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Primary Attraction

Understanding Student Awareness of Primary Sector Career Opportunities

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Kellogg Rural Leadership
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Leadership

“A true leader has the confidence to stand alone, the courage to make tough decisions and the compassion to listen to the needs of others. He does not set out to be a leader, but becomes one by the quality of his actions and the integrity of his intent.”

- Douglas MacArthur (1880-1964) United States Army General -

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Executive Summary

According to the UN, food production must double by 2050 to meet the demand of the world's growing population. Innovative strategies are needed to help combat hunger, which already affects more than one billion people in the world. (un.org 2009)

The world is changing and I believe the historical poor perceptions of the primary sector are no longer acceptable. There are students out there hungry for knowledge. My goal is to be proactive and help plant the seed of primary sector interest in their minds.

My rationale behind tackling this subject is the unacceptable, ill-informed opinions that our school leavers are still being exposed to.

My aim is to understand school leaver knowledge and awareness of primary sector career diversity.

My research was gathered via an 18 question questioner surveying 20 students, an interview with three ASB Future Leaders and an interview with two teachers.

Key findings;

- Historical poor perceptions by parents, teachers and career advisors that are effecting knowledge of modern primary sector career options.
- Our youth are very interested in knowing more regarding New Zealand's primary sector, there is strong interest in finding careers that help New Zealand's economy prosper.
- Creating interest is only the first step, nurturing that interest right through to employment is lacking.
- Tying together social media, technology and emotional marketing are the key to creating change.

Recommendations and action list;

- The creation of a national curriculum tailored to New Zealand's key economic drivers.
- The use of cutting edge technology on a national scale to expose our students, parents and teachers to modern, world leading primary sector opportunities.
- Create a concept that follows initial interest all the way through to employment.

Forward

In August 1981 at Timaru hospital, a baby boy was born, second eldest of 4 children. He was born to happy, humble, urban parents, mother a receptionist, father a New Zealand Railways technician. He grew up happy and healthy in Timaru City knowing no other. At the age of 8, his parents decided they needed more space for the family of 6, and purchased 8 hectares not far from Timaru, in a rural community called Southburn. It was here that they built a house and purchased 10 sheep and 1 cow.

This decision would drastically influence the boy's future.

Straight away the boy fell in love with the rural lifestyle, spending every spare opportunity nearby at a family friends 300-hectare sheep and beef property. It was here that he was taught the basics of farming, but more importantly, he was taught in a way that made farming enjoyable, a feature that cemented his aspirations for a career in the primary sector.

The young man didn't overly enjoy his high school years, and left school at 17 to enter the workforce, taking a secure but menial position at a local meat works. Although he was earning great money, his inner voice was telling him, maybe there's more to life.

Fate, chance, call it what you will, during a normal day on his way to work, voicing his interest in farming and aspirations for something more, his carpooling neighbour, who happened to farm deer, gave the boy a name and address of a high country station he had recently visited. Those details were, Paddy and Barbara Boyd, Managers of Haldon Station, possibly the two most important names that would influence in the boy's future from here on.

This quiet, curious and hardworking young man, with a thirst for knowledge had finally found his calling...

The Primary Sector – High country sheep, beef and deer farming.

So how did this boy go from growing up in the city, to a career in the primary sector?

Was there a push in high school to look at careers in the primary sector?

What if the boy's parents had decided they were happy with living in town?

How many urban school leavers with the right attitude and ability are ill informed of the exciting diverse range of primary sector careers, but have not been as fortunate as this boy to be introduced to the sector?

How many students are we willing to let slip through the gaps?

Personal Background

Hi, I'm David O'Sullivan 35, married to Chanelle O'Sullivan 28.

Sheep, beef and deer farming is my passion and occupation. After several years at Haldon Station as a general hand I had the opportunity to travel to Ireland for a family occasion. I took this opportunity and worked on a stud sheep farm near Dublin for 1 year, I returned to New Zealand and completed a Diploma in Farm Management with distinction, from Lincoln University, I then worked my way up taking on progressively challenging roles to get to where I am now. Chanelle moved down from Auckland aged 19 to a shepherd general role at Guide Hill Station, Tekapo. A brave move that I take my hat off to. Chanelle then pursued dairy farming, vet nursing, Farming Mums NZ Facebook group Creator/Director, and now part time with Landcare NZ, and Grassroots Media as a social media marketing specialist, as well as looking after our 2 children Isabelle 5 and Hunter 2. Very busy, but we'd have it no other way, we work very well as a team.

We are currently going through the final stages of taking on an equity management position of a New Zealand High Country property producing an innovative, industry changing, world leading health product.

Introduction

Why is the Primary sector important to New Zealand? The agricultural, horticultural, forestry, mining and fishing industries play a fundamental role in New Zealand's economy, particularly in the export sector and in employment. Overall, the primary sector directly accounts for around 7.5% of real GDP and contributes around half of New Zealand's total export earnings. (Treasury NZ 2015)

New Zealand's primary industry export revenue is expected to have reached over \$36.7 billion in the year ending June 2016. In 2012 MPI announced a goal of doubling primary sector exports to \$64 billion by 2025. The primary sector currently accounts for one in six jobs nationwide, it is estimated 50,000 new employees over the next ten years will be needed to reach MPI's goal. (MPI 2016)

The Primary sector has a massive range of career opportunities that in my opinion, your average urban and rural school leaver has no idea about.

In sectors not just agriculture, but viticulture, forestry, aquaculture, horticulture, equine, agribusiness, international trade, supply chains and rural services ect.

I believe I was very fortunate to have been exposed to rural life at a young age, albeit on a very small scale. Until recently taking on leadership roles within the industry, I was never aware of the diverse career opportunities out there. Diverse primary sector opportunities were never mentioned at school, it was very much, "go to university" or "go out into the work force and find a secure job". I don't believe a lot has changed. So finding motivation to tackle this issue was not difficult.

Literature Review

In this section I have looked at previous projects on topics similar to my research question, firstly to make sure there was no double up but more importantly to discover if similar key findings were found. I have also reviewed a national article on career days (Johnston A, 2017) and an international article on primary industry knowledge (Ahmad O, 1991) Lastly I have reviewed a national webpage designed purposely to attract people to the primary sector.

Past project - Jason Rolfe

“Stoking Secondary School Students’ Interest in Primary Industry Studies” 2015

Rolfe looks at three main areas; the career advice given to future generations regarding primary industries, what knowledge careers advisors have of opportunities available and what stigmas/barriers are preventing students from undertaking primary sector careers. This is a very impressive project, very in-depth data and with great recommendations.

Key points;

- The lack of knowledge and education of both the schools and the parents involved in helping students towards the primary industry careers. Being ill-informed is contributing largely towards the continual poor perception of the primary sector.
- Responsibility for providing information to students on the broad range of primary careers, has largely been left to the individual industries. This information was often left to the career advisors to pass on to students, without any key instructions for the best way to use it.
- Common barriers/stigmas were; lack of knowledge of individual roles within the industry, poor weather/hard work, farming is for dummies and rural students are put off by bad experiences at home.
- The industry needs to sell itself better. All too often the industry is portrayed in a negative light.

Past project – Barbara Kuriger

“Perceptions of a career in the dairy industry” 2001

Kuriger looks into the perceptions and barriers Taranaki secondary school students are facing in regards to seeking a career in the dairy industry.

This is also a very impressive project, with an obvious amount of hard work going into the gathering such impressive survey data.

Key points;

- Better work needed with careers advisors to expose students to new opportunities.
- Better understanding and action needed to change agricultures poor perception.
- Offer incentives to attract more students into the primary sector.
- Working with career undecided students, those identified to be the target market.

National article review

“Experience day helps pupils explore options” (Johnston, A. 2017)

This article looks at events that are being organised in relation to advertising and promoting the diverse range of career opportunities within the New Zealand primary sector.

This particular event was a “Get Ahead Experience Day” held at Innovation Park near Christchurch. 104 students from 13 local schools attended the event.

