Something to Crow About:

What can poultry farmers do to answer consumer perceptions and pressures facing our industry?

by Jodie Redcliffe

2013 Nuffield Scholar

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Executive Summary

The hypothesis of this report is that perceptions of the poultry industry held by animal activists and consumers drive the pressures on farming that the industry face. The situation is exacerbated by self-perceptions farmers have. This report then discusses some of the pressures on farming that stem from perceptions, including animal welfare, competition for resources (environment, investment and people), sustainability, waste management, value in the supply chain and food safety.

The implications of these pressures is that there are things that need to change; farmers have to be responsible for speaking up for themselves, the consumer's place in the supply chain has to change, the industry needs to attract talented people, influence government, maintain research and development (R&D) and innovation, develop markets and attract funding.

Finally, this report makes some recommendations that this can only be done when farmers change the way they think about farming. Farmers need to make communication and engagement central to what they do. Farmers are the part of the value chain that is important to consumers. By not telling consumers what they do, and why, activists and retailers are jumping into the gap and filling it with inaccurate perceptions. The supporting scaffolding of farmer organisations is needed to help navigate change, to make sure farmers are informed, consistent in their messaging, and that they are underpinned by the building of valuable branding and partnerships. The result of such changes should be a strong, growing industry with increased profitability for all.

Without farmers, there is no chicken, and there can be no meaningful connection to the consumer.

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Foreword

My husband Wayne and I are contract broiler farmers in Wamuran, Queensland, an hour north of the state capital of Brisbane. We farm over 1.4 million birds a year, housed in seven tunnel-ventilated sheds. My journey to Nuffield began more than 10 years ago when I was asked by my Rabobank manager to apply. At the time we had small children at home and we had just purchased our farm from Wayne's parents. Yet the idea simmered away at the back of my mind. With a degree in psychology, and having run my own small business for 15 years teaching Japanese, lifelong learning is a concept I try to put into practice. When Jim Geltch arrived at our bi-annual Poultry Information Exchange (PIX) conference in 2012, the confluence of influence prompted me to finally apply for a Nuffield scholarship.

Serving as President of the Queensland Chicken Growers' Association for the past four years, I was concerned about many industry issues. I originally approached the Nuffield opportunity to look at ways of reducing input costs, particularly alternative bedding materials. When I was successful in my application however, the first thing my 22-year-old marketing-student daughter said was 'Oh Mum, you'll have to think of a better topic than that. Sawdust is not sexy!' This was my first taste of the importance of perception in agriculture, and ultimately what I chose to write my report about. We live in a world where everything is marketing spin, and perception is reality. If we do not tell the story of what we do, someone else will drive perceptions of our farming practices.

The aim of the Contemporary Scholars Conference (CSC) and Global Focus Program (GFP) is to give Nuffield scholars a global outlook on agriculture. As I travelled the world I found overwhelming positivity about the future of agricultural pursuits and our ability to feed the world. Nevertheless, when we discussed the pressures farmers face, there were strikingly similar feelings of misunderstanding and misinformation. The common theme was that farmers are not telling our story - others are. This struck a chord with me. The chicken industry receives a large and growing amount of activist attention. Whilst animal welfare has always been the root of everything we do in our industry, now it is not enough to do it; it is regulated, documented, audited and frequently challenged. By focusing on the topic of farmers speaking up, my hope is to effect some change in the transparency of our industry that reflects the industry's success and maturity.

The anecdote that best explains my topic was from Dr Friedericke Plumeyer at Landvolk Niedersachsen, the Lower Saxony Farmers' Association in Germany. When we were discussing the increase in corn plantings due to demand for ethanol, Friedericke said that they have had an increase in complaints from local residents. The residents complain that when they ride their bicycles along the country lanes, they cannot see the landscape anymore because the corn grows too high (Plumeyer, personal communication, 22 August, 2013). To me, this is the height of intolerance, and an illustration of the lack of understanding consumers have about what farmers do. I recently heard Joel Salatin speak. He is sometimes called the High Priest of the Pasture (Purdum, 2005), and he is certainly the master of the 'sound bite'. I got an appreciation of how important it is to deliver your message of agriculture passionately and succinctly. The way he characterised it made sense; farms are not owned by society, yet society feels they have a right to impinge upon the way we do business (J. Salatin, Tasting Australia, 2 May, 2014).

We are learning all the time about the most efficient way to grow a chicken, as technologies in our industry have truly transcended company and country boundaries. We have not included consumers in that conversation though. Consumers are romantically harking back to the 'good old days' of farming where chickens peck through green pasture and cows do the same. We are not farming in the 1950s and we are not going back to that. We would never ask doctors to practice medicine the way they did in the 1950s, would we? So I see the need to change both the behaviour of farmers and the psychology of consumers: farmers need to be concerned about what consumers want and consumers need to understand farming practices and make informed choices. Then having made those choices, consumers need to buy what they say they want.

