>	<b>Number of Employees</b>	<b>Samples</b>
Main Director's office	7(20%)	1
Administration and human resource development Department	73(20%)	15
Finance Department	30(20%)	6
Transportation service control Department	267(20%)	53
Audit and Inspection Department	4(20%)	1
Management Information planning Department	5(20%)	1
	<b>386</b>	<b>77</b>

### 1.7.3 Types of Data Collected

The study used both primary and secondary data. The primary data consisted of qualitative and quantitative data. The Primary data was collected from the sample respondents employees and management. The Secondary sources data was collected from different written materials such as books, documents, magazines, policy manuals e.t.c. The qualitative data was obtained from observation and interview and the quantitative data was obtained from questionnaires and documents.

#### **1.7.4 Method of Data collection**

The main data gathering instruments were questionnaires and interview. The questionnaires were distributed to employees, sample respondents from production and operation and technical department of the company. The questionnaires were prepared in Amharic language as it is the official medium of communication. The researcher used questionnaires because, it keeps the privacy of the respondents, is reliable, cheap and can gather large information from wider respondents. Both close ended and open ended questions were included in the questionnaires.

The Interview was conducted with the general manager, human resource department and production and technical managers, safety officers of the company. Interview was used in order to cross check that the data was obtained from employees and managers. The interviews were semi structure and based on interview schedule.

#### **1.7.5 Data Analysis Method**

The information gathered from different sources were systematically organized, analyzed, tabulated and interpreted. Among the different techniques the researcher used were percentage, tabulation and frequency distribution. Qualitative analysis was used for the data which was collected through interview and document analysis.

### **1.8 Organization of the study**

The study was organized and arranged into four chapters. The first chapter consisted of the introductory part, statement of the problem, research questions, and objective of the study, scope of the study, definition of terms, research design and methodology and organization of the study. The second chapter dealt with review of related literature and chapter three was concerned about data presentation, analysis and interpretation. The fourth and last chapter included summary of major findings, conclusions and recommendations. Finally bibliography and other important documents were attached.

## 1.9 Schedules

### 1.9.1 Time budget

The research proposal schedule

S.No	Major Activities	Units	Months							
			November		December				January	
			3	4	1	2	3	4	1	2
1	Formulating the research problem	Week	-	-						
2	Finding Literatures	Week			-	-				
3	Developing the objectives	Week					-	-		
4	Preparing research design	Week					-	-		
5	Reviewing the research proposal	Week						-	-	
6	Writing the final research proposal	Week								-

### 1.11.2 Cost Budget

S. Number	Description	Cost	Remark
1	Stationery	700.00	
2	Printing	200.00	
3	Binding	50.00	
4	Transport cost	200.00	

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.1. Organizational safety**

Organizational safety is a contemporary discipline of study and research developed from the works of James Reason, creator of the Swiss Cheese Model, and Charles Perrow author of Normal Accidents. These scholars demonstrated the complexity and system coupling inherent in organizations, created by multiple process and various people working simultaneously to achieve organizational objectives, is responsible for errors ranging from small to catastrophic system failures. The discipline crosses professions, spans industries, and involves multiple academic domains. As such, the literature is disjointed and the associated research outcomes vary by study setting. This literature provides a comprehensive yet concise summary of safety and accidents organizational knowledge using internal links (to existing Wikipedia pages), external links (to sources outside of Wikipedia), and literature citations.(Charles,2001:4)

##### **2.1.1 Good safety culture**

Effective safety management requires more than just an organizational structure and a set of rules and procedures. It has roots in a strong and visible commitment to safety by top management. The priority given to safety is continually demonstrated by management attitudes, decisions and methods, as well as by a clearly stated safety policy and objectives. When management places safety ahead of financial gain, a clear message is sent to everyone in the organization, and a positive company safety culture is created. (Brazier,2008:12)

There are no absolute measures of company safety culture, but there are some key indicators that are almost always associated with a positive safety culture. One is the adequacy of the allocation of budget and personnel to the safety function. Another is whether a safety position is considered a prize or a dead-end job. Still another positive indicator is when senior management not only reviews financial performance but also openly and objectively assesses the company's safety performance.

A productive company safety culture encompasses both individuals and the organization, and thus must effectively address both attitudes and structure.

A successful safety culture needs clearly defined duties and well-understood procedures together with clear reporting lines. According to Brazier(2008:22)the characteristics of a good company safety culture include:

- Informed managers who know what is really going on.
- An empowered work force comprising individuals who are willing to report their own errors and near misses and do not fear sanctions.
- A “just” culture with a clear line between the acceptable and the unacceptable.
- Wary operators who are ready to deal with the unexpected.
- Flexibility to operate according to actual needs.
- Adaptability and the willingness to learn and implement necessary reforms.

A company’s safety culture is an intrinsic characteristic of the company itself. It is an inherent part of the operation of the organization and must be based on high levels of information sharing and trust between management and the work force. P. Hudson (2001: 36) has developed a model of the evolution of the safety culture in an organization as a function of increasing levels of information and trust. The model, shown in Figure 1, has five stages that proceed from almost a total disregard for safety to a culture in which safety is the preminent company value.

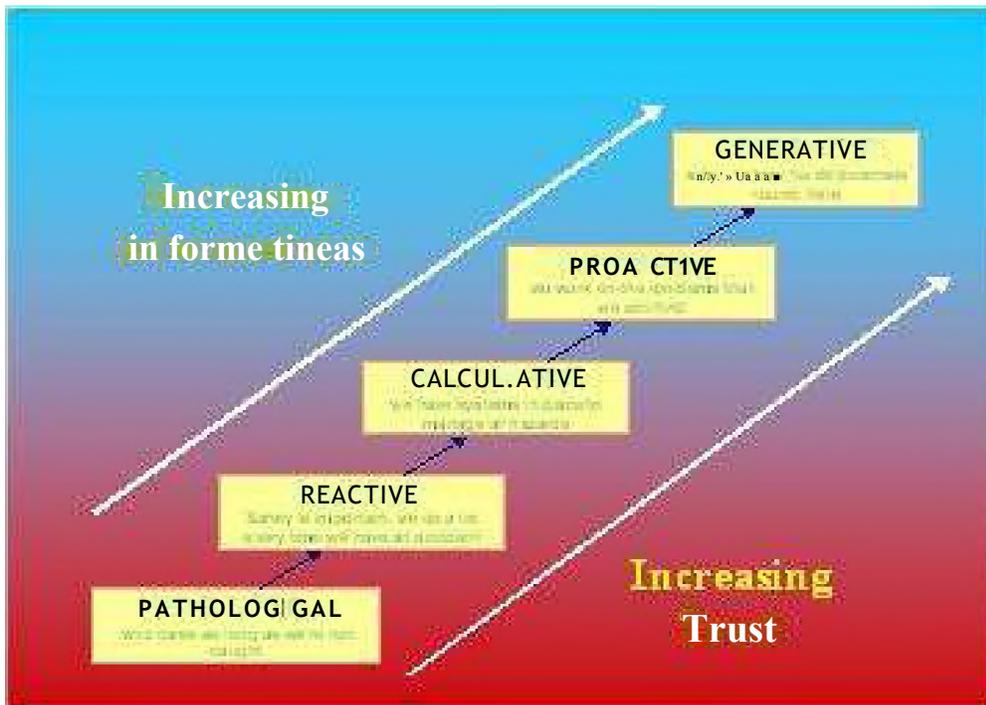


Figure 1: Evolution of Safety Culture, P. Hudson.

