

# People Centred Whole Farm Management Plans

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*an idea whose time has  
come<sup>1</sup>*

**Terry Parminter – KapAg Ltd**

<sup>1</sup>Victor Hugo, 1852, *Histoire d'un Crime*



# Presentation Purpose

- The key to having farmers motivated to developing and implementing farm management plans is to address their goals for their business and their future farming careers and link these to opportunities in their farm system and off-farm impacts.
- Understanding the link between farm management plans and farmer behaviour or action, means understanding the human psychology of behaviour.

# Presentation Content

- Understanding human behaviour and its relationship with the content of farm management plans.
- Applying this understanding as a set of principles determining the content of People-Centred Whole-Farm Management-Plans.



# Understanding Behaviour - beliefs

Belief

Belief

Belief

Belief

Behaviour

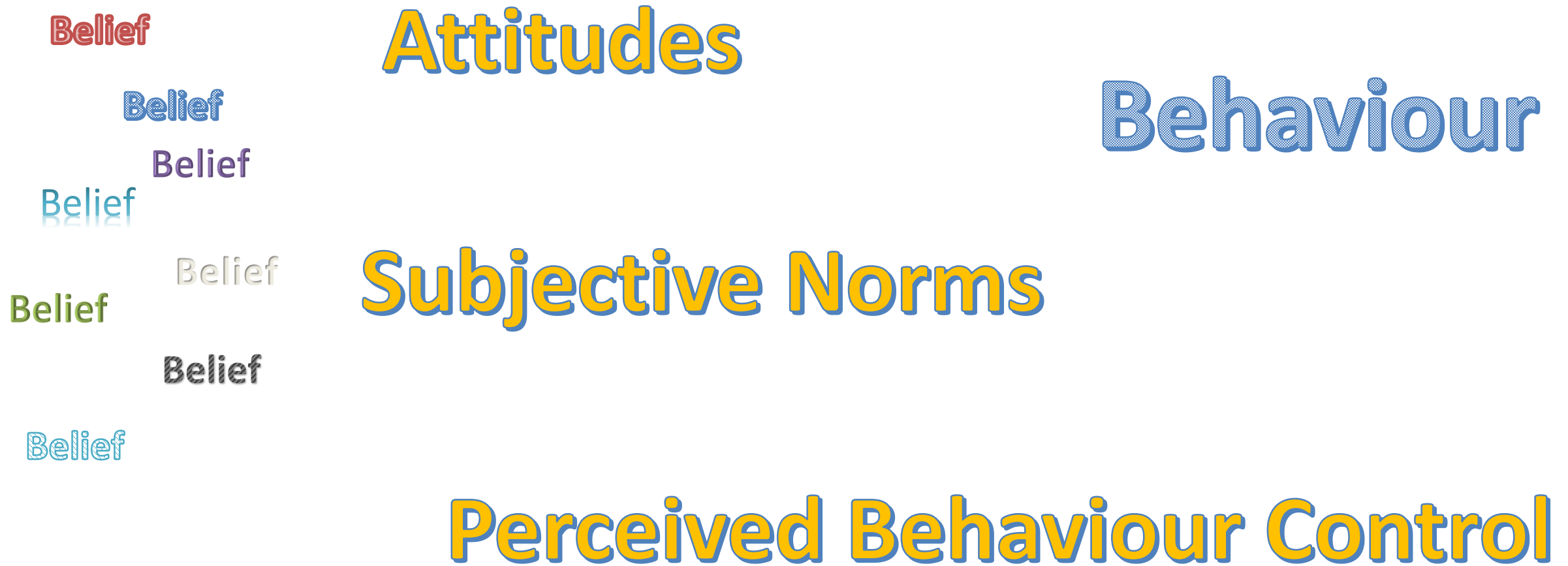
Belief

Belief

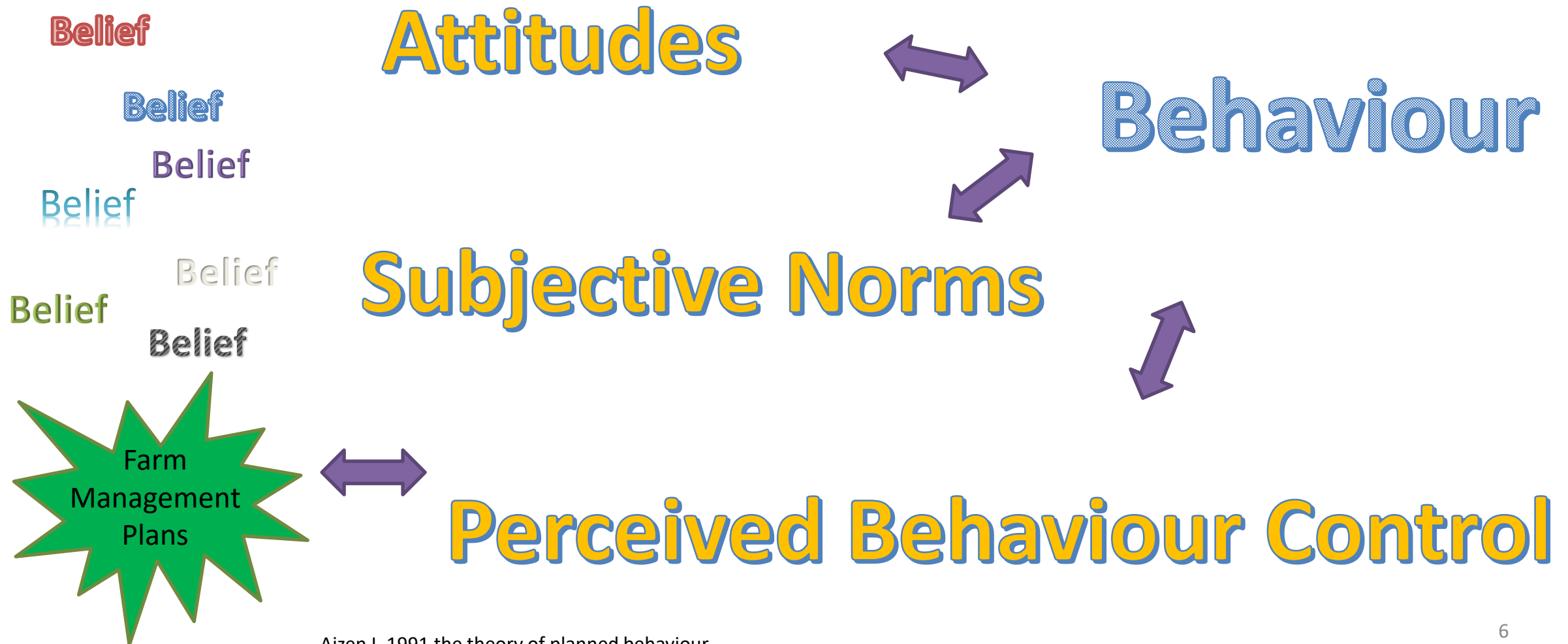
