



NUFFIELD
NEW ZEALAND

*Global Vision, Leadership
and innovation in Agriculture*

Effective Industry Collaboration for Environmental Gains



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Executive Summary

New Zealand farmers are facing significant pressure to manage the impact of their land use on water quality which has been affecting their social licence to farm. The environment we farm in underpins the sustainability of our farming businesses and our country. As stated in the KPMG Agribusiness Agenda 2017, an annual report detailing the insights and megatrends relevant to the agribusiness sector, a vision for the agri-food sector is actually a vision for New Zealand, given we are the only developed country that relies on selling biologically produced products to fund our schools, roads and hospitals.

Statutory regulation for fresh water management has caused competition between farmers within catchments as allocation of nutrients amongst land owners is discussed. A national strategy and anticipating the way forward is an easier way to collaborate than when legislation is in place. It takes more listening and more engagement. In my experience as a Certified Nutrient Management Advisor, farmers are willing to better understand what changes need to be made on farm, they don't want to be doing the wrong thing. The competition really begins when industry bodies or processing companies get involved. Energy-wasted competition with fellow New Zealand farmers will get us nowhere. In situations where compromise is needed between farmers the time needs to be taken for the trust and understanding to be built between all parties involved. We need to better use our resources, both physical such as soil, water and biodiversity, and human resources to be the best New Zealand we can be. All too often I hear and read phrases such as "We need to collaborate more" or "we need to collaborate better". What does that actually mean? What is effective primary industry collaboration for environmental gains? That is the questions I have been asking myself and others over the last 12 months.

This report includes four case studies that have been completed from sixty eight interviews completed during my Nuffield travels through America, Canada, Ireland, England, China and Australia. These case studies show how effective collaboration can be achieved. When effective collaboration is referred to, it is focusing on communities and catchments remaining strong and vibrant. I'd love to see a New Zealand where instead of talking about Sarah the dairy farmer or Tom the sheep and beef producer, we talk about Sarah and Tom the food producers who farm in the same environment.

Environmental gains regarding soil, nutrients, irrigation, effluent and biodiversity can be made by each and every one of us. Each land based agricultural sector in New Zealand has a role to play and often, regardless of which sector you farm in, the same management practices will be applied to achieve these gains.

We need to acknowledge the current model of collaboration is not working. The main findings of this report identify key themes that came from interviews with overseas organisations that are having success with collaboration which enabled them to tackle environmental challenges. These key themes are listed below:

UNITED VOICE

The leaders of our primary industry need to set clear goals together and have a joint vision on what we want to achieve for our environmental management.

RIGHT TYPE OF PEOPLE

Having the right type of person involved in the collaborative process. The right type of person is someone who can create a movement, has the ability to understand where others involved are coming from and have respect and mana of the people they represent.

COLLABORATION, COOPERATION OR PARTNERSHIP

Establish if collaboration, cooperation or partnerships are needed to achieve the desired goals. Collaboration is not always necessary.

STRONG FACILITATION

There is a need for facilitators that can manage the difference in the group, yet move the group forward to make decisions. These facilitators need to be independent of the organisations involved in the regulatory process including regional councils.

This report is primarily targeted at industry leaders of land based, food producing agriculture. I believe for collaboration to truly occur we need agreement at the top of our organisations. Overall this report explains the key elements that are needed for successful collaboration.

Whilst our industry is being challenged by synthetic or clean proteins there is also a growing demand for real, nutrient dense, healthy food. We have an opportunity to make a strong link between the health of the environment and the health of the food that it produces. What can we do today to set us up for the next 100 years?

Acknowledgements

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I feel extremely privileged to be accepted as part of the 2017 Nuffield NZ scholars. Any other year would not have allowed me to experience this with 5 other amazing individuals. Mathew Hocken, David Kidd, Ryan O'Sullivan, Nadine Porter and Jason Rolfe thanks for the sharing this journey with me. I looked forward to intertwining journeys into the future.

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Foreword

There has never been any other options of an industry I wanted to be involved in, it's always been agriculture. Growing up on the family sheep and beef farm allowed me to experience farming as a family unit. The love of the land and the environment around it runs in the blood. Having graduated from Lincoln University in 2004 with a B. Com Ag Farm Management, I headed overseas to explore the world. Upon my return I began working in the fertiliser industry as a sales rep. This led to many different roles. As a Certified Nutrient Management Advisor and nine years' experience using Overseer, my most recent work has been with farmers to manage and mitigate environmental risk on farm.

However, I had always wanting to be working on farm. When the opportunity came in 2013 to become part of the family farming business I jumped at the chance. Due to a personal change in early 2014 the decision was made not to continue farming. I could remain in agriculture just not in the capacity I had envisaged. This was a significant turning point. I looked at what was challenging our family business and farming within environmental limits was an area that I could make a difference. At this time, the Hurunui Waiau Regional River Plan was operative and there was a rule that significantly affected the ability for our farm and others like it to increase production, even within the seasonal variability that exists with dryland farming. My family has farmed on, swum in and enjoyed the Hurunui River for five generations. Under the plan the river was at its load limit for Nitrogen. A community working group was established to come to an agreement on how best to move forward. This was my first experience of 'community collaboration'. It went round in circles for 12 months until sub groups where formed. A community decision has still not been agreed on.



Figure 1. The Hurunui River at the back of the family farm.

The word collaboration continued to come up across the country as catchments and regions try to come to agreement on how best to manage the environment and allocate nutrients with in regulation. Divide is occurring in the industry. I would read and hear phrases such as “we need better collaboration” or “we need to collaborate more”. Why aren’t we getting this right? Human and capital resources are stretched. In a small country with about 60,000 farmers why can’t we effectively collaborate?

In applying for a Nuffield scholarship it was easy to choose the topic. What does effective industry collaboration look like for environmental gains? I’ve had an amazing opportunity to better understand the collaborative process, understand what has happen when it doesn’t work and what needs to happen for it to effectively work. I looked at a number of different environmental programs and how they have been delivered to get real change for farmers and communities. It all takes time. Lots of time. And everyone needs the same shared goal. “We cannot solve our problems with the same thinking we used when we created them” Albert Einstein.

1. Introduction

Global consumers are demanding sustainable products. In a recent survey (Solar City, 2014), 75% of consumers stated they are more likely to purchase products from companies that are making more of an effort to be sustainable. New Zealand products such as protein and fibre are a small proportion of global production. For New Zealand farmers to stay relevant on a world stage we need to be identifying which consumers and markets we want to be dealing with and ensuring we have an authenticated product to provide them.

Currently in New Zealand, rural communities have been struggling as more businesses and people move into urban regions. In addition, these urban communities are putting pressures on farmers to decrease their environmental impact. The development of the National Policy Statement for Freshwater (Freshwater NPS, 2014) has meant that regional councils have had to implement strategies to improve water quality. Nutrient (Nitrogen and Phosphate) allocation through the use of OVERSEER® and Farm Environmental Plans has been utilised widely across New Zealand by regional councils to reduce farm nutrient losses. Mitigations for sediment loss and E.coli are also considered. This has led to industry bodies and supply companies moving from a traditionally transactional and support relationship to environmental advocates for their specific industry. The additional regulation on farmers, as well as environmental competition between sectors (dairy and sheep & beef, irrigated and dryland) has seen divide amongst our communities.

Effective collaboration between industry bodies, supply companies and therefore sectors, would provide the opportunity to include the whole community in the environmental discussion and provide united messaging around sustainability and New Zealand agriculture. Sustainability is not an activity, it's the change to thinking that leads to activity that makes use sustainable. Sustainability is no longer a tool to be used for marketing, it's the story and the authentication behind the sustainability that will sell our products.

To create effective industry collaboration all interested parties need to be included in developing the New Zealand agricultural message. The KPMG Agribusiness Agenda 2017 ranked “involving the spectrum of interested parties in the vision conversation” as the second priority for the New Zealand agri-food sector. The report then goes on to state that we need to ensure all interested are involved in the development of a vision for the future.

Through my work at Ballance Agri-Nutrients, working with farmers around environmental management I have seen many great examples of farmers getting stuck in to do what's right but I've also seen a divide in this industry. All too often I hear and read phrases such as ‘We need to collaborate more’ or ‘we need to collaborate better’. But what does that actually mean? What does effective primary industry collaboration look like for environmental gains? That is the questions I have been asking myself and others over the last 12 months both in New Zealand and overseas.

