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Factors Influencing the Adoption of Whole Farm Plans: A Wairarapa Case Study

A thesis presented in partial fulfilment of the requirements for the degree of Master in Applied Science in Agricultural Extension

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Sian Cass

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Abstract

Hill country erosion is a serious environmental issue in New Zealand. After widespread damage from storms in 2004, Horizons Regional Council initiated the SLUI programme. This programme relies on whole farm plans (Whole Farm Business Plans) as the core tool to address erosion on hill country farms. Several regional councils in New Zealand, like Horizons, rely on whole farm plans and continue to seek ways to achieve a high level of voluntary adoption by farmers.

A single case study was used to examine the phenomena of adoption of whole farm plans. This research answered the question: What factors influence the adoption by farmers of whole farm plans, and why these factors are influential? A review of historical farm plans identified plans most similar to Horizons Whole Farm Business Plans. These were located in the Wairarapa and this formed the case area. Farmers from two catchments in the Wairarapa, and key informants were interviewed to identify factors influencing adoption of farm plans.

Findings from this study, in the main, support adoption diffusion literature for agricultural innovations. The specific mix of interrelated factors that influence the adoption of farm plans, and the reasons for their influence, were identified and described. Characteristics of this case included the widespread adoption of farm plans, and farmers’ perceived farm plan implementation as secondary to the core farm business. Factors associated with the compatibility of the innovation to the core farm business and the credibility of the organisation delivering farm plans provided important influences on adoption of farm plans. The circumstances of the farmers and their farm did not strongly influence adoption in this study because farm plans are customised and take into account each individual’s circumstances. For an innovation such as farm plans that is considered secondary to the core farm business, factors easing implementation were important. This was contributed to by the characteristics of the innovation and by the delivery and support from the organisation. Key people played a significant role in farmers’ decisions to adopt a farm plan.
Acknowledgements

Janet Reid, as the main supervisor, has been a friend and colleague throughout this thesis. Her thorough approach and determination to keep the iterative process going has been a test of endurance, but above that, often overwhelming generosity.

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As for any challenge there has been a team of support. Alec Mackay helped to initiate this research and has been encouraging and supportive throughout. I would like to thank Horizons Regional Council for their financial assistance. Grant Cooper has been an important contact at Horizons Regional Council, likewise Dave Cameron and Stan Braaksma at the Greater Wellington Regional Council. Farmers interviewed in the Wairarapa and key informants associated with regional councils have all generously offered their time and knowledge. Denise Stewart has been an amazing asset fulfilling many tasks with incredible ease at the INR office. Many times friends and family have provided support to keep me going, grammatical expertise, and care of my children when I needed a longer day of study. In particular, Tim Upperton and Sally Babbage have filled in many gaps. My husband Jeff, and my two children George and Lucy have been an important part of the support and they have put up with a lot over the time of this project, so its now time to have some fun.
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List of Acronyms

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<th>Meaning</th>
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<tr>
<td>CCS</td>
<td>Catchment Control Scheme</td>
</tr>
<tr>
<td>CSS</td>
<td>Countryside Stewardship Scheme</td>
</tr>
<tr>
<td>ESS</td>
<td>English Stewardship Scheme</td>
</tr>
<tr>
<td>ESA</td>
<td>Environmentally Sensitive Areas</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GWRC</td>
<td>Greater Wellington Regional Council</td>
</tr>
<tr>
<td>IAFS</td>
<td>Integrated Arable Farming System</td>
</tr>
<tr>
<td>IPCC</td>
<td>International Panel on Climate Change</td>
</tr>
<tr>
<td>LMO</td>
<td>Land Management Officer</td>
</tr>
<tr>
<td>LRI</td>
<td>Land Resource Inventory</td>
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<tr>
<td>LUC</td>
<td>Land Use Capability</td>
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<tr>
<td>LWMP</td>
<td>Land and Water Management Plans</td>
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<tr>
<td>MAF</td>
<td>Ministry of Agriculture and Fisheries</td>
</tr>
<tr>
<td>OEFP</td>
<td>Ontario Environmental Farm Plan</td>
</tr>
<tr>
<td>SCRC</td>
<td>Soil Conservation and River Control</td>
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<tr>
<td>SLUI</td>
<td>Sustainable Land Use Initiative</td>
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<tr>
<td>WCB</td>
<td>Wairarapa Catchment Board</td>
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<tr>
<td>WFBP</td>
<td>Whole Farm Business Plans</td>
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