Belief

Belief

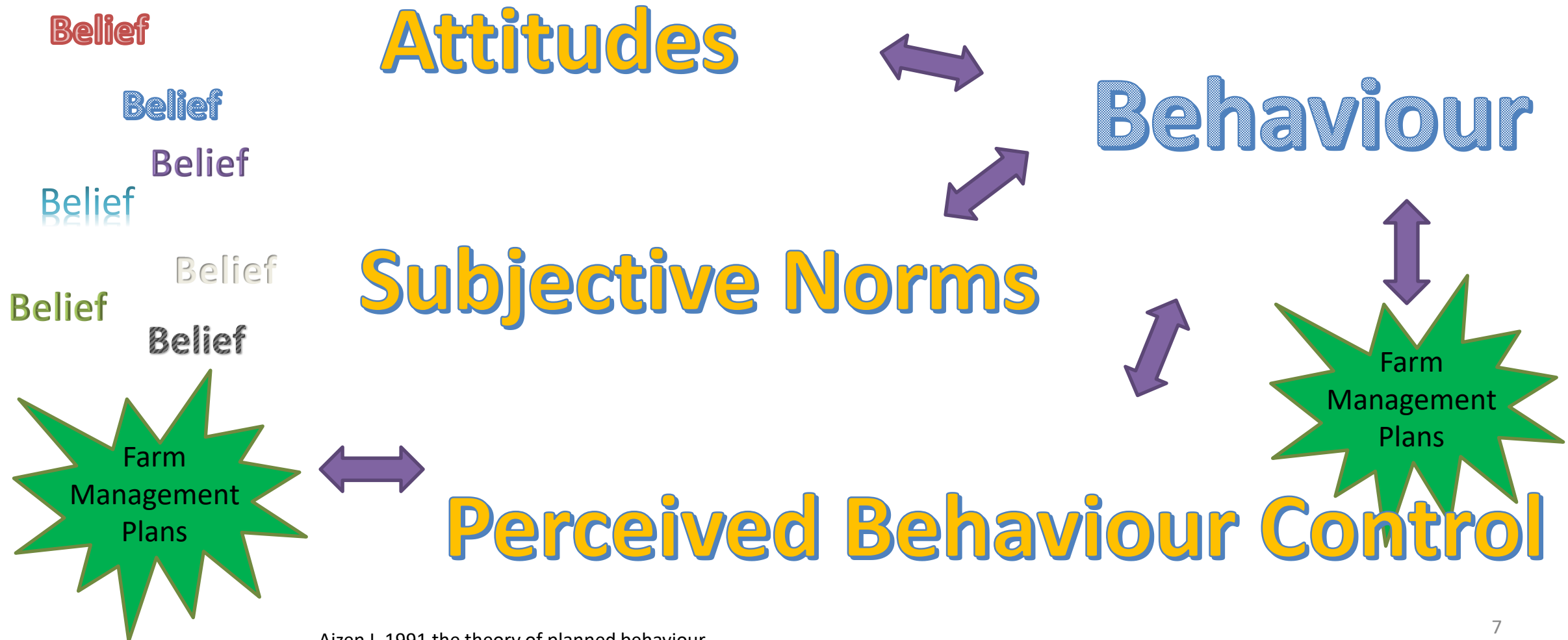
# Understanding Behaviour – global determinants



# Indirect Model of the Influence of Farm Management Plans on Behaviour



# Direct Model of the Influence of Farm Management Plans on Behaviour



# People Centred Whole Farm Management Plans

## Sections addressing:

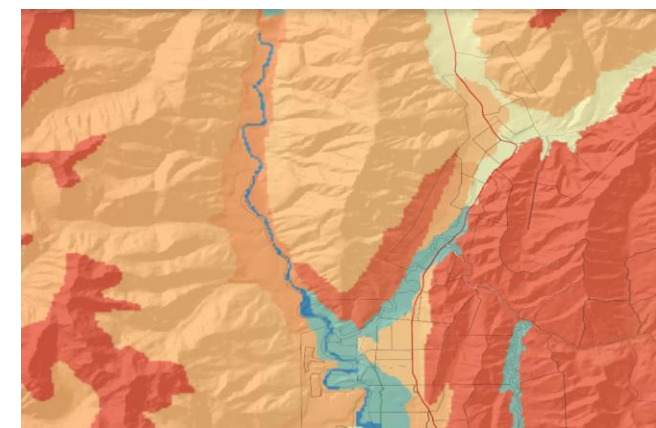
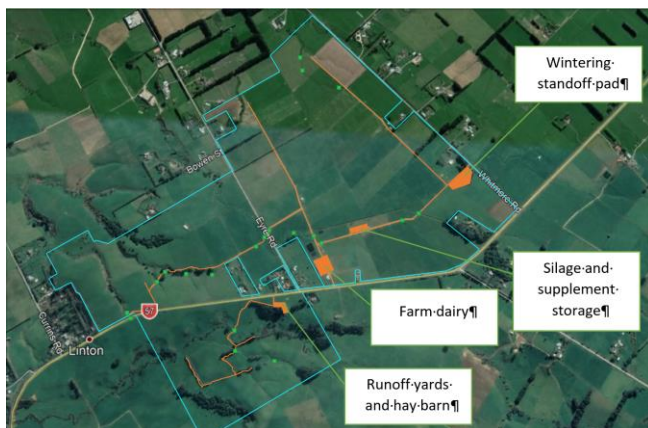
- Goals
- Objectives
- Farming policy
- Natural resource state and risks
- Strategic operations
- Strategic-system interactions