The event was hosted by NZ Young Farmers and funded by Dairy NZ and Beef & Lamb NZ.

The event offered modules from participating agricultural entities, including Pipfruit NZ, Horticulture NZ, Sprout Agritech, MPI, PGGW, Claas, ANZ, Primary ITO, Careers NZ, FAR, Balance and Gallagher. They covered sciences, engineering and commerce plus many more. “It was nice having all industry sector representatives in one spot” was feedback given by one particular attendee.

NZ Young Farmers business development co-ordinator said the event was a great success and more of the same would be offered throughout other parts of the country.

“Get Ahead” project manager said 10 events would take place nationally. Up to 130 students were registered for each event.

“We are finding students are really engaged in the day. They don’t necessarily have any background in agriculture”

International article review

“Social, Economic and Farming Characteristics Affecting Perception of Rural Youths Regarding the Appropriateness of a Career in Production Agriculture”.

(Ommani A, Islamic Azad University, Shoushtar, Iran – 1991)

In my opinion the essence of this article is very similar to the issues we are facing here in New Zealand. Urbanisation and poor perceptions are causing a shortage of skilled youth in rural Iran, which in turn is effecting future development and rural progress. A serious issue as Iran addresses its goal of self-sufficiency in the production of food and fibre products.

The objective of this article is to present the results of a study designed to analyse the social, economic and farming characteristics affecting the perception of rural youths considering a career in agriculture.

A key theme effecting Iran and New Zealand is;

“One of the main factors affecting young people’s success to employment in agricultural practices was their connection with local informal networks. Informal networks provided young people with information about opportunities or personal recommendations for jobs”

The common link here is the lack of knowledge and education our teachers and students have of modern primary sector careers.

The specific objectives of this survey were;

- To understand rural youth by demographic characteristics.
- To determine perception of rural youths of Shoushtar Township regarding appropriateness of a career in production agriculture.

- To identify social, economic and farming characteristics affecting on perception of rural youths regarding appropriateness of a career in production agriculture.
- To describe perception of rural youths' awareness with respect to production agriculture.
- To identify activities, strategies or policies that could be implemented by government agencies, the private sector or other organizations to support the economic and social conditions conducive to increasing the desire of rural youth to remain in and/or return to rural communities.

Key points

- Rural youth had low levels of perception regarding agriculture. Youths did not have access to training, education or other youth entrepreneurship support programs in their community.
- Approximately 45% of rural youth have low awareness about farming practices. Agricultural extension training courses could be useful to teach rural youth in this regard.
- Low income, poor social participation, mechanization level and the poor awareness rural youths' have in regards to agricultural practices and crop yields are the major contributors towards low career uptake in agriculture.

GrowingNZ

GrowingNZ is a website created by the Primary Industry Capability Alliance (PICA), specifically designed to show students examples of the diverse range of primary sector careers, direction for learning more, personal example clips and up and coming events. PICA is a collaboration between Dairy NZ, Ara, MPI, Primary ITO, NZYF, BLNZ, FAR, Lincoln University, Taratahi and Forest Owners Association.

In my opinion the website has very good content, including good direction for people to explore further. I do believe the website could do with a modern upgrade, aimed specifically at the target audience which I believe is 15 to 20 years old. I am concerned about the awareness and advertising of this website. Of the 18 students that completed my survey, specifically the question, "What type of advertising have you seen for careers in the primary sector?", two mentioned Careers Expo but no one mentioned GrowingNZ.

Summary

This section has brought to light some very similar themes, whether national or international, we are both having similar issues around continual low levels of education and knowledge of modern primary sectors, contributing towards continual poor perception of the sector.

The second point is the great initiatives that are beginning to develop. They sound very good, but the issue I have is this; have they been developed with actual youth input or were they developed by those that believe they know what youth want and how youth think. I also believe interest is easily lost and I am unsure whether the different initiatives being developed to attract our school leavers actually have a solid follow up program that takes them all the way to career uptake.

The next section will endeavour to show the level of awareness our school leavers have and how they would like to contribute towards change.

Methodology

The Process

Before I began the Kellogg course, I had always been interested in knowing how to attract new people to, in my opinion, a great industry.

As you may have guessed the introduction is my story. A city boy, introduced to the rural life via random events.

I began with big ideas and all the answers, contacting big New Zealand primary related companies with big plans, thinking I could change the world. That didn't happen.

I was very quickly brought down to earth, which made me slow down and think. The best way to get answers good enough to create change in the future, is go to the target group and the change makers, our students, school leavers and education leaders.

I then began the process of constructing a survey. Not a simple easily analysable yes/no survey, but one that contains open questions to really extract raw honesty. The feedback response was outstanding.

The survey responses were surprisingly insightful and unsurprisingly honest. These proactive students are the only ones who can really speak with experience as to what needs to change. The process I have taken to answer these questions is.

Survey This survey consisting of 18 questions received 20 responses. It is targeted towards 15-20 year olds, male and female from rural and urban backgrounds. It is aimed at gaining awareness, opinions and ideas for change in relation to primary sector career awareness and uptake. This survey is purposely designed with open ended questions aimed at getting more than a yes-no answer. In my opinion this section is the "gold" of this entire research project. The purposely designed questions allows respondents to open up and speak their minds. The survey was published in two Facebook pages, Farming Mums NZ and NZ Farming, where members were asked to forward the survey to friends matching my target group. Twenty respondents were received. In looking back, I believe I should have been more specific in finding respondents, as I am unaware of the demographic spread and ideally would have wanted more urban respondents.

Education This section will try to gain an understanding from teachers about whether primary sector related education is receiving as much attention, as is the importance of the primary sector to New Zealand's economy. I would like to know what is currently being used within our curriculum to promote primary sector career options. I am also interested about whether the historical poor perception has changed, or is agriculture still portrayed as a "job for drop outs"?

Case Studies This section is designed to; case study three students at a deeper more personal level. I have purposely tried to use individuals from vastly different backgrounds and cultures. The aim of this is for each to explain their upbringing, family and journey into the primary sector, industry awareness, future aspirations, ideas and opinions for change, in relation to the main research question: **How aware are our school leavers of the diverse range of career opportunities within New Zealand's primary sector?**

Findings and Discussion

Below is my analysis of the questions, education review and case studies. The raw data is available in the appendix section.

Survey Questions;

1. Are you from an urban or rural background?

Answer Choices	Responses	
Urban	16.67%	3
Rural	44.44%	8
Combination of above	38.89%	7
Total		18

Summary;

My initial thoughts were; a higher percentage of urban students would have made for stronger data, but this was not the case. As you will see above, there is a low level of awareness, irrelevant to the fact 83 percent have some type of rural experience.

2. Are you male or female?

Answer Choices	Responses	
Male	38.89%	7
Female	61.11%	11
Total		18

Summary;

61%, female responses. Being a historically male dominated industry, females have largely been ignored from general primary sector opportunities. I am aware of a large number of extremely intelligent woman in a diverse range of primary related careers, who are fantastic role models for the female of the future.

3. Age.

Answer Choices	Responses	
13-14	0.00%	0
15-16	22.22%	4
17-18	50.00%	9
19-20	27.78%	5
Total		18

Summary;

Great to see a range from 15 to 20 years old. In my opinion 13-16 is the target age to begin an attraction campaign. More importantly, follow up from here to advise, direct and encourage right through to career uptake is seriously lacking.

4. Have you heard of the New Zealand primary sector?

Answer Choices	Responses	
Yes	100.00%	18
No	0.00%	0
Total		18

One of the respondents noted: "After I started to gain knowledge of New Zealand and its background, the primary sector was something that kept on coming up and how New Zealand's image in the world was from how grass, environment and animals were the best in the world. As I wasn't that familiar with this sector my parents allowed me to be open to it by letting me take the subject in year 10."

Summary;

As I expected primary sector knowledge is wide, but to what level is the key question.

5. What do you think of the primary sector as an industry to work in?

Summary.