My GFP took six Antipodeans to India, Qatar, France, Ukraine, Turkey and states on both sides of the United States of America (US). Subsequently, Wayne and I travelled in Germany, France, England, Ireland, Canada and eight states of the US. The reach and importance of the Nuffield organisation is quite astounding, and it is not until you are within it that you realize what you have been missing out on. Over the course of my Nuffield travels and studies, I have tried to achieve the balance espoused by Ken Knox, former Canadian Deputy Minister of Agriculture and founding Director of the Canadian Agri-Food Policy Institute, at the CSC (11 March, 2013); to have friends and maintain networks, to travel to understand how others really think, to look into their eyes and see how things really are, to listen more and not fill pregnant pauses, to communicate effectively, to value family and the ones who are not with you, and to regularly reset and refine your goals.

This is the value of Nuffield to me.

Figure 1. Chanticlear Farming

Source: *W. Redcliffe, (Wamuran, February 21, 2013).*

Acknowledgements

I would like to acknowledge the generous support of my sponsors, the Sylvia and Charles Viertel Charitable Foundation. I would like to thank Nuffield scholars and Eisenhower and McCloy Fellows worldwide who have contributed to my thought processes and my findings, and in general made me a more knowledgeable and more tolerant person.

In particular, I would like to thank the Nuffield 2013 scholars worldwide. I have often reflected upon the luck or circumstance that now makes us a lifelong tribe. By divine scheme, we are now bonded together, and I will always have the benefit of their views and their friendship. I thank two #nuffield13 scholars in particular: Claire Bragg for her enthusiasm for chicken farming, and her wonderful team ethos with husband Nick; and Alo Mohan for helping me understand how important the right preparation, then communicating with the right people, can be.

So many people have so much more faith in me than I do, and it is a valuable personal lesson. This includes Jim Geltch, with whom I had the pleasure of sharing the Ukrainian and Turkish legs of our GFP. I would like to thank Kara Knudsen, Guy Hebblewhite, Natasha King, Sophie Stanley and Matthew Ipsen, my GFP buddies, who will remain important parts of my life in the Nuffield Universe. I am grateful to Matthew who proofread my report, added valuable insight, and then thanked *me* for the privilege of reading it!

I would like to thank my husband, Wayne, who has learned as much from my Nuffield as I have (it was always going to be a two-for-one deal). Finally, I want to acknowledge the patience and belief of my three best achievements, our children: Dimity, Nicholas and Pippa Redcliffe.

Abbreviations

AAA: Animal Agriculture Alliance

ABS: Australian Bureau of Statistics

ACMF: Australian Chicken Meat Federation

AFBF: American Farm Bureau Federation

ASPCA: American Society for the Prevention of Cruelty to Animals

CAP: Common Agricultural Policy

CRRDC: Council of Rural Research & Development Corporations

CRS: Congressional Research Service

CSC: Contemporary Scholars Conference

DPI: Delmarva Poultry Industry Inc.

