



Healthy Rivers
PLAN FOR CHANGE

Wai Ora

HE RAUTAKI WHAKAPAIPAI



RAUKAWA CHARITABLE TRUST
TE POARI MANAAKI O RAUKAWA



TŪWHARETOA
MĀORI TRUST BOARD



Understanding landholder adoption of technologies and practices

A method for understanding decision making

Presentation for the Collaborative Stakeholder Group Healthy Rivers Plan Change/Wai Ora
He Rautaki Whakapaipai

Why are we telling you this?

- Understanding the range of enterprises that need to be considered in policy design.
- Understanding why landholders use particular practices.
 - Differences in cost for landholders to respond to interventions
 - Variation in response to possible intervention requirements

Approach

- A method for understanding how landholders make choices about practices and technologies.
- It can provide insights into landholder choices and how these choices may be influenced.
- Can be used to help set priorities for, and design of water resource management policies.

Involvement and decision making

- Adoption of practices and technologies is highly involving.
- Landowners will devote time and effort to reasoning about the consequences of adopting.
- This requires them to identify the elements in their farm system that interact with the practice or technology to influence the benefits and costs of adoption.

Farm context and benefit sought

- The elements of the farm system that interact with a practice or technology to influence the benefits & cost of adoption is the farm context for that practice or technology.
 - The farm context can include physical, technological and lifestyle characteristics.
- The number of potential adopters is the set of farmers with farm context that suit a practice or technology.

Example – irrigation technology

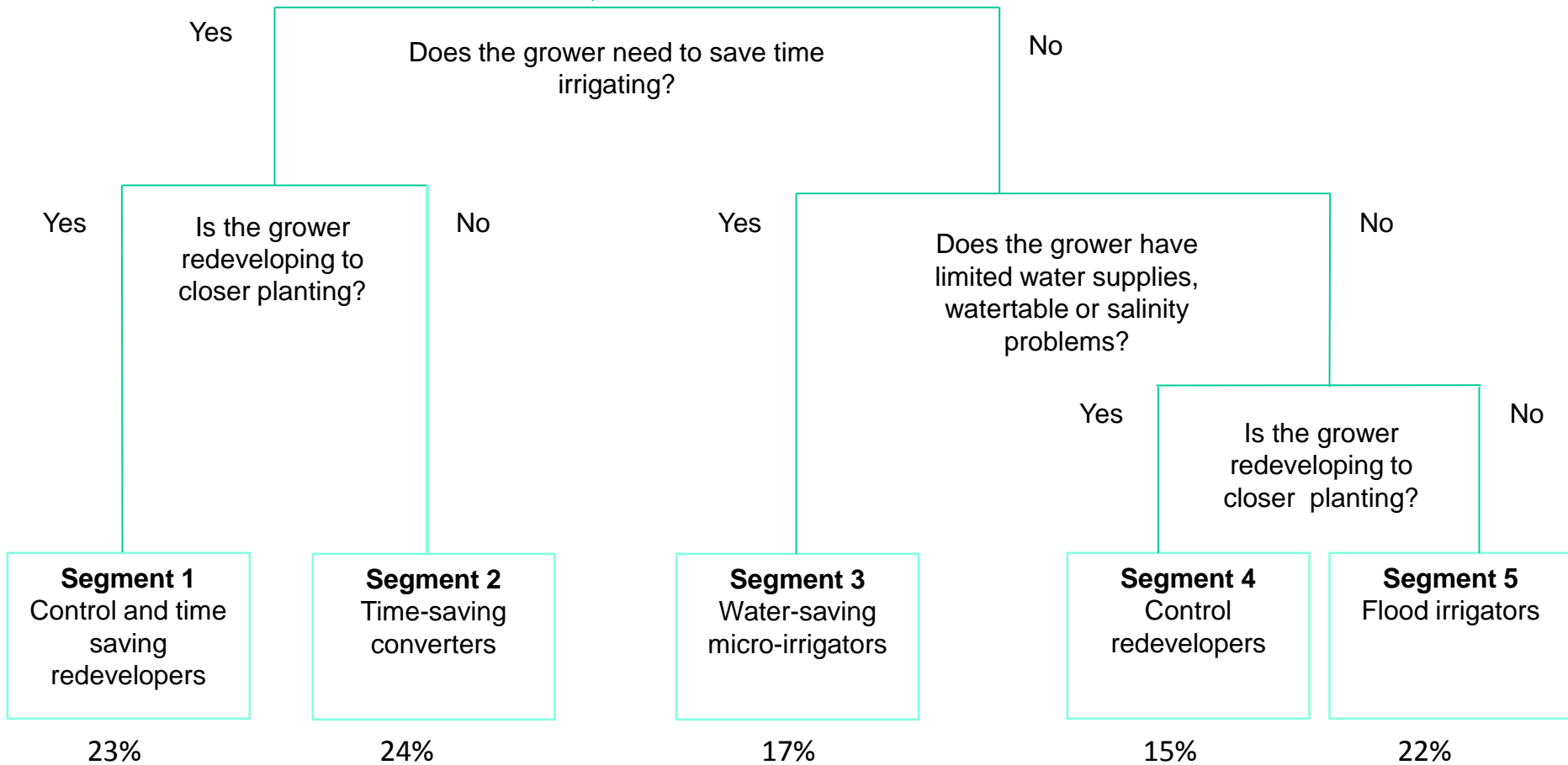
- Identify factors influencing fruit growers decision to adopt micro irrigation.
- The benefits sought included:
 - Reduced use of water and labour,
 - Greater control over volume delivered, and
 - Flexibility in timing of activities.



Example - Farm Context

- The farm contextual factors that influenced growers decision making included:
 - Limited labour,
 - Hilly or sandy country,
 - High density plantings, and
 - Limited water supply,
 - Problems with high water tables or salinity,
 - Problems with supply of irrigation water at volume,
 - Depend on having water available to irrigate on demand.

Example - Benefit segments



Example - Findings

- Growers motivated to change technology by need to save time, flexibility and when redeveloping – not just water savings.
 - Those most likely to hear messages about water savings and efficiency only 17% of the market.
 - The flood irrigators are not least bit interested unless or until something changes in their context.
- Kaine, G., Bewsell, D., Boland, A.-M., Linehan, C., 2001. How to win growers and influence change. Presented at the APEN International Conference, APEN, 3-5 October 2001 University of Southern Queensland Toowoomba, Queensland, Australia.

Key messages

- Farm contextual factors influence the benefit or cost of adopting a technology or using a practice.
- Each farm context is different therefore the relevance and cost of practices or technologies varies from one farm to another.
- Changing practices or technologies may be extremely difficult, particularly if the elements of the farm that influence the advantages or disadvantage of a practice or technology are fixed.