A very broad range of answers came from this question. A common theme coming through is the awareness our school leavers have of knowing how important our primary sector is to New Zealand. They are keen and eager to help the country prosper but are held back by ill-informed advice, as you will see from question 12. There is a minority of negative perceptions coming through. In my opinion coming from the historic views of older generations, the negative views stem from a time when farming was historically hard, physical labour, breaking in New Zealand. Being honest but pushing the positives is an area that still needs a lot of work

"The primary industries will be a highly desirable career choice for our best and brightest young people" (Nathan Guy, Bootcamp 2014)

Great intentions from the ministry. Capitalising on their intentions is up to us.

6. Please list the different industries within the New Zealand primary sector that you know of. E.g. Forestry.

Summary.

A very good range of answers of the individual primary sectors; agriculture, horticulture, arable, forestry, equine, aquaculture, dairy sheep and beef.

As I expected there is good awareness of basic knowledge. This is where most knowledge of the primary sector stops. As you will see in the following question, there is limited knowledge when asked to expand on each sector.

7. Please list the different career options that you know of within the New Zealand primary sectors. i.e. Research, Farm Management.

Summary.

There are varying degrees of knowledge. They are very general answers, which tells me they are uninformed of the greater career opportunities out there.

Farm Owner, Manager and Assistant. Tractor Driver, Casual Relief Milker, Contract Milker, Shearer.
(Anonymous respondent)

Agricultural Economist, Agriculture engineer, Animal Scientist, Food scientist, Foreign trader, Rural Banking (Anonymous respondent)

In my opinion we need to leverage off the students that are aware of the diverse opportunities to create an advertising campaign to help inform other students. Farmers teaching farmers meets students teaching students.

8. Where do you get your careers advice from?

Summary.

Career advisors, parents and teachers are the most common areas where the respondents seek advice. Which begs the question, "How aware are our careers advisors, parents and teachers of the primary sector importance and its diverse career opportunities?" This also leads to another important aspect, how many students actively seek career advice? Targeting those that are unsure of direction (like myself) is key to attracting the numbers needed.

9. What do you think are the best parts of working in the primary sector?

Summary

A strong theme coming through for this question is the ability to help the country via an occupation with a purpose.

1. *Getting to help an industry that is vital for financial stability.*
2. *Helping New Zealand's economy to thrive and grow via its backbone industry.*
3. *Being able to increase New Zealand's main primary industry and sustain it for the future.*

It is vital we take note of this key theme, possibly one of the most important of this project. Our youth are very keen to help New Zealand prosper. Leveraging off this key idea is an area I will target in my actions section.

Outdoors, animals, learning and innovation are also popular points to be considered when advertising our industry.

10. What do you think are the not so good parts of working in the primary sector?

Summary.

This is one of the most important questions of the survey.

In recent times it has become increasingly obvious that those involved in the primary sector are not doing a very good job of advertising the positives of our industry and getting walked over by viewer hungry media with sensationalist stories.

There were 2 main issues here, poor knowledge of opportunities and the portrayal that long hours, poor weather and hard physical work covers every primary related career. There are some truths here and we do need to be honest when promoting our industry, but I believe they would not be seen as negatives when managed properly.

As seen in question 6 and 7, the basic awareness is there, which is great, but the more diverse awareness is not. To remedy this I envision a mix of cutting edge technology and smart, sharp advertising, which I will reveal in my action list.

Follow up, is another important area that I believe is lacking.

“One idea might be a ‘New Zealand Primary Sector Skills Fund’ where the industry runs high profile scholarships to top up the Government’s tuition subsidies and student loans. Or Primary Sector Ambassadors who can talk up our industry in the classroom and create stronger partnerships between schools and industry.” (Nathan Guy, Bootcamp 2014)

11. Which parts of the primary sector would you like to work in if you had the opportunity?

Summary.

14 of the 20 responses noted that careers that were hands on practical agriculture, with the remaining six being slightly more diverse. The high percentage of responses that trended towards the more commonly known career options sums up the entire question. As questions 7 and 8 read, this is an awareness issue starting with our teachers, parents and careers advisors.

Responses to question nine suggest our school leavers are hungry for knowledge and opportunities that better our country, yet they are hamstrung by poor ill-informed advice. I believe adding specific classes to the national curriculum, based on areas that have significant impact on our economy, would attract a large uptake, with no enforcement required.

12. While at school, what feedback were you given regarding a career in the primary sector?

Summary.

“Go to university” “Barely mentioned” “Fall back on farming” “Not for females”

Should we accept that in 2017, the people we trust to educate our children are giving this type of advice to our school leavers. Are they really that naive to the importance of the primary sector to the national economy?

It is becoming more common that different sectors are taking groups of teachers out to farmer’s property’s to see for themselves what modern agriculture looks like. While this is great, the logistics are difficult and it only shows one group, one sector. I believe the idea is positive, but the intent is too narrow and needs wider vision, we need to be showing off the cutting edge diversity that the primary sector now offers and we need to be doing it in a way that makes the teacher want to see it themselves.

I will explain more detail in the action list, but I envision using industry leading virtual reality technology to advertise in schools, a smart and sophisticated “day in the life” of every possible primary related career. I envision having no problem with student uptake, but how do I get teacher and advisor uptake, where the main advice and mentoring comes from?

The power of the people, I believe a policy where no student is allowed to view before every teacher has viewed the program, would rectify this.

13. What type of advertising have you seen for careers in the primary sector?

Summary.

There seems to be good uptake over a wide range of advertising, the internet, career days, posters, newspapers. With so many other competing options out there I believe the primary sector needs an advertising point of difference. The virtual reality combined with a social media marketing expert is where we need to be, as soon as possible before another industry joins the dots. Is the current advertising content being used, sharp and smart enough to really encourage the student to investigate further?

“We know the challenges ahead in attracting the best and brightest young people into the primary industries.

My challenge to Bootcamp attendees is to form a working group to work closely with me and my officials to help deliver practical solutions.” (Nathan Guy, Bootcamp 2014)

My intention post course is to attract investment and evolve the virtual reality concept into a practical solution.

14. What advertising content would attract your attention?

Summary

Responses to this question include, diverse, personal, big picture, positives, hands-on and social media. All of these are very much possible and our minister already talks of using a personal touch. My survey mentions no word of this happening, as yet.

The minister suggests that we need primary sector ambassadors who can talk up our industry in the classroom and create stronger partnerships between schools and industry. (Nathan Guy, Bootcamp 2014)

In my opinion; a day in the life, hands on farming is also achievable, but comes with farmer uptake, logistics and health and safety issues on the national scale that I envision advertising to.

15. What type of advertising media do you believe is best suited for this type of promotion, and why? ie. TV, Facebook.

Summary.

Facebook, Facebook, Facebook! I would love to dig deeper into the psychology on why it is so popular, but that's a project for another day. When advertising and promoting career opportunities we need to harness the popularity and reach of Facebook or design something psychologically similar.

I believe Facebook popularity is very similar to three principles from Dale Carnegie's book, "How to Win Friends and Influence People."

1. Remember that a person's name is to that person the sweetest and most important sound in any language.
2. Be a good listener. Encourage others to talk about themselves.
3. Talk in terms of other people's interests.

I envision using these principles to revolutionise the way we advertise and seek employment opportunities, which will be explained more in my actions list.

With social media bringing contact closer there still is a place for TV, papers, posters and pamphlets.

16. What additional information would you like to receive about the career options in the New Zealand primary sector?

Summary.

There is a degree of repetition coming through, that I am trying to steer away from, but is very hard to ignore when these issues are being pushed so strongly. The two main areas being voiced by respondents are; how do we get involved and how can we receive more knowledge on diverse opportunities.

In my opinion most advertising content does contain information on where to investigate further. It may be a case that we need to tailor the advertising differently towards the modern target audience. Social media marketing experts may become an integral part in career opportunity promotion. Our target audience is becoming extremely tech savvy. Thinking towards the future, cutting edge technology may also be an option.

Universities using a more diverse range of practical work options was an interesting answer from one respondent. Is this solely the role of our universities or should our secondary schools be offering diverse work experience options?