### **2.1.2 Benefits of good safety culture**

Addressing health and safety should not be seen as a regulatory burden. It offers the following advantages. Jeyenes, J(2002:114)

- reduced costs and reduced risks
- employee absence and turnover are lower, accidents are fewer
- improved standing among suppliers and partners.
- increased productivity, employees are healthier , happier and better motivated.

### **2.1.3 Bad safety culture**

Safety culture is personal. Bad leaders will result in bad culture. An organizations values and behaviours are modeled by its leaders and internalized by its members that serve to make safety the overriding priority. As leaders the culture of an organization is a reflection of the quality of leadership. Nothing else can have such a dramatic impact on the success or failure of a career. (Smith, 2010: 65)

Mearns ( 2003: 72) highlight that although safety culture was the concept originally used to describe the inadequacies of safety management that result in major disasters , it is interesting that the concept is now being applied to explain accidents at the individual level.. Although the overall culture of an organization may have an impact on the behavior of employees, much research has focused on the impact of more localized factors(i.e supervisors, interpretation of safety policies) in the specific culture of individual workplaces.

### **2.1.4 Costs of poor safety culture**

HSE(Health and Safety executive) statistics reveal the human and financial cost of failing to address health and safety. Each year

- Millions of working days are lost due to work related illness and injury.
- Thousands of people die from occupational injury
- A worker is fatally injured almost every working day

Organizations can incur further costs such as **uninsured losses and loss of reputation.**

## 2.2 Work Environment

The physical aspects of a workplace environment can have a direct impact on the productivity, health and safety, comfort, concentration, job satisfaction and morale of the people within it. Important factors in the work environment that should be considered include building design and age, workplace layout, workstation set-up, furniture and equipment design and quality, space,

temperature, ventilation, lighting, noise, vibration, radiation, air quality.

**Ergonomics** is the study of the relationship between people, the equipment they use and the physical environment in which they work. Applying ergonomic principles to the design, modification and maintenance of workplace environments, has a benefit on people's work performance and short- and long-term health and safety.

### 2.2.1- Why should we evaluate the workplace environment?

When people are working in situations that suit their physical and mental abilities, the correct fit between the person and the work task is accomplished. People are then in the optimum situation for learning, working and achieving, without adverse health consequences, e.g. injury, illness.

### 2.2.2- What work environment factors should be assessed?

When assessing the workplace environment, consideration should be given to individual **human characteristics** such as age, sex, experience, physical stature etc., and how well these human characteristics match the physical environment. Appropriate **design** of workplace environments will ensure that they accommodate a broad variety of human characteristics.

The work environment should satisfy the physical and mental requirements of the people who work within it. The necessary adjustments to the work area, in terms of the heights and angles of furniture and equipment, should be made for the comfort and safety of **each** person.

Physical environmental factors can have an adverse impact on people. The specific physical factors that limit performance will vary depending on both the work environment and individual differences. Those people who are working within an environment are the ones **best able** to identify factors that affect their work. It is important to involve these 'hands-on' people in consultations with supervisors, managers and occupational health and safety personnel when considering options for controlling the risks in question.

The following environmental hazards may require consideration in a workplace because they are a major cause of accidents.

**2.2.3 Noise.** Excessive exposure to loud noise can irreversibly damage the ear, resulting in noise-induced hearing loss. ‘Nuisance’ noise can be annoying and distracting and result in reduced job performance and satisfaction. Noise may also be unsafe if it impairs communication in the work environment, such as by overpowering auditory alarms.

**2.2.4 Lighting.** Lighting levels need to be appropriate to the task and **must** comply with Australian Standard 1680. Working in dim or overbright work environments can result in eyestrain, headaches, irritability and, inevitably, reduced productivity. Light sources, including the sun, can create unwanted reflections, glare and shadows in the workplace that can cause discomfort and distraction, and can interfere with the performance of visual tasks. Low levels of lighting can cause depression, which for some people may be severe.

**2.2.5 Ventilation, air quality and thermal comfort.** Ventilation is important for the control of dust, fumes, gases, aerosols, climate and thermal comfort factors. Exposure to different types of dust can result in fibrosis of the lung, allergic reactions and asthma attacks. Various vapours, gases and aerosols have the ability to cause respiratory and skin damage. Extremes of heat can reduce concentration and motivation and cause a number of heat-related illnesses. Extremes of heat can also reduce tolerance to chemical and noise exposure, and increase the risk of heart attacks.

**2.2.6 Vibration.** Whole body vibration, e.g. from riding a mower, can affect comfort and performance even at low levels and can cause damage to the spine, stomach pain and gastrointestinal complaints. Hand-arm vibration, such as from hand tools, can have negative effects on muscles and the skeleton, and can contribute to carpal tunnel syndrome, low-back pain and vibration white finger, for example.

**2.2.7 Radiation.** Exposure to ultraviolet radiation from the sun can induce potentially lethal skin cancers. Exposure to direct sun, particularly between the hours of eleven and two, can result in sunburn, headaches and fatigue. Different people have varying degrees of sensitivity to the sun, e.g. fair freckled skin often burns more quickly than olive skin. Precautions for avoiding sun exposure should be followed diligently by **everybody**.

**2.2.8 Unsafe Acts:-** Apart from the above mentioned unsafe conditions worker carelessness or unsafe acts contribute to the cause of accidents. Examples include failure to use personal protective equipment, overriding safety controls, disregarding safety procedures, improper use of tools and equipment, and failure to use reasonable caution in danger zones(.Buillaim,S.1991:325)

## **2.9 Costs of Accidents**

**2.9.1 Direct Costs:** - These are sometimes referred to as insured costs” and involve the company’s liabilities both as an occupier of premises and employer of staff. Company’s pay premiums to an insurance company to give them cover against claims made by injured persons. Premiums are determined largely by the past claims history and the risks involved in the business operation. Other direct costs, perhaps, product liability claims for defective or unsafe products or specific injury claims, which may be settled in or out of a court. Fines imposed by courts for breaches of the law, together with defence costs in such cases can also be substantial direct costs.

### **2.9.2 Indirect Costs**

While many organizations may be fully aware of the direct costs of accidents, very little attention is paid to the indirect costs. Many of these costs may be hidden in other costs and thus not fully recognized, e.g. production costs e.g. lost production: extra overtime costs to make up production loses, damage costs and training and supervision costs, administration costs. Typical indirect costs such as treatment costs of the injured employee, lost time costs, of the injured person, management, first aid staff and others involved. Other miscellaneous costs include. Perhaps replacement of damaged personal property and incidental costs incurred by witnesses attending court.(Stranks, 2006:34)

### **2.9.3 Accident prevention Strategies**

Strategies aimed at preventing accidents should be geared, firstly to reducing the objective danger in the workplace (Safe place strategies) and secondly to increasing people’s perceptions of risks at work.(Safe person strategies).