In this report, effective collaboration is defined as communities of different backgrounds and opinions working in harmony towards a common goal. Collaboration is explained using five essential elements and twenty success factors. During my travels, 68 interviews were conducted using a semi structured approach and 4 Case studies from groups dealing with environmental management have been compared and contrasted to identify which of the essential elements and success factors have been used. The aim of these case studies is to give industry and regional groups some inspiration to collaborate to achieve the changes they need to make on farm to achieve the environmental goals.

This report is primarily targeted at industry leaders of land based, food producing agriculture. I believe for collaboration to truly occur we need agreement at the top of our organisations.

1.1 The current New Zealand situation – SWOT

To best understand why effective industry collaboration for environmental gains is important, we need to understand our current situation. This will help us identify what we can achieve. This is my interpretation of a SWOT analysis to understand our current situation.

Table 1. SWOT of current New Zealand Agriculture situation.

<p>STRENGTHS</p> <ul style="list-style-type: none"> • Willingness of farming community to do the right thing • Ongoing science • Abundance of water • NZ's pasture based system • Competitiveness of NZ farmers against the world • Farming systems created to suit climatic conditions • Genetics • High quality produce • Single level of government • Creative proud New Zealanders eg. Weka workshop • Grass fed GMO Free, Antibiotic Free, hormone free. Good time to wrap it up together as a selling point • Not farming with subsidies • Next Generation of farmer making decisions • Supportive Rural Professionals • Nutrient Management tools eg. OVERSEER 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> • Urban/Rural divide • Competition between farmers in different sectors • Competition between sectors • Farmers not accepting of being told what they can and can't do on farm • Not using social media effectively • Not using main stream media effectively • Distance to our markets • Not telling our unique New Zealand story • The rest of the world not really knowing about New Zealand • Animal welfare standards • Heavily export dependant • Public perception is reality, regardless of the truth • Poor ability to manage water as a resource • Lack Traceability • Lack of extension in ag – enabling wider adoption • Over complicating before doing the basics
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • Plentiful water • Engaged farmers • Willingness by farmers to do what's needed • Social media • Better use of taxes/grants/funding • #loud&proudkiwi. We already punch above our weight on a world scale, let's do it with our food • Potential for expanding NZ's range of value-add products • Telling the pasture story – grow grass, grow animals, recycle animal waste, etc • Understand our difference and market it! E.g. free range meat. • Organic – or a derivative of this way of operating. • Diversification 	<p>THREATS</p> <ul style="list-style-type: none"> • Synthetic food • Great story telling of other 'Real Food' producing countries • Younger generations not knowing where food comes from • Farming systems – focused on production • Social media and main stream media • Animal welfare standards • Environmental regulation • Climate variability • Attracting enough skilled staff members • Market volatility, which appears to be the new norm • Value of land, not focused enough on cash flow and too dependent on equity • Traceability

2. Aims & Objectives

There is an increasing amount of resources being used to best understand and implement environmental management in New Zealand land based agriculture. I am regularly hearing and reading statements that the industry needs to collaborate more and collaborate better. The aim of this research project is to gain a better understanding of what effective industry collaboration looks like and get an understanding of where the agricultural industry can make improvements.

Information on the collaborative process has been collected through the literature, from academics and from collaborative practitioners. The objective of this is to know what steps need to be taken to achieve the desired outcome of effective collaboration.

Case studies have been completed from groups and organisations I met during my overseas travels which were working for environmental outcomes. The objective of these case studies is to explain why the group formed, how they formed, the structure of the group, what helped with buy-in, gains that have been made by the group, future challenges and keys to success.

Three key themes were selected from this information. The objective of this is to identify how we can make changes and ensure the success of collaborative groups within New Zealand agriculture.

3. What is collaboration?

The Oxford dictionary simply defines collaboration as ‘work together on an activity’. It sounds pretty simple right?

There have been years of research and work gone into understanding collaboration. Collaboration is defined by Wilder Research Centre as *“Collaboration is a mutually beneficial and well- defined relationship entered into by two or more organizations to achieve common goals. The relationship includes a commitment to mutual relationships and goals; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards”* (Mattessich, Murray- Close and Monsey, 2001)

If collaboration is done correctly a more durable and effective **relationship** is established.

Collaboration brings previously separated organisations into a new **structure** with full commitment to a common mission. Such relationships require comprehensive planning and well-defined **communication** channels operating on many levels. **Authority** is determined by the collaborative structure. Risk is much greater because each member of the collaboration contributes its own **resources** and reputation. Resources are pooled or jointly secured, and the products are shared. (Mattessich, Murray- Close and Monsey, 2001)

There are some essential elements highlighted in this statement. They are further described in table 2.

Table 2. Essential Elements for Collaboration (Adapted from Mattessich, Murray- Close and Monsey, 2001)

ESSENTIAL ELEMENT	DESCRIPTION OF COLLABORATION
Vision and Relationship	<ul style="list-style-type: none"> • Commitment of the organizations and their leaders is fully behind their representatives. • Common, new mission and clear goals are created. • One or more projects are undertaken for longer-term results
Structure, Responsibilities, Communication	<ul style="list-style-type: none"> • New Organisational structure and/or clearly defined and interrelated roles that constitute a formal division of labour are created. • More comprehensive planning is required that includes developing joint strategies and measuring success in terms of impact on the needs of those served. • Beyond communication roles and channels for interaction, many “levels” of communication are created as clear information is a keystone of success.
Authority and Accountability	<ul style="list-style-type: none"> • Authority is determined by the collaboration to balance ownership by the individual organisation with expediency to accomplish purpose. • Leadership is dispersed, and control is shared and mutual. • Equal risk is shared by all organisation in the collaboration.

Resources and Rewards	<ul style="list-style-type: none"> Resources are pooled or jointly secured for a longer-term effort that is managed by the collaborative structure. Organisations share in the products; more is accomplished jointly than could have been individually.
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The Wilder Research Centre has established twenty factors that influence the success of collaboration. They are grouped into six categories. During the collaborative process it is considered good practice to check against the factors to gauge the success of the process. There is a check list in Appendix 2.

The table shows the twenty factors and the six categories they are grouped in.

Table 3. Twenty Success Factors (Adapted from Mattessich, Murray- Close and Monsey, 2001)

Category	Factor
ENVIRONMENT	<ol style="list-style-type: none"> History of collaboration or cooperation in the community Collaborative group seen as a legitimate leader in the community Favourable political and social climate
MEMBERSHIP CHARACTERISTICS	<ol style="list-style-type: none"> Mutual respect, understanding and trust Appropriate cross section of members Members see collaboration is in their self-interest Ability to comprise
PROCESS and STRUCTURE	<ol style="list-style-type: none"> Members share a stake in both process and outcome Multiple layer of participation Flexibility Development of clear roles and policy guidelines Adaptability Appropriate pace of development
COMMUNICATION	<ol style="list-style-type: none"> Open and frequent communication Established informal relationships and communication links
PURPOSE	<ol style="list-style-type: none"> Concrete, attainable goals and objectives Shared vision Unique purpose
RESOURCES	<ol style="list-style-type: none"> Sufficient funds, staff, materials and time Skilled leadership

Collaboration takes time and energy to be successful. A clear goal needs to be set and agreed to by all parties as to why the group should be working together. Often we rush the process because we have time constraints and the social capital has not been built amongst the group. Social capital is a form of economic and cultural capital in which social networks are central. Social capital is about the members of the group better understanding what their strengths, values and challenges are. The better the understanding, the higher the social capital. Building the social capital is critical to the success of the collaboration. 'If people could improve their knowledge, especially important during the social capital building time, the collaborative process would be more effective' Roberta McDonald, Nuffield Scholar, Ireland. If there is not a mutual understanding of the parties involved, the goal will never be achieved.

This understanding leads on to trust and respect. Having trust and respect amongst the group allows the differences to be discussed. In many situations differences are due to a lack of understanding.

Effective collaboration starts with the individuals involved. If the right type of people are not involved the collaboration will not be a success. The people involved need to have the ability to understand where others are coming from and have the respect and mana of the group they are representing.