17. How would you like to receive this information?

Summary.

The essence I get from this answer on format type when receiving additional info is, "Any way, just give us more information in a fun and engaging way". The personal touch is very popular, but as I have mentioned previously I believe on the scale we need to be advertising, the use of cutting edge technology possibly including a virtual personal touch would be much more effective.

18. Thanks for taking part - Is there anything you would like to add?

Summary.

The final question has really drawn out the fundamental issues that are frustrating our school leavers. Below is a selection of raw data that explains why the primary and education sectors need to undertake fundamental change.

In high school I was, and still am frustrated about the lack of information for people interested, there may be opportunities in the primary industry but it seems impossible to find them

I think there could be better engagement with younger people.

I went to an all-girls private boarding school. I feel they thought the students were too good for the primary industry, i.e. need to be doctors and lawyers.

I think the primary industries could be promoted a lot more to city kids as viable career options.

The social view needs to change

The respondents are eager to learn, eager to contribute and eager to matter. So why in 2017 are they accepting advice from teachers and career advisors that are ill informed offering negative opinions? The next section will endeavour to answer this.

Education Sector View

Our school students spend up to five years at secondary school at a crucial time in their life when they are extremely impressionable.

I believe this is the perfect time to voice the importance of the primary sector and to encourage students to consider the diverse options that are available. For this to happen they need encouragement from their teachers. Why is this not happening?

Two teachers have been asked if they can explain the reason.

Question asked;

How aware do you believe our school leavers are of the diverse range of career opportunities within New Zealand's Primary Sector? Where do you believe the poor perception stems from?

Teacher 1.

As a parent myself I am constantly telling them about the myriad of career opportunities and the importance of agriculture, particularly in a New Zealand context.

BUT there are issues getting more agriculture and horticulture teachers. The reasons for this are anyone with a Ag or Hort degree is in high demand by the industry where they can earn more. New teachers tend to move over from science/biology. There is also a shortage of science teachers nationally. Many teachers do not want to move over to teaching ag/hort for four main reasons 1) They have to teach themselves agriculture and what textbooks there are, are Australian. 2) Many schools still use agriculture as a dumping ground for the less able and difficult students. 3) There are few good teaching resources so teachers have to find/create them 4) The subject association is small and geographically widely spread so it is difficult to get assessments moderated or provide mutual support.

POSITIVE MOVES; Centres of Excellence in Agribusiness and the proposed Agricultural Experience Centre.

Teacher 2.

Mount Albert Grammar School is unique among urban schools in having its own farm attached to the school. Agriculture is available to be studied at all year levels and the Year 13 Agriculture course is a University Approved program. All students have the opportunity to visit the farm and lambing is a particularly popular time. Many students take agriculture at the junior level just for the chance to sample the rural lifestyle and the chance to work with animals as well as study in the classroom.

The agriculture and horticulture teachers are linked to the science department which I think also aids the perception of agriculture as a high tech career.

The perception of agricultural careers you outline above is very much the perception of my generation (I'm in my 60s and when I was young unless there was a family farm it was a pretty tough road to take) and this has possibly carried through to the parents of our current students. It was often the reality "in my day".

However, we make students here very aware that agriculture today is very different and I cite examples of people in their mid to late 30s in managerial roles on large farms earning substantial salaries with housing, vehicle, and meat often added to the package. We also point out that a knowledge of agriculture is not only relevant to on-farm work but also to careers in such things as banking and business and we are offering Agri Business as a subject this year which is proving popular. I often refer to that ad from a while back with the “heard of cows, heard of chickens” to illustrate the value of agricultural knowledge across a range of careers.

We also teach horticulture and students on Gateway are able to choose things like turf management as well. We get students interested in all parts of the primary sector – viticulture and oenology are popular too.

Some students will have inherited negative perceptions of farming but we do our best to dispel these ideas. Of course some students do want the hands-on, mustering or milking careers and we are happy to support them in those directions as well.

There is a difficulty in that those wanting to study agriculture related courses at tertiary level need to go outside of Auckland and even with student loans and allowances this requires a family contribution which not all families are in a position to make. Scholarships help and they make Lincoln attractive to our sporty students interested in agriculture. Waikato and Massey can provide scholarship assistance for some students also.

Summary.

Lack of teachers with modern primary sector knowledge with limited access to modern primary related text books and curriculum direction.

As teacher 1 indicates, teaching is poorly paid in relation to other options for those with primary related qualifications. An incentive may be required to attract teachers with primary industry skills.

This generation of students are battling with parents and teachers that witnessed the time when primary related positions were physically hard and poorly paid. I believe the best way to change the perception of teachers and parents is to create interest and excitement, achieved by my virtual reality career advertising concept, page 27.

In my opinion farmers learn best from other farmers, more so than company sales reps. This concept, I believe also relates to students, which is why I asked the opinion of 3 “future leaders” who presented at a recent New Zealand AgriFood Investment Week seminar. These are the students we need on board to promote positivity. The next chapter discusses case studies about these people.

Case Studies – Future Leaders

In this section I have asked three prominent people that have affectionately been given the title “future leaders”, Can you please tell me about your background, where you grew up, rural or urban, how you learnt about the primary sector and its career options, what you are doing now, what are your future aspirations and finally what is your opinion of my main research question. “How aware are our school leavers of the diverse range of career opportunities within New Zealand’s primary sector.

Future leader 1.

The first case study is a female from a rural background, her family having been farming for many generations with a long association with the land.

“The agricultural industry is all about diversity and finding ways in which we can broaden our outlook at how we provide, grow and create produce for the world. There are so many opportunities within the agricultural and horticultural industries, it is an exciting and promising time to be involved.”

Her passion is for food production and educating people about where their food comes from.

“There is a world shortage of food, by encouraging young people into this sector we are securing our future for the generations ahead. We need to remember that the concept of farming is to provide food, because without food we face a very bleak future.”

She is also very aware of the shortage and negative views of women in agriculture.

“Every day I am surrounded by enthusiastic young men and a distinct absence of girls. The perception of agriculture is wearing gumboots and working on the land, and as a school subject it has had a reputation of being taken by those who are less academic students”.

It is interesting to see the main themes coming through straight away, firstly the thirst for knowledge and the eagerness to contribute towards national and global issues, then secondly the constant battle with negative perceptions.

“While improvements have been made, even now comments are less than favourable. Recently I was asked by a fellow student what subject I had in the next period and when I told them I had Ag- Hort, the comment was “oh what a drop-kick”. This attitude towards agriculture is one of our first barriers, people need to know there is so much more to the industry.

Many of these people who hold negative views have no idea what the industry entails, having no knowledge about practicality of the industry. Education needs to start with our youth so we can change our ways for the future. Only 3,313 students that study agriculture at school are girls and 7,167 are boys. We need to look at these statistics and find a way to improve them and make the courses more appealing for everyone”.

It is inspiring to know we have students out there that are understand the barriers but are still enthusiastic towards the future of the primary sector. How inspirational these students will be if we could only get the resources to voice their opinions on a national scale,

My vision and aspirations for the future is to both, develop the agriculture industry for future generations and create and grow my own company. New Zealand has some of most innovative

farmers, scientists and marketers in the world and by continuing to work together we can achieve some amazing results.

Future leader 2.

My second case study grew up on a dairy farm in the Waikato just outside of Matamata. He spent his childhood playing on the farm and then later relief milking and working on farms for school holiday jobs. He went through school with reasonable grades, leaving College with NCEA level 3 including the requirements to go to University. Interestingly, he did not take any agriculture or horticulture classes at college even though both were offered.

His perception of Ag and Hort classes at school, was they were not seen as a challenge or worth doing as meaningful contribution for what was needed to go to university. He lived on a farm so didn't see the need to study it at school.

His initial career plan and further education was not farming related at all. The intention was to complete law and accounting with a view to joining law enforcement.

"Our teaching staff and careers advisors didn't offer much in other alternatives, satisfied mostly that I had a plan at least, any career in agriculture or agriculture related was not promoted. I had always thought I knew how to milk cows so that was my fall back career position, it had not crossed my mind (or advocated by others) that it could be first choice career move with loads of job options and opportunities".

