ABSTRACT

Food loss occurs during production, handling, and post-harvest processing. Food loss also occurs because the product is under quality and shelf-life over. In addition, the performance and knowledge of farmers also need to be improved to minimize food loss. Food loss in the milk supply chain occurs due to spills, damage, and product contamination caused by operator negligence and poor handling procedures due to the lack of material handling and operational performance. This study aims to determine the effect of material handling and operational performance on the occurrence of food loss in the milk supply chain. The method used is a quantitative method with a statistical test is Chi-Square. The results showed that in the handling, there were several causes such as the number of productive cows, the area of the cage and storage. One of the causes of food loss is the high production of bacteria, which impacts the damage to dairy products. In operational performance, the primary reason is socialization among farmers regarding cleanliness and handling of cattle during production. New farmers with low experience are expected to attend training to increase production capacity and avoid bacterial contamination. Milking equipment innovation is also important to reduce food loss in the milk supply chain.

Keywords: Food Loss, Milk, Material Handling, Operational Performance, Supply Chain