The figure below shows the 5 essential skills an individual involved in the collaborative process should have. A long term successful relationship is unlikely without the five skills presented below.

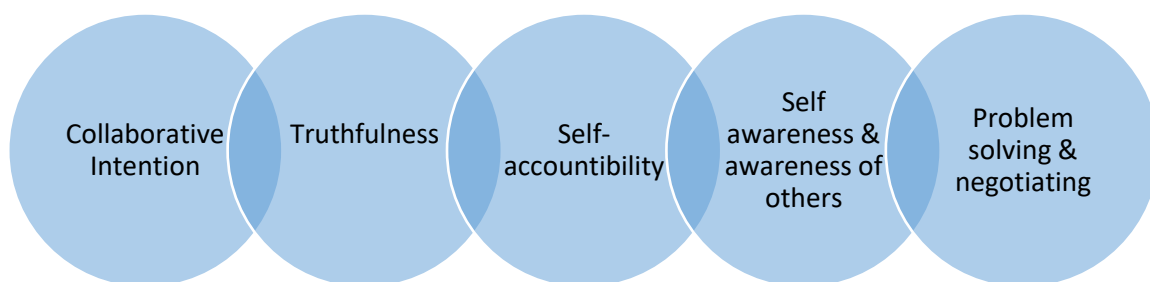


Figure 2. The Five Essential Skills (Tamm and Luyet, 2004)

There needs to be a combination of people involved who are information providers and influences. The figure below describes how a mixture of information and influence is important. Before identifying who the people involved will be, it's important to establish what the combination of

information providers and influences need to be. By using this simple matrix it allows the best combination to be identified.

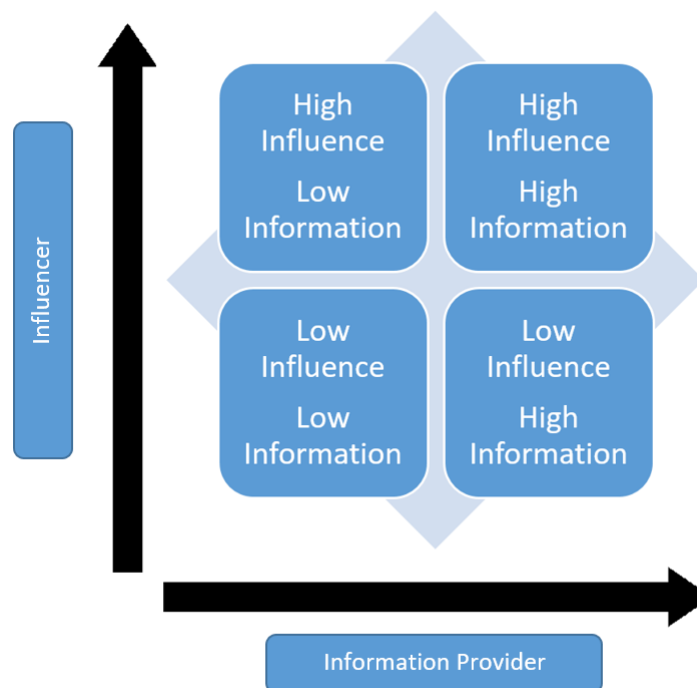


Figure 3. Information provider vs Influencer

Once the groups have been identified it then allows individuals that bring this right set of skills to be identified and asked. This should not be an open invitation. To be effective collaborations need to move to a position where they have both high levels of information and high levels of influence (Figure 3). In developing effective collaborations it is important to establish the skill sets of the people available and work to bring the people needed together in an environment whereby they can work together to develop a collaborative team that has both information and influence.

There needs to be clear communication back to the group and people are being represented so everyone knows what stage the collaboration is at. "Consistent messages help create behaviour change" Finola McCoy, Animal Health Ireland.

If the foundations are set and the process reviewed along the way, there is every chance the collaboration will be a success.

4. Why collaborate for Environmental Gains?

Collaboration within the New Zealand agricultural industry makes sense. We are all food producers farming within the same physical and ecological environments. Instead of talking about Tom the sheep and beef farmer or Sarah the dairy farmer, we need to talk about Tom & Sarah the food producers that farm in the same environment. We have all been part of the problem and we are best suited to be part of the solution. As individuals, farmers want clean water and a sustainable farming business. I have not met a farmer that does not want clean water and a sustainable farming business. As a country we need strong rural communities that will continue to thrive and provide excellent quality food to our domestic and overseas consumers. The soil, water, ecosystem and biodiversity that underpins our economy is across all land based, food producing sectors. By pooling our resources we can build our social capital, share our knowledge and done correctly this will be an effective use of time. However, we need to spend the time in the beginning to have any chance of gaining time. Whilst there have been some really good examples of collaboration working well such as ACRE (Ag Communities Respecting the Environment) in the lower North Island, as an industry it has not been successful. The Farmer Leaders group formed in May 2017 is also a step in the right direction. The inclusion of Iwi and all land based agriculture would see this group achieve more traction. It's time for change - Nothing changes if nothing changes.

There is no denying that getting community agreement once statutory regulation is in place brings challenges. It requires a lot more listening and engagement by involved parties. As an industry there are clashes over nutrient allocations. In some situations conflict resolution needs to occur before effective collaboration can take place. Different sector groups within catchments are seen as competitors. Our competitors are other protein exporting countries. We need to remember this. Communities are suffering and the challenges coming to farmers from non-farming citizens regarding water quality is at an all-time high.

During the Nuffield Triennial conference in the UK, LEAK UK Chief Executive Caroline Drummond commented on the challenges they are facing in the UK regarding the health of people's diets. She felt the challenges and discussion they are having regarding health is very similar to the challenges and discussion they were having regarding the environment 25 years ago. If they had the opportunity to combine the two there would be a much better understanding of where food came from and how it is actually produced, not perceived to be produced – both good and bad. Bringing the consumer along the journey with the farmer links the health of the food to the health of the environment that food is produced in. This is a great opportunity for New Zealand as discussions

regarding the environment are prevalent and health conscious consumers are prepared to pay for good quality food that has been produced sustainably.

There is a lot of talk about environmental sustainability but we can't talk about this in isolation. To be truly sustainable we need to ensure we are not only environmentally sustainable but socially and economically sustainable. It's hard to be green when you're in the red.

As an industry in New Zealand we have 1000's of people that are passionate about ensuring a future for generations to come. Understanding the collaborative process will allow us to implement change and achieve our desired goals. We are all part of this. As Simon Sinek said, 'Accountability is hard. Blame is easy. One builds trust, the other destroys it'.

5. Method for research

The findings presented in the following section are the result of sixty eight semi structured interviews, reading and observations carried out during eight months of Nuffield New Zealand scholarship travel between March and October 2017.

Discussions were had with levy organisations, companies and individuals involved in the environmental management before leaving New Zealand. The Nuffield Contemporary Scholars Conference (CSC) and the Global Focus Program (GFP) were used as a means of gauging general awareness of other countries' perceptions of what environment management was happening in New Zealand. Countries visited as part of the CSC and GFP were Brazil, Argentina, Singapore, India, Qatar, Denmark, United Kingdom and America. Countries were selected for personal travel based on desktop research and personal recommendations regarding success and challenges with environmental management and the collaborative process. Countries visited were America, Canada, Ireland, United Kingdom, Denmark, China and Australia. Interviews were held with farm businesses across a wide variety of sectors, commodity organisations, consultants, industry bodies, agribusiness companies, universities and research institutes, Government officials primarily in Foreign Affairs, Trade and Agriculture Ministries, and non-government organisations. Reading and listening to podcasts about the collaborative process during my travel helped to develop my thinking about what is necessary to have successful collaboration. The podcasts covered examples outside of agriculture such as health, business, technology development and art.

Groups and organisations were interviewed following a semi structured approach with the same questions being used to lead the discussion. The question prompts are listed in Appendix 1.

Responses were recorded in note form and are held by the author.

A video blog was kept and posted on social media via Facebook and Twitter which gave me a record of my thinking throughout the year and also allowed me to keep family, friends and colleagues updated on my travels. This also allowed people to give me instant feedback and challenge my thinking which was greatly appreciated while travelling.

