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RURAL LEADERSHIP
PROGRAMME



Keeping our farmers passionate in challenging times

Kellogg Rural Leadership Programme

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I wish to thank the Kellogg Programme Investing Partners
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To the individuals that I interviewed, thank you for your knowledge and passion towards my report. It is much appreciated.

To my wife, thank you for your help towards my report but for also putting up with the endless questions and late nights working in the office to get the report done.

Cohort 48, from attending the programme I now know that the network of people in our cohort is a passionate group of individuals that all bring valuable knowledge to the table. Having this great network of individuals is a very valuable tool for us all and plays a big part in the wider agribusiness sector for collaboration.

Executive Summary

A significant component of New Zealand's sheep, beef and dairy farms involves the production of winter forage crops. This ensures high yielding crops are available throughout the winter months when there is very little grass growth for continued rotational grazing. Pasture swards are left to rejuvenate through the winter months ready for spring. New Zealand farmers pride themselves on being custodians of the land and recognise the importance of continually enhancing our environment with sustainable practices. Within the multiple agricultural sectors, New Zealand produces some of the highest quality food and fibre for the global market whilst satisfying regulatory requirements set by our government.

Farmers over the last five years have adopted new practices to better mitigate the on farm environmental impacts regarding intensive winter grazing (IWG).

The target for this report is to answer the research question; how do we keep farmers passionate about farming when they are up against immense amounts of environmental policy change from our current government but more specifically, intensive winter grazing.

The report identifies key areas to help farmers with their frustrations on the ever-changing IWG policies. These key findings will provide an insight to answering my report question.

Methodology

A literature review was undertaken to further understand the research topic. Semi structured interviews were conducted with a generational perspective to better understand the outlook amongst the generations.

Key Findings

The research undertaken included a comprehensive overview of the mixed perspectives and mindsets throughout four generation cohorts focused on IWG questions. It is important to highlight the use of generational perspectives when evaluating the current research topic. Although there are many trends from the interview answers, the majority of the IWG policy and regulation will affect the younger generations the most.

Government and industry bodies need to have collaborative approach between industry bodies and farmers to get the best outcome when writing policy. This needs to be with a generational perspective but more specifically, the younger generation in the primary sector. They need to be encouraged to step forward and take leadership roles so that their voice can be heard to help shape the future of our IWG policy and regulations.

From the survey answers, themes were generated using a thematic analysis. These themes are broken down into several subthemes that reflect the underlying topic.

- Collaboration
- Education
- Simplicity
- People

Recommendations

The following suggestions have been made as a result of the conclusions drawn from this report.

Develop closer collaboration

Farmers understand there needs to be sensible regulation in place around IWG to secure a world class environment for future generations to enjoy. There needs to be further collaboration within sectors and from the government to work with more with our industry bodies

Plan Long Term

The use of strategic long-term planning towards writing IWG policies can only be seen as beneficial for the agricultural industry. By allowing it to be proactive in its development towards attainable regulation.

Provide Education

Provide beneficial and cost-effective support for farmers around new policy.

Maintain pragmatic approach

Farmers from all sectors need to be more involved and utilised for their extensive knowledge around a pragmatic approach to writing policy. I believe working with the farmers from the ground up when writing policy would deliver a better outcome.

Incentivise Farmers

Due to consumer demand for more robust guarantees of food safety and quality in developed nations, market forces have propelled the development of numerous policies and good management practises (GMPs). Putting incentives in place for farmers to adopt GMPs is relevant to keep farmers passionate and engaged in relation towards regulation.

Voice of the younger generation

Our industry bodies and policy makers need the leaders of tomorrow to be around that table when forming policy ideas. Creating a 'youth voice' for the agricultural industry is something that shouldn't be underestimated.

1. Introduction

Over the last five years farmers have come under pressure from the New Zealand government with changes to policy and regulation towards intensive winter grazing (IWG), (Wallace 2021). Some of this policy is practical but others are not and have later been amended. The ever-moving targets for policy creates frustration and confusion among farmers with not enough robust scientific research or time put into developing and writing the policies.

Farmers over the last five years have adopted new sustainable practices to better mitigate on farm environmental impacts regarding winter grazing. It is only in farmers best interests to see the environment that we all live in flourish.

In 2020, the government released the Essential Freshwater Package (Ministry for the Environment, 2020) which is a set of standards and regulations designed to achieve genuine freshwater improvements for NZ's lakes, rivers, wetlands and other freshwater waterways within a generation.

The National Environmental Standards for Freshwater 2020 (NES-FW, 2020) is a document released within part of this package and it aims to regulate activities that pose risks to the health of freshwater and freshwater ecosystems. It does this by setting a standard for certain activities, which either need to meet permitted activity status or need a resource consent granted from the relevant regional council to continue the certain activity.

Intensive winter grazing (IWG) is recognised as an activity on farm that can have a negative impact on the environment and therefore needs to be regulated to minimise and mitigate those impacts.

IWG is defined by the NES-FW as “the grazing of livestock on an annual forage crop at any time in the period that begins on 1 May and ends with the close of 30 September of the same year” (Resource Management - National Environmental Standards for Freshwater Regulations, 2020). An annual forage crop is any crop that is grazed in the place it is grown but doesn't include pasture.