# Information in Support of Strategic Decisions



Keep it practical and keep it pictorial



# Farming Goals

Based on:

- Over the last year, what did you most like spending your time doing?
- What things happened on the farm that made you feel most optimistic about farming?
- Describe a change on the farm that made a positive difference to your life?

Then over the next few years

- What would you like to reduce – do less of?
- What would you like to increase – do more of?
- What would you like to accomplish?

# Farming Objectives

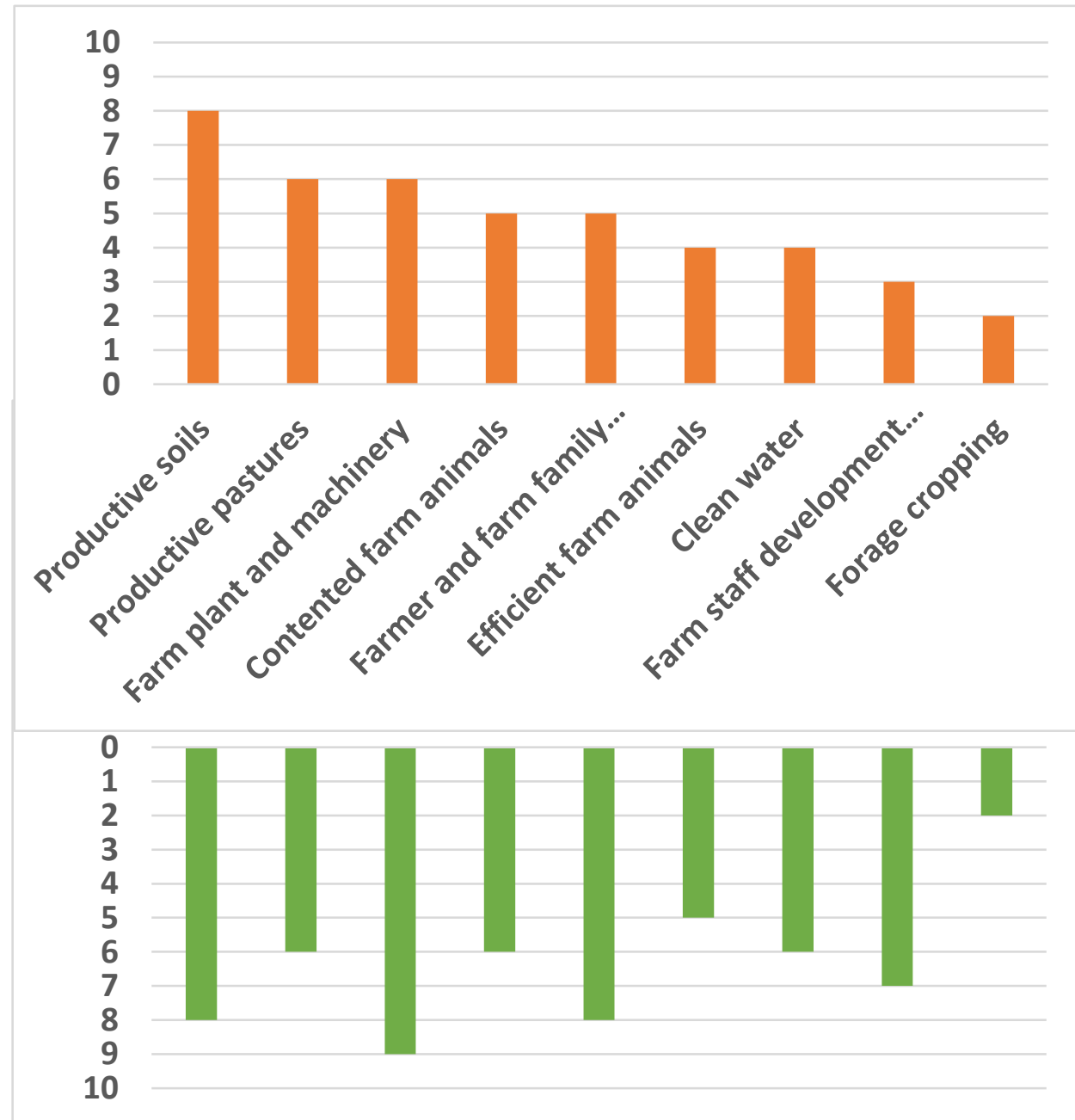
Questions (scale 1-10):