6. Selected Overseas Case Studies

The following four case studies are from community and national organisations that were met with and interviewed during the 6 months of travel as part of the Nuffield Scholarship. The purpose of the case studies is to explain the situations, how they were established, what was achieved and what have been the key learnings from these case studies. The common theme that came through was a need was identified and the groups could see the power in working together. Whilst they had their differences at times, the purpose of what they were trying to achieve was greater than their individual desires.

Case Study 1

6.1 Linking the Environment and Farming UK (LEAF)

Why did they form?

LEAF was formed in 1991 by a group of likeminded farmers who could see that a collective voice was better than working individually. They wanted to be showing consumers what they were achieving on farm. They saw an opportunity for a two pronged approach. The first was to improve farming practices and drive sustainability by the development and uptake of, initially, Integrated Crop Management which was built around Integrated Pest Management and then becoming Integrated Farm Management. The second approach was to reposition agriculture in the minds of the general public.

How did the group form?

They had a strong first Chairman in David Richardson. He was very inclusive which forged the way for all the people around the table to be open and honest in order to get action and move forward on the work needed. Furthermore having some very good farmers speak in support of LEAF and go on to become the first demonstration farms, added further credibility. The group's vision around farming, living and eating sustainably was well communicated. One of the original employees is now the Chief Executive, Caroline Drummond.

Structure of group

LEAF has been developed as a charity which has a £1.3million turnover. This is made up of 1/3 memberships, 1/3 grant and 1/3 funding. The team is growing as LEAF employ more passionate people. In June 2017 they merged with FACE (Farming and Countryside Education) which has built up their strength in public engagement and education.

What helped with buy in?

They have a clear vision - *Our vision is for a world where we are farming, living and eating sustainably*. Finding and implementing innovative solutions to sustainability challenges cannot be addressed in isolation. It requires the involvement of a wide range of actors from across the food chain – farmers, retailers, researchers and Non-government organisations (NGO's)(LEAF website, 2017). They have remained very consistent with their messaging which helps build trust with farmers and consumers. They have always focused on an integrated farm approach and responsible agriculture in the minds of the general public. When LEAF was formed in 1991 they were engaging with NGO's which was unheard of. LEAF recognised there needed to be an understanding of what their values were and identify areas which they had in common and where there will be differences.



Figure 4. Leaf Integrated Farm Management

A LEAF certification has been in place for 11 years. LEAF mark fresh vegetables are sold through Waitrose supermarkets in the UK. The LEAF mark doesn't guarantee a premium at this stage but it shows to the customer there has been integrated farm management on farm. LEAF certified farmers see opportunities going forward for LEAF mark products as the section of the market grows for certified products which have been sustainability produced. Some Restaurant groups are also looking into how they can use LEAF marked produce on their menus.

Future Challenges

- Brexit
- People not recognising the link between Climate change and the environment
- The increasing demand for food
- Obesity and health of people
- People want good quality food until they have to pay for it.
- No global governance infrastructure for sustainably produced food with consistent standards between countries regarding environmental management, animal welfare and social reasonability.
- Governments being legislative driven. There is a risk of problems being taken out on the farmers that have not been fully thought through and understood by government.

Gains that have been made by the group

- Open farm Sunday which has been running for 11 years. They now had a total of 382 farms that open their farm in early June every year. They have seen a change in urban engagement and a greater understanding of farming and how their food is produced. They send out a questionnaire which provides them with feedback. 1 in 7 people have never heard a cow moo.
- Consumers are starting to look out for LEAF certified products.
- Waitrose fresh vegetables are LEAF mark certified.
- Clear public engagement and messaging about pesticide use.
- Clear public engagement and messaging about Nitrogen from fertiliser.

In 2016 they released their 5 year strategic direction - 'LEAF: the go-to organisation for the delivery of more sustainable food and farming'

Our priorities

Our priorities will be focused on building our capability and delivery, specifically around five enabling

objectives:

- *Tripling LEAF's capability and capacity over the next five years to deliver its work and outreach.*
- *Increasing the adoption of more sustainable farming practices through Integrated Farm Management.*
- *Improving industry recognition and demand for sustainably sourced products.*
- *Leading a collaborative approach within the industry for better public engagement and education among consumers, children and young people.*
- *Positively influencing people's attitudes towards, and knowledge of food, farming and the environment.*

(LEAF UK website, 2017)

Key to the Success

- The framework has always been about continued improvement rather than a blue print, it is very site specific to individual farms.
- The messaging and vision has remained consistent.
- It started with likeminded farmers across the arable and horticulture sectors. As the movement grew livestock farmers wanted to be involved. It's been driven by farmers.
- The organisation operates in 3 channels:
 - Technical knowhow and knowledge transfer
 - LEAF Sustainable review, a self-assessment
 - Public engagement – 38 demo farms and 9 innovation centres.
- High technical farming standards have always been included. There is a clear expectation of what's required to become LEAF certified.
- Whilst the certification is shown on food sold to end consumers, it doesn't guarantee a premium.
- The program has improved efficiency on farm.
- A strong link between the health of the environment and the health of the food it produces.
- Engagement with end consumers.
- Skilled, well trained and engaged employees that work with farmers to provide them with the right tools and services to make meaningful changes on the ground.
- Feedback from farmers and consumers to make continues improvement.
- Reflect on what has been going well.
- Farmers are used as the 'mouth piece', they are telling their own story.
- They are clear on their message and who their audience is.
- Farmers have a choice to be involved.

5 KEY SUCCESS FACTORS

Collaborative group seen as legitimate leader in community

Started by respected farmers.

Mutual Respect, Understanding & trust

Farmers involved want the best outcome for all parties.

Members see collaboration is in their self-interest

Farmers involved believe they will benefit from the collaboration.

Shared Vision

Our vision is for a world where we are farming, living and eating sustainably.

Sufficient funds, staff, materials and time

Set up as a charity allows a team to enable the vision to happen.



Figure 5. LEAF farming with Nature. Renner Farms, Northumberland, UK

Observations

The main observation from this case study is what can be achieved when likeminded farmers work together with a shared vision. There is a holistic approach to farm management which has allowed LEAF to merge with FACE to better build the community understanding of farming and food production.

Case Study 2

6.2 Grow Ontario Together

Why did they form?

Agricultural organisations recognised the need to work together on Ontario's Domestic Action Plan for Achieving Phosphorus Reductions in Lake Erie, Canada. There is an enormous task ahead of them regarding water quality in Lake Erie but they have realised that the only way they are will achieve anything is by working together. They learned this from being originally unorganised on how to deal with regulation regarding insecticide (Neonicotinoids) in relation to the bee population and other pollinators. NGO's were well organised and this was a clear benefit. The new regulations and the political process shocked farmers and agribusiness groups. Accustomed to an environment where

farmers' voices are given a generous hearing, farmers instead found themselves fighting against a vocal and organized environmental movement.

The agricultural organisations involved have shared values and realised they have been part of the problem and are best placed to be part of the solution. They could see the value in being an agricultural voice that is united. Agricultural policy and business issues affecting farmers are complex, and are best served by a coordinated response from farm organisations. They identified that agricultural organisations need to collaboratively pursue actions in the best interests of Ontario farmers, and avoid duplication while utilising existing resources to their maximum potential.

How did the group form?

Grow Ontario Together (GOT) was formed in 2016, initially only including the Grain Farmers of Ontario and Ontario Pork. It included the chair of each organisation. The collaboration now includes the Beef Farmers of Ontario, Ontario Sheep Farmers, Ontario Greenhouse Vegetable Growers, Ontario Fruit and Vegetable Growers, the Ontario Processing Vegetable Growers, Ontario Federation of Agriculture and Thames River Phosphate Reduction Collaboration. There has been a key person involved in the formation of the group, Michael Keegan. Michael had previously worked as a civil servant, and then as a staff member in the Ministry of Agriculture, Food and Rural Affairs. He saw an opportunity for farmers to be more organised in relation to regulation. He felt farmers don't want to be villains on these issues, they want to be heroes. He started talking to farm leaders in late 2015 and the group was formed in 2016.



Figure 6. Toxic Algae boom in Lake Erie

Structure of group

The organisation is a collaboration with a decision-making body comprised of the leaders of the participating organizations. The leadership group is co-chaired by the Grain Farmers of Ontario (GFO) Chair and the Ontario Federation of Agriculture (OFA) Chair. They were chosen by the leadership group as a whole.