When the initial rules were released in 2020, they were unpractical and impossible for farmers to comply with (Intensive winter grazing, 2022). The government heard and listened to the concerns that farmers had and made amendments to the released policy to allow the rules to be more workable (Intensive winter grazing, 2022). Farmers understand there needs to be sensible regulation in place to create a thriving world class environment for future generations to enjoy.

As the NES-FW policy currently stands; rules for intensive winter grazing came into force on 1 November 2022. If farmers can not comply with the below rules (Resource Management - National Environmental Standards for Freshwater Regulations, 2020), they need to apply for a resource consent or have a Freshwater Farm Plan in place to continue IWG:

1. the area of the farm that is used for IWG must be no greater than 50 ha or 10% of the area of the farm, whichever is greater.

2. the slope of any land under an annual forage crop that is used for intensive winter grazing must be 10 degrees or less, determined by measuring the slope over any 20 m distance of the land.
3. livestock must be kept at least 5 m away from the bed of any river, lake, wetland, or drain (regardless of whether there is any water in it at the time).
4. on and from 1 May to 30 September of any year, in relation to any critical source area that is within, or adjacent to, any area of land that is used for intensive winter grazing on a farm:
 - a. the critical source area must not be grazed.
 - b. vegetation must be maintained as ground cover over all of the critical source area.
 - c. maintaining that vegetation must not include any cultivation or harvesting of annual forage crops.

The above policies will affect many farms as they won't be able to meet the permitted activity status and will need to apply for a consent or have a Freshwater Farm Plan in place. As these won't be available for Canterbury by next year, a resource consent must be applied for by 1 May 2023. This will come at a cost with Environment Canterbury Regional Council stating that there will be a deposit of \$3,500 per consent which could instead be used towards improvements and enhancements on farm (Environment Canterbury, 2022).

The research question driving this report is: How do we keep farmers passionate about farming when they are up against immense amounts of environmental change from our current government but more specifically, intensive winter grazing. From the report findings collated information will identify key areas to help farmers with their frustrations on the ever-changing IWG policies. These key findings will provide an insight into answering my report question.

The hypothesis for this report is as follows: will current and planned intensive winter grazing policies going to increase exports in our global market through the marketing of rigorous winter grazing regulation or is our industry going to take a hit because of unpractical policy that farmers cannot comply with?

2. Purpose and Objectives

This research topic is in the back of many farmers minds and is relevant for safeguarding the future of the New Zealand agricultural industry in a sustainable and viable way. This report will help to better understand the perspectives from a generational view towards intensive winter grazing policy and regulation.

Objectives for this report are as follows:

- Encourage and educate rural communities to understand IWG policies and how they may affect their properties but to also understand how they can be compliant with these regulations.
- To understand in more depth the impact that overwhelming regulation and compliance can have on rural communities.
- To understand intensive winter grazing regulation better and to be a custodian of good management practice to showcase environmental excellence in this practice.
- Analyse findings from semi structured interviews to analyse and understand how farmers are dealing with policy focused on intensive winter grazing.

3. Methodology

3.1 Literature Review

To further understand the research topic, a literature review of relevant peer reviewed materials was conducted. To analyse, draw conclusions, and define a set of recommendations on how to keep farmers passionate about farming when up against ever moving regulation in relation to intensive winter grazing, the study conducted for this report makes use of qualitative measures.

3.2 Semi Structured Interviews

To help answer the research question thematic analysis was used to identify patterns or themes within qualitative data which was collated through semi structured interviews. These interviews were structured around a generational perspective to gain an understanding of the different mindsets or perspectives throughout the generations. The significant themes were identified as a whole and analysed in my findings and discussion.

Generations for Interviews:

- Three individuals 20-29
- Three individuals 30-39
- Three individuals 40-59
- Three individuals +60

3.3 Thematic Map

To analyse the data collected a thematic map was generated to identify themes and sub themes to discuss and reflect on the different viewpoints of each theme. The methodology Braun and Clarke created in their articles from 2006 or 2013 is used in the subsequent steps for applying thematic analysis.

4. Literature Review

A critical analysis of the following literature has been conducted to better understand the research question. It comprises mindset, Incentives for GMP and the Kubler-Ross change curve.

4.1 Mindset

“Mindset change is not about picking up a few pointers here and there. It's about seeing things in a new way. When people...change to a growth mindset, they change from a judge-and-be-judged framework to a learn-and-help-learn framework. Their commitment is to growth, and growth takes plenty of time, effort, and mutual support.”

(Dweck, C. S. (2017))

The definition of mindset is defined as a person's way of thinking and their opinions (Cambridge Dictionary,2022). To better understand mindset, comprehensive research was undertaken by Carol Dweck to understand the relationship between mindset and the way people behave towards different outcomes.

The industry realises that there needs to be sensible and viable regulation in place around IWG for future generations to flourish. One of the report questions for the semi structured interviews was how might changing your mindset to look at winter grazing regulation and policy as an opportunity to drive change and be leaders in the environmental space.

Carol Dweck's study on mindset is an extensive research topic undertaken on the behaviours of thousands of individuals. There are two main mindsets to navigate life with; growth and fixed mindset. Her research demonstrates how our conscious and unconscious thoughts affect us and how something as simple as wording can have a powerful impact on our ability to improve.