He still wasn't 100% sure on a path forward, so his parents took him to a private careers advisor (on recommendation from other family) who then proceeded to look at all the options, one of which was something in agriculture. The advisor was not specific, but mostly focused on it being something he enjoyed and had a close affiliation with. So it made sense to include it as part of his tertiary studies and then see what opportunities came from it. He recommended I take a look at agri-business type course at Massey and Lincoln. Lincoln at the time were offering a course that suited an unusual combo of agriculture and accounting, so he went to university at Lincoln. A fantastic 4 years opening his eyes to the theory behind what he had done practically on farm.

"The people I met at Lincoln make up my closest friends but also an invaluable network of smart people across NZ doing great things in all sorts primary sector jobs".

As it turned out accountants with specific agricultural knowledge were in demand, the ability to broach the physical and financial aspects of the farming business is extremely important to successful farmers.

I managed to secure an internship then a graduate job with PricewaterhouseCoopers in Hamilton. Over the next 3 years I completed my professional study and exams and became a Chartered Accountant.

He is currently with KPMG based in Tauranga, giving him the opportunity to provide financial and business support to the primary sector of New Zealand.

Opportunities present themselves to those that are willing, but you have to put yourself in the position to take them. The NZ primary sector has plenty of opportunities for young people and I am very grateful to be pointed in the direction of this industry when I was leaving school. Its pleasing to see programs like Agri-Kids and Teen-ag run by NZ Young farmers are helping put farming in the frame, but there are still large chunks of the urban population where it isn't known to be an option.

Future Leader 3.

My final case study has absolutely no back ground in agriculture, which she sees as a benefit. She enjoyed learning about it, because it was something completely new.

In year 9, the time had come to choose subjects for year 10. She chose Chinese and Accounting Economics, which left 1 more. "Why don't we choose agriculture", she asked her friends, they responded with laughter, saying that agriculture is a bum subject, a subject you take to get for easy credits.

The phrase "bum subject" wasn't something that she agreed with and the fact that people don't want to take a subject because you can get easy credits was a pathetic excuse, she believed.

She took agriculture just for the fact it was different. At that point, she was still planning to become a lawyer or an accountant. As the year went on, she thought agriculture was alright and it was something quite different to what she thought agriculture initially was, she thought agriculture was men out on the farm with pitch forks. Still enjoying it, she took agriculture again in year 11.

This was the year she became obsessed with agriculture. She loved everything about it and found studying about animals, plants, their structure and properties very fascinating, realising the fact that everything starts here.

Her plans were now rapidly changing and she began researching a direction that would have her studying Agribusiness/Agriculture and Horticulture with a conjoint in Accountancy, with an ambition to work towards a career in foreign trade.

She believes in order for the industry to make progress they need more people, especially youth. "At the moment, not a lot of young students think of studying agriculture in school and that's what we need to change".

In her opinion it is the government's responsibility to let everyone know about primary sector opportunities, and believes a primary sector awareness subject should be compulsory in high school for two years.

"If agriculture plays such a big part in New Zealand and it is what New Zealand is known for then it should become compulsory".

"At the moment, not a lot of students or at least girls see this as their future path way and I want to change that. I want girls to enjoy this as much as the guys do and this is not going to happen until we do something about it. In order for the youth to take interest it won't just happen in a day but we need to start thinking now in order for New Zealand's future to be secure".

Summary Statement;

On an export basis the primary sector is extremely important to New Zealand's economy, we have a government with ambitious primary goals for the future and we have intelligent school leavers hungry to contribute. We also have 90% of New Zealanders living within urban areas. The key to linking these four, is positive change in our education system and telling a good story.

Conclusion

The basics are, secondary school students want more information on primary career options, but are hamstrung by ill-informed parents, teachers and career advisors.

“Anyone with a Ag or Hort degree is in high demand by the industry where they can earn more money than teaching” (Anonymous teacher)

We need the education ministry to acknowledge the importance of the primary sector and direct resources to incentivise primary related teaching, and the creation of modern primary related curriculum.

Although it has been successful for generations, teachers are still teaching the basic school curriculum, then sending our students out into the world to find their way. The world is changing fast, is it time we look towards the future and think outside the educational box.

“I don’t think the MOE is uninformed, just not in the business of doing anything about it. They see it as a school’s choice as to what they teach and, after all, you do not need to do agriculture at school to study it at university” (Anonymous teacher)

I believe we need, in a positive way, to involve and inform our new education minister Nikki Kaye. Firstly, primary sector importance and secondly listen to our students, of what they want to learn and achieve at secondary school. In my opinion Nikki Kay is young vibrant and ambitious leader, the perfect qualities to understand our youth and drive change.

I was impressed with the responses from my survey, I was guilty of expecting uninterested, un-useful responses. The students are far more aware than I ever was at that age. Social media has made the world very accessible, they understand population growth and the issues of global food shortage and are eager to contribute to helping New Zealand prosper.

So why are we holding them back with poorly informed, old fashioned advice.

Where has the poor perception of the primary sector careers stemmed from? The truth is, we live the way we do because of industries like these.

1. To increase awareness, firstly we need change from our education leaders. What is the engine room of the New Zealand economy and is that flowing through into our education system?
2. Secondly, we need to drastically increase awareness of the diverse opportunities the primary sector offers, it is unacceptable in an economy such as New Zealand’s, that is so reliant on the primary sector, for our school leavers to have minimal knowledge and false perceptions.

3. Thirdly, we need to increase primary sector exposure to every student. In my opinion there are two types of secondary school leavers, the minority which are those who are motivated, ambitious and know what they want, and the majority, which are those that are unsure of direction, this was me.
Yes, we definitely need the go getters, but I believe the unsure students are equally as intelligent when exposed to their calling. Along with urban raised students these are the students we need to be targeting, I strongly believe that once the seed is sown, of interesting, diverse and potentially lucrative careers that contribute strongly to the national economy, then anything and everything is possible.

Yes – In the past, the primary sector was hard, physical back breaking labour, while our forefathers broke New Zealand in. Today it is exciting, diverse and sophisticated.

Times have changed, so let's change with the times.

Action List

When considering Kellogg, I became aware a research program was required. I told myself, if I get accepted, the topic of choice for the project has to really mean something to me. It has to be a topic that I am happy to give 100% to and once completed, give 100% towards making change happen. That is what I intend to do, I have already made contact with Sprout Agritech.

Over the course of the Kellogg classes and the researching of my project, my way of thinking has changed drastically. I now know what can be achieved and that ideas can become reality with the right research, contacts and attitude. "People like people who help them like themselves" (Dale Carnegie).

Education, awareness and exposure I believe are the key areas that need to be addressed if we are to change and move forward. I have been working on a strategy that links all 3 together. A creation for the primary sector growth, but once IP is secured this has the ability to include other industries.

Here is my strategy for change.

1. Education.

Tailored Education

The education aspect, I believe is the most important. Change starts at the top, and I plan to approach the appropriate people with this concept. I believe there is an opportunity to lead the world and create a national curriculum tailored to New Zealand's key economic drivers.

Initially it only needs to be a short course, introducing all students to what drives the New Zealand exports.

Introduce and expose and let the next generation take ownership. Then listen to their feedback. Once interest is created then find the resources to educate further. I don't generally feel the word compulsory fits well with teenage students, but I do believe it should be a requirement.

Including primary related questions into core subject material is a great addition, but I don't believe it is enough.

My survey shows the modern secondary school student wants more from our education system; these are our leaders of tomorrow. Is it smart to ignore their opinion?

2. Awareness

Create a business that links cutting edge technology with primary career options and information.

Virtual Insight

A day in the life - Primary

VIRTUAL INSIGHT is a business concept where our school leavers have access to virtual reality technology linked together with a smart and sharp advertising campaign designed firstly to introduce them to the importance of the primary sector to the New Zealand economy and secondly introduce them to modern day and futuristic primary sector practices.

