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Farmers' Acceptance of Insects and Cassava as Alternative Feed Sources in Livestock Feeds in Kenya

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Abstract

Limited access to quality and adequate feeds impose a major challenge to smallholder livestock productivity in sub-Saharan Africa. In order to improve access to quality and adequate livestock feeds, policymakers, practitioners, and researchers are promoting the utilisation of alternative feed sources which have high-quality protein and energy. Cassava and insects have thus been promoted as alternative sources of energy and protein respectively. However, their production and utilisation are low across smallholder livestock systems in sub-Saharan Africa. This study assessed farmers' acceptance of insects and cassava as alternative feed sources and their determinants in Murang'a County in Kenya. The study employed the theory of planned behaviour and collected data from a random sample of 378 dairy farming households in Kenya. A multinomial logit regression model was used to assess determinants of farmers' intentions to use insects and cassava as alternative feed sources in livestock feeds. The results indicate that only 11 % and 30 % of the dairy farmers were aware of insects and cassava as alternative feed sources respectively. However, the intention to use insects and cassava as alternative feed sources in livestock feeds was high at 76 % and 86 % respectively. The results of the multinomial logit regression model reveal that generally; farmers' attitudes towards perceived benefits of using insects and cassava in livestock feed, subjective norms, perceived behavioural control, access to insurance and extension services, membership to a farmer group, farm size, and years of experience in livestock farming were significant determinants of farmers' intention to use insects and cassava as alternative feed sources. The study discusses the implications of these findings in scaling up the production and utilisation of sustainable alternative feed sources.

Keywords: Energy, multinomial logit model, protein