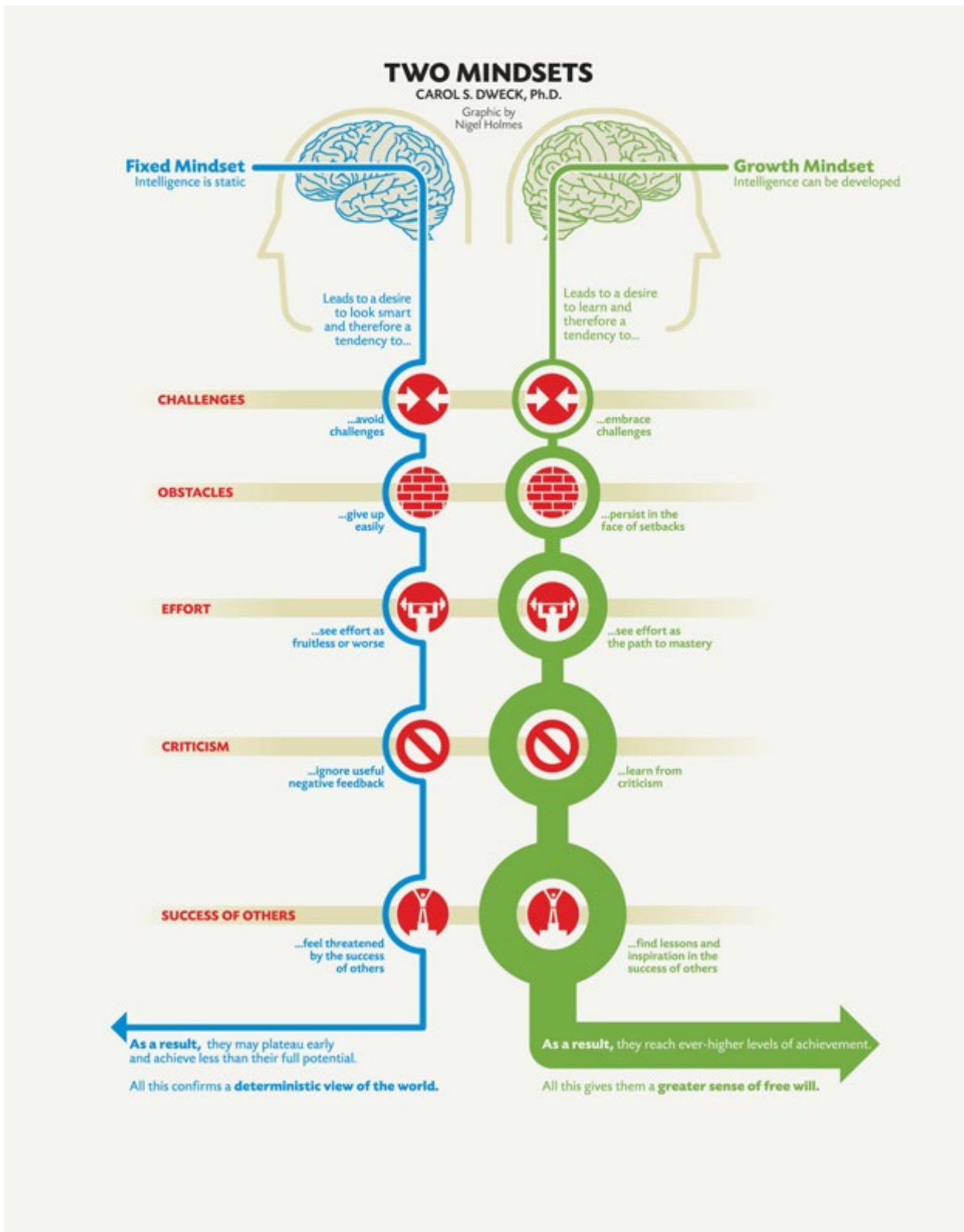


Figure 1. Two mindsets (Dweck, year unknown)- Graphic by N Holmes

Examples of characteristics of a growth mindset:

- Resilience from failure
 - Use your mistakes to learn how to be better in the future.
- Focus on process instead of product
 - Enjoy the process along the way to achieve end goal.
- Strength of teamwork and collaboration
 - Fastest way to increase your skill set and knowledge is by working together.
- Determined attitude towards goals
 - Don't view failure as a bad thing, use it as an opportunity to learn from mistakes.
- Persistent
 - Never give up even when everyone says that it's not possible.

(Dweck n.d.)

4.2 Incentives for Good Management Practise (GMP)

Incentives can be defined as “something that motivates or encourages individuals to achieve” (*Incentive - Wikipedia, 2022*). For the purpose of this research, incentivising farmers around GMP focusing on IWG regulation is relevant to keep farmers passionate. Market forces have driven the development of many GMPs through the demand of consumers in developed economies for stronger food safety and food quality assurances. It is important to note that with new policy often comes cost so incentivising farmers to adapt to new policy change becomes attractive (Piñeiro, Valeria; Arias, Joaquin; Elverdin, Pablo; Ibáñez, Ana María; Morales Opazo, Cristian; Prager, Steve; and Torero, Máximo. 2021)

If GMPs are market driven by the production of food and fibre from attributes demanded by consumers, there may be an opportunity to increase gross farm revenue through premium prices. GMPs focused on environmental sustainability should be seen as a providing assurance for the benefit of food safety and enhancing our environment. Consumers may be willing to pay premium prices for these assurances which could ultimately see the farmers receive higher prices for their produce which in turn could help cover incurred costs with new regulation. Incentivising IWG GMPs may also be a means of securing access to lucrative markets around the world that want only the very best quality produce.

