Factors Influencing Adoption of Cleaner Production in Small & Medium sized Businesses: A Case of Western Province of Sri Lanka

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ABSTRACT

More recently, there are lot of companies have benefited by implementing Cleaner Production practice, designed for environment and life cycle assessment. But the Cleaner Production practice is not being implementing on a broad basis in Sri Lanka, especially in Small and Medium Enterprises (SME). Most of the businesses are less focusing on wastage, environmental pollution and cost of pollutions. Businesses need to examine the ways to reduce the wastage and recycling methods with the intention of maximum utilization of the limited resources. Hence this study is designed to analysis the data collected from a stratified sample from the SMEs which is situated in western province of Sri Lanka through a designed questionnaire to find the factors of why SME peoples adopt or not adopt to Cleaner Production practices.

KEYWORDS: Cleaner Production, Small and Medium Enterprises, Wastage

INTRODUCTION

Small to medium-size businesses widely contribute to the global economy. The SMEs account for approximately 97% all industries in Sri Lanka. The SMEs are now emphasized to improve competitiveness, and expand the employment by industrial environment as well as the local Government. The most of the SMEs are trying to increase value addition and productivity while minimizing the negative impact to the environment and ensure the social responsibility but less focusing on the wastage. In order to achieve high profit margin by satisfying the existing demand, they have to be aware of new production technologies as well as new environmental practices to minimize the wasteful of raw materials, energy and environmental laws and standards. In this regard, SMEs are essential to encouraged adopting Cleaner Production concept.

SMALL AND MEDIUM SCALE ENTERPRISES (SME)

SMEs are the foundation of the private sector and will be critical to the recovery in growth

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and employment (International Monitory and Financial Committee/ World Bank Group)

There is no standard definition of SME globally. It can vary country to country and sometimes across the study field. According to the SMED project, the widely used definition in Sri Lanka is:

- By number of employees (white paper)

  05 – 50   - Small
  50 – 100   - Medium

- By investment (without land and building)

  Up to 5 million SLR   - Small
  5-50 million SLR   - Medium

SMEs in Sri Lanka operate either as individual enterprises or in groups or clusters. Some of them operate in industrial estates set up by the Government. There are around 60 industrial estates run by Board of Investment, Ministry of Industries, Industrial Development Board, Urban Development Authority and private sector.

Small and Medium scale Enterprises (Specially Small Scale) in Sri Lanka generally are reluctant to invest in new concepts until they are fully convinced. This

is mainly due to financial constraints, lack of awareness of how to utilize new technology and poor business communication. Thus the Cleaner Production concept is also not a popular concept in SMEs.

This study is reinforced with this lack of awareness of Cleaner Production Concept that required companies to upgrade their production technology and thereby improve the productivity.

STATEMENT OF PROBLEM

Currently the businesses consume natural resources per unit of product or services are high and the impact of pollutants produced is high. Cleaner Production is a continuous application of an integrated preventative environmental strategy introduced in the areas of production process, products and services in order make eco- friendly output and . reduce risk to humans and the environment.

RESEARCH OBJECTIVES

The objective of this research is to
- Study the awareness of Cleaner Production concept in SMEs in Sri Lanka.

- Identify the factors influencing the effective implementation of CP programme.

- Study to which extent such factors influencing to adoption of CP programmes.

- Study the extent of adoption/ implementation of CP progarmmes and improvements / benefits gained.

- Provide Information to policy makers.

LITERATURE REVIEW

Cleaner Production Assessment (CP)

"Cleaner Production is the continuous application of an integrated *preventive environmental* strategy to processes, products, and services to *increase overall efficiency*, and *reduce risks to humans and the environment.*"

The principle behind CP is that the improving environmental performance, consumer interest, health & safety for workers it also improves efficiency, profitability & competitiveness of the industry. The main focus of cleaner production is on prevention or reduction of waste and inefficient use of energy and resources.

Cleaner Production can be applied to the processes used in any industry, to products themselves and to various services provided in society.

For production processes, Cleaner Production results from one or a combination of conserving raw materials, water and energy; eliminating toxic and dangerous raw materials; and reducing the quantity and toxicity of all emissions and wastes at source during the production process.

For products, Cleaner Production aims to reduce the environmental, health and safety impacts of products over their entire life cycles, from raw materials extraction, through manufacturing and use, to the 'ultimate' disposal of the product.

For services, Cleaner Production implies incorporating environmental concerns into designing and delivering services.

The Figure 01 follows the basic methodology consist of the principles elements.
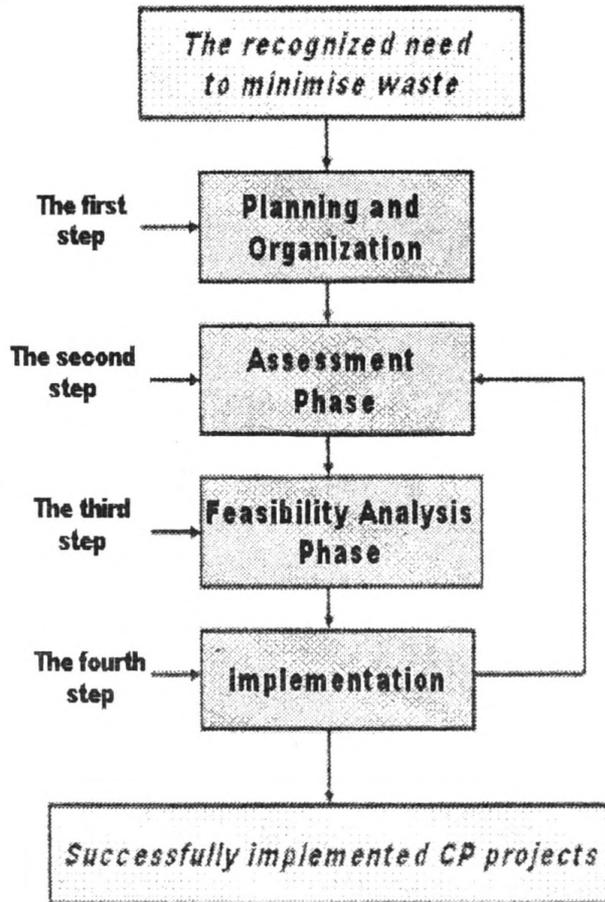

Figure 01: Cleaner Production Procedure

METHODOLOGY

For the research purpose, it is supposed to collect primary data through standardized questionnaire which will sent to highest level of management in the SME industry of Western Province in Sri Lanka. For the purpose of sub-sequent analysis, respondent businesses will be self categorized in to sectors, according to Industrial Classification. One aim of the questionnaire will be to identify the extent to which SMEs are familiar with the principles of CP. With each questionnaire a cover letter will be included to provide some background to the principles of CP.

Results will be derived through analyzing data with a suitable statistical tool which is called Factor Analysis at the end of the research. Factor analysis is a collection of methods used to examine how underlying constructs influence the responses on a number of measured variables. By using this Factor Analysis, the common influencing factors for the classified industry can be identified.

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