EU: European Union

FCR: Feed Conversion Ratio

FFA: National Future Farmers of America Organisation

FFN: Future Farmers Network

GFP: Global Focus Program

GMO: Genetically modified organism

HSUS: Humane Society of the United States

NFF: National Farmers Federation

PETA: People for the Ethical Treatment of Animals

PIX: Poultry Information Exchange

Poultry CRC: Poultry Cooperative Research Centre

QCGA: Queensland Chicken Growers Association

R&D: Research and Development

RDCs: Research and Development Corporations

RIRDC: Rural Industries Research and Development Corporation

RSPCA: Royal Society for the Prevention of Cruelty to Animals

USDA: United States Department of Agriculture

USFRA: United States Farmers & Ranchers Alliance

YF&R: Young Farmers & Ranchers

Objectives

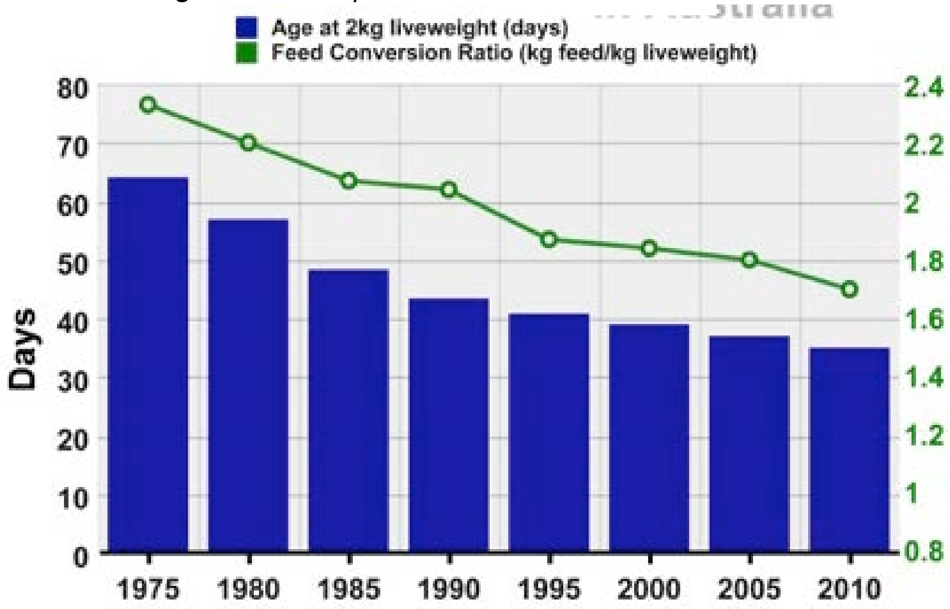
- To understand the perceptions of the poultry industry and who drives them.
- To understand how perceptions of poultry farming have led to the pressures farmers face.
- To understand what needs to change and be strengthened.
- To understand how the agenda for change can be set by farmers with the supporting scaffolding of farmer organisations.

Chapter 1: The rise and rise of chicken

'The globe-spanning chicken is an epic story of evolutionary, agricultural and culinary success, outnumbering human beings on the planet by nearly three to one.' (Adler & Lawler, 2013).

In the past 30 years, worldwide commercial chicken meat production has increased exponentially, with increasingly automated plants, and improvements in feed conversion efficiencies from improved breeds, nutrition and husbandry. In 1965, it took 65 days and 5.7 kg of feed to reach a live bird weight of 2 kg. In 2008, this was achieved in only 36 days with 3.6 kg of feed (Chicken Meat Research and Development Plan, 2009) (Figure 2). The average meat yield per bird increased by an average of 1 per cent (%) per year in the 20 years to 2012 (Mifsud, 2013).

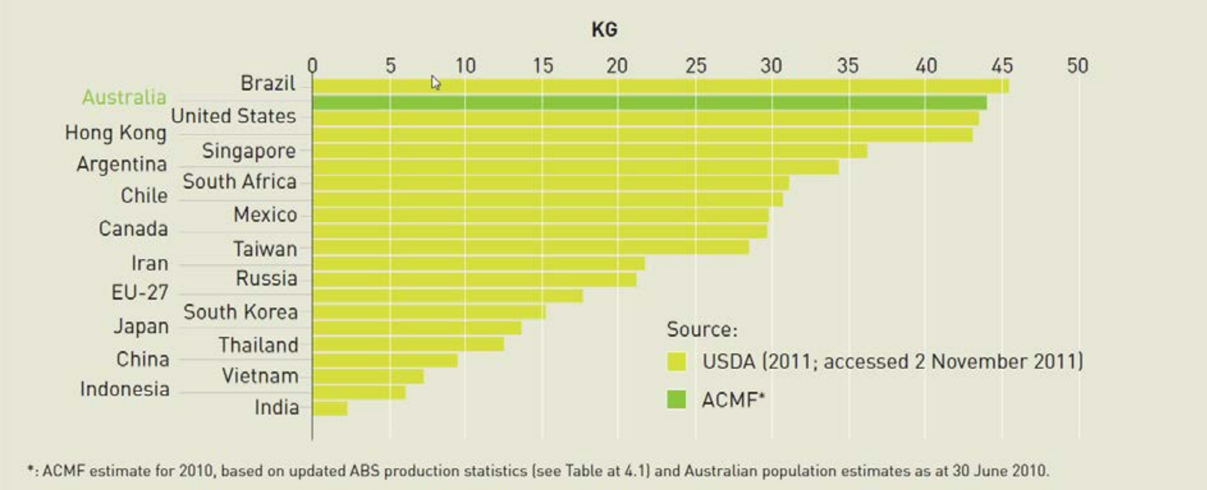
Figure 2: Efficiency of Chicken Meat in Australia



Source: *Australian Chicken Meat Federation (ACMF), (2014).*

Concurrently, consumption has risen due to favourable consumer attitudes to chicken. Compared to other meat proteins, chicken is price competitive, a low-fat protein source, has product diversity, quality and safety, consistency and versatility. In addition, targeted marketing has been able to foster popularity within the family group (Brunton, 2009). Total world poultry meat production in 2012 was 102.2 million tonnes (Australian Commodities Statistics, 2013). Specifically, global broiler production in 2013 was 84.6 million tonnes, an increase of 2.2% on 2012 (USDA International Egg and Poultry, 2013). By 2030, poultry meat demand is predicted to be 39%, making it the most consumed of all meats (Global Poultry Trends, 2013). Developing economies, particularly India and China, will continue to experience increasing demand for poultry with population increases, improved disposable incomes and changing consumer taste preferences (Global Poultry Trends, 2013). In developing countries, consumption of meat has been growing at 5-6% per annum (World Agriculture: Towards 2015/2030, 2003).