Collectively or individually farmers should have an incentive to adopt GMP around IWG to protect themselves against global market forces from poorly managed farms. GMPs could provide farmers with a means of demonstrating their due diligence in practicing GMP techniques with respect to food safety, quality, and the environment. A recognised IWG GMP programme may protect the farmers practicing GMPs to a poorly managed farm if there were to be disruptions in the supply chain keeping the well managed farms operating and the poorly managed farms identified. The strength of this incentive would be highly dependant

on the ability to market and segregate (GMP and non- GMP produce. Piñeiro, Valeria; Arias, Joaquin; Elverdin, Pablo; Ibáñez, Ana María; Morales Opazo, Cristian; Prager, Steve; and Torero, Máximo. 2021)

Table 1. Characterising Incentives/Disincentives to Adopt GMPs (Hobbs 2003)

Incentive	Farmer Incentive	Processor/ Retailer incentive	GAPs Systems Where Most Prevalent
ECONOMIC			
Price Premium	xx		PSC
Access to market/supply chain	xx		PSC
Access to reliable inputs		xx	PSC, IG
Product differentiation	x	xx	PSC
Stabilise yield/revenue	xx		PSC, IG, G, IA
Reduce storage losses	x	x	PSC, IG, G, IA
Reduce wastage	x	xx	PSC
Increase farm asset value	x		PSC, IG, G
Protection against market externalities	x		PSC, IG
Increase variable production costs (e.g. labour)	--	--	PSC, IG, G, IA
Reduce output/increase average costs	--	--	PSC, IG, G, IA
Increase fixed production costs (e.g. equipment)	--	--	PSC, IG, G, IA
Asset specific investment*	-	-	PSC
Reduce search costs	x	x	PSC, IG (G, IA)
Reduce monitoring costs		xor ^a	PSC, IG, (G, IA)
Altruism/social capital	x	x	
REGULATORY/LEGAL/ INSTITUTIONAL			
Asserting property rights on scarce resources	x		G
Subsidies	x	x	G
Reduce liability/show due diligence	x	xx	PSC, IG
Reliance on institutional infrastructure	-	-	PSC, IG, G, IA
Third party monitoring	x	x	PSC, IG, G, IA
HUMAN CAPITAL			
Expand skill set	x	x?	PSC, IG, G, IA
Record-keeping (literacy)	--	-	PSC, IG, G, IA

Key:

Where xx = strong incentive to adopt; x = marginal incentive to adopt;

-- = strong disincentive to adopt; - = marginal disincentive to adopt

PSC = Private supply chain GAPs;

IG = Industry Group GAPs(e.g. producer association),

Table 1: Showcases the characterising incentives/disincentives to adopt GMPs. This was published from a report written for the Food and Agriculture Organisation of the United Nations. This provides a great example of incentives to adopt for GMP.

4.3 Kubler Ross – Change curve model

Understanding and identifying how individuals deal with change has been proposed by Kubler-Ross through the change curve model documented in 1969 which is also known as the grief model. The original model was documented for grief and trauma but also applies to change. (Understanding the Kubler-Ross Change Curve 2015)

The five stages:

Denial: The Stage of shock or denial is usually the first stage in the Kubler-Ross Model and is mostly short-lived. This is a phase during which one puts on a temporary defence mechanism and takes time to process certain disturbing news or reality. One may not want to believe what is happening and that it is happening to him/her. It can bring about a dip in productivity and the ability to think and act. After the initial shock subsides, one may experience denial and may remain focused on the past. Some people tend to remain in the state of denial for a long time and may lose touch with reality.

Anger: When the realization finally hits, and one understands the gravity of the situation, he/she may become angry and may look for someone to blame. Anger can be manifested or expressed in many ways. While some take out the anger on themselves, others may direct it towards others around them. While some may be angry at life in general, others may blame the economy. One always tends to remain irritable, frustrated and short tempered during this stage.

Bargaining: When the stage of anger passes away, one may start thinking about ways to postpone the inevitable and try to find out the best thing left in the situation. Those who are not faced by death but by another trauma may try to negotiate in the situation and come to a point of compromise. Bargaining may help to come to a sustainable solution and might bring some relief to those who are moving close to what they wish to avoid altogether. The search for a different outcome or a less traumatic one may remain on during this stage.

Depression: Depression is a stage in which the person tends to feel sadness, fear, regret, guilt and other negative emotions. He/she may have completely given up by now and may now reach a dead end from where the road only seems dark. One may display signs or indifference, reclusiveness, pushing others away and zero excitement towards anything in life. This may seem like a lowest point in life with no way ahead. Some common signs of depression include sadness, low energy, feeling demotivated, losing trust in god, etc.

Acceptance: When people realize that fighting the change that is coming into their life is not going to make the grief go away, they resign to the situation and accept it completely. The

resigned attitude may not be a happy space but is one in which the person may stop resisting change and move ahead with it (Understanding the Kubler-Ross Change Curve 2015).