### **2. 9.4 A safe work place**

Safe place strategies are principally concerned with reducing or eliminating the objective dangers that threaten the safety of workers. These include

1. Premises- Premises should be structurally safe.
2. Environment-Poor standards of working environment are a contributory factor in many accidents. Sound working environment should be provided.
3. Plant and machinery-Legislation, requires plant and machinery to be adequately fenced or controlled in such a way that operators are not exposed of risk of injury.

4. Processes- A work process may incorporate a number of machines, materials and differing operating skills. Such factors must be considered during design and be subject to regular monitoring.
5. Systems of work:- The need for clearly defined and documented safe systems of work is abundantly clear in many work situations.( Stranks,J.2000:39)
6. Supervision and control:- Good standard of safety supervision from the boardroom downwards should be indicated in the employer's statement of health and safety policy.
7. Training:- It is the legal duty of employers to provide information, instruction, training and supervision. (Guillford,1995: 39)

### **2.9.5 Safe persons at work** Safe person strategies include the following

**1. Personal Protective Equipment:-** The provision and use of PPE should be considered as prevention strategy. The usage relies heavily on the worker wearing the item of personal protection e.g. gloves, safety helmet e.t.c

**2. Vulnerable groups:-** Certain groups of workers, by virtue of their age, physical condition, lack of experience, may be vulnerable to accidents than others. Such groups include young persons, pregnant women, disabled persons e.t.c. Special Consideration is needed in this case.

**3. Unsafe behavior:-** Horseplay and other forms of unsafe behavior can be a feature of some work situations if supervision and control are poor. Management must take a very strong line here, with instant dismissal of offenders in extreme cases.

**4. Personal Hygiene:-** Many substances used in industrial processes can promote occupational skin conditions, in particular ,dermatitis. Such substances must be properly controlled, and facilities for maintaining good standards of personal hygiene provided and maintained.

**5. Maintaining awareness:-**Everyone should be aware of the risks in the workplace. Hazards should be clearly identified in the statement of Health and safety Policy, together with the precautions necessary on the part of workers. Methods of increasing and maintaining awareness include the use of posters, training, safety competitions, various forms of safety monitoring, hazard spotting exercises, hazard reporting systems and the use of "Days Lost" notice boards indicating the number of days lost per month as a result of accidents at work.( Stranks ,2006:41)

## 2.3 Workplace transport Safety

What is workplace transport?

Workplace transport is any activity involving vehicles used in a workplace. Vehicles driven on public roads are excluded. To manage workplace transport effectively, there are three key areas to consider when carrying out your risk assessment:

### 2.3.1 Safe Site- Design

**Segregation** :-Every site is different and likely to present different hazards and risks. However a well designed and maintained site with suitable segregation of vehicles and people will make workplace transport accidents less likely.

The most effective way of ensuring workers and vehicles move safely around workplace is to provide separate employees and vehicle routes in the workstation. Where possible, there should also be a one way system as this will reduce the need for vehicles to reverse, and will help workers and drivers.

The circumstance might mean that complete segregation is not possible, so it is needed to have clearly marked workers and vehicle routes, using measures such as barriers and signs.

**Speed** ;- Reducing vehicle speed is an important part of workplace transport safety. Fixed traffic control measures such as speed humps, chicanes and rumble strips can reduce vehicle speed. It is important to select the most appropriate control as the wrong measure can increase risk by reducing vehicle stability.

Speed limits can also be used, but they need to be appropriate, properly enforced and, where possible, consistent across the site.

To assess an appropriate speed limit, consider the route layout and its usage. For example, lower speeds will be appropriate where workers are moving around

**Lighting**:- At night every workplace should have suitable and sufficient lighting, particularly in the areas where vehicles maneuver. There must not be sudden changes in lighting levels which may lead to drivers being dazzled. <http://www.HSECom.>"Workplace Transport Safety"

<http://www.HSECom.>"Workplace Transport Safety"

### 2.3.2 Safe Site Activity

**Reversing** :-Around a quarter of all deaths involving vehicles at work occur as a result of reversing . It also results in considerable damage to vehicles , equipment and property.

The most effective way of reducing reversing incidents is to remove the need to reverse by, for example , using one way systems. Where this is not possible, sites should be organized so that reversing is kept to a minimum. Where reversing is necessary consider the following,

- Install barriers to prevent vehicles entering workers' zones
- Plan clearly mark designated reversing areas.
- Keep people away from reversing areas and operations
- Use portable radios or similar communication systems.
- Install equipment on vehicle to help the driver and workers, eg reversing alarms, flashing beacons and proximity sensing devices.

**Parking**:- Parking areas should be clearly indicated and there should be separate parking areas for vehicles in the workstation. When vehicles are parked, their parking brakes should always be applied. Drivers should never leave a vehicle unattended without ensuring a vehicle is securely braked, the engine is off and the key to the vehicle has been removed.

### 2.3.4 Safe Vehicle

Vehicles used in the workplace should be suitable for the purpose for which they are used. You should carefully consider the working environment in which a specific vehicle will be used and the suitability of that vehicle for the people using it. Consulting with those who will use it is a key part of developing a vehicle specification.

The Road Vehicles (construction and use) regulations 1986 formulated by Health and Safety Executive(2013) set the standard for the design and construction of vehicles used on public roads. Most vehicles used in the workplace should meet this standard.

Vehicles should be designed so that , wherever possible, those who use them can do their work from the ground. Where people have to work at height on vehicles, suitable means safe access onto and around vehicles should be provided.

**-Maintenance:-**Vehicles should be maintained in good working order so they remain mechanically sound, and any devices, such as flashing beacons, function properly,. Vehicles must be thoroughly examined by a competent person and reports kept.

Planned inspection are a vital part of preventive maintenance. These may include daily safety checks carried out by drivers and regular maintenance inspections based on time mileage.

Drivers should be provided with a list of the daily checks to be signed off at the start of each shift. This should be monitored to ensure the checks are carried out properly.[http://www.HSE Com."Workplace Transport Safety"](http://www.HSE.Com.)accessed on March 21,2014

### **2.3.5 Safe Driver**

Drivers should be competent to operate a vehicle safely and receive appropriate information, instruction and training for the vehicle they use. It is particularly important that younger or less experienced drivers are closely monitored following their training to ensure they work safely.

## **2.4 Driver Management**

**2.4.1 Drivers' Recruitment:-**Road transports shall have a policy and procedure in place to address the requirements in recruiting new and competent drivers. For existing employees it must be assured that they have have and continue to have the skills and experience to operate a vehicle safety. If the work changes drivers should have the necessary training to carry out the duty while considering safety.

Applicable for the recruitment of new drivers in some countries dependant on the National Regulations, the requirements in the policy and procedures include age, physical applicability, medical check, educations, previous employment background, knowledge test, on road driving assessment, probations period e.t.c

### **2.4.2 Drivers' Training**

A system in place to ensure that the training needs of drivers are identified and satisfied in an appropriate and adequate manner so that operations are carried out competently and safely. The training shall be delivered by approved trainer and be properly assessed and recorded.

### **2.4.3 Drivers' Monitoring**

The company shall have a formal system and procedures to monitor and promote safe driving behavior and performance.