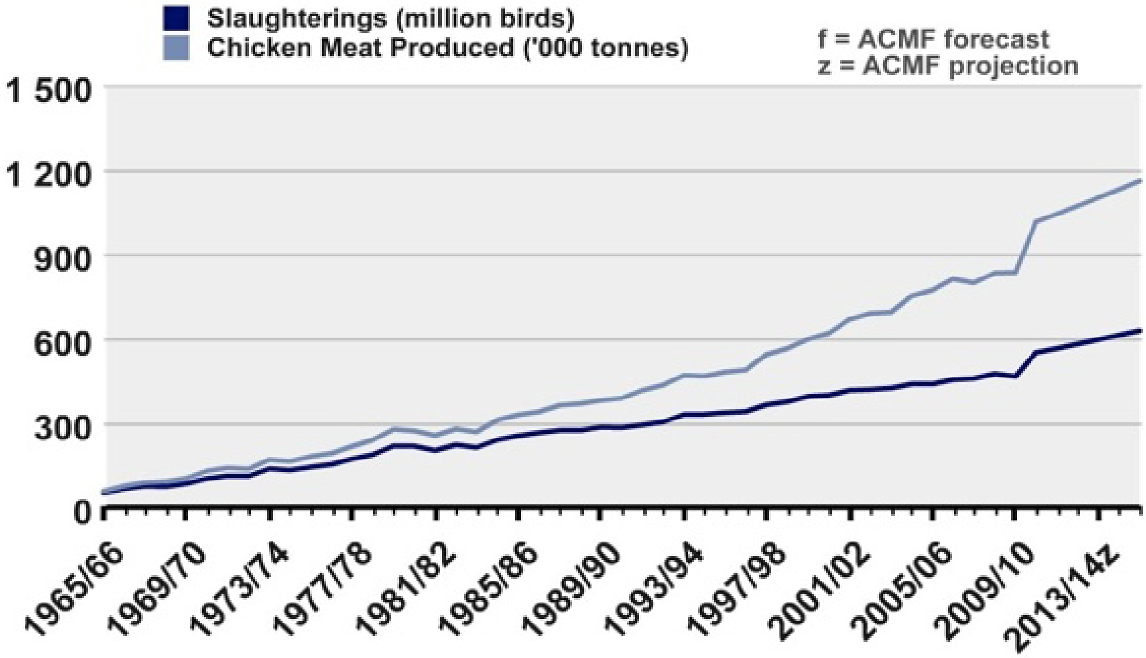
Figure 3: Per Capita Chicken Meat Consumption (kg) for Selected Countries, 2010



Source: *ACMF (2014).*

Although Australia produces only 3% of world poultry meat, Australia is second in per capita chicken consumption, behind Brazil. The US, China and Brazil are the world's biggest chicken meat-producing countries, while Australia is 12th (Figure 3). In Australia in 2012, chicken meat production was 1046.7 tonnes (559.5 million birds processed), growing at an annual rate of 4.4% over the preceding 12 months. This is an increase of 32% since 2001-2002 (ABARES, 2013) (Figure 4).

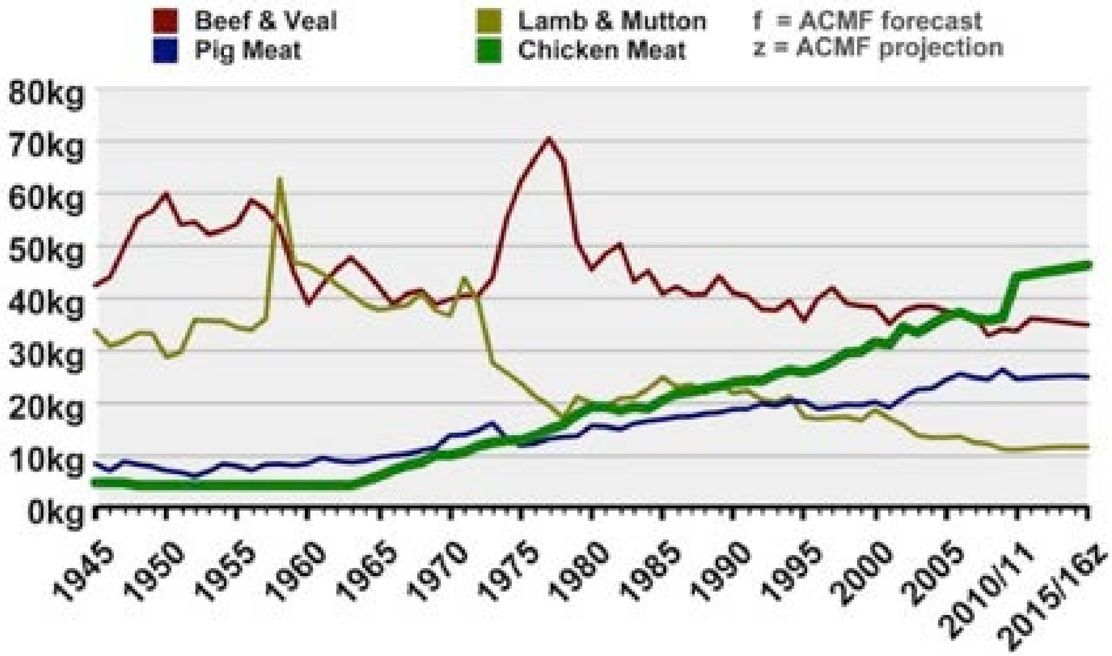
Figure 4: Chicken Meat Production in Australia