The Kubler Ross model is relevant literature to this report. In the agricultural industry it is inevitable that the industries will always be faced with change. Understanding how we deal with the change is an important aspect of moving forward. The change curve model developed by Kubler-Ross helps us to better understand the stages when faced with change. Relevant to this report, change within policy and regulation towards IWG is as mentioned inevitable and will be forever moving in the future. Understanding how we deal with change and the time it takes to adapt is important to note.

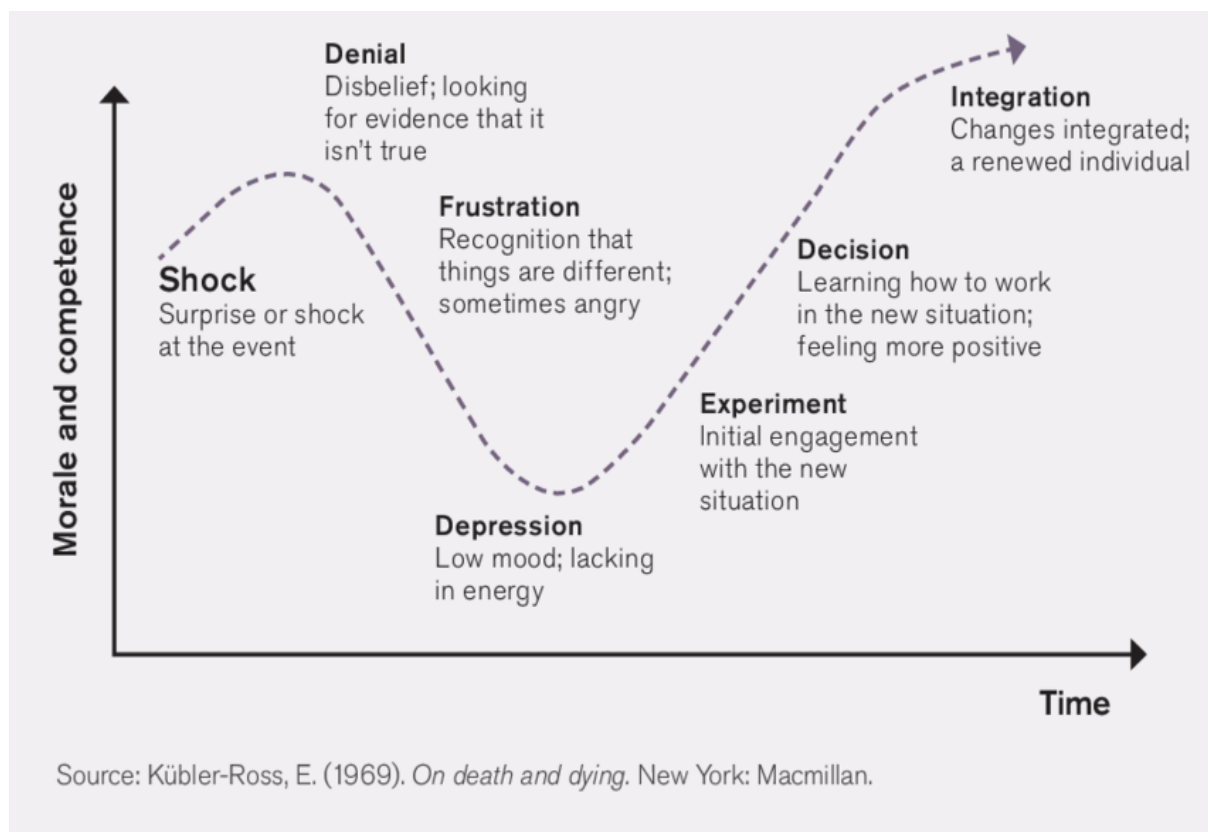


Figure 2. Kubler-Ross,E. (1969). On death and dying.

5. Findings and Discussion

The four age cohorts provide an insightful tool to critically analyse the data from the semi structured interviews. It was a great way to understand how different age groups understand and place their views on IWG and the environmental policy that are linked to it.

Table 2. (Overview of perspectives) Compares the different mindsets and perspectives from the four different generation cohorts in an overview from each question drawn out of the semi structured interviews. (Refer to appendix 1 for the interview questions)