Unsafe behavior and traffic violations shall be counseled and disciplinary actions taken on repeated offenders.[http://www.HSE Com](http://www.HSE.Com)”Workplace Transport Safety.”accessed on March 21, 2014

#### **2.4.4 Seat Belt Policy**

##### **Objectives**

Seat belts in vehicle are mandatory installation and used by all vehicle occupants in vehicles performing transportation services for business. Seat belts assure safety.

#### **2.4.5 Mobile phone policies**

The use of mobile phone while driving is identified as a contributing factor in road accidents. Drivers shall not initiate nor answer a mobile phone call while they are driving. While the vehicle is in operations, including a call stopped at a traffic light. The best recommended practice is ‘ Engine on- Phone off’

#### **2.4.6 Drug and alcohol policy**

In most countries that conduct measurements of intoxication levels, up to one quarter of all road accident fatalities have been found to be associated with alcohol. Alcohol reduces the ability to drive safely because it impairs coordination, upsets judgements and leads to longer reaction times. Drivers shall not operate a vehicle while under the influence of alcohol, drugs, narcotics or medication that could impair the operator’s ability to safely operate the vehicle. <http://www.HSE.com>” Workplace Transport Safety.”

### **2.5 What is Journey Risk Management?**

Simply put, it is a safety system delivered by a live team of experts to companies in the energy, logistics and transportation sectors.

Using customized purpose written software, the team ensures the safety of employees as they travel to and from work sites or while travelling on any work related activities. The real value of this service is when the “what if?” happens. A recent example:

A driver was en route to a work site in Alberta when he experienced severe chest pain. He contacted the journey management team, who were watching and responsible for his

safety, and spoke to an agent. A Journey Management Operator immediately contacted emergency personnel in that location and advised them of the situation and the driver's exact location using the GPRS tracking system which is deployed in all company vehicles and visible as part of a delivery of Journey Management system across Canada and the US. An agent then stayed on the line with the driver to ensure that he was conscious and calm, while managing the emergency response effort it was possible to expedite the response.

That driver admittedly, likely owed his life to his company's dedication to safety and implementation of a journey management system. Collins, (2004:67)

### **2.5.1 The Benefits of Journey Management**

-Journey Management Increases Safety and Lowers Risk

A journey management plan offers assistance in allocating mobile resources (employees, trucks, and heavy equipment) to considered journeys.

Some of the variables that a journey management plan assesses are:

- Purpose of trip
- Driver readiness (license status, hours-on-duty, safety certificates, hazardous materials certification, etc.)
- Road conditions
- Planned routing

Journey management factors are usually totaled to arrive at a "risk management" sum.

If the sum of risk factors rises above predetermined levels, then the planned journey is reviewed by supervisory or management staff. This means your company can authorize or manage hazardous or critical journeys.

### **2 .5.2 Journey Safety and Risk Management Procedure and Plans**

Not sure what has happened out there to prompt the number of enquiries we are getting about travel safety plans, journey risk management, Trip Management Plans and safe driving hours for workers driving out to mines and remote sites. In response, below is a guideline with a great example of a procedure covering all these issues.

#### **1. PURPOSE**

The purpose of this guideline is to specify the requirements for light / heavy vehicle driver hour's requirements within Company.

**2. SCOPE**

This guideline applies to tasks involving driving a Company owned or operated light or heavy vehicle for a prolonged period (2 to 12 hours), with particular reference to associated driving hours. This guideline applies to all Company employees and other persons undertaking prolonged driving activities on behalf of Company.

**3. PROCEDURE**

- Light Vehicles: (A vehicle with a gross vehicle mass less than 8 tonnes and / or seating capacity of up to eleven people including the driver)

-Company employees shall not be permitted to drive for more than ten (10) hours in any twenty-four (24) hour period.

-Employees shall not be permitted to drive for prolonged periods (2 to 10 hours) where the period of driving and working would exceed ten (10) hours in that working day or in a twenty-four (24) hour period.

-Heavy Vehicles: (A vehicle with two or more axles with a gross vehicle mass greater than 8 tones)

Company employees who are tasked as drivers of heavy vehicles (as detailed above) shall comply with the table below for required standard driving hours including any other related tasks to the operation of the heavy vehicle.

**Company Standard Hours: Heavy Vehicles**

In any period of.....	Maximum DRIVE / WORK	Minimum REST
5 Hours 30 Minutes	5 Hours	30 minutes, either as one continuous period or as two periods of 15 consecutive minutes each
24 Hours*(See Note 1)	14 Hours(maximum 12 hours driving)	10 hours, including one period of 6 consecutive hours  **(see note 2)
168 Hours(7 Days)	72 Hours	96 hours, including one period of 24 consecutive hours

**\*\*\*(see note 3)**

Note 1. For enforcement purposes the 24 hour period means any period of 24 hours but is usually taken as the 24 hours up to the time of the interception. It does not necessarily mean midnight to midnight.

Note 2. Continuous rest period must be taken away from the vehicle unless the vehicle is fitted with an approved sleeper berth.

Note 3. Rest periods of 24 hours or more must be taken away from the vehicle.

### **2 5.3 Guidelines of Driving**

The attached “Driving Hours Guidelines” and statement on “Driver Fatigue” published by the Australian Road research Board provide comprehensive information on the procedures to be followed when driving on official Company business and are to be read in conjunction with this policy.

#### **2.5.4 Driving Hours Guidelines**

These Guidelines are part of the Company Health, Safety, and Environment & Community Management System and reflect Company’s commitment to the health and safety of employees. The Guidelines specify driving and duty hours to promote safe work practice.

Research has indicated that up to 25% of road accidents are the result of drivers being tired or falling asleep. These Guidelines specify procedures to minimize the chances of motor vehicle accidents resulting from fatigue and drivers falling asleep.

#### **2.5.5 General Principles of Driving**

- Safe driving practices should be actively encouraged at all times.
- Staff should apply risk management principles to potential fatigue related driving risks.
- The taking of regular and adequate rest breaks (e.g. 10 minutes rest break every 2 hours) during a long motor vehicle journey is of fundamental importance in avoiding driver fatigue.
- The distance which can be reasonably covered during a day of driving will be governed by the type of vehicle that is used, the type of terrain involved, the road, weather and

traffic conditions, the prevailing speed limits and the maximum time that should be spent driving (see Section 3).

- Any driver who feels fatigued should stop as soon as practicable and take an adequate rest break. This may mean 20 minutes away from the vehicle or a night of sleep, depending on the time of day and the preceding period of driving.-

In planning journeys involving a period of driving, an employee and the supervisor authorizing such travel shall take the following considerations into account:

- how long an employee will have been on duty prior to commencing driving and of the duration of any work duties at the end of the journey;
- The time at which the journey is to be undertaken, the duration of the journey and the distance to be covered. The timing of the journey should not interrupt normal sleep patterns wherever practicable;
- the provision of adequate rest breaks before, during and after the journey;
- the avoidance of any unusual accident risks during the journey; (eg frost, fire, flood, cyclone);
- any need for the employees to perform other duties immediately after the journey; (This may require limitation of the duration of the journey.); and
- the possibility of more than one driver travelling in the vehicle to share the driving on long journeys or journeys undertaken in isolated areas or under hazardous environmental conditions. (Collins,2008: 72)

## **2.6. Safety Management**

A Safety management system is a tool that allows an organization to monitor and improve its safety culture. ICAO recommends a sequential 10-step approach to implement an SMS to ensure that all necessary elements to build an efficient system are present.