Source: *ACMF (2014).*

Australian chicken meat industry revenue is expected to grow at an annualized 2.7% (Witham, 2013). Prices for poultry have been falling 1.9% a year on average (ABARES, 2013). Coupled with continued productivity gains and value for money in the marketplace, the Australian chicken market should remain strong even though retail prices for chicken meat have been extremely low and are forecast to continue to fall (Witham, 2013). Processors were predicting growth of between 2 and 4% for 2013 aided by the continued introduction of processed or value-added products.

Figure 5: Comparative consumption of meats in Australia



Source: *ACMF (2014).*

Australian poultry consumption in 2012 was 44kg per person per year, greater than beef and lamb combined (Figure 5). Australian consumers currently spend $5.6 billion per annum on chicken meat in supermarkets, fast food outlets, specialty shops and restaurants. Ninety percent of the population eat chicken meat at least once a week and one-third eat chicken three or more times a week (ACMF, 2014). Five percent of all grains produced in Australia are purchased by the chicken meat industry. Ninety-five percent of Australian chicken meat is processed by seven chicken meat-processing companies. Two processors, Inghams and Biaida, together control more than 70% of poultry processing. The majority of the farming sector is comprised of approximately 800 contract growers, whilst between 10 and 20% of the poultry processed by the seven companies are from their own farming operations. There is a small but increasing presence of large corporations within the farming sector (ACMF, 2014).

In summary, the industry's vertical integration means that a small number of major companies have substantial market power and a small direct customer base. This has guaranteed strong whole-of-industry improvement. The industry relies on careful supply management in a market that is highly competitive, despite very limited international trade. The Australian chicken meat industry's strong productivity growth is a result of the adoption and adaption of superior genetics, improved bird nutrition and sophisticated management practices from all over the world and economies of scale (The Australian Chicken Meat Industry, 2011). All but 0.5% of poultry produced here is domestically consumed (Australia and food security in a changing world, 2010) and there are strict biosecurity protocols in place to protect the domestic industry from virulent poultry diseases which are not found in Australia (ACMF, 2014).

Whilst 74% of the world's poultry meat is produced in ways that are described as 'intensive' (State of the World 2006, 2006), there are now a number of alternatives to commercial chicken farming, including various ‘higher welfare’ systems, and free-range farming. Free-range chicken meat farming in Australia also uses large flock sizes at high stocking densities. In Australia, free-range and organic chicken meat together account for 23% of industry revenue (ACMF, 2014).

The meat chicken industry has a long list of positives:

- Efficient use of land and feed resources for high productivity (high Feed Conversion Ratio, FCR),
- Control of the environment (low exposure to biophysical impacts and low environmental burden),
- A stable farm cost structure,
- Product available all year round at low cost and high value for money,
- Product with tenderness and consistency of mild flavour that takes well to other flavours.

However, the strengths of the chicken industry are rarely acknowledged and instead (often erroneous) perceptions of chicken farming are driven by animal activists and ill-informed consumers. These perceptions lead to pressures in the areas of animal welfare, competition for resources, sustainability, waste management, control over farming decisions and food safety. This report discusses those perceptions and their influence on consumer shopping choices. It also discusses the importance of defining and bolstering the perceptions farmers have of themselves. This report then explores what needs to change and how farmers can best do this: by speaking up for themselves, changing where the consumer sits in the supply chain, attracting talented people, fostering R&D and funding, chasing markets, and influencing government. The roles of processors, extension services, retailers, government and welfare agencies are discussed.