For each part of the whole farm system:

(1) Relative to its potential performance; how is this part performing now?

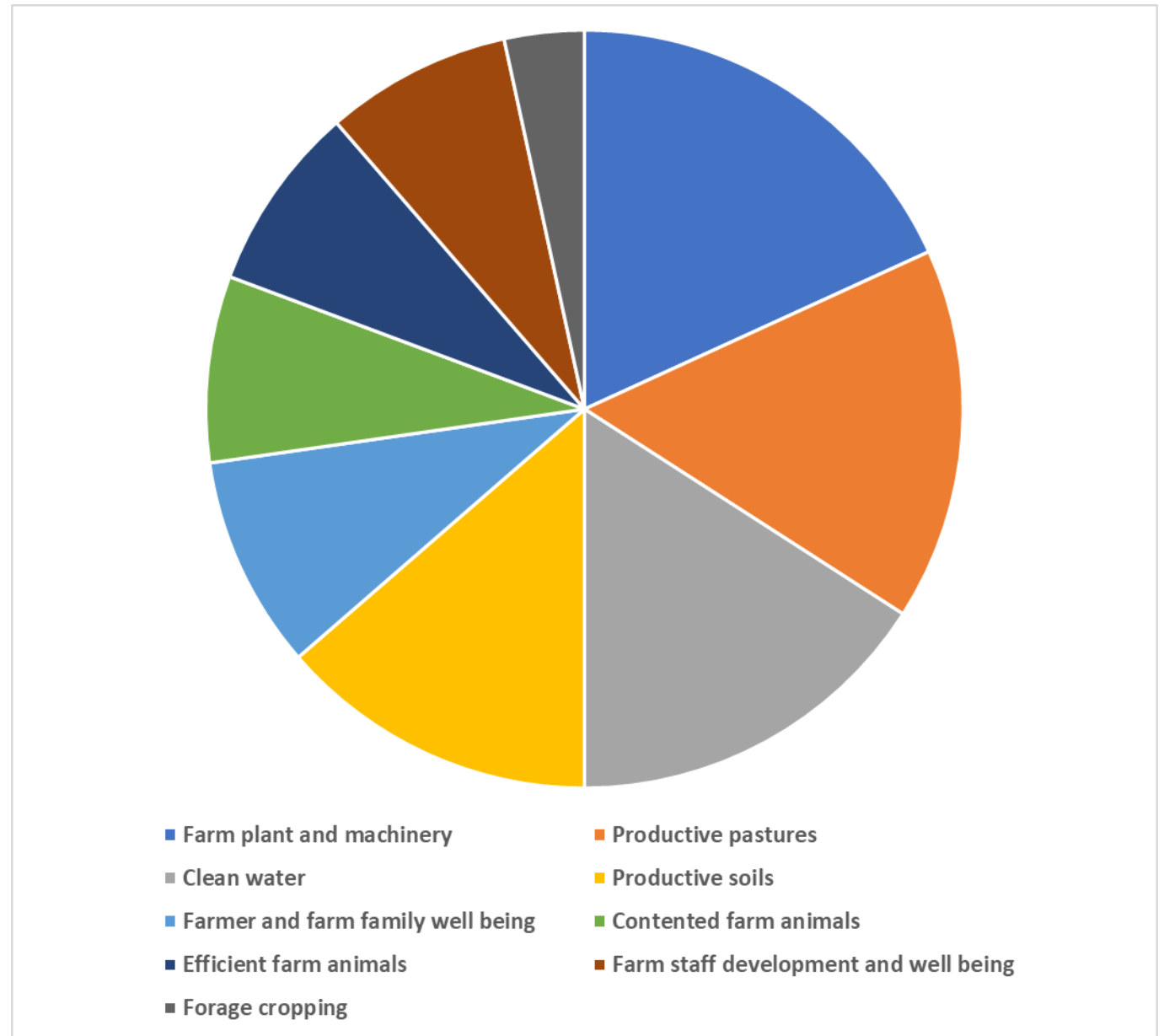
What is creating this gap?

