HACCP and tea processing sector in Sri Lanka: effect of market and non-market incentives for adoption

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Consumer awareness on food quality attributes and more importantly the demands for food safety has been considerably increased around the world in the recent past. In view of that, introduction of enhanced food safety metasystems like Hazard Analysis and Critical Control Points (HACCP) – a management system in which food safety is addressed through the analysis and control of hazards at the earliest possible point in the food chain – at the firm has been considered of paramount importance.

The purpose of this study was to examine empirically the motives for an implementation of system of HACCP in tea processing sector in Sri Lanka, where the role of internal and external market and non-market incentives were of special concern. A structured questionnaire was administered with Quality Assurance Managers from 41 tea processing factories located in the High, Mid and Low tea grown regions in Sri Lanka from July to August 2007 to collect data. Next, the Mean Scale Values for 10 individual incentives affecting the adoption of HACCP were derived using the Confirmatory Factor Analysis techniques (e.g. Scale Reliability using Cronbach Alpha, Unidimensionality through Principal Axis Factoring, and Construct Validity by constructing an MTMM matrix) for both: (1) “adopters”, i.e. possess a fully operational system (22%) or about to complete implementation (12%), and (2) “non-adopters” (66%) of HACCP.

The results show that external (e.g. reputation of the firm, pressure created by outside forces such as customers and neighbours) and internal (increased sales, enhanced efficiency in procedures and human resources) market-based incentives had a greater impact on the decision to adopt HACCP. Interestingly, tea processors did not much care about the existing government regulation on food safety; however, anticipated a stringent public regulation and effect of liability laws in this respect. Also, the majority of non-adopters have reported that high cost associated with HACCP adoption demotivate their decision. The outcome of analysis, as a whole, suggests that tea processing sector in Sri Lanka, similar to many demanding food processing sectors in the developed countries (e.g. meat, dairy, fish), can effectively be motivated to adopt enhanced food safety controls like HACCP by injecting appropriate market-based incentives into the system.

Keywords: Adoption, Food safety, HACCP, Incentives, Regulation, Tea industry in Sri Lanka

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