Finally, this report makes recommendations for change: the central role of farmers who, together with farming organisations, need to work together to improve the view of Australian agriculture and poultry farming in particular. This report suggests some directions for future research to better understand the climate of consumer perceptions.

Chapter 2: Perceptions and misconceptions

The positives of the chicken meat industry detailed in Chapter 1 do not feature in perceptions of the industry at all. The fundamental change that needs to take place over the farming landscape is an awareness of the perceptions held about the industry, and how farmers can and must engage. This chapter will focus on the perceptions of three groups: animal activists, consumers and farmers' self-perceptions, although perceptions are held by other groups such as environmental activists as well.

2.1 Animal Activists

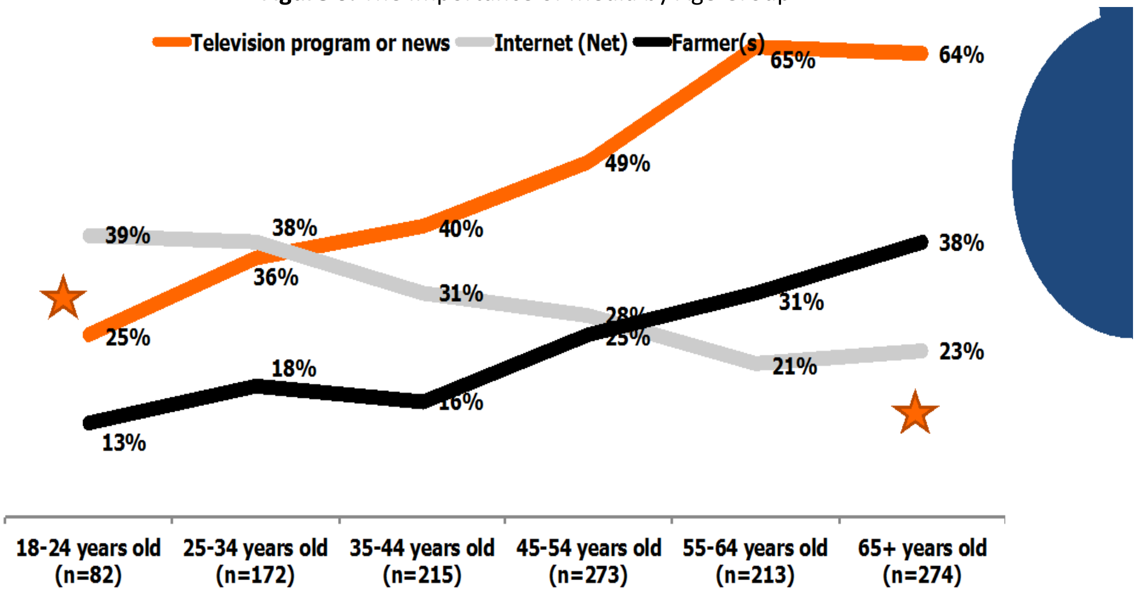
In the context of animal protein industries, the ideologies of animal activists stem primarily from a vegan agenda; they do not want consumers to eat meat at all. Moral and ethical beliefs including concerns for animal welfare are the main reason to avoid meat (Hoek et al, 2004). Organisations such as Humane Society of the United States (HSUS), People for the Ethical Treatment of Animals (PETA), and Animals Australia provide the commentary for how people think about animals and the food they eat, in an era where most consumers are not exposed to agriculture and have very little idea about where their food comes from. Animal activists are championing societal condemnation of the meat industry, and as their belief system, that cannot be challenged (M. Cooper, personal communication, 29 August, 2013). Animal activists are engaged, highly organized, and passionate about their message. They generally have a well-structured strategy, and are careful to maintain a consistent, 'scientific' message. Yet they use images of cute and fluffy domestic animals and extrapolate that to farm animals, using the only attachment that people have with animals (their pets) to evoke an emotional response. They also use shock value, emotive language, and illegal and underhanded tactics. They understand that negative information will stick. Undercover video is a common tool, with the results posted on-line (Kentucky Fried Cruelty, 2014).

There are differences between animal rights and animal welfare issues. Animal rights advocates object to killing chickens for food, the conditions under which they are raised, methods of transport, and methods of slaughter. Animal welfare groups do not argue that animals should never be farmed, and do not condone violence. They tend to seek legal, social and financial strategies to oppose intensive 'factory' farming, citing harm to the environment, creation of health risks, and abuse of animals. Other issues they have argued against have been the use of genetically modified organisms (GMOs) and pesticides in feed, and antibiotic use. Kelli Ludlum, Director of Congressional Relations with the American Farm Bureau Federation (AFBF) thinks the Humane Society of the United States (HSUS) is the biggest bane to American agriculture, as they are not seen to be as extreme as animal rights groups such as PETA. Kelli characterised HSUS as 'PETA in a pinstripe suit and a nice wristwatch' (K. Ludlum, personal communication, 17 March, 2014). HSUS have 11 million members, all paying $35 per year. That is four times the size of PETA, and twice as big as the AFBF, the one united voice for agriculture in the US, that has just 6 million farmer members.

