DEVELOPMENT OF A HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP) MANUAL FOR A FOOD PROCESSING PLANT

A dissertation submitted to the
Faculty of Animal Science and Export Agriculture
Uva Wellassa University
In partial fulfillment of the requirements for the award of the
Degree of Bachelor of Science in Export Agriculture

By

SAMARANAYAKE RAJAPAKSHA MUDIYANSELAGE KAUSHALYA PRABHASHWARIE RAJAPAKSHA

Faculty of Animal Science and Export Agriculture

Uva Wellassa University

2012

ABSTRACT

Food processing manufacturers are more towards of ensuring food safety and obtaining food safety certifications with the increasing demand and the awareness of consumers for safe and high quality food. Hazard Analysis Critical Control Point (HACCP) system which was developed by the Codex Alimentarious Commission provides a systematic approach of identifying, evaluating and controlling food safety hazards. This study was conducted to develop a HACCP manual for a food processing plant which produces curry mixtures and ready to eat food products. Study was started by conducting a gap analysis to identify the gap in between current status of Good Manufacturing Practices (GMPs) in the food processing plant and standard level required for the HACCP system. Next preliminary steps were completed by establishing product description and process flow diagrams of each product. After completing the preliminary steps, all hazards associated with each production step and preventive measures of each hazard were identified. Critical Control Points (CCPs) of each production process were identified and critical limits, monitoring procedures, corrective actions, verification process and a record keeping system was established for each CCP. Application of seven HACCP principles showed that, the identified CCPs in every production process are quite similar due to the similar nature of the raw materials and the production processes. Raw material receiving was a critical control point in eliminating or controlling physical and chemical hazards in every production process while coking, autoclaving, hot filling, sterilizing packing materials were CCPs in eliminating biological hazards. HACCP manual which was developed by this study can be used in implementing HACCP in the food processing plant and it would be a success with the team effort of all employees and good managerial commitment.

Keywords: Food Safety, HACCP, Hazards, Critical Control Point