Age Cohort	20-29	30-39	40-49	+50
<u>Question 1</u> Describe IWG regulation / Policy	<ul style="list-style-type: none"> Necessary Extreme Needs to be driven from grass roots up. Unpractical regulation. More cost. Marketing benefits. 	<ul style="list-style-type: none"> Costs incurred with new regulation. Unpractical Areas need to reflect rainfall /soil type. Paddock selection. 	<ul style="list-style-type: none"> Understand the why. Some policy not needed as common sense. Needs to be practical. 	<ul style="list-style-type: none"> High cost. Can see other ways to do it better.
<u>Question 2</u> Information Source	<ul style="list-style-type: none"> Industry bodies. Social media. CSA areas. 	<ul style="list-style-type: none"> Industry bodies. Social Media. CSA areas Slope requirements. 	<ul style="list-style-type: none"> Farmers weekly. Industry bodies. 	<ul style="list-style-type: none"> Internet Industry bodies. Farmer talk back radio. IWG consent.
<u>Question 3</u> Thoughts on proposed freshwater plans	<ul style="list-style-type: none"> Understands why. 	<ul style="list-style-type: none"> Need to work more with farmers at ground level. Economical. Long term plan rolled out. 	<ul style="list-style-type: none"> Need to be simple so farmers can fill out without 3rd party. 	<ul style="list-style-type: none"> Need to do something about it. Frustrated with very little education around new policy.
<u>Question 4</u> Effects of fresh water farm plan.	<ul style="list-style-type: none"> Adds stress. Not attractive for younger generation looking into regulation. Daunting 	<ul style="list-style-type: none"> Losing productive farm land to fence off to water ways. Create awareness. 	<ul style="list-style-type: none"> Cost to the business. Farming sustainably for future generations to prosper. 	<ul style="list-style-type: none"> Imperative for future generations. Farmers need to understand consumer demands.
<u>Question 5</u> Innovation / technology	<ul style="list-style-type: none"> Needs to be more available. 	<ul style="list-style-type: none"> Access of information. Cost. 	<ul style="list-style-type: none"> Cost Not enough. 	<ul style="list-style-type: none"> Never enough. Cost.
<u>Question 6</u> Future of regulation and policy	<ul style="list-style-type: none"> Case by case basis. Reginal councils will need more expertise and employees. 	<ul style="list-style-type: none"> Strict More bureaucracy. 	<ul style="list-style-type: none"> More realistic approach from change of government. 	<ul style="list-style-type: none"> 2-5 years isn't enough time to educate farmers on new policy need a long-term plan.
<u>Question 7</u> Advice to the government	<ul style="list-style-type: none"> Collaborate more with farmers. Younger generation Voice 	<ul style="list-style-type: none"> Incentive farmers for GMP around IWG. Listen to farmer voice. 	<ul style="list-style-type: none"> Implement pragmatic policy. Collaboration. 	<ul style="list-style-type: none"> Listen to farmers. Collaboration.
<u>Question 8</u>	<ul style="list-style-type: none"> Needs to be practical. 	<ul style="list-style-type: none"> Focus on what they can control 	<ul style="list-style-type: none"> Industry bodies need to accurately 	<ul style="list-style-type: none"> Knowledge. Incentives. Not

How do we keep farmers passionate.		<ul style="list-style-type: none"> • Clear and pragmatic policy. • Incentives 	<p>reflect the voice of farmers.</p> <ul style="list-style-type: none"> • Farmers are optimistic. 	
<u>Question 9</u> Changing mindset	<ul style="list-style-type: none"> • In this mindset more than against. 	<ul style="list-style-type: none"> • Better outcome for future generations. • Trial new practices. • Sharing knowledge 	<ul style="list-style-type: none"> • Better outcome for future generations. • 	<ul style="list-style-type: none"> • Future generations will benefit. •
<u>Question 10</u> Opportunities	<ul style="list-style-type: none"> • Yes not sure what. 	<ul style="list-style-type: none"> • Farmers need to be better at selling our story. • 	<ul style="list-style-type: none"> • Understand consumers demands. 	<ul style="list-style-type: none"> • Listen to consumers and observe behaviours in marketplace.
<u>Question 11</u> Markets lost without standards in place.	<ul style="list-style-type: none"> • Laggards need to catchup or be weeded out. • Farmers are unconsciously showcasing GMP. 	<ul style="list-style-type: none"> • High end consumer products. • Developed nations that understand. 	<ul style="list-style-type: none"> • High end consumer products. • Developed nations that understand. 	<ul style="list-style-type: none"> • Developed nations that understand.

Table 1 provided a comprehensive overview of the mixed perspectives and mindsets throughout the generations focused on questions related to IWG. It is important to highlight the use of generational perspectives when evaluating the current research topic. Although there are many trends in the answers from **Table 1** the majority of the IWG policy and regulation will affect the younger generations the most.

Government and industry bodies need to have collaborative approach between industry bodies and farmers to get the best outcome when writing policy. This needs to be with a generational perspective but more specifically, the younger generation in the primary sector. They need to be encouraged to step forward and take leadership roles so that their voice can be heard to help shape the future of our IWG policy and regulations.

5.1 Thematic Map

The following thematic map displays four main themes that were developed from the semi structured interviews for all generational perspectives. Each theme is broken down into several subthemes that each reflect the underlying theme. This thematic map is based off thematic analysis from the methodology developed by Braun and Clarke in their 2006 and 2013 articles.