### **2.6.1 Step 1: Planning**

Following a logical progression, the SMS process starts with careful planning. The creation of a planning group composed of the appropriate experience base within the company is an important part of planning. The formation of the group should include the

designation of a safety manager, development of a realistic safety strategy and preparation of an implementation plan for the SMS.

### **2.6.2 Step 2: Senior Management's Commitment to Safety**

The ultimate responsibility for safety rests on the shoulders of senior management. The stage for a positive safety culture is set by the extent to which company leaders accept the importance of proactive risk management. Safety objectives must be practical, achievable, regularly reviewed and reassessed, and communicated to the staff with a clear endorsement by senior management. Safety plans and program documents should be signed and supported by the CEO. They should include a reasonable reporting chain for safety issues that goes through the safety manager and ends at the CEO, if necessary. Appropriate resources should be visibly allocated to support the safety manager and the operation of the safety program.

### **2.6.3 Step 3: Organization**

The resilience of a company is influenced by its way of conducting business and managing safety. In order to efficiently support the implementation of an SMS, the company safety manager should be appointed by and have direct access to the CEO. There should be a safety committee that is structured to support safety management, has a clear statement of responsibilities and accountabilities, and oversees training and competency.

### **2.6.4 Step 4: Hazard Identification**

In a good safety culture, hazard identification is proactive rather than reactive and is not punitive. When humans operate in fear of punishment for normal mistakes, errors and unsafe actions will remain hidden, and opportunities for improvement and prevention will be lost. Proactive hazard identification processes such as the line operations safety audit (LOSA) provide a continuous commitment to safety. Management must provide these processes with adequate resources to systematically record and store, and competently analyze data on identified hazards. (Stranks, 2006:62)

### **2.6.5 Step 5: Risk Management**

Following hazard identification, risk management serves to focus safety efforts on those hazards posing the greatest risks. This requires that all risks be critically assessed and ranked according to their accident potential. Both the likelihood of occurrence and the severity of consequences must be taken into account. If risks are deemed acceptable, the

company's operations may continue unchanged, at least for the present. However, even "acceptable" risks can be the focus of SMS efforts to reduce overall accident exposure. If risks are considered unacceptable, operations must be stopped or altered until steps can be taken to remove or avoid the identified hazards.

Risk management is a closed-loop process in which residual risks are assessed and cost-benefits analyzed after each risk-reduction step. This process is assisted by staff feedback on actions taken and the success of procedures put into place.

### **2.6.6 Step 6: Safety Investigation**

Lessons learned about safety are more beneficial when they include a focus on root causes ("why") rather than only on a description of the accident or incident ("what"). Identifying root causes requires trained investigators who look beyond the obvious causes at other possible contributing factors, including, but not limited to, organizational issues. Key operational staff must be properly trained to conduct safety investigations and have appropriate management support. Their output in terms of safety lessons learned should be disseminated throughout the organization. The regulatory authority must also be aware of causal findings so they can be transferred to other operators, as appropriate.

### **2.6.7 Step 7: Safety Analysis**

In order to be accepted by all stakeholders, an SMS must encompass objective trend analyses, occurrence investigation, hazard identification, risk assessment, risk mitigation and monitoring of safety performance. Solid analytical capabilities provide compelling evidence to steer cultural change. Analytical tools and specialists support the risk-management process through the use of an up-to-date safety database. Safety recommendations should be proposed to senior management, and corrective measures must be taken and tracked to verify their effectiveness.

### **2.6.8 Step 8: Safety Promotion and Training**

Safety awareness within an organization is continuously improved by keeping staff informed of current safety issues. This can be accomplished using appropriate training, safety documents and participation in safety-related seminars. Training must be viewed as an investment in the future of the organization, rather than as an expense. All employees, regardless of their role and experience, can benefit from safety analysis feedback and lessons learned.

### **2.6.9 Step 9: Safety Information Management**

A large amount of data are generated when operating an SMS. When the information is not properly recorded, stored and used, it can be a waste of time and money. A safety management manual is the vehicle to document how the SMS relates to other functions within the organization and how SMS data should flow and be used within the company. Appropriate approaches for the dissemination of safety information, including necessary technical support and equipment, must be implemented while simultaneously assuring the protection of sensitive safety and personal-identification information.

### **2.6.10 Step 10: Safety Oversight and Performance Monitoring**

The last step “closes the loop.” Feedback to continuously improve the system is based on the following:

- Safety oversight through inspections and audits to document for staff and management that the safety actions are properly performed.
- Safety performance monitoring to assess if the efforts of the SMS remain effective and are meeting the organization’s safety objectives. This requires the identification of accepted performance indicators.
- Dissemination of findings and implementation of corrective actions to improve the system. (Stranks,2006:63)

## **2.7 Barriers to Effective Occupational Safety Management Systems.**

In their comprehensive study on occupational safety and health management system, (Gallagher et al, 2001) underscore several factors impeding the implementation of effective OSHMS. This include the type of system chosen by enterprises, internal organizational factors(Such as management commitment ,the integration of OSHMS into management systems, worker involment,workforce characteristics, the nature of the organization , contractor relations and audit processes and tools.(Hamzoui,2007:62)

## CHAPTER THREE

### 3. DATA PRESENTATION , ANALYSIS INTERPRETATION

The data collected from different primary and secondary sources were presented, analyzed and interpreted accordingly. This analysis was done based on the returned responses of the sample respondents and interviewed people. The chapter consisted of two main parts. The first part dealt with the analysis and interpretation of data collected from employees of the Weyra Transport Share Company. The second was related to the analysis of the responses from the management of the Weyra Transport Share company. The researcher used questionnaires and interview for such purpose. Interview was conducted with the general manager, human resource manager, technical managers and head of health and safety and different administrative issues. The questionnaires were distributed to employees at functional level. The total number of questionnaires distributed were 77. Among these 70 of the questionnaires were properly completed and returned to the researcher.

#### 3.1 Table 1.1 Characteristics of the Respondents

No	Item	Respondents	
		No	%
1	Sex		
	Male	40	57
	Female	30	43
	Total	70	100
2	Age 18-34	14	20
	35-44	34	49
	45-54	22	31
	Total	70	100
3	Educational Background		
	High school graduate	8	11
	TVET Graduate	22	31
	College Diploma	25	36
	Degree	13	19
	Masters Degree	2	3
Total	70	100	

As shown in item 1 of table 1.1, out of 70 respondents, 40(57%) of them were males while the remaining 30(43%) of them were females. This implies that the number of male employees is greater than that of female employees in Weyra Transport share company.

With regard to item 2 of table 1.1, 14(20%) , 34(49%) and 22 (31%) of the respondents were between the age groups of 18-34 yrs, 35-44 yrs and 45-54 yrs respectively. This indicates that the majority of them are between 35-44 yrs.

Concerning educational background, 8 (11%) of them are high school graduates, 22(3%) of them are TVET graduates, 25 (36%) of them are diploma holders, 13(19%) of them have first degree ,where as 2 (3%) of them have masters . From this we can deduce that the majority of the employees under study are diploma holders.

