# CHAPTER 1 INTRODUCTION

## INTRODUCTION

# 1.1 Background

Quality is defined from the point view of customers as the ability of a firm to meet or exceed the expectations of the customer. But for practical purposes, it is necessary to be more specific. Quality has multiple dimensions in the mind of customer such as conformance to specifications, value, and fitness for use.

In industry, it is extremely important that the dimensions for example and quality of individual products be known and maintained. This is of particular importance where large quantities of parts, often made in widely separated plants, must be capable of interchangeable assembly. Otherwise, difficulty may be experienced in subsequent assembly or in service, and costly delays and failures may result.

In recent years, defective products resulting in death or injury to the user have resulted in expensive litigation and damage awards against manufacturers. Inspection is that function which controls the quality (e.g., the dimensions, the performance, and the color) manually, by using operators or inspectors or automatically with machines. The challenge for business today is to produce quality products or services efficiently.

### 1.2 Problem statement

Most of large, medium, and small size of Libyan industries are belongs to government sector. These industries can be classified into two kinds: one is designed and produced mainly for export (global market) such as oil industries, and the other one is designed and produced for domestic use (local market) such as cement industries. The first kind is run and controlled by qualified specialists with the help of foreign experts, and people are thrust in this kind of products and it has a high level of quality. However, the other kind is run and controlled mainly by local labors who have lower qualification than oil industry's labors.

In Libya there are about five factories producing cement. Although all of them using same raw material, there is a difference in the quality of the products. Similar to any other kind of products, the price of the cement products reflecting the difference in its quality level. In addition to that there is a complain from the people towards these companies due to the difference in the price and quality of the products.

In addition to that, Libya is going to be developed, and all know that cement is essential for any construction. Due to that, now days there are huge demand of this kind of product (cement). So that in order to develop cement industries in Libya, it must be studied focusing on the quality control which make it competitive and in the standard level of international products.

Finally, it is useful to study the quality of the product through a period of time. Evaluating the Libyan cement production with respect to quality is one of the main motivation behind this research. Studying the quality of Libyan cement products will be the field of the current research.

# 1.3 Objectives

The main aim of the research is to study the quality control system adapted in the Libyan cement industries, as it is one of the main products highly needed now days and in the future. The method of approach has been to design and distribute three different forms of questionnaire, that is carefully prepared and given to the proper people and administrations. Answers are submitted and analyzed that gives the main results of the current research.

In order to achieve this aim, an extensive field and theoretical study has been conducted, these include the following:

- 1- Visiting different Libyan cement factories and monitoring the quality system applied for each factory.
- 2- Meeting of quality and management officers for each cement factories.
- 3- Visiting of Libyan ministry of industry and meeting the in-charge officers for quality and management administrations.

- 4- Studying the quality of Libyan cement products with respect to similar foreign products.
- 5- Finally the research aims to come out with suggestions that contribute of developing Libyan cement industries in order to saisfy the customer need and make it competitive for local and global market according to international standard level of quality.

# 1.4 Thesis layout

This thesis is divided into five chapters. Following chapter of introduction, chapter two represents up to date literatures related to this study to provide the reader with insight into the basic knowledge. Chapter three represents a systematic description of the methodology and method of approach adopted in this work. In chapter four results and discussion are presented and discussed. General conclusions and some recommendations for further work are presented in chapter five.