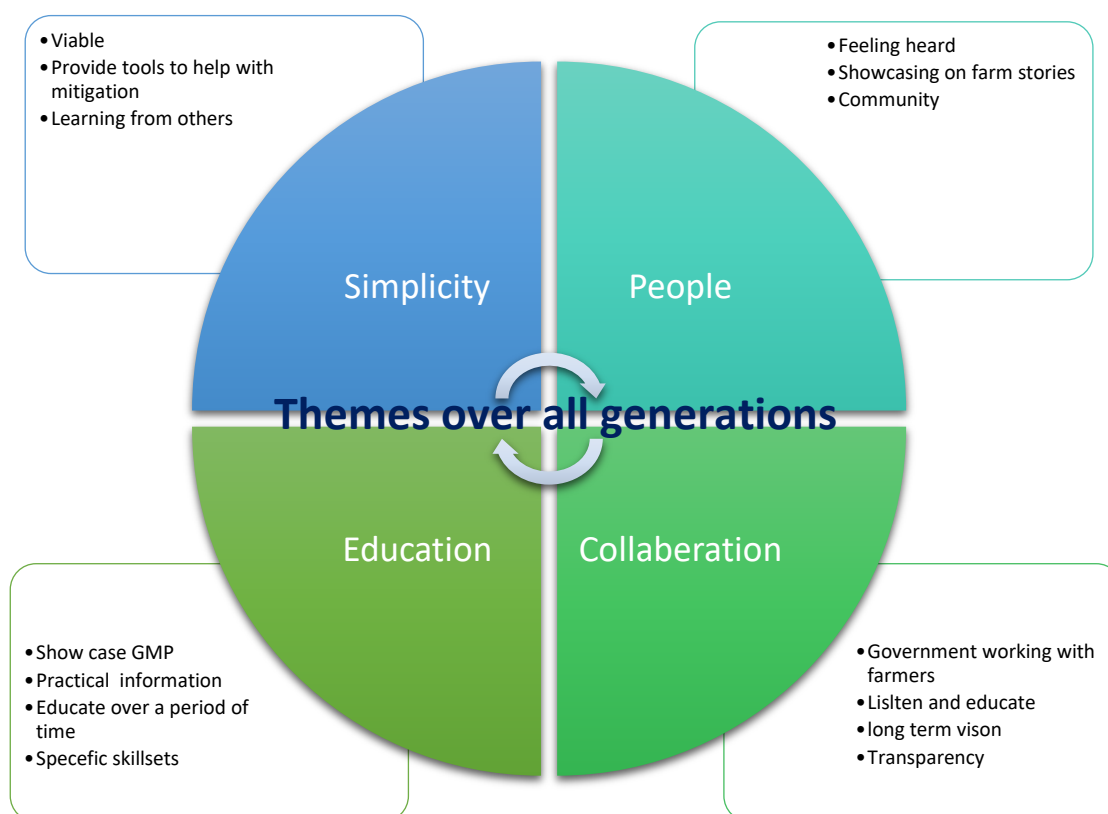


Figure 3: Thematic map themes over all generations

Themes over all generations

1. Collaboration

- a. Government collaborating with farmers and Industry bodies
 - It is important for government to work with multiple generations of farmers and industry bodies before writing policy. This would ensure the extensive knowledge from all involved would be utilised.
- b. Listen to farmers

- Farmers want to know their voice is heard and voiced when industry bodies are meeting with government. This was a common theme that came out of the interviews.

c. Long term vision

- Share long term vision for IWG regulation and policy to give farmers something to work towards and so they can understand the why. Let farmers contribute to shaping that vision. This can inspire them to achieve targets and goals.

d. Transparency

- Transparency encourages accountability and informs the industries about proposed regulation.

2. Education

a. Showcase GMP

- As sectors we need to showcase GMP to educate others, recognise achievements and highlight environmental excellence.

b. Practical information

- Practical information for farmers seems to be the best way to understand change. Industry bodies using fact sheets seem to be a preferred method amongst the interviewees, practical and simple process to follow. Preferred to be emailed directly so information is brought to their attention without having to go looking for it.

c. Educate over a period of time

- This was highlighted from multiple interviewees that the government needs to offer education on policy change in advance, so sectors have a lengthy period of time to implement these new policies on farm before they are rolled out.

d. Specific skillsets

- Making sure the right people with the right skillset are employed when educating farmers. Farmers will lose hope if not getting the correct information.

3. Simplicity

a. Viable regulation

- Policy and regulation need to be economically viable for farmers to actively engaged and their willingness to adhere to regulation.

b. Tools to help with mitigation

- Farmers love tools that make their day-to-day jobs easier in a practical form. Sometimes having to scroll through the internet to find information around mitigation techniques can be frustrating and slow.
- c. Learning from others
- Sharing on farm experiences of GMP or just in general is a very practical and effective way to learn. Attending catchment group field days is another great way to get farmers off their own properties to visualise and hear how it can be done differently.
- 4. People**
- a. Feeling heard
- Farmers need to know their voice is heard up to government. Our industry bodies are our best way to communicate with the government. For farmers to remain passionate they need to have confidence in their industry bodies that the voice of the farmer is accurately being represented to the government.
- b. Show casing on farm stories
- Examples of farmers excelling in practices on farm or showcasing environmental excellence need to be shared and more often. It has been identified through the interviews that farmers aren't particularly good at showcasing GMP. This could only be a positive approach to bridging that urban and rural divide.
- c. Community
- The agricultural community is a strong resilient community that works together. All sectors within the primary industry now more than ever need to collaborate and work together on common issues.

5.2 Implications of thematic analysis

There are multiple trends expressed across the four generational perspectives showcasing that there is most definitely similar or if not identical themes across all the age cohorts. These themes correspond to the research undertaken in the literature reviews which has aided in critically analysing the report findings.

6. Conclusion

Farmers from all sectors affected by IWG policy and regulation understand there needs to be sensible regulation in place for our environment to flourish. New Zealand farmers pride themselves on being custodians of the land and recognise the importance of continually enhancing our environment with sustainable practices. Within the multiple agricultural sectors, New Zealand produces some of the highest quality food and fibre for the global market whilst satisfying regulatory requirements set by our government.

