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**DECISION MAKING AND NEW ZEALAND
CUTFLOWER GROWERS**

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DECISION MAKING AND NEW ZEALAND CUTFLOWER GROWERS

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Abstract

This thesis reviews the literature on decision making and proposes two decision-making models: a generic model of primary production systems and a model of cutflower growers, and attempts to validate both. From the literature, twelve decision-making models from a range of sources (theoretical, empirical, primary and non-primary production systems) are reviewed from a soft systems perspective, and a new seven-phase generic model is developed. These seven phases are: Problem detection and prospecting; Problem definition; Acquisition of information; Consideration of alternatives; Making a choice; Implementation; and Checking and judgement. A survey of 26 cutflower growers endorses the generic model, and it is expanded to describe the steps used in decision-making by cutflower growers. Further analysis and validation of the cutflower decision-making model occurs by conducting a single case study on a sandersonia grower.

The proposed generic model incorporates the best features of all the models reviewed, and it has a number of key differences from other models:

- It shows the cyclic and iterative interrelationship of the components,
- All the phases are highly dependent on a number of factors, including the goals, aspirations and preferences of the decision maker, and external factors,
- A new dimension called 'Prospecting' has been added to 'Identify problem' as it can be an important trigger to start the decision making process, particularly in relation to new crop choices,
- 'Judgement' is used during the checking process, and is strongly influenced by the way people learn. The process of learning is a synthesis of finding out and taking action much as the process of decision making is,
- The new model reflects decisions made under all degrees of uncertainty and risk. It also describes the decisions made over a range of decision types, whether they are operational, tactical or strategic.

Analysis of the case study revealed that further modifications were required to the newly proposed decision-making model of cutflower growers. These included restructuring the model so that 'Information' is a much more intrinsic part of the decision making process as it is involved in all phases of the decision-making process. The phases of 'Problem detection and prospecting' and 'Problem definition' were considered to be too similar to warrant two categories, therefore they were combined. The phases 'Consideration of alternatives' and 'Choice' have also been combined, not only because they are similar actions but also because of the higher iterative relationship the two have.

Keywords: cutflowers, decision-making models, decision-making behaviour, information, primary production systems.

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