

## ***Impact of Social Comparative Nudging and Educational Interventions on Tomato Loss Reduction at Retail Environment***

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Tomato, a soft natured vegetable, faces a high post-harvest loss compared to many other vegetables produced in Sri Lanka. Despite adopting various strategies to reduce these losses, the reduction has not reached a satisfactory range, especially at retail level. Therefore, this study aims to identify why these attempts have failed and what factors actually motivate retailers to reduce the losses, using a social experiment with two treatments: social comparative nudging and information provision. This experiment was conducted with 27 retailers, including roadside vendors, grocery cum vegetable retailers and exclusively vegetable-focused retailers in the Kandy district of Sri Lanka for 14 days. The data were analyzed using mean comparison tests, and DID regression analysis. The results indicate a significant decrease in percentage losses for both treatment groups, with nudging through comparing their monetary loss to a benchmark proving to be more effective in the short run. The differential responses among retailer types highlighted that roadside vendors and exclusively vegetable-focused retailers responded better to providing information on loss reduction strategies, while grocery store owners were more responsive to nudging. Furthermore, factors such as prioritization of monetary losses over food losses, customer retention strategies, and opportunistic behavior of upstream supply chain actors hindered the adoption of the introduced loss mitigating practices during the experiment. These findings underscore the importance of understanding that retailers' business objectives are not centered on minimizing their food losses, but rather on monetary losses and that grocery cum vegetable store owners are relatively more unaware of their monetary losses as they do not give importance to vegetables. Therefore, tailoring interventions to emphasize the economic impact of food losses while customizing educational programs to address the factors that affect different types of retailers' decisions in adopting loss reduction strategies, is crucial to reduce tomato losses at the retail level.

**Keywords:** Information Provision, Monetary Loss, Supply Chain Actors, Social Experiment

*Financial support provided by the Australian Center for International Agricultural Research (ACIAR) is greatly appreciated.*