



Farmers' Perception of Good Agricultural Practices (GAPs) and GAPs-based Guideline Model for Potato cultivation in Sri Lanka

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Abstract

The quality and safety of potatoes produced in Sri Lanka suffer from improper farming practices from production to the post-harvest stage. It happens basically in the absence of Good Agricultural Practices (GAPs). GAPs are practices that address the environmental, economic, and social sustainability of on-farm processes that result in the final products' safety and quality. Therefore, this study aims in assessing farmers' perceptions of GAPs using a developed GAPs-based guideline model for potato production in Sri Lanka. Using a snowball sampling technique, the study surveyed 225 potato farmers in two districts (Nuwara-Eliya and Badulla). Data were collected through structured questionnaires focusing on farmers' perceptions of selected 15 GAPs such as soil conservation, fertility management, etc., and five characteristics (relative advantage, compatibility, complexity, trialability, observability). The study revealed that the majority of farmers perceived three factors: relative advantages, complexity, and observability in all (15) GAPs components. Further, the perception of compatibility was limited for five specific GAPs components such as documentation, input balances, usage of fertilizer recommendation, waste disposal, and workers' health and safety. Further, the results implied a lower perception of trialability only for the usage of fertilizer recommendation while depicting a 63% of positive perception. Interestingly, as an average perception, 90% of farmers were highly perceived (mean score: > 3.5) on the developed GAP-based guideline system. It will help farmers to obtain guidance, accurate knowledge, and vital information easily at the right time on GAPs. Moreover, the developed GAPs-based guideline model can be a great opportunity to improve potato cultivation by reducing extreme synthetic chemical and fertilizer usage, bad crop management practices, post-harvest losses, as well as potato importation in Sri Lanka. Moreover, to address the language difficulty among farmers, a developed model will be prepared in the three languages used in Sri Lanka to make use of it by a wider group.

Keywords: *Compatibility, Farmer's Perception, Good Agricultural Practices, Guideline System, Trialability*

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