The Chairs of each organization form the leadership and governance committee. Senior staff (executive director level) also participate in the leadership committee - but chairs are decision-makers with direct accountability to each of their organizations.

GOT have no employees, instead they use contractors. The contractor, Michael Keegan & Associates (MK & A) is external to the collaborating organisations and provides project management, advice and guidance for the collaboration. The project manager is be accountable to all members of GOT. The contractor does much of the activities but also leverages significant people power from each of the participating organizations. There are currently 2 contractors from MK & A engaged with GOT.

What helped with buy in?

The group was established on shared values. They have a very clear mission statement “Healthy soils, clean water. Good business, Strong communities”.

The group has a clear target of who’s involved, the agricultural organisations, and why they are working together.

...The guiding principle behind the collaboration is to ensure a collective and effective voice on the key issues affecting agriculture in Ontario to influence and control the trajectory of public and government actions in response to those issues. The priority issue focus has been, and will continue to be, on Ontario’s Domestic Action Plan for Achieving Phosphorus Reductions in Lake Erie (DAP). As such, the primary outcomes expected from the project is to:

- *Influence and control the development of policy, programs and actions from Ontario in its DAP commitments,*
- *Mitigate costs and other burdens to agriculture that might develop from DAP commitments*

A Memorandum of Understanding (MoU) signed by all parties clearly outlines expectations, funding and exit routes for parties involved. GOT members determined at the first meeting a proportionate

share of the retainer and all other resource costs. Changes to the proportionate costs can and will be made should new members join GOT. Everything has been clear from the outset.

Future Challenges

The reduction of Phosphate levels in Lake Erie is a huge task. One of the critical issues that arises in the execution of required activities is around the necessary resources to be successful. As individual organisation look to provide solutions to their farmers it is important that coordinated efforts and pooling of resources continues to be successfully executed. This is critical to achieving the objectives and outcomes.

The Lake is bordered by four American states, Michigan, Ohio, Pennsylvania and New York and Ontario in Canada. This brings up challenges of accountability and politics between countries and states. This will continue to be ongoing.

MK & A is a critical resource in this project. For it to continue to be successful, Michael in particular, needs to prevent burn out.

Gains that have been made by the group

The nine agriculture organisations have a clear goal and structure in place to face challenges to the industry together.

They are an organised group the provincial and federal government can work in partnership with to provide farmers with the tools they need to improve nutrient management practices on their farms. This includes support, incentives and regulation.

Conducting and supporting better monitoring research activities to ensure that collective efforts are having the right reduction impacts.

Key to the Success

There were very clear objectives set by the group. It is the intention of organisations to work together under the Grow Ontario Together (GOT) banner to jointly identify priority issues, develop positions on those issues, and to collectively take those positions to the public, government decision-makers and other interested stakeholders to secure a sustainable future for Ontario farm families. The guiding principle behind the collaboration is to ensure a collective and effective voice on the key issues affecting agriculture in Ontario. The GOT partnership organisations wish to ensure Ontario farmers' interests are well represented to governments and to the public. This has happened at a time of generational leadership change in Ontario. There is an appetite at leadership level to do something different.

GOT has looked at how decisions are being made within government. This has determined their 'why' they need to work together. By understanding the government decision making process they have been able to fill the void and deliver solutions. This not only allows them to influence policy but be in the driver's seat.

The leadership group meets quarterly with 2 written updates a month from MK & A. They also meet as needed when issues or events require additional time for discussion. The majority of organisations are based in Guelph, Ontario which makes it geographically easy to meet.

Observations

The main observation from this case study is the role Michael Keegan plays. Having a key person who understands the policy and the situation of the farmers allows solutions to be delivered that are a win win. Through his knowledge of government they

5 KEY SUCCESS FACTORS

Favourable political and social climate

Organised groups are being listened to government as NGO's experienced with neonicotinoids.

Appropriate cross section of members

All land based agricultural groups are included.

Development of clear roles and policy guidelines

Michael Keegan is key to the facilitation of this group.

Open and frequent communication

Quarterly meetings by the group as well as two monthly written updates provided by MK & A per month allows everyone to be informed.

Unique purpose

The goals and vision of this group differ from that of the member organisations.

have been put in the driver's seat. "Fill the void of government decision makers. Not only influence but be in the driver's seat" Michael Keegan, Grown Ontario Together.

Case Study 3

6.3 Iowa AgSTATE

Why did they form?

Iowa AgSTATE was formed in 1997. Representatives of farm and commodity organizations, agribusinesses, state government and Iowa State University began to talk about the need for a long-range, strategic plan for Iowa agriculture. The group involves leadership of all segments of Iowa agriculture to develop a proactive, futuristic vision for Iowa agriculture and an action plan to help make that vision a reality. They identified the need for pooling their resources together as different industries were facing similar challenges. Iowa is the 2nd ranked state in the nation for agricultural production and value of exports; 90% of its land is used for farming and food production. A name designed to help the public understand the purpose of the group was chosen. Iowa AgSTATE is an acronym for "Agricultural Strategic Thinkers Acting Together Effectively". All members are also partners in the Clean Water Iowa initiative which includes the Iowa Nutrient reduction Strategy.

How did the group form?

Initial discussions were amongst like-minded Chief Executives. They could see value in forming a group and plans were put in place for the group to be formed.

VISION STATEMENT

Empower Iowans to lead the world in responsibly-produced food and agricultural products to not only meet, but exceed, the demands of customers. *Iowa Department of Agriculture and land stewardship website, 2017.*

MISSION STATEMENT

Dedicated to identifying challenges and opportunities in Iowa agriculture and recommending changes to help the entire state achieve the greatest possible benefit from Iowa's food, materials, and products industry. *Iowa Department of Agriculture and land stewardship website, 2017.*

Structure of group

Commodity organisations make up the members. They typically send their Chief Executive Officer and chief elected officer (president, Vice president or chairman). They represent the organisation for the time they serve in their position. Some CEOs that have been in place for 10 years or more, most of the elected farmer leaders are in place for a maximum of 2 years

Iowa AgSTATE

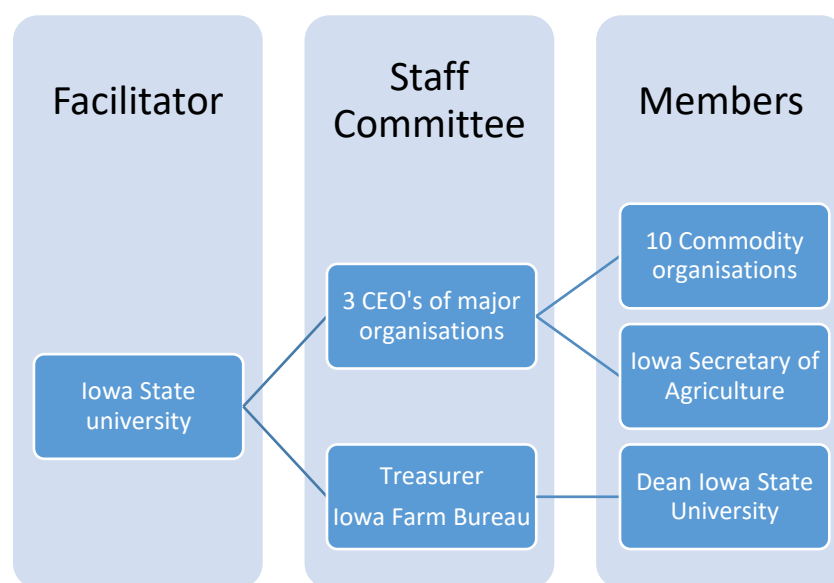


Figure 6. Iowa AgSTATE Structure

Meetings include updates from the organisations on activities and issues that are important, political and non-political. Iowa AgSTATE is a place to share, not to get approval from others. It is a place where ideas and solutions are presented to see if others are interested in joining to bring several groups together around an activity. Policy is talked about, however this is not generally voted on.

What helped with buy in?

