

# Smart Food Safety Management Framework for Small Scale Restaurants

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Food safety inspection is a crucial factor in small scale restaurants, to prevent food borne illnesses among the consumers. HACCP is the international tool to manage food safety effectively which can be used as a unique protocol to assure the food safety in any food company. However due to the limited time as a local public health inspector, food safety is a minor concerned subject in their field of working. Objective of this study is to enhance the existing Sri Lankan food inspection process to Badulla area through a developed risk-based food inspection system, which analyze, diagnose and implement main principles of food safety. Interviews with health professionals and pilot survey for small scale restaurants (30) were conducted to understand the existing food inspection programme. Based on that pilot survey, among the targeted group of food handlers most were lack of knowledge on food safety and sanitation. Hence, assessment model based on HACCP for food safety inspection in small scale restaurants was developed. In order to facilitate the end-users to use this developed model, an Android food safety application which consists of optimized user interfaces and offline database was developed. Prototypical development was achieved the user satisfaction in the field level due to its effectiveness and accessibility. As a result, it assures the food safety in small scale restaurants and has potential to improve the food safety practices in food services in the areas covered by the national hygienic and sanitary regulations. Furthermore, “big data” collection through this mobile application can be used for further data analysis, which creates multiple research opportunities.

*Keywords:* Food safety inspection, Android food safety application, HACCP