I believe farmers over the last five years have adopted new practices to better mitigate the on farm environmental impacts regarding intensive winter grazing (IWG).

Looking at the Kubler Ross change model and Carol Dweck's mindset study, I do think there is very relevant information within the report regarding how we can deal with change and also looking at the fixed mindset and the growth mindset when dealing with change.

The target for this report was to answer the research question; how do we keep farmers passionate about farming when they are up against immense amounts of environmental policy change from our current government but more specifically, intensive winter grazing.

The research undertaken for the report highlights the areas that I believe are necessary for keeping farmers passionate about farming when up against ever changing IWG policy and regulation.

7. Recommendations

The following suggestions have been made as a result of the conclusions drawn from this report.

6.1 Develop closer Collaboration

Farmers understand there needs to be sensible regulation in place around IWG to secure a world class environment for future generations to enjoy. There needs to be further collaboration within sectors and from the government to work more with our industry bodies. For farmers to remain passionate about farming, they need to have confidence in their industry bodies that they are collaborating accurately with government on policy. Farmers want their voices to be heard through their industry bodies. Working together collaboratively rather than separately will be the key to success.

6.2 Plan Long Term

The use of strategic long-term planning by policy writers towards writing IWG policies can only be seen as beneficial for the agricultural industry by allowing it to be proactive in its development towards attainable regulation. With long-term goals for regulation in place, farmers will be able to take their time to comprehend upcoming regulations and implement them before due deadlines. This gives farmers the opportunity to report back to industry bodies whether proposed regulations can be complied with. This allows a pragmatic approach to be taken before new policies are released.

6.3 Provide Education

Provide beneficial and cost-effective support for farmers around new policy. For example, offering farmers technical support can make adopting new farming techniques more feasible and sustainable. Education needs to take place over a period before the policies are implemented to allow farmers time to build capability in implementation.

6.4 Maintain Pragmatic Approach

Farmers from all sectors need to be more involved and utilised for their extensive knowledge around a pragmatic approach to writing policy. I believe working with the farmers from the ground up when writing policy would deliver a better outcome and keep farmers up to date and feel involved. One approach I think could be beneficial in achieving this, would be to further promote catchment groups and the information they possess. All this information needs to flow up through our industry bodies to central government.

6.5 Incentivise Farmers

Due to consumer demand for more robust guarantees of food safety and quality in developed nations, market forces have propelled the development of numerous policies and good management practises (GMPs). Putting incentives in place for farmers to adopt GMPs is relevant to keep farmers passionate and engaged in relation towards regulation. There is a large cost involved with new policy, for example, consents will be needed for IWG which will affect a big proportion of farmers throughout New Zealand. Therefore, by having incentives in helps to offset those extra costs accumulated with compliance.

What incentives could look like:

Reward farmers for GMP. One example of this in the dairy industry is the Co-operative difference payment through Fonterra. There are five key focus areas that must be achieved to receive your premium payment.

- Environment
- Animals
- People & Community
- Co-op and prosperity
- Milk excellence

Another example is from NZMerino company. With their ZQ and ZQRX standards for wool. Wool that is supplied into NZMerino under the standards of ZQ or ZQRX is represented as the wool of choice for world-class brands securing farmers a premium price above commodity. With five key focus areas you must adhere to:

- Animal Welfare
- Environmental sustainability
- Quality fibre
- Traceable to the source
- Social responsibility

With these two examples in mind, I believe there is opportunity to develop a monetary incentive or something similar for GMP around intensive winter grazing. This would help in mitigating incurred costs for new regulation.

6.6 Younger Generation Voice

The younger generation of farmers understand there must be sensible regulation in place towards IWG. Our industry bodies and policy makers need the leaders of tomorrow to be around that table when forming policy ideas. Creating a 'youth voice' for the agricultural industry is something that shouldn't be underestimated. There is one example of this through New Zealand Young Farmers called 'The Food and Fibre Youth Network', which enables young individuals in the primary sector to add their voice to shaping the future of our food and fibre sector.

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8. Appendix

Appendix 1: Questions for semi structured interviews

Questions:

1. How would you describe intensive winter grazing policy and regulation?
 - Cost's
 - Benefits
2. Where do you find the best information around policy change / regulation?
 - What policy / regulatory information have you searched during the last week?
3. What are your thoughts on the proposed freshwater farm plans?
4. How does the freshwater farm plan affect
 - 1) You
 - 2) Your business
 - 3) Future generations
5. Is there enough innovation and technology in the food and fibre industry to help with mitigation?
6. What do you think winter grazing regulation and policy might look like in 2-5 years' time?
7. If you could offer the Government one piece of advice around policy change focused on intensive winter grazing, what would it be?
8. How do we keep farmers passionate about farming when there is continuing change in regulation and compliance around intensive winter grazing?
9. How might changing your mindset to look at winter grazing regulation and policy as an opportunity to drive change and be leaders in the environmental space.
10. What premium market opportunities do you think New Zealand's food and fibre sector should be chasing with the marketing of rigorous environmental standards of New Zealand's current and planned policy.
11. Given that New Zealand exports about 90% of its food and fibre produce, what produce markets might New Zealand lose if it doesn't have rigorous environmental standards?