### 3.2 Table 1. 2 Employees’ Position and their Experience

No	Item	Respondents	
		No	%
1	Position		
	- Safety officers	3	4
	- Mechanics	22	31.4
	- Transport Service sector	25	36
	- Audit & Inspection	10	14.3
	- Finance sector	10	14.3
	Total	70	100
2	Period of service within the company		
	- Less than 5 yrs	15	21
	- 5-10yrs	25	36
	- More than 10yrs	30	43
	Total	70	100

Concerning employees position and their experience, according to item 1 of table 1.2, 3 (4%)of the respondents are safety officers, 22(31.4) of the respondents are mechanics, 25 (36%) of the respondents are from transportation service control department, 10 (14.3%) of the respondents are from audit and inspection department , while 10 (14.3%) of the respondents are from finance department. This implies that the majority of the respondents are from transportation service control department because the main activity of the company is to transport fuel from the port to the center and other regions of Ethiopia.

In item 2 of table II ,15 (21%) of the respondents are below 5 years of service, 25(36%) of the respondents are between 5-10 years and the rest 30(43%) of the respondents are above 10 years of service period. This indicates that the majority of the respondents have long years of experience i.e above 10 years.

**3.3 Table 2. Respondents Response about the general implementation of safety culture.**

1	Item	Response										Total	
		Very High		High		Moderate		low		Very low			
	What are the good and bad safety cultures in the company?	No	%	No	%	No	%	No	%	No	%	No	%
A	General implementation of Safety Culture	20	29	5	7	40	57	5	7	-	-	70	100
B	Managements concern for safety before profitability	12	17	12	17	39	56	-	-	7	10	70	100
C	Clarity of safety objectives policies and employs	-	-	30	43	40	57	-	-	-	-	70	100
D	Implementation of good safety culture	10	14.3	10	14.3	30	43	10	14.3	10	14.3	70	100
E	Existence of poor safety culture and the loss	-	-	-	-	34	48.5	34	48.5	2	3	70	100
	Incurred because of it												

In item 1 of table 2, concerning the general implementation of safety culture in the company, about 20 (29%) of the respondents said very high, 5(7%) of the respondents said high ,40(57%) of the respondents said moderate , 5(7%) of the respondents said low and none said very low. From this we can deduce that the overall implementation of safety culture in the company is moderate.

In item 2, concerning management’s concern for safety before profitability 12(17%) of the respondents said very high, 12(17%) said high, 39(56%) of the respondents said moderate and 7(10%) of the respondents said very low. This clearly indicates that the management’s concern for safety before profitability is moderate.

In item 3, with regard to the clarity of safety policies and objectives to employees ,none said very high, 30(43%) said high, 40(57%) said moderate and none said low .This infers that the clarity of safety policies and objectives to employees is moderate.

In item 4, with respect to the implementation of good safety culture 10(14.3%) of the respondents said very high, 10(14.3%) said high , 30(43%) of the respondents said moderate, 10 (14.3%) of the respondents said low and10 (14.3%) said very low. From this we can conclude that the implementation of good safety culture in the company is moderate.

In item 5, regarding the existence of poor safety culture and the loss incurred, none said very high and high, 34(48.5%) of the respondents said moderate, 34(48.5%) of the respondents said low, 2(3%) of the respondents said low and 2(3%) of the respondents said very low. This indicates that the existence of poor safety culture and the loss incurred is moderate.

Based on the information obtained from informants one can generalize that safety culture in Weyra transport share company is not perfectly implemented in the company. The moderate rate concerning safety issues shows the shortcoming or unfulfilled aspect of safety issues. As Weyra transport share company is one of the exemplary fuel transportation service rendering company that has been awarded by fuel companies in road safety and operational excellence, the result is expected to show very high rate. Thus we can say that there are some problems regarding safety issue.

The respondents further confirm the existence of a problem by stating the following:-

- Less attention is given to safety issues
- There is less acceptance of safety issues (rules and regulations) by employees
- There is lack of knowledge about the safety of fuel transportation by employees hired for safety purposes and they continually resign after some months.

According to the response of the general manager in the interview question, the company regards safety culture as one part of a job and implements it by giving instructional and material support. The company has its own designed policies and established committees with regard to safety issues.

Some of the company's health and safety policy are as follows:-

- Pursue the goal of no harm to employees
- Protect the environment
- Use material and energy efficiently to provide products and services
- Manage health and safety matters as any other critical business activity
- Protect personnel, property, information and reputation against security threats.
- Care for the health of employees and those whose health may be impacted by the company's operations etc

When we compare the information given by the management and that of the respondents in the data analysis made above, we will find that there are differences and contradictions in opinions.

**3.4 Table 3. Respondents' Response about the Suitability of the Working area.**

	Item How is the suitability of the working area for safety?	Response										Total	
		Very High		High		Moderate		low		Very low			
		No	%	No	%	No	%	No	%	No	%	No	%
A	The general suitability of the working area	-	-	2	3	-	-	-	-	68	97	70	100
B	Proximity of the offices to the maintenance center	68	97	2	3	-	-	-	-	-	-	70	100
C	The effect of lighting ,noise, radiation, fumes on work performance & safety	67	95.7	1	1.4	2	2.8					70	100
D	Using personal protective Equipment	7	10	7	10	7	10	42	60	7	10	70	100
E	Rate of Accident	-	-	-	-	8	11.4	54	77.1	8	11.4	70	100
F	Cleanliness and safety of the workshop	-	-	-	-	10	14.2	56	80	4	6	70	100

In item 1 of table 3,with regard to the general suitability of the working area none said very high, 2(3%) of the respondents said high ,none said moderate low and very low.

In item 2, concerning the proximity of the offices to the maintenance center, 68 (97%) said very high, 2(3%) said high and none said moderate, low and very low. From this we can deduce that the officers are very close to the maintenance center.

In item 3, with regard to the effect of lighting ,noise, radiation, fumes on work performance and safety, 67 (95.7%) said very high, 1(1.4%) said high ,2(2.8%) said moderate and none said low and very low. This infers that the effect of lighting, noise, radiation, fumes on work performance and safety is very high.

In item 4 ,with respect to using personal protective equipment ,7 (10%) of the respondents said very high, 7 (10%) said high, 7 (10%) said moderate, 42(60%) said low and 7(10%) said very low. This clearly indicates that the usage of personal protective equipments by employees is low.

In item 5 ,regarding the rate of accident none said very high and high, 8(11.4%) of the respondents said moderate, 54 (77.1%) said low and 8 (11.4%) said very low. From this we can generalize that the rate of accident is low. In item 6, regarding the cleanliness and safety of the workshop, none said very high and high, 10(14.2%) said moderate, 56 (80%) said low and 4 (6%) said very low. From this we can infer that the cleanliness and safety of the workshop is low.

According to the data gathered through interview and document review , the general suitability of the working area in Weyra Transport Share Company is low. The student researcher can also confirm this from personal observation. The analysis further shows the proximity of the offices to the maintenance center. This results in employees' exposure to noise, radiation, fumes etc. According to the findings of the study the majority of safety employees do not use personal protective equipment. As to the informants, this arises from negligence and using the safety clothes for other purposes. Regarding the rate of accident, even if the level is low, as to the informants, more people could be saved. The above information concerning the suitability of the working area is further confirmed by the respondents in the open ended question who stated that:-

-The working area gets dusty in dry season and muddy in rainy season and that affects health and safety. According to the reply of the head of health and safety and different administrative issues,- the environment should be healthy and clean to ensure safety. He pointed out that temporary solutions like cleaning of the working area is being carried out., Since the office lay out is dispersed ,a grand building (G+7) is being constructed to fix the problem permanently.

