

Strengthening the Livelihood Resilience of Smallholder Dairy Farmers against External Shocks in the Northern Dry-Zone of Sri Lanka

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Improving dairy farmers' livelihood resilience help them sustain in farming and reap higher economic returns. This study was conducted in the Jaffna District, which is part of the dry zone of Sri Lanka. A total of 203 dairy households were selected using the stratified purposive random sampling method. Households' livelihood resilience to environmental challenges and shocks was determined through Structural Equation Modelling (SEM). SEM path diagram was developed based on the model developed by Food and Agriculture Organization, which uses resilience as a latent variable. It was a function of six components that were not directly measured from the data set. The SEM analysis revealed that the latent variable 'livelihood resilience' had a significant positive association with the five components. Further, the dietary diversity index ($P > |z| = 0.081$), the quality score of health services ($P > |z| = 0.052$), frequency of assistance ($P > |z| = 0.000$), quality evaluation of assistance ($P > |z| = 0.000$), land owned ($P > |z| = 0.086$), educational level ($P > |z| = 0.017$), and the number of household members who have lost their jobs ($P > |z| = 0.010$), significantly enhanced the livelihood resilience. The finding of this study would help to develop a policy framework that could be supportive in gaining sustainability in milk production through fostering the livelihood resilience of the dairy farmers in the Northern Dry Zone of Sri Lanka.

Keywords: Dairy farm households, Jaffna district, Structural equation model, Livelihood resilience

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