All the organisations involved get value out of the being part of the group. Sub groups are formed when issues are brought to the group by existing members. An example of this is the AgSTATE labour taskforce. It has been identified for a number of years that farming businesses were heavily reliant on immigrant workers yet nothing was being done to address the situation. A case was presented to the group by one of its members stating the issues and what could be achieved if the industry addressed it together. Some points included:

- The current unemployment rate in Iowa is 3.1% - lowest since 1962. The state is at a point where it is difficult to find individuals to fill open jobs. How do we get more workforce?
- There has been no change in immigration law since 1990, even though the world has changed in many ways. In the beginning, America needed the best and the brightest. Now they are short of labour.
- Visas are a time consuming process
- The goal of the initiative is for 70 percent of the Iowa workforce to have education or training beyond high school by the year 2025. Less than half the workforce does now.

It was agreed at the meeting that a task force would be formed. *Iowa AgSTATE Labour Taskforce: Gretta Irwin, Iowa Turkey, suggested forming a task force to discuss the shortage of agriculture workers. "This is a really important issue we've been talking about for 20 years, but nothing has happened." She said a task force could come back to the full AgSTATE group with at least some talking points, perhaps something on the policy side where AgSTATE groups could agree to provide a unified front. Irwin volunteered to chair with group. Several people spoke in favour, and offered to assist. It was agreed the task force would be formed, and groups could have one or more representatives participate, if desired. (AgSTATE meeting minutes, June 2017).* The first meeting of the task force was held September 2017, 3 months after the group was formed.

Addressing an issue such as labour is of benefit to all the members. Whilst it was brought to the group by one member organisation, they all get value out of it.

Future Challenges

The group is responsible for establishing a Farm Bill Plan for the State. These are generally issues that all are agreed on and if a group disagrees, then that issue is not put in the document. There needs to be a process put in place for how to work through items that aren't agreed on as these will continue to come up.

Iowa AgSTATE represents a vast majority of the opinions of farmers, but not all. There are a few groups that represent a minority point of view that are not part of AgSTATE. They generally disagree with the mainstream groups on many approaches, their memberships are very small. If the small groups start to relate to NGO's their voice will get heard. These groups could pose a challenge if there is not some form of contact and understanding.

Gains that have been made by the group

The state of Iowa continues to be a power house of American agriculture. The formation of AgSTATE has allowed the state to address challenges to agriculture in a collaborative way. One example was when the Clean Water Iowa initiative was released in 2013. Having AgSTATE in place already allowed discussion around implementation of the initiative to take place. Since its release, 56 demonstration projects located across the state are in place to help implement and demonstrate water quality practices and a record level of funding (\$4.8 million) was obligated to match the \$8.7 million farmer/landowner investment to install cover crops and other in-field practices to reduce nutrient loss. The group has allowed Iowa to stay relevant.

Key to the Success

- The members see great value in having a united voice.
- They want to ensure Iowa stays as a productive state.
- Meetings are held quarterly with a clear agenda.
- “Ag State typically meets 4 times per year, maybe from 10am-3pm, certainly less than a full day with time for folks from around the state to travel in and home if they are just coming for this meeting”, Bill Northey, Iowa Secretary of Agriculture, 2017.
- There is trust, respect and a clear vision for the group.
- Organisations see value in having all commodities strong, not a monopoly.

Observations

The main observation from this case study is the willingness of each sector group to ensure everyone is getting value out of the group. Participants want the best for the state of Iowa and see value in having all commodities strong. The name of the group,

5 KEY SUCCESS FACTORS

Mutual respect, understanding and trust

Organisations involved want the best outcomes for all parties.

Appropriate cross section of members

All land based agricultural groups are included as well as the University.

Ability to comprise

The organisations involved see the bigger picture of Iowa remaining strong therefore are prepared to comprise when needed.

Shared Vision

There is a clear vision, mission and strategy which has been formed by all members of AgSTATE.

Skilled Leadership

A combination of CEO's and elected chairman ensure the group has good leadership.

Iowa AgSTATE - Agricultural Strategic Thinkers Acting Together Effectively, clearly defines what the group is about.

Case Study 4

6.4 Danish Agriculture and Food Council

Why did they form?

Denmark has a population of 5.7 million people. It produces enough food for a population of 15 million people. The Danish Agriculture & Food Council (DA & FC) was formed in 2009 and it represents the farming and food industry of Denmark including businesses, trade and farmers' associations. Due to the size of the individual organisations it was identified the need to work together to better spend money, talking as one voice and stay relevant on a global scale.

How did the group form?

In 2008 the agricultural industry was fragmented and there was no collective voice. The DA & FC is the result of a merger of five organisations: Danish Agriculture, the Danish Bacon and Meat Council, the Danish Agricultural Council, the Danish Dairy Board and Danish Pig Production.

Structure of group

The council is a combination of Farmer unions, co-operatives, finance, young farmers and levy bodies.

The figure below shows the structure of the council. The Chairperson of each organisation is represented on either the Primary Sector Board or the Company Board. The Primary Sector Board represents the farmers and the Company Board represents the co-operatives and the employees of companies. Currently there are 29 people on the Primary Sector Board and 24 on the Company Board. The Joint Board is a combination of both boards. To ensure there is transparency between both boards and that communication is clear, the Company Board has three representatives on the Primary Sector Board and vice versa. The chair and two deputies of the Primary Sector Board and the Company Board make up the Joint Chairmanship which then feeds directly into the Chief Executive of DA & FC.

Danish Agriculture & Food Council

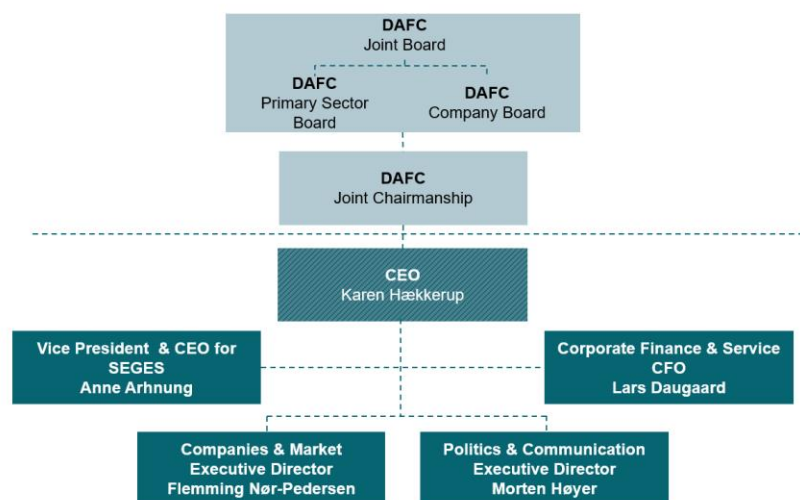


Figure 7. Danish Agriculture & Food Council Structure. DA & FC Nuffield presentation 2017

Meeting timeframes:

- Primary Sector Board – 10 / year
- Company Board – 5 / year
- Joint Board – 2 / year
- Joint Chairman – 12 / year

The Joint Board have two meetings per year. The December meeting is to plan for the year ahead and the June meeting is to approve the budget.

The Joint Chairman meet monthly and work on matters needing faster decisions. They have the mandate from the Joint Board to make decisions when needed.

Primary Sector members are elected to be chairperson of the industry they represent buy its members. Company Chairs are automatically part of the Company Board. Larger companies such as Danish Crown can allocate who they want to be on the board. The Chairperson of the Primary Sector is always chair of DA & FC.

What helped with buy in?

There is an unwritten agreement that you allow each sector to gain something. An example of this was when the dairy payout was low and the EU offered subsidies. The pork industry allowed this to happen. Due to this agreement they will not start fighting amongst themselves, it has always been

this way. There is a level of respect between Chairs and they know they need to work it out and find solutions. The Joint Chairmanship will also ensure there is very few disagreements through their monthly meeting.

When the council was established it was clear on the areas it would cover for its members, these include:

- Overall industrial policy and regulatory framework
- Research and innovation policy
- Trade and market policy and the EU Common Agricultural Policy (CAP)
- Animal welfare
- Food safety
- Environmental and energy policies

It does not include marketing and sales of the products as this sits with companies.

Future Challenges

The council is funded through farmer levies. Farmers are currently paying twice – for their sector body and DA & FC. The DA & FC levy is related to the turnover of the farm however there is maximum limit. Company members pay a subscription.

There is an extra cost to farmers for having the DA & FC. Some see other farmers as piggy backing as they are not paying the levy yet reaping the benefit of the council. The council needs to continue to show its value to the industry to ensure farmers and companies continue to pay the levy.