2.2 Consumers

The perceptions of consumers are shaped by influencers, often in the social media space. That space is crowded with animal activists, but also with their vulnerable targets, the social media aware demographic that are accustomed to receiving and believing news from the internet (Figure 6). The demographics of the 'yummy-mummy bloggers' and the 'millennials' express their opinions online, and ask for information online. Importantly, activity in the social media space illustrates that people do not want knowledge per se, but edutainment (K. Daynard, 2013).

Figure 6: The Importance of Media by Age Group

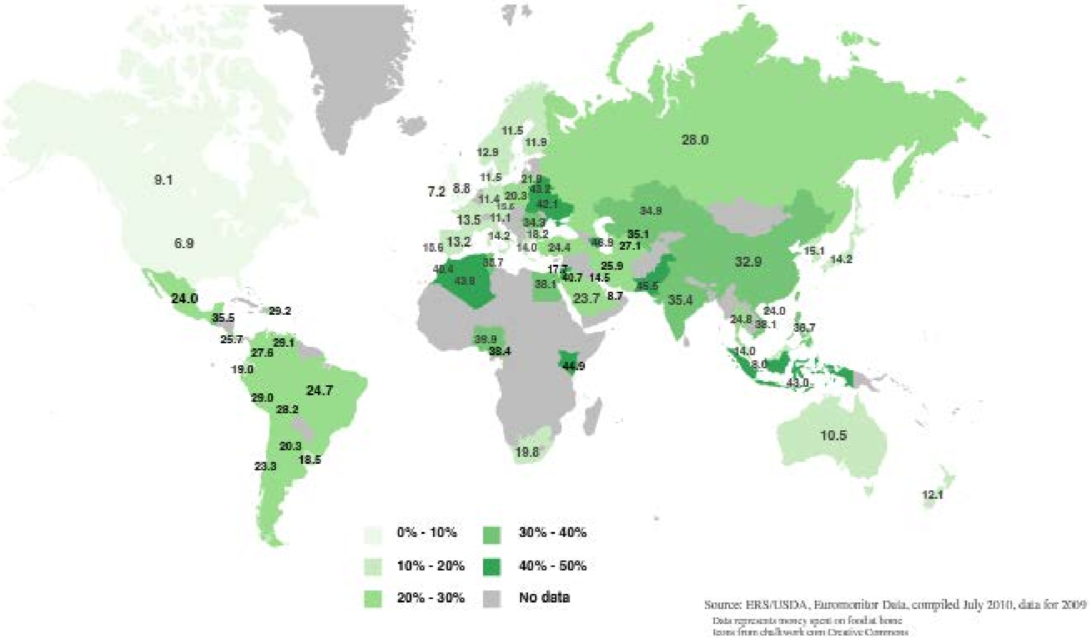


Farm and Food Care Canada represent farmers to raise community awareness of farmers and farming. This graph is from their 2012 Attitude Survey and shows the importance of social media in the 18-24 and 25-34 year old categories where almost half of all respondents get their information about farming from on-line sources.

Source: *Farm & Food Care Canada, 2012.*

The Australian consumer's views are also shaped by the nature of our society. The Australian populace has never starved, and spends a relatively small amount on food (Figure 7).

Figure 7: Percentage of Income spent on food



Source: *Jones, N. (2011).*

Spending a small percentage of income on food results in consumers not ascribing value to it. Conversely, Australians have a high disposable income, and the ability to buy outside basic necessities. The Australian consumer expects, and has never really experienced anything but, a reliable, safe, high-quality and affordable food supply (ACMF, 2011). This is precisely the point at which chicken has excelled. There is also a shift to health trends that is informing choices, again, where chicken has a natural advantage (Seguin, 2013).

Agricultural issues are cultural issues; all societies go through an agrarian phase, and being able to feed its population is central to a nation's identity. However, as a reflection of a wealthy nation, people in developed countries have moved on from wondering where the next nutritious meal is coming from. They do not really care about how their food is produced or where, even though there is a section that does (J. Greene, personal communication, 18 March, 2014). We rely on the market, and retailers, to drive awareness of food. Legislation of labelling laws can help expand consumers' awareness of food production, (J. Greene, personal communication, 18 March, 2014), and this is a current Australian political discussion, as it is in the US.

