

195816  
05/02/2010

**“ISO 22000 FOOD SAFETY MANAGEMENT  
SYSTEM”  
IN  
SRI LANKAN CONTEXT**

**BY  
Supun Nishad Jayasinghe**

CR  
05/02/2010

**Library - USJP**



**195816**

Thesis submitted to University of Sri Jayewardenepura as partial fulfilment of requirement for the award of Degree of Bachelor of Applied Sciences in Food Science and Technology (Special).

2009

i

**195816**

# **“ISO 22000 FOOD SAFETY MANAGEMENT SYSTEM” IN SRI LANKAN CONTEXT**

**By  
Supun Nishad Jayasinghe**

## **ABSTRACT**

Food safety is a global concern. Food safety is related to the presence of food-borne hazards in food at the point of consumption. Therefore food safety hazards should be controlled through out the food supply chain effectively to deliver safe product to the consumer (End user for its intended use). And also, there is a growing demand of consumers for healthy and safe food products. It is a big challenge for people who have been involved in food related business industry to supply for the demand of safe food products. Food safety related certifications play a major role to ensure global/local food standards. ISO 22000 Food Safety Management System is becoming very important in this aspect of ensuring safe food commodities.

A questionnaire based survey was carried out among eleven food processing companies, five experts, four consultancy service providers, five certification bodies, ten retailers and forty consumers to find out objectives, benefits, limitations and compliance levels of implementation of ISO 22000:2005 FSMS standard. The resulted data were analyzed by k-mean cluster analysis. The identified major objectives were directed towards, “Food Safety”, “Profits” and “Regulations”. Expected major benefits were towards “Profit maximization”. As major limitations, “Lack of top management commitment”, “Lack of knowledge” and “Financial problems” can be seen. Compliance for “System management” and “HACCP Principals” were noted with high frequencies than “PRPs” and “Communication”.

## CONTENTS

<b>CONTENT.....</b>	<b>VI</b>
<b>LIST OF TABLES.....</b>	<b>VIII</b>
<b>LIST OF FIGURES.....</b>	<b>IX</b>
<b>ACKNOWLEDGEMENT.....</b>	<b>X</b>
<b>ABSTRACT.....</b>	<b>1</b>
<b>CHAPTER 01.....</b>	<b>2</b>
INTRODUCTION.....	2
<b>CHAPTER 02.....</b>	<b>5</b>
LITERATURE REVIEW.....	5
2.1 Food Quality & Food Safety.....	5
2.1.1 How to manage for quality.....	7
2.1.2 Quality Assurance.....	8
2.1.3 The Eight Quality Management Principals.....	9
2.1.4 About Consumer demands and the need to control food safety hazards	10
2.2 Standardization.....	13
2.2.1 Adherence to internationally accepted standards.....	15
2.3 ISO.....	16
2.3.1 What is ISO?.....	16
2.3.1.1 The ISO's Name .....	16
2.3.1.2 Advantages of ISO.....	17
2.3.2 What is ISO 9001:2000 QMS?.....	17
2.3.2.1 ISO 9001: 2000 Standard.....	17
2.3.3 What is HACCP?.....	18
2.3.3.1 The HACCP System.....	18
2.3.3.2 Scope of HACCP.....	19
2.3.3.3 Application of HACCP.....	19
2.3.3.4 Advantages of HACCP.....	20
2.3.4 What is ISO 22000:2005 FSMS?.....	21
2.3.4.1 The evolution of food safety management systems.....	21
2.3.4.2 ISO 22000:2005 Food Safety Management System Standard.....	22
2.3.4.3 ISO 22000 – Food safety from ‘farm to plate’.....	23
2.3.5 ISO 22000:2005 Food Safety Management System.....	24
2.3.5.1 Objective of the standard:.....	25
2.3.5.2 Key Elements of FSMS:.....	25
2.3.5.3 Specific Requirement of the standard:.....	26

2.3.5.4 Why choose FSMS:.....	28
2.3.5.5 Major impediments in implementation of ISO 22000 in food industry..	31
2.3.5.6 A complete menu of standards.....	32
2.4 Upcoming trends.....	33
2.4.1 A revolution in international food safety standards?.....	33
2.4.2 Strengthening the chain .....	34
2.4.3 PAS 220: supporting ISO 22000.....	36
2.4.4 FSSC 22000.....	36
2.4.5 FSSC 22000: the icing on the cake .....	37
2.5 Certifications Industry.....	40
2.5.1 Implementation of product or system certification in food industry.....	41
2.6 Food Industry in Sri Lanka.....	41
2.7 Statutory & Regulatory requirements in Sri Lanka.....	42
2.7.1 Harmonization of food laws and regulations.....	45
<b>CHAPTER 03.....</b>	<b>46</b>
<b>METHODOLOGY.....</b>	<b>46</b>
<b>CHAPTER 04.....</b>	<b>48</b>
<b>RESULTS &amp; DISCUSSION.....</b>	<b>48</b>
<b>CHAPTER 05.....</b>	<b>79</b>
<b>CONCLUSION.....</b>	<b>79</b>
<b>CHAPTER 06.....</b>	<b>81</b>
<b>RECOMMENDATIONS.....</b>	<b>81</b>
<b>REFERENCES.....</b>	<b>83</b>
<b>ANNEXURE I</b>	
<b>ANNEXURE II</b>	
<b>ANNEXURE III</b>	
<b>ANNEXURE IV</b>	
<b>ANNEXURE V</b>	