

## **Current Status and Future Potentials for Alternative Feed Ingredients Usage in Self-Mixed Poultry Feed Production in Dummalasuriya Veterinary Region, North-Western Province, Sri Lanka**

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Even the most optimistic forecasts do not guarantee that the animal feed industry can meet the future global requirements for traditional feed ingredients. Therefore, an increasing interest in locally available, low-cost alternative feed ingredients (AFI) is evident. The primary aim of this study was to identify the current practices and future potentials of using AFI in self-mixed feed production based on self-mixers' experiences, production scale, and education level. A pre-tested questionnaire was used in face-to-face interviews with poultry feed self-mixers in Dummalasuriya veterinary region, North-Western Province, Sri Lanka. The responses collected from 61 self-mixers were statistically analyzed using the Chi-square and Ordinal Logistic Regression tests in SPSS version 22.0. According to results, around 84% of poultry feed self-mixers were commercial layer farmers. Only 13% of self-mixers were using AFI in their self-mixed feed production. Self-mixers' willingness to use AFI was impacted by the production scale ( $P < 0.05$ ), as the willingness to use AFI was lowered with higher production scales. Constraints for adaptation to AFI were associated with the production scale and education level of the self-mixers ( $P < 0.05$ ). The impact of lack of awareness on AFI was higher for small- and medium-scale self-mixers than for large-scale self-mixers ( $OR > 1$ ). The self-mixers who had higher education beyond secondary education were more aware of AFI ( $OR > 1$ ). The impact of insufficient supply of AFI was more detrimental for large-scale self-mixers compared to small- and medium-scale self-mixers ( $OR < 1$ ). Educating the self-mixers about the available AFI and its technical applications would improve the use of AFI by small- and medium-scale self-mixers. On the other hand, encouraging investments in large-scale AFI production to ensure a continuous supply is recommended to popularize AFI usage by large-scale self-mixers.

**Keywords:** Alternative feed ingredients, Poultry feed, Self-mixers, Production scale

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