### 3.5 Table 4 Respondents' Response about the Safety of Vehicles.

	Item	Response											
		Very High		High		Moderate		low		Very low		Total	
		No	%	No	%	No	%	No	%	No	%	No	
A	The availability of new spare parts	5	7.1	-	-	5	7.1	60	85.7	-	-	70	100
B	The drivers usage of driving manual	58	83	6	8.5	-	-	6	8.5	-	-	70	100
C	Measures taken on drivers who violate driving rules	-	-	70	100	-	-	-	-	-	-	70	100
D	Training given to prepare the trip journey plan	5	7	60	86	-	-	-	-	5	7	70	100
E	Driving without minimization or exaggeration , preparation of the standard trip plan					70	100					70	100
F	measures taken to avoid problems related with safety of Vehicles	6	8.5	52	74	6	8.5	6	8.5			70	100

In item 1 of table 4, with respect to the availability of new spare parts, 5(7.1%) said very high, none said high, 5(7.1%) said moderate, 60(85.7%) low and none said very low. From this we can generalize that the availability of new spare parts is low.

In item 2 of table 4, regarding the drivers' usage of driving manual, 58(83%) said very high, 6(8.5%) said high, none said moderate, 6(8.5%) said low and none said very low. From this we can deduce that the drivers' usage of driving manual is very high.

In item 3 of table 4, concerning the measures taken on drivers who violate driving rules, none said very high, 70 (100%) said high, and none said moderate, low and very low. From this one can conclude that the measures taken on drivers who violate driving rules is high.

In item 4 of table 4, with regard to the training given to prepare the standard trip / journey plan, 5(7%) said very high, 60(86%) said high, none said moderate and low and 5(7%) said very low. This infers that the training given to prepare the standard trip/ journey plan is high.

In item 5 of table 4, regarding the drivers' preparation of the standard trip plan without minimization or exaggeration, none said very high and high, 70(100%) said moderate and none said low and very low. From this we can deduce that the drivers' preparation of the standard trip plan is moderate. In item 6 of table V, concerning the measures taken to avoid problems related with safety of vehicles, 6(8.5%) said very high, 52 (74%) said high, 6(8.5%) said moderate, 6(8.5%) said low and none said very low. This clearly indicates that the measures taken to avoid problems related with safety of vehicles is high.

On the basis of the above findings of the study the major problems related with safety of vehicles is maintenance management and journey management, Regarding maintenance management, the main problem is finding new spare parts for maintenance purpose on time, the unsuitability of the working area for maintenance purpose, the problem in the regular check up of the technical condition of vehicles by drivers using vehicle follow up checklist and others. with respect to journey management although training is given to prepare the standard trip plan, the drivers prepare it with some minimization and exaggeration.

This is confirmed by the informants who stated that there is a visible difference between the trip plan prepared by drivers and the actual journey registered on the G.P.R.S (Computer system follow up)

According to the statement of the general manager, at its establishment the weyra transport share company had vehicles that have 75% completed their service years and 90% did not fulfill safety requirements. Having realized this, presently the company has

become the owner of 100 modern vehicles that render fuel transportation service. -The general manager added that the company has been continually awarded by oil companies such as Oil Libya and Total for road safety and operational excellence.

-According to the statement of the head of health & safety and different administrative issues,- the company vehicles have up to date devices to ensure safety of vehicles.

The student researcher also pursued some of the documents of the company and confirmed the facts .

### 3.6 Table 5. Respondents' response about the management of safety in the company.

	Item What are the major problems related to safety management?	Response										Total	
		Very High		High		Moderate		low		Very low			
		No	%	No	%	No	%	No	%	No	%	No	%
A	The company's monitoring analysis and improvement of its safety culture	6	8.5	6	8.5	52	74	6	8.5			70	100
B	Involvement and representation of employees in safety consultation	8	11.4	51	72.8			8	11.4	3	4.3	70	100
C	Safety and health training on risk exposure	10	14.3	50	71.4	-	-	-	-	10	14.3	70	100
D	Application of proactive hazard identification record, storage & analysis of hazard	10	14.3	30	42.8	10	14.3	10	14.3	10	14.3	70	100
E	Measures taken to avoid problems related to safety management	9	13	26	37	26	37			9	13	70	100

In item 1 of table 5, with regard to the company's monitoring, analysis and improvement of its safety culture, 6(8.5%) said very high, 6(8.5%) said high ,52(74%) said moderate ,6(8.5%) said low and none said very low. In item 2 of table VI, concerning the involvement of employees in safety consultation, 8(11.4%) said very high, 51(72.8%)

said high, none said moderate, 8(11.4%) said low and 3(4.3%) said very low. This infers that the involvement of employees in safety consultation is high.

In item 3 of table 5, with respect to safety and health training given on risk exposure, 10(14.3%) said very high, 50(71.4%) said high, none said moderate and low and 10(14.3%) said very low. From this we can deduce that the safety and health training on risk exposure is high.

In item 4 of table 5 ,regarding the application of proactive hazard identification,record and storage,10(14.3%) said vey high, 30 (42.8%) said high, 10(14.3%) said moderate, 10(14.3%) said low and 10(14.3%) said very low.

This shows that the application of proactive hazard identification, record and storage is high.

In item 5 of table 5, with regard to the measures taken to avoid problems related to safety management, 9(13%) said very high, 26(37%) said high, 26(37%) said moderate, none said low and 9(13%) said very low. From this we can conclude that the measures taken to avoid problems related to safety management are rated equal, high and moderate respectively.

Based on the analysis of the data, the company's monitoring analysis and improvement of its safety culture is moderate.

The researcher anticipated very high rate as the company's first and foremost task is giving priority for safety monitoring. Regarding the involvement of employees in safety consultation, it is found out to be high but according to the information in the open ended question, the acceptance level among employees is low.

With regard to safety and health training on risk exposure , the technical manager and the head of health & Safety and different administrative issues stated that -training is given by safety officers, fire fighting authorities and minimedias give coverage on safety issues every 15 minutes of teatime.

According to the reply of the head of health and safety and different administrative issues, the application of proactive hazard identification, clarification and measures are taken. Such measures include rendering medical service in the compound clinic,taking care of the accident occurring on the road and training on how to use fire extinguisher for fire accidents.

## **CHAPTER FOUR**

### **SUMMARY OF MAJOR FINDINGS ^CONCLUSIONS AND RECOMMENDATIONS**

The assessment of safety culture practice in Weyra Transport Share Company indicates the following major findings.

Regarding age 34(49%) of the respondents are between the ages of 35 and 44. With respect to sex 40(57%) are males and the rest are females. Concerning educational background, 25(36%) of them were working in the company for more than 10 years.

With regard to years of service the majority of the respondents 25(36%) were working in the company for more than 10 years.

On the subject of the general implementation of good safety culture in the company 30 (43%) of them rated it as moderate.

On the issue of the prevalence of poor safety culture and the loss incurred, most of the respondents 34(48.5%) rated it as moderate.