I envision a world leading emotional marketing campaign that allows our students to go inside the export sector and view every primary related career possible.

International Trade	Supply Chains	Research	Production	Science	Fisheries
Meat & Fibre	Forestry	Dairy	Technology	ect.	

In an ideal world we would have every student getting hands on experience in every sector. Although this is not impossible it is a logistics and health and safety nightmare.

I believe there is a gap in the market and an opportunity to develop a virtual reality "Day in the life".

I believe this combination will work well. MPI has an ambitious goal for 2025 needing 50,000 new people. Our youth are hungry for cutting edge technology and our school leavers have a thirst for knowledge.

There is also an opportunity I believe, once the IP is secured to allow other sectors to buy in.

3. Exposure

Create a website that revolutionises recruitment. A website where ambitious students can advertise themselves instead of waiting for opportunities to come to them.

AdvertiseMe

Put Yourself Out There

“Ambitious people, making things happen, creating opportunities for themselves”

AdvertiseMe is a website plus app, revolutionising the way we advertise positions and seek employment. It works in conjunction with the new primary based curriculum and the virtual insight concept. It is designed to bridge the gap between created interest and employment.

This is a website where students have the ability to build an profile of their interests, including all the usual details that would be in a cv and cover letter, with no charge.

Gender	Interests	Education	Ambitions	Mission Statement	Goals
Location	Experience	Specific key words		Age	Photos
Non negotiables		Health	Licences	Cover letter	Personal

This account has the ability to be set on either, eg. seeking employment, curious or not seeking employment.

The website is then accessible to companies, for a case by case fee, to search key words and attributes, in the search for potential employers that fits their criteria.

Contact is then made between the two parties where the next step can be organised. This also has the potential to be used on a larger scale

The benefits of AdvertiseMe compared to conventional employment avenues are;

1. It gives career uncertain students the ability to advertise their curiosity and ambitions to explore options relative to their interests.
2. It gives confidential new Start-ups the ability to confidentially seek employees.
3. It gives employers the ability to narrow their search with minimal effort. No advertising, then searching through potentially large numbers of applicants with wide ranges of skill levels.
4. It gives the employer the ability to perform a global search for that highly specific role.
5. It gives high turnover employers the ability to privately seek employees.

“Some of the best positions out there were never applied for”

Conclusion - Strategic Link

All too often, I feel industry promotion initiatives lack national collaboration and fall short of achieving great things. They promote the sector and stimulate interest but fail to take the target along the journey all the way to employment. My strategy link is designed to rectify this.

1. Research the acceptance of a required course covering primary sector importance.
2. Design the Virtual Insight concept, used within the previous course to advertise and expose all career possibilities.
3. While invigorated and enthusiastic, students are then able to create a profile on my AdvertiseMe concept, which will link individual interests with primary related companies, potentially offering work experience, scholarships or employment.

References

Johnston, A. - Experience Day helps students explore options (2017)

Farming Mums NZ - farmingmumsnz.com

Ommani, A. - Islamic Azad University, Shoushtar, Iran (1991)

https://www.researchgate.net/profile/Ahmad_Ommani/publication/267957584_Social_Economic_and_Farming_Characteristics_Affecting_Perception_of_Rural_Youths_Regarding_the_Appropriateness_of_a_Career_in_Production_Agriculture/links/54b90a340cf28faced626784.pdf

Situation and Outlook for Primary Industries, Ministry for Primary Industries (2016), Resources p16

Future Leaders - NZAgInvest

<http://nzaginvest.co.nz/events/future-leaders/>

<https://blog.asb.co.nz/posts/2017/04/the-future-of-agrifood.html>

NZfarmer - Facebook

<https://www.facebook.com/nzfarmer>

Rolfe, J. - Stoking Secondary School Students' Interest in Primary Industry Studies – (2015)

Past project – Barbara Kuriger

Kuriger, B. - Perceptions of a career in the dairy industry – (2001)

SurveyMonkey - Official Site

<https://www.surveymonkey.com>

Treasury NZ – (2015)

<http://www.treasury.govt.nz/economy/overview/2015/12.htm>

un.org – (2009)

<https://www.un.org/press/en/2009/gaef3242.doc.htm>

Appendix

Speech to the New Zealand Primary Sector Bootcamp programme 2014

(Ministry for Primary Industries – Hon Nathan Guy)

“The primary industries will be a highly desirable career choice for our best and brightest young people”

Attracting the best people.

“My third and final theme is people, and it’s potentially the most important because without top people we won’t be competitive or increase value.

We know the challenges ahead in attracting the best and brightest young people into the primary industries.

To reach our export double target we will need an additional 50,000 workers by 2025 and over half of these workers will need a Tertiary or Level 4 Qualification.

This is particularly important to the regions where the primary sector accounts for one third of all jobs. It’s also a concern given the average age of a farmer is 58 years.

We are facing a major skills shortage. We have 10 years to fill the pipeline, and this needs to start today. The government can’t do this on its own, and nor should we.

My challenge to Bootcamp attendees is to form a working group to work closely with me and my officials to help deliver practical solutions.

One idea might be a ‘New Zealand Primary Sector Skills Fund’ where the industry runs high profile scholarships to top up the Governments tuition subsidies and student loans. Or Primary Sector Ambassadors who can talk up our industry in the classroom and create stronger partnerships between schools and industry.

There is no shortage of work underway already, but the potential is there to achieve a lot more by collaborating.

MPI, MBIE and the Ministry of Education have already started working together to consider what skills are needed, and how we can make education and training more responsive to the needs of industry. We also need more clarity for teachers and students on where resources can be found.

The primary sector is increasingly sophisticated with the use of new technologies like robotics, which gives us an opportunity to appeal to a wider audience.

One example is the EPIC challenge which involves Year 10 students developing a marketing plan to convince their fellow students to consider careers in the primary industries. The winning project could be replicated and used around the country.

In the Budget this year the government boosted tuition subsidy rates for degree level and above for agriculture, horticulture, viticulture, forestry studies and other agriculture, environmental and related studies.

There is a lot more we can do to develop our human capability and I want to hear your ideas. I know some of you have started sharing employees between your companies which is a great way of understanding different industries and upskilling."

Raw Survey Data

5. What do you think of the primary sector as an industry to work in?

If I wasn't taking the subject and wasn't informed by it my answer would have been that I have no interest in being in the industry, but after 2 years of learning and experiencing what agriculture and horticulture has to offer I would love to be in the industry as I want to make this industry something that people who are urban and who also don't have any farming background like me to take this as a future job. Not only that I want to keep that image of New Zealand in the world to be viable in the future.

It's a big part of NZ, but with the focus on dairy and early mornings it doesn't sound like me.

It is a good environment for people to learn in.

Quite well paid and a lot of time spend outdoors with longer hours.

Needs to be monitored more closely with wages and staff conditions by the government. But all in all it is a good line of work.

Great sector however in New Zealand we are a very small sector which limits job opportunities available for graduates as many people stay in their jobs for a long time and in some aspects of the industry such as genetics and meat industry there is not a lot of turnover in jobs which makes it hard for graduates to enter the industry where their specific interests lie.

I personally feel that it is near impossible to begin a career. Unless you have family/connections to it your only option is to complete courses generally attended by 'drop outs' or spend years studying the academic side of things with no real middle ground.

I think its great fun to be honest. You work hard, keep active, plenty of fresh air and no cities. I wouldn't want to be anywhere else.

It's the backbone of our country but is very hard to get into as a young person, especially for females.

Long hard hours, low pay typically on farms better in the supporting businesses.

Lots of hands-on, outdoor practical work, that provides the foundation of our economy.

Fantastic industry with keen, like-minded people. Everyone is generally always really positive about trying new technologies also.

I want to work in the primary sector. It's the best kind of work. Practical and useful.

Doesn't sound and look attractive but is a good stable industry.

Amazing it's a thrill to be a part of, people don't realise how much work goes into it.

Amazing. Grown up in it and love it.