The Danish Agriculture and Food council is unique globally, rare in the European Union but common in Scandinavia. The changing political world will continue to be a challenge for all agricultural countries and Denmark is no different. They will have to continue to deal with the democratic process and compromise where needed.

Gains that have been made by the group

The council has successfully changed the perception of farmers in Denmark. Local consumers trust Danish produced food and will actively seek it out when making food purchases. There is pride amongst Danes that the food produced in Denmark is world leading. This has been achieved by a joint messaging, front footed issues such as the environment and engaging with the urban population.

Key to the Success

'Danish farmers don't consider their neighbours as competitors, they see other countries as competition' Anders Sogaard, DF & AC, 2017.

All the organisations and companies involved in the council have cluster thinking about the agri-food sector. They are driving for the same goal for Danish food and agriculture.

There is a strong alignment with government. The current Chief Executive, Karen Haekkerup is the former Minister of Agriculture. She is a social democrat and still has close relationships with people in government. Her understanding of the political system has the allowed DF & AC to be positions to make the most of situations. Currently she is a key player in the success of the council.

The executives and boards firmly believe that they must continue the development of the sustainable intensive food production where Denmark produce more with less input and with a lower environmental impact. This is an area where Danish food production has a competitive advantage, and there is a great potential. Strong political will and strategic investments are needed to bring about this vision of circular production, but if they continue to develop sustainable intensive food production, they can create jobs and growth, enrich nature and provide answers to some of the major global challenges we all face.

Observations

The main observation from this case study is the pooling together of resources. Denmark is a proud agricultural country and they see identified the need to work together to stay relevant. The Chief Executive of DA & FC plays a key role with her ties to government. The personal contacts allow dialogue between DA & FC and government. A comment was made that this is not illegal and people talk so take advantage of it.

5 KEY SUCCESS FACTORS

History of collaboration or cooperation in the community

Denmark agriculture has a history of co-ops and working together.

Members see collaboration is in their self-interest

Working together will help them remain relevant in the global agri- food sector.

Multiple layers of participation

Every level within each partner has some involved in the contribution and success of the collaborative process.

Established informal relationships and communication links

Strong link between DA & FC and government due to previous work relationships.

Sufficient funds, staff, materials and time

More efficient use of resources due to collaboration

7. Key themes

During the numerous interviews both in New Zealand and abroad there were three key themes that continued to come up, these were:

1. The type of people involved
2. Identifying the best way to work together. Is it Collaboration, Cooperation or a partnership
3. The need for a strong facilitator

These themes are further explained.

7.1 The Type of person involved

To ensure the collaborative process has the best chance of being successful it is important to have the 'right' type of person sitting at the table. Members of the collaborative group share and understanding and respect for each other and their respective organisations: how they operate, their cultural norms and values, their limitations and their expectations (Mattessich, Murray- Close and Monsey, 2001). All too often the person involved is the most senior, the most available or the most knowledgeable. Whilst these may be considered desirable traits, they may not lead to the right person for the job and egos must be left at the door. What is the key to success are the following traits:

- Ability to understand where the other parties are coming from
- Respect and Mana of the group they are representing
- Communicate well with the group they are representing
- Have the mandate to make decisions at the table
- Ability to gift give and gift take (comprise)
- They believe it's in the group's best interest to be involved in the collaborative process
- Has a good network and understanding of the local environment (physical, political and social)

"The right type of person is a person who can create a movement" - Andres Sogaard, Danish Food & agriculture Council, Denmark

"We are nodes in a network, the stronger the nodes, the stronger the network" Alan Cohen, Illumio, USA

For the best people to be involved the individual groups need to value the process and take the time to ensure the most appropriate person is there to represent the group. Often this process is rushed and the wrong person is involved. The biggest challenge we have is the 'right' person is often

involved in a number of other project and can't dedicate the time that is needed for the process to be a success. There is a possibility for industry bodies and companies to allow employees opportunities at different levels to be involved in collaborative process to develop the skills necessary to have impact at the top of our organisations.

The individuals involved need to consider themselves board members. They need to show governance and leadership not management.

7.2 Identifying the best way to work together

This journey began because the word collaboration continued to come up whenever multiple groups or industry bodies needed to work together in relation to the environment. More often than not the next phrase to follow was 'we need better collaboration' or 'we've failed to collaborate'. Do we in fact need to be collaborating? Would we see better results in certain areas if we co-operated or worked in partnerships? The time and input required for effective co-operation and partnership is significantly less and can achieve sustainable outcomes.

Definition of Cooperation and Partnership

Cooperation is characterised by informal relationships that exist without any commonly defined mission, structure, or planning effort. Information is shared as needed, and authority is retained by each organisation so there is virtually no risk. Resources are separate as are rewards. (Mattessich, Murray- Close and Monsey, 2001)

Partnership is characterised by more formal relationships and an understanding of compatible missions. Some planning and division of roles are required and communication channels are established. Authority still rests with the individual organisations but there is some increased risk to all participants. Resources are available to participants and rewards are mutually acknowledged. (Adapted from Mattessich, Murray- Close and Monsey, 2001)

To ensure there is no disappointment and the expectation is clear it is paramount the group decides how in fact they will be working together. Collaboration in its true form will bring a safe and supportive environment where participants can talk openly and candidly.

Often the words collaboration and co-operation are used interchangeably but they represent fundamentally different ways of contributing to a group and each comes with its own dynamics and power structure that shape groups in different ways. When collaborating, people work together on a single shared goal. When cooperating, people perform together while working on selfish yet common goals (cloudhead.headmine.net, 2017). If we look into a number of the perceived

collaborations that have failed since the National Policy Statement for Fresh Water has been in place, a number of them would in fact be cooperation's.

First of all it needs to be established if in fact collaboration is needed. Do we need to collaborate, cooperate or is it a partnership that's required.

7.3 Facilitator

People play such a big role in the effectiveness of collaboration. Having a strong independent facilitator that can enable the group to hold their differences while moving forward to reach agreement. The facilitator can address the differences and note them in a 'risk register'. The group should not try to sort those risks until the trust and respect has been built within the group. If there are individuals that cannot wait, they may not be the 'right' type of person to be involved.

The facilitator should have an understanding of the focus and goals of the group. It is important that they can't have conflicts of interest e.g. be a staff member of a regional council. This will delay the trust building as individuals may consider them to be influencing decisions.

The facilitator needs to be respected by the group to keep the group on track and weather the conflicts of interest that will likely occur.

8. Conclusions

There is no doubt the world we live in today is constantly changing and increasing in complexity. There are higher demands on our nature resources and we are set with the task of ensuring they are there for generations to come. Farming and the environment will always go hand in hand. It is a marriage that will never divorce no matter how toxic it gets. It is up to our land based food producing primary sector to ensure we continue to learn and improve our farming practices to protect the environment we all live in. New Zealand has a favourable climate and good soils for growing high quality protein that is respected on the world stage. New Zealand has a great reputation and our natural environment plays a big role in this. By maintaining this reputation and collaborating as an industry we can position ourselves for the high end real food market. The link between a healthy environment and the health of the food it produces is not a fashion, it's a trend. The trend is your friend.

While in Washington DC I was looking at President Roosevelt's memorial. I came across a quote *"Men and nature must work hand in hand. The throwing out of balance of the resources of nature throws out of the balance also the lives of men"*

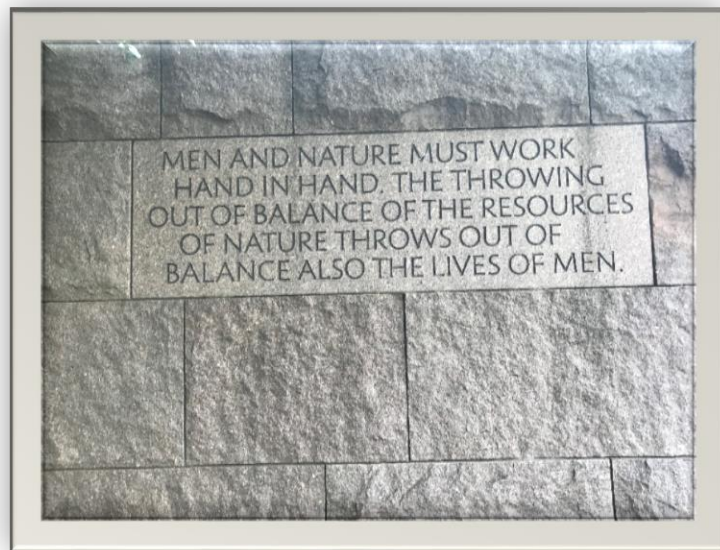


Figure 8. President Roosevelt memorial, Washington DC.

