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Resilience attributes of New Zealand dairy farmers

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Abstract

New Zealand dairy farmers are now in an era characterised by uncertainty in the farm business environment. Thus, managing risk is a major challenge for farmers if they want to keep ahead in the business. This means that farmers must develop resilience. Resilience involves having the ability to mitigate threats and adapt to the opportunities offered by change when this is required. However, little is known about what is required to become resilient, or whether someone with a highly resilient personality has different perceptions of risks and risk management behaviours compared to others.

To determine what the attributes of a resilient dairy farmer were likely to be, what the most relevant sources of risk in the farm business environment were, and what the most relevant strategies for managing risk were, an extensive literature review was undertaken. This review was also used to develop a survey which was conducted with a random sample of 1559 dairy farmers. Principal component analysis and cluster analysis were used to determine the most relevant resilience and risk profile attributes from the survey data and to differentiate farmer types based on these attributes. Furthermore, differences between resilient farmer types with respect their perceptions of change, volatility and opportunities in the risk sources in the farm business environment, risk management behaviour, and other individual and farm business characteristics were tested by a range of statistical tests.

Results concluded that five resilience attributes (general self-efficacy, willingness to change, locus of control, social sense-making, and strategic thinking) were useful in distinguishing two resilient farmer types: high and low resilient farmers. Few differences were found between resilient farmer types regarding their perceptions of risk in the different sources of risk in the farm business environment, although high resilient farmers did see more opportunities than threats in the farm business environment. However, they were also more risk averse which may indicate that they carefully plan and implement the strategies they choose for managing risks. Indeed, high resilient farmers made more use of, and gave more importance to, strategies that were associated with visualising and positioning their business in the future, and with strategies associated with the prevention, mitigation, flexibility and diversity to risks compared to low resilient farmers, which was consistent with resilience theory. The resilience profile and management strategies used by resilient farmers identified in this research can be used by those in the industry to support farmers in building resilience and encourage the use of management strategies associated with resilience.

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