6. Please list the different industries within the New Zealand primary sector that you know of. E.g. Forestry.

Agriculture, Horticulture, Imports, and Exports are the ones that I know of so far.

Dairy, sheep, beef, forestry, deer, crops.

Forestry Winery Construction Medical Oil Exploration Farming Earth science.

Dairy Sheep and beef Fishing Forestry.

Forestry dairy beef sheep goat horticulture fishing.

Forestry, dairy, genetics, meat, wool, sheep, beef, venison, food safety and improvement, marketing, trade, policy.

Fisheries Forestry Agriculture Horticulture

Sheep, beef, dairy, deer, goat, and chicken farming, (and probably some others. Horses...?) orchards, vineyards, other crops, forestry.... I don't know what else.

Farming (dairy & dry stock), fishing, mining.

Agribusiness, research, dairy, sheep, beef, goats etc, bee keeping, bio-security.

Crop, sheep and beef, dairy, poultry, pig.

Farming, dairy, arable, sheep, beef, horticulture, forestry, fisheries.

Agribusiness Dairy Sheep and Beef Deer.

Dairy Sheep Beef Bees honey Deer Pigs Chicken Fishing Mining.

Farming, animal care, forestry, horticulture, beekeeping, agricultural science.

Agriculture, Horticulture/Arable, Forestry, Equine and Aquaculture.

Forestry Dairy Sheep and beef.

Deer, sheep, beef, dairy, horticulture, viticulture, apiculture, aquaculture, forestry, ornamental, arable.

7. Please list the different career options that you know of within the New Zealand primary sectors. i.e. Research, Farm Management.

Agricultural Economist, Agriculture engineer, Animal Scientist, Food scientist, Foreign trader, Rural Banking. These are some that come in mind.

Farmer, Ag Research, rural banking.

Dairy manager Dairy consultant.

Way too many to list. Research. Dairy assist 2IC. management head Shepard. Sheppard general. Tractor driving. Contractors just to name a few.

Research, farm management, rural banking, fertilizer, advisory, HR, semen collection, stock agent, consultancy, food safety, meat inspection.

Laborer, farm hand, farmer, (hands on type and the 'hire other people to do stuff while you run around checking up on them' type,) research person, contractor, stock agent, digger dude, I don't really know what counts as primary.

Share-milker, Farm owner, Manager, shepherd, general hand.

Research, farming, representatives (grass seed, fert, stock) consultancy, rural banking.

Farm management, Farm Adviser, Agricultural consultant and Farmer.

Scientific research for all industries, farm management, farm worker, forestry worker, fisheries protection officer.

Farm management, partnerships, companies, research.

Sales reps Agents Farmers Advisers Bankers Scientists.

Same as above but with different areas of focus within each e.g. farming there is dry stock, Dairy, contracting. Horticulture there is vineyards, orchardist, nursery, market gardening etc.

Farm Owner, Manager and Assistant. Tractor Driver, Casual Relief Milker, Contract Milker, Shearer.

Management Ownership Science.

Consultancy, farm worker, 2ic, managing, contract milking, equity partnership, 50/50sharemilking, banking, seed & fert rep.

8. Where do you get your careers advice from?

I personally get my career advice from my parents and specially my dad as he has had a lot of experience in many work places so his advice allows me to understand what to do and what not to do. My teachers are also a great help for me to get advice, as they also have had many experiences and they want me to do well. Another place where I can get career advice is from the career advisors they allow us to see what careers match with our interests.

Careers advisor and family.

Career expo and sometimes teachers from school.

Careers day.

People who are currently in the industry.

Family/friends experiences, online information

I don't know. I've always wanted to be a farmer since I was little, so I've never really sought advice on what I should do. I've explored other industries and while I'm open to doing all kinds of work, farming is where my heart is.

A horrible career advisor from school.

Careers advisors.

My parents.

Last year school careers advisor, careers NZ website, this year's university career advisor.

Currently at Lincoln University studying Dip. Farm Management, so getting a lot of career advice from my lecturers.

School careers adviser.

Mainly school but my mum is really helpful because she knows a lot about everything like this and she understands the value of primary industry because she's an ecologist and has spent a lot of time on farms and she owns a lifestyle block and is a hunter.

School through primary ITO , Agriculture NZ course and Internet/books.

9. What do you think are the best parts of working in the primary sector?

Being able to increase New Zealand's main primary industry and sustain it for the future and allowing this industry to hold value.

Time spent outdoors truly embracing New Zealand's elements.

The outdoors and the ability to learn in the work place.

Nothing beats being up at the crack of dawn in the hills mustering. Everyday a new problem will surface which you need to solve, the Agriculture industry is very diverse and constantly undergoing innovation and improvements in production.

Being involved in what makes New Zealand, New Zealand. Working with the land, environment, animals and people. Once your foot is in the door there is always plenty of room to grow, improve and learn.

I like the lifestyle. Early to rise and early to sleep, hard work and physical activity, plenty of fresh air, and good health food.

Working with animals and on the land.

Working outdoors with animals, and helping New Zealand's economy to thrive and grow via its backbone industry.

Getting to help an industry that is vital for financial stability.

Being able to work outdoors, different challenges and environments every day, hands on work. Ability to learn and grow with your surroundings, and the ability to carry out your own trials.

Outdoors, opportunities, passionate people.

It is useful and practical and there aren't enough good people entering these industries.

The experience. Supporting an important part of NZ.

Physical side and working with animals.

Working with animals especially deer.

10. What do you think are the not so good parts of working in the primary sector?

Honestly I like everything about it at the moment I haven't seen anything that is bad because I am still learning but yeah one thing is that if we want to increase our industry and make it well known we need to change as the consumers change.

*Early mornings and working in the rain and cold.
Long hours.*

The hard work and how quickly markets and peoples demand can change quickly.

The employer can get away with too much still.

The most difficult is gaining a job once you graduate. The only jobs readily available for university graduates are rural banking and fertiliser companies and shepherding, it is very difficult to gain an entry level job in the agriculture industry unless your key interests fall within the sectors listed above

There is not always job stability. Often lots of hard work over a long period of time before you begin to see any of the rewards

Sometimes it's hard for girls to get into it if you haven't grown up with it, especially if you are small, but that just calls for hard work and determination.

*Most people look down on the jobs and think it's easy and requires little work.
Bad stigma with SAFE etc, bad hours.*

Not many people are that fussed on working in the primary sector because they don't know much about it or don't think they can work it

Having to work outside in all weather, physically demanding jobs, can be low paid for long hours

*Working ridiculously long hours (like on some dairy farms) or working on long rotation rosters.
Over worked.*

It's not valued as a career choice like it should be. Too many kids going to university and learning the same things and not enough learning practical things. So sometimes not so great people end up in the primary industries because it's a last option. It should be valued as a first option.

In some cases, the pay rate or hours worked. And sometimes the lifestyle adjustment or difference in lifestyle.

The money but it's not all about that.

I think it's great.

11. Which parts of the primary sector would you like to work in if you had the opportunity?

I would like to work in the business side of the primary industry, mainly foreign trade as it allows me to do what I like which is travelling, accounting and agriculture but I think there are chances for changes to occur with that plan if something else intrigues me in this industry.

Rural banking or farm advisory.

Customer service or research.

Dairy.

Tractor contacting.

Meat industry and genetic improvement.

Agriculture, not sure what exactly but working with live stock, the practical side of things rather than theoretical.

Farming. Particularly interested in deer farming, but sheep and beef is cool too. Never really done dairy, but I'd be keen to give it a go.

Farming.

Farming, consultancy, stock rep.

Agriculture and sheep and beef.

Scientific research.

Would quite like to do rep work eventually, or even get into nutrition and be an animal nutritionist

Farm management and agronomy.

Farming. Especially dry stock and fencing.

Farming.

Management.

Dairy Sheep and beef.

Deer farming in particular.

12. While at school, what feedback were you given regarding a career in the primary sector?

I am being given very positive feedback about having a career in the primary industry because not a lot of people come and talk about this to the careers department and when I went they were very helpful and explained what is good to get into the courses for the primary industry.