We are all living in a VUCA world. This military phrase is an acronym for Volatile, Uncertain, Complex and Ambiguous. In the words of Gerd Leonhard, Futurist and CEO of The Futures Agency, “flip the VUCA. Velocity, Unorthodox, Collaboration and Awesomeness”. I feel these words should be the new catch phrase for New Zealand agriculture.

9. Recommendations

Starting this journey I wanted to find ways that the New Zealand agricultural industry could effectively collaborate for environmental gains. As we all know, we are a small country at the bottom of the world. To remain relevant in the global market we need to be promoting and supporting the industry and the environment, no one is going to do it for us. The environment that we all live in and many of us farm in needs to be treasured for the sustainability of our industry and our country. We truly live in paradise and we need to treat it that way. My recommendations are as follows:

1. UNITED VOICE

The leaders of our primary industry need to set clear goals and have a joint vision on what we want to achieve for our environmental management. This has been happening

independently amongst our sector groups. Going forward this needs to be done collectively for the good of all New Zealand. There needs to be a willingness for compromise. The goals need to be Specific, Measurable, Attainable, Relevant, Time bound (SMART) goals that everyone is committed to. Transparency with all New Zealanders about work that is being undertaken to improve the environment – both good and bad will help authenticate our story. Being transparent will allow the trust to build.

2. RIGHT TYPE OF PEOPLE

Having the right type of person involved in the collaborative process. The right type of person is someone that can create a movement, has the ability to understand where others involved are coming from and has respect and mana of the people they represent. There is no room for egos in the collaborative process. There needs to be a combination of influencers and information providers. It should first be established which organisations need to be involved then look to the people to ensure diversity.

3. COLLABORATION, COOPERATION OR PARTNERSHIP

Established if collaboration, cooperation or partnerships are needed to achieve the desired goals. Collaboration is not always necessary but if collaboration is the best option the process needs to be committed to.

4. STRONG FACILITATION

There is a need for facilitators that can hold the difference in the group yet move the group forward to make decisions. These facilitators need to be independent of the organisations involved in the regulatory process including regional councils.

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Appendices

Appendix 1. Questions covered during semi-structured interviews

- What does collaboration mean to you?
- Why do you need to collaborate?
- Is there any regulation/legislation involved?
- What are the challenges you have faced with collaboration?
- What have been your strengths?
- What's the diversity of the people involved in collaboration?
- How were they selected to be involved in the process?
- What level of influence do they have in the group they represent?
- What have been the groups strengths and challenges?
- What do you see the future of collaboration liking like with the use of technology?
- Where to for this group/individual?
- How do you keep people engaged in the process?

Appendix 2 Wilder Research Collaboration Factors inventory

The Wilder Collaboration Factors Inventory

Name of Collaboration Project _____

Date _____

Statements about Your Collaborative Group:

Factor	Statement	Strongly Disagree	Disagree	Neutral, No Opinion	Agree	Strongly Agree
History of collaboration or cooperation in the community	1. Agencies in our community have a history of working together	1	2	3	4	5
	2. Trying to solve problems through collaboration has been common in this community. It's been done a lot before.	1	2	3	4	5
Collaborative group seen as a legitimate leader in the community	3. Leaders in this community who are not part of our collaborative group seem hopeful about what we can accomplish.	1	2	3	4	5
	4. Others (in this community) who are not a part of this collaboration would generally agree that the organizations involved in this collaborative project are the "right" organizations to make this work.	1	2	3	4	5
Favorable political and social climate	5. The political and social climate seems to be "right" for starting a collaborative project like this one.	1	2	3	4	5
	6. The time is right for this collaborative project.	1	2	3	4	5
Mutual respect, understanding, and trust	7. People involved in our collaboration always trust one another.	1	2	3	4	5
	8. I have a lot of respect for the other people involved in this collaboration.	1	2	3	4	5
Appropriate cross section of members	9. The people involved in our collaboration represent a cross section of those who have a stake in what we are trying to accomplish.	1	2	3	4	5
	10. All the organizations that we need to be members of this collaborative group have become members of the group.	1	2	3	4	5
Members see collaboration as in their self-interest	11. My organization will benefit from being involved in this collaboration.	1	2	3	4	5
Ability to compromise	12. People involved in our collaboration are willing to compromise on important aspects of our project.	1	2	3	4	5
Members share a stake in both process and outcome	13. The organizations that belong to our collaborative group invest the right amount of time in our collaborative efforts.	1	2	3	4	5

Wilder Collaboration Factors Inventory www.wilderresearch.org

Factor	Statement	Strongly Disagree	Disagree	Neutral, No Opinion	Agree	Strongly Agree
	14. Everyone who is a member of our collaborative group wants this project to succeed.	1	2	3	4	5
	15. The level of commitment among the collaboration participants is high.	1	2	3	4	5
Multiple layers of participation	16. When the collaborative group makes major decisions, there is always enough time for members to take information back to their organizations to confer with colleagues about what the decision should be.	1	2	3	4	5
	17. Each of the people who participate in decisions in this collaborative group can speak for the entire organization they represent, not just a part.	1	2	3	4	5
Flexibility	18. There is a lot of flexibility when decisions are made; people are open to discussing different options.	1	2	3	4	5
	19. People in this collaborative group are open to different approaches to how we can do our work. They are willing to consider different ways of working.	1	2	3	4	5
Development of clear roles and policy guidelines	20. People in this collaborative group have a clear sense of their roles and responsibilities.	1	2	3	4	5
	21. There is a clear process for making decisions among the partners in this collaboration.	1	2	3	4	5
Adaptability	22. This collaboration is able to adapt to changing conditions, such as fewer funds than expected, changing political climate, or change in leadership.	1	2	3	4	5
	23. This group has the ability to survive even if it had to make major changes in its plans or add some new members in order to reach its goals.	1	2	3	4	5
Appropriate pace of development	24. This collaborative group has tried to take on the right amount of work at the right pace.	1	2	3	4	5
	25. We are currently able to keep up with the work necessary to coordinate all the people, organizations, and activities related to this collaborative project.	1	2	3	4	5
Open and frequent communication	26. People in this collaboration communicate openly with one another.	1	2	3	4	5

Factor	Statement	Strongly Disagree	Disagree	Neutral, No Opinion	Agree	Strongly Agree
	27. I am informed as often as I should be about what goes on in the collaboration.	1	2	3	4	5
	28. The people who lead this collaborative group communicate well with the members.	1	2	3	4	5
Established informal relationships and communication links	29. Communication among the people in this collaborative group happens both at formal meetings and in informal ways.	1	2	3	4	5
	30. I personally have informal conversations about the project with others who are involved in this collaborative group.	1	2	3	4	5
Concrete, attainable goals and objectives	31. I have a clear understanding of what our collaboration is trying to accomplish.	1	2	3	4	5
	32. People in our collaborative group know and understand our goals.	1	2	3	4	5
	33. People in our collaborative group have established reasonable goals.	1	2	3	4	5
Shared vision	34. The people in this collaborative group are dedicated to the idea that we can make this project work.	1	2	3	4	5
	35. My ideas about what we want to accomplish with this collaboration seem to be the same as the ideas of others.	1	2	3	4	5
Unique purpose	36. What we are trying to accomplish with our collaborative project would be difficult for any single organization to accomplish by itself.	1	2	3	4	5
	37. No other organization in the community is trying to do exactly what we are trying to do.	1	2	3	4	5
Sufficient funds, staff, materials, and time	38. Our collaborative group had adequate funds to do what it wants to accomplish.	1	2	3	4	5
	39. Our collaborative group has adequate "people power" to do what it wants to accomplish.	1	2	3	4	5
Skilled leadership	40. The people in leadership positions for this collaboration have good skills for working with other people and organizations.	1	2	3	4	5