The study revealed that 40(57%) of the respondents rated the clarity of safety policies and objectives as moderate.

Concerning the general suitability of the working area for safety, the majority of the respondents 68(97%) said that it is very low.

From the respondents point of view 42(60%) of the respondents said that the usage of personal protective equipment by the employees is low.

Regarding the safety of vehicles it is evident from the study that 60 (85.7%) of the respondents said that the maintenance of vehicles is low. The study further showed that most of the respondents 70(100%) said that the trip plan employed by drivers for journey management had exaggeration and minimization.

With pertinent to the management of safety in the company most of the respondents 52(74%) pointed out that the company's monitoring, analysis and improvement of its safety culture is moderate.

As far as the measures taken to avoid problems related to safety management is concerned, 26(37%) of the respondents rated it as moderate.

Based on the information obtained in the open ended question, the student researcher was able to find out that the company gives less attention to safety issues and there exists a problem of acceptance of safety issues by employees. From interview conducted the respondents of the management maintained that the company has integrated safety issues as part and parcel of the job and implements it by fulfilling the necessary requirements..

## CONCLUSION

From the data analysis of questionnaire, interview and reading of the company's document, the student researcher draws the following conclusions.

As the study is aimed at assessing the implementation of safety culture in the company, it is found out the company has its own safety culture but somehow it did not prioritize or deeply rooted the concept of safety as it ought to be. The major problem figured out eventually is the company's insufficient attention to safety issues, the employees' less acceptance of safety issues, the company's less allocation of budget for safety equipments, the employees' less usage of the existing personal protective equipments, the unsuitability of the working area for health and safety and the problem in the maintenance and journey management regarding vehicles' safety.

The research shows that the company has a safety unit and its responsibilities are to manage health and safety matters as any other critical business activity, protect the environment, and protect personnel, property, information and reputation against security threats. However had it quitely pursued the safety unit, no problem would have been discovered.

## RECOMMENDATION

Based on the facts, major findings of the study the basic problems in the company are the less integration of safety culture as part of the organizational culture in the company, the minimal acceptance of safety issues by employees the unsuitability of the overall work environment of the company and the problems in vehicles maintenance and journey management. Having analyzed such findings, the student researcher has come up with different suggestions and recommendations.

The management should witness its high concern and attention for safety to enable employees to consider it as part and parcel of their job.

Safety awareness and acceptance within the organization should be improved by keeping staff informed of safety issues. This can be accomplished by using consecutive trainings, safety documents ,safety posters, brochures ,pamphlets e.t.c as a daily reminder.

The employees' usage of safety equipments must be increased by addressing the merits and demerits of the usage and its impacts on safety.

It is crystal clear that any working area should be suitable enough to ensure the health and motivation of employees . Thus the company should reconstruct and make adjustments of the working area to assure its suitability.

The company should ensure its safety of vehicles by supervising the maintenance and journey management aspect. Potential suppliers of spareparts should be made ready ahead of time and a standard trip plan for driving should always be designed.

Last but not least the company should work on strongly on the monitoring, analysis and improvement of its safety culture to have a clear commitment to the safety of the organization and to have a more productive, efficient and productive work force.

It is the responsibilities of the management to create a safety climate that encourage employees to exhibit proper behaviors consistent with safety. The student researcher hopes that this study will be a stepping stone and aid for more refined and comprehensive studies in the future.

### **Interview question for management group**

1. What is the general outlook of the company regarding safety issues?
2. What is the company's health and safety policy?
3. What are the method and procedure practice in the company during accidents?
4. How do you express the awareness and attitude of employees to protect themselves from accident?
5. What is the major cause of accidents with in the company?
6. What is the effort method to improve the physician environment of the working station?
7. What does the company suffer when employees and injured?
8. What motivation tool do you apply to hard workers?

# St Mary's University

## Faculty of Business

### Department of Management

#### Questionnaires to be Filled by Employees

This questionnaire is prepared to gather information in Weyra Transport Share "Company about the practice of the "safety culture "for academic purpose only. The success or failure of this academic research depends highly on your true and accurate response. Please note that any information obtained from you will be treated carefully. Therefore I kindly request you to attempt each question as much as you can. Thank you in advance for your cooperation.

#### Part I Demographic Characteristics

1. Sex      male                      female <sup>n</sup>
- 2-Age      less 25               25-34                       35-44               45-54      above 55
3. Work Experience              Less 5                      5-9 10-14              15-19              above
4. Educational qualification

- High School graduate
- Tvet graduate
- College diploma
- BA/BSCdegree
- Masters degree
- PHD
- Other

**Part II The status of the organization concerning the practice of safety culture in the company.**

5.How do you rate the Implementation of the safety culture in the company?

Extremlyhigh            high            moderate low            extremely low

6.How much is the shared care and concern for hazards and its impacts or people?

Extremly high            high            moderate low            extremely low

7.What is the extent of creating awareness among employees about safety?

Extremly high            high            moderate low Extremly low

8..To what extent does the company monitor, analyze and carry out feedback systems regarding safety?

Extremly high            high            moderate            low Extremly low

9.How do you express the loss incurred because of poor safety culture?

Extremley high high            moderate            low            Extremely low

### Part III The suitability of the working area for safety

10. Is the working area suitable for safety?

Strongly agree      agree      neutral      disagree      strongly disagree

11. How do you rate the proximity of the offices to the maintenance center?

Extremely high      high      moderate      low      extremely low

9. How do you measure the effect of lighting, noise, radiation, fumes, etc on work performance and safety?

Extremely high      high      moderate      low      extremely low

11. do safety employees use safety devices like personal protective equipment while working?

Strongly agree      agree      neutral      disagree      strongly disagree

10. How do you express the rate of accident inflicted on employees?

Extremely high      high      moderate      low      Extremely low

11. Does the company have a clean and safe workshop and maintenance garage?

Strongly agree      agree      neutral      disagree      strongly disagree



1. How far is the cleanliness and safety of the workshop and maintenance center  
A) Very High                      B) Medium                      C) Low
2. How much is the follow up Made on the future of GPRS and OBG on Board computer on the Vehicles?  
A) Very High                      B) Medium                      C) Low
3. How much is follow up made on the fixture of GPRS and OBG (On board Computer) on the vehicles?  
A) Very High                       B) Medium                       C) Low
4. To what extent do the drivers use the daily checklist that expresses the technical situation of the Vehicles?  
A) VeryHigh  B) Medium  C) Low

1. Is the safety statement clear so that it can be read and understood by those who may be at risk?  
A) Yes  **1**      B) No       C) No Answer
2. Are the necessary safety control measures required for a safe work place identified and implemented e.g Safe access, Clear passage ways, internal traffic control e.t.c  
A) Yes       B) No       C) No Answer
3. Is safety and health training being carried out? Does the training give adequate information on risk exposure?  
A) Yes       B) No       C) No Answer
4. Do safety consultation, employee participation and representation procedures exist?  
(is there good cooperation between employer, managers and employees on safety and health issues ?  
A) Yes       B) No       C) No Answer
5. Are risk assessments being carried out on a regular basis as risks change and are the necessary improvements made to keep to the safety and health management system up to date?  
A) Yes       B) No       C) No Answer



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