

**FARMERS' ADOPTION OF NEW DAIRY TECHNOLOGIES IN  
WEERAKETIYA AREA, HAMBANTOTA DISTRICT**



**By**

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**EU/IS/2018/BST/037**



**FTC246**

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**2025**

## ABSTRACT

Dairy farming is a crucial sector in Sri Lanka, significantly contributing to rural livelihoods and food security. In the Weeraketiya area of the Hambantota District, smallholder farmers manage a substantial portion of dairy production; however, many continue to rely on traditional practices, which limits their productivity and sustainability. This study aims to investigate the factors influencing the adoption of new dairy technologies among these farmers, focusing on socio-economic characteristics, perceived benefits and barriers, and access to information. A total of 100 dairy farmers were selected using a simple random sampling method, and data were collected through a pre-tested structured questionnaire. The analysis was conducted using SPSS version 24, employing descriptive statistics and multiple regression analysis to explore the relationships between the variables. The demographic analysis revealed that 38% of respondents were over 49 years old, 83% were male, and 61% had completed secondary education. The regression model explained 31.7% of the variance in technology adoption, with education level ( $p = 0.002$ ) emerging as a significant positive influence. Conversely, barriers such as financial constraints ( $p = 0.246$ ) and limited access to information ( $p = 0.230$ ) negatively impacted adoption rates. These findings highlight the need for targeted interventions to enhance education, improve financial accessibility, and strengthen extension services to support the adoption of modern dairy practices among smallholder farmers. Addressing these challenges is essential for promoting productivity and sustainability in Sri Lanka's dairy sector.

**Keywords:** Access to information, Barriers, Dairy technology, Perceived benefits, Socio-economic characteristics

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