(2) What is the relative importance of this area to achieving my farming goal/s?



# Comparative Farming Objectives

Combines the size of the gap and the farmer's enthusiasm for addressing it.



# Strategic operations

- Attend a family holiday in Nelson by 30<sup>th</sup> November 2021
  - Ontrack: Travel and accommodation booked by 10<sup>th</sup> November 2021
  - Offtrack: Silage making delayed, problems mating cows
- Place 2km of drainage coil in the wettest 3 paddocks by February 28<sup>th</sup> 2021.
  - Ontrack: materials and contractor available
  - Offtrack: wet weather makes access more difficult
- Produce 400kg MS/cow by May 30<sup>th</sup> 2021.
  - Ontrack: Monthly production ahead of last year
  - Offtrack: Monthly milk production behind last year
- Undersow 20-50ha with plantain by 1<sup>st</sup> May 2021.
  - Ontrack: Have resources available (time and money)
  - Offtrack: Lack enough seed of suitable cultivar
- Set GHG reduction target by 30<sup>th</sup> June 2022.
  - Ontrack: Available GHG numbers and interpretation, aligned with Government policy
  - Offtrack: Uncertainty within the industry (he waka eke noa)
- Design an artificial wetland for Top Gully paddock by Easter 2022.
  - Ontrack: Availability of suitable designer
  - Offtrack: Government policy making establishment and maintenance too difficult

Objective->	1.Family holiday by November 2021	2.Drain wettest paddocks by end of May 2021.	3.Produce 400kg/cow MS by June 2021	4.Undersow 20-50ha by May 2021	5.Set GHG reduction target by June 2021	6.Design an artificial wetland by June 2021	Enhancements and mitigations (numbers link actions to objectives)
Efficient animals	-/+		+++	+++	+++		1.Ensure operational procedures in place for farm staff before going away 4.Check more productive species for our farm 5.Calculate intensity values for GHG
Contented animals	-/+		+	++			1.Ensure operational procedures in place for farm staff before going away 4.Check more productive species for our farm
Productive pastures		+++	+	++			4.Check more productive species for our farm
Productive soils		++					
Forage cropping		+					
Clean water		-			+	+++	2.Ensure drainage does not go straight to waterway but through grass filter strip 6.Prioritise and refine design to address community priorities
Greenhouse gases		+	--	--	+++	?	3,4 Increased pasture intake for milking cows will increase GHG, mitigate by drying off at higher condition score and using less nitrogen in Autumn
Farm plant & machinery							1-5 Establish a maintenance schedule for each vehicle
Farmer & farm family wellbeing	+++		++			--	1.Avoid being distracted by farm while away 6.Ensure design is practical, and a sound investment

# Summary

- Farmer decision making and behaviours are determined by their cognition (beliefs)
- Understanding behaviour means understanding attitudes, subjective norms, and perceived behavioural control
- To address the thinking behind strategic decision making, we need People-Centred Whole-Farm Management-Plans
- Peoples' farming goals integrate their career and their business
- Farmers' objectives can be quantified as a performance gap and their motivation to address it
- Delivering on objectives requires monitoring how they are tracking
- A conflict matrix can be used to identify ways to enhance and/or mitigate the interactions between operationalising objectives and the whole farm system

# Thank you

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# Compliance Model of Behaviour

## Behaviour (farm management planning)

