Chapter One

Introduction
1. Introduction

1.1 Introduction:-

• In the light of the continuing effort reduce the cost of production while maintaining the quality of the product taking into are required the amount of the scrap. A necessary plans to reduce, reuse or recycling the scrap by chasing the source of the scrap. The source could be a primary or secondary.

• There is a need to apply a set of tables to explain and facilitate access to the best results.

• Industrial companies have had a major problem with high level of scrap, which mean high cost of scrap treatment.

• Sudanese companies: ZAIN, MTN, COCACOLA, PEPSI, COLDAIR, KENANA, Have provided minimization programmes to handling their scrap.

• PASGIANOS Company is one of HAGGAR holding group aimed to minimizing their wastes by applying a waste reduction program.

1.2 Problem statement:

In 2014 the waste of the 500 ml bottles is (6528 bottles per month) which is equal to 0.5% of the monthly production which cost the company (13056 SDG/month).

1.3 Objectives:

Primary objective:

• Reduce the total waste of the 500ml bottles from 0.5% to 0.1%.

Secondary objective:
- Reducing the waste of $\text{CO}_2$ which is used to create the counter pressure

1.4 Scope:
This study is on PASGIANOS, PET line, 0.5 Liter including three products (PASEGIANOS, FORAT ORANGE, and BEER)

1.5 Methodology:
This research is going to use to solve the research problem, specifically the six sigma methodology DMAIC model.

1. Start
2. Visiting factory
3. Find issues
4. Collecting data
5. Analyzing
6. Select the main issue
7. Evaluate results
8. Meet the customer
9. Decisions making
10. Set recommendation
11. End