It was evil and dirty or the work was to hard work.

It is not a career, females should pursue as it is physically demanding, it's not seen as a very lady like thing to do.

Not much really. As someone who is not brave enough to go and ask myself I feel if I didn't already know about it I would have had no idea of the different careers available. I feel it would have been better if it were advertised more, rather than a "if you might be interested then come see me privately ". A lot of kids who grew up in the city would not have expressed interest, because of lack of knowledge and the stereotype that you can't be a farmer If you were not raised in the lifestyle, because you lack the skills and opportunity.

I was home schooled and I always encouraged to try things out for myself. Various people have given me both positive and negative feedback, but I guess in the end its about finding out for yourself what best suits you.

Go to university and get a whole lot of degrees that have nothing to do with the career I want to do within the primary sector.

It was never really pushed at school. I was determined to go into the primary sector so it was mostly up to me.

Not a lot. I only learnt about things through Young Farmer's groups.

Very little - I come from a city school and it was barely mentioned.

Told that it was the drop out industry, that I should investigate other options e.g. Trades/diplomas before deciding upon farming. And that farming only involved practical work.

Through gateway programme and careers advisors. My mum and a neighbour ex-farmer who teaches me and tells me a lot of stuff.

Was encouraged to pursue a career however only saw the industry as a good job to fall back on.

I was told not to go farming and that it was a joke. Our school only thought going to university was what you should be doing.

13. What type of advertising have you seen for careers in the primary sector?

Honestly not that much comes in mind of advertising for careers in the primary industry but there is one poster that I do see quite a lot of times which advertise the practical life on the farm, there were tractors and sheep.

Some posters in the career counsellors office.

Only during the careers expo.

Paper ads, farm source add, Facebook and Trademe adds and the weekly farmer's papers.

Trademe, fence post and agstaff.

Limited. Although there is plenty at events such as the field days, within schools there is next to nothing.

Fonterra ads on tv also just job advertisements on sites like trade me.

Posters and pamphlets, get ahead days.

Young Farmer and Teen ag.

At the careers expo, the primary sector stands. At the A and P show there was also a primary sectors stall.

Mainly Facebook, from NZ Farming, and another page Australian Lot Feeders Association.

Dairy NZ, Young Farmers/TeenAg/ Get ahead.

Flyers, radio ads, Facebook ads.

Internet. Different adverts at school about the different options.

Newspaper, job searches, grad programs.

14. What advertising content would attract your attention?

Something that is not what everyone thinks meaning everyone thinks agriculture is just the farm but having different advertisements like food science or the business side of this that's what will attract me personally because I am not use to seeing that and if I see those advertisements it will cause me to think a bit more about it.

Social media or TV.

A book or advice on what you do and why it is enjoyable, even a speech.

Internships with meat companies and research organisations involved with genetics and meat improvement currently you only see research roles in soil and plant science advertised.

I think just more information being put out there in the form of easy to find online content, posters, notices etc anything is better than the idea that it's your responsibility to reach out if you're interested, because a lot of people just don't know where to begin so they are turned off it completely.

Ones from people that don't expect you to have 5 years' experience and would be willing to take you on and teach you their ways.

Things that illustrate that the industry doesn't just mean farming that there are more business commerce and research jobs than people realise.

Advertising about Events - days where you can go and actually see what is involved in that industry rather than just reading about it.

Mainly Facebook or Instagram, as that's where I see the most adverts. I don't watch a lot of TV.

The bigger picture importance of agriculture in New Zealand.

Not sure, I think a variety like TV and Facebook and through school programmes.

Social media and TV.

Posters and internet.

The benefits and enjoyment received from working in the industry, this is hardly ever presented.

Commented [d1]:

15. What type of advertising media do you believe is best suited for this type of promotion, and why? i.e. TV, Facebook.

I think TV is gone now, I think Facebook, twitter and other social media sites is how we should advertise as everyone is on them now to the young kids to the old aged people everyone is one there, so if we need to advertise I think social media is a great platform.

Facebook, that's where most people are.

Facebook as most of us young adults trying to get a career are connected through Facebook or any social media.

Face book. And schools and high schools need to go on farm days at different types of farms

Facebook is good since everyone is on it but you would want one page which has advertising for all sorts of jobs rather than a different page for everything. TV is difficult as being rural there is no set time where you can ensure all the audience will be watching unless it's during country calendar. Newspapers are good as if I don't read someone who does will let me know if something I may be interested in comes up

Face book would definitely reach an audience of this age group and it would be accessible 24/7 and people feel more comfortable about it rather than having to approach someone. I always found pamphlets useful but then was always left looking for more detailed information but it's always a start to get people thinking and interested.

I don't really know to be honest. Maybe Facebook, but then i don't even use anything else. We don't even have TV.

TV or social media.

TV and Social media because a lot of people use or watch this so therefore it would be spread around more.

Facebook - easy to save or click interested, everyone has easy access to it, cheaper for the advertisers too.

I think Facebook, it is reaching a wider audience in the age group to be targeted (15-25yo)

Facebook... Everyone uses it.

Facebook. Keep posted on fb, teens hardly watch TV.

Any social media.

16. What additional information would you like about the career options in the New Zealand primary sector?

One thing that I like about the career options within the primary industry is that it is so open and basically anyone can join in with any skill. For example, if you like math and accounting then the business side of it, but if you like physics and math then we have the engineering side of it or if you like biology and chemistry then we have the science part of it and all these connect to the primary industry.

What new opportunities are available?

I think in our degrees we should be required to do some practical work in the industry so we can gain better understanding of what jobs are available rather than doing all the practical work component on farm.

More in depth about all the individual careers because I feel like there are so many jobs in the industries that kids my age have no idea even exist

I'd like to know more about the values and standards of the people that are training the young people.

There are more opportunities than you realise and they are more versatile than the image typically portrays.

More booklets or pamphlets accessible for students on options in the industry and how to get there.

Necessary qualifications/ training.

Some good advice about how to get into it and what employers look for, it's good to have actual people in the industry talking to kids about the good parts of it. But also at school from early on, from intermediate kids need better ideas and exposure to careers in the primary sector - at the moment they get virtually nothing

The pros and especially the cons of every job. It's not good for someone to enter a job just to find out it's no good. They should know the negative side of the job if any, and prepare to face the challenges.

17. How would you like to receive this information?

Personally, by talks of peoples experiences because I don't think personally for me online or poster advertisements is that effective, people's stories, what they regret, what they like and their experiences in general is how I would like to receive my information.

Online.

Speech or internet, through school

Email

Online information is a great easy way for people to look into it themselves before perusing their interest more

On websites and from personal feedback from people who have experienced it first hand

In a fun engaging way

Booklets pamphlets

Websites/ email

Email and Facebook

Put it in with the NCEA learner guides.

Email

18. Thanks for taking part - Is there anything you would like to add?

I think there could be better engagement with younger people about what you can do for a job in the primary sector.

In high school I was, and still am frustrated about the lack of information for people interested, there may be opportunities in the primary industry but it seems impossible to find them unless you grew up learning the skills or know someone willing to give you a chance. More information and advertising about how and where to get started would encourage a lot more people to show interest

I went to an all-girls private boarding school and the agriculture industry was never really talked about or promoted. I feel they thought the students were too good for the primary industry (ie need to be doctors and lawyers) or that the industry isn't suitable for their girls, which is something that needs to be looked at with potentially having a focus on these sort of schools, as there are very intelligent students that could do very well in the industry but are lead to believe that it is just the hands on farming side of it. There were maybe 4 girls from my year of almost 200 that were interested in the industry and only 2-3 of us have continued on in it.

I think the primary industries could be promoted a lot more to city kids as viable career options - most of them see it just as farming when there really is so much more to it than that.

I don't think my generation understand the variety of jobs that require high qualifications that come under the agriculture branch other than milking cows and shearing sheep.

The social view needs to change about primary industries. It's not presented with the great opportunities that there are for the people who join the industry.