Marketing is pervasive in all industries, including agri-food. Manning (2013) discusses Cause Related Marketing as a retailer communication tool to enhance brand loyalty. Manning (2013) explored the relationship of Cause Related Marketing to Corporate Social Responsibility and Consumer Social Responsibility. For example, under the banner of ethical consumerism (positive buying of ethical products over products seen as harmful to the environment or to morality), retailers promote organic and local/artisanal production of food, coupled with a historical and idealised view of farming. The idea of true consumer choice is a myth, as retailers do the choice editing for consumers (L. Manning, personal communication, 30 August, 2013).

2.3 Self-perceptions

In an aging population of farmers in a tiny demographic in an affluent nation (ABS, 2010-11), the Australian farmer has traditionally depicted a life of struggle, not of success. The agriculturalist has traditionally been male, self-employed, working much longer hours than those in other professions, and not well educated (Cary, Webb & Barr, 2002). There has been a general discouragement of the younger generation becoming involved in farming. This is discussed in Chapters 3.2.3 and 4.3. When speaking about farmers in Canada, Bill Emmott (2013) said that they have the perception that multinationals have control over price, media and the government. This holds true for poultry farmers in Australia, who blame others for lack of control. Notwithstanding other barriers discussed in this report, it can be a lack of confidence to move to large-scale production that results in the 'hollowing-out' of the middle-sized farms and an erosion of profitability. Farmers believe in getting on with farming, how they want to farm, and minding their own business (Smith, 2014). Farmers tend to dismiss any attempted engagement with 'you wouldn't understand'. These factors conspire to a low level of discussion about farming practices. In the chicken meat industry, farmers have had the additional barriers to engagement of contract growing, where they have no legal ownership of the chickens in their care, and are removed from pure market conditions. Vitally important biosecurity issues can also limit on-farm engagement. This has meant very little dialogue with the end consumer and a discouragement of openness about practices.

Chapter 3: Pressures facing poultry farmers

The perceptions of animal activists, consumers and farmers themselves detailed in the preceding chapter have led to the main areas of concern being faced by the poultry industry. These are: pressures upon animal welfare standards, competition for resources, sustainability, waste management, profitability and food safety.

3.1 Animal Welfare

Consumers perceive high animal welfare standards at the production stage as an indicator that the product is safe, healthy and of high quality (Verbeke et al, 2010). In the past five years, animal welfare issues have exploded as a factor in the purchasing decisions of consumers (Napolitano, Girolami & Braghieri, 2010). Animal welfare standards for poultry differ from country to country, and with the late-2013 decisions of both Coles and Woolworths to sell only RSPCA-accredited chicken meat for their own-branded product, Australia is in the process of becoming one of the most highly regulated broiler landscapes in the world. The perception that how poultry farmers rear their birds is not welfare-friendly is directly related to changes to accreditation requirements. In the UK, RSPCA-accredited chicken only accounts for 5.9% of the market (Chicken Meat Production in the EU, 2012). In the US, Foster Farms have begun American Humane Association accreditation as the first third-party animal welfare program dedicated to the humane treatment of farm animals (Foster Farms, 2013). Foster Farms is only the 12th largest broiler processing company in the US (Thornton, 2011).

3.2 Competition for resources

3.2.1 Environment

Intensive poultry production sits squarely on the suburban interface. The industry competes directly with the urban population, who have little or no direct connection to agriculture, for land and water resources. Just 0.7% of Australians are farmers, but 53% of our landscape is agricultural land (Trends in Australian Agriculture, 2005). In other words, it takes a lot of space to do what farmers do. This is true even in the intensive sector when farms are encouraged to buffer operations from neighbours. Most Australian states have varying forms of regulations or guidelines. For example, Queensland Guidelines Meat Chicken Farms (2012) and the Victorian Code for Broiler Farmers (2009) are successful to varying degrees in protecting farmers' rights to farm.

When 'cheek to jowl' with urbanites, agricultural productivity is not valued nor understood and is often treated with suspicion and disrespect. In the Allgau region of southern Bavaria, the hotel manager at a resort marketed as 'eco-friendly' receives regular complaints that the bells around the cows' necks in the fields are too noisy. Yet this is precisely the rural idyll they have driven from Munich to experience (D. Reisegl, personal communication, 20 August, 2013). In Massachusetts, the third most populous state of the US, Jeff LaFleur grows cranberries for the cooperative Ocean Spray. He said that everything he does is under the microscope. Neighbours are not afraid to take a water sample from his outlet flume if they suspect the water may be polluted (J. LaFleur , personal communication, 3 July , 2013). In Canada, poultry farmer Richard Weirenga (personal communication, 30 March, 2014) said he tries to avoid problems with neighbours by making sure he does everything he can over and above industry regulations, since his neighbours know exactly what all the regulations are, and 'want to find a stick to hit you with'.

3.2.2 Investment

Unlike most other agriculture, the intensive poultry industry operates with strong and consistent cash flow that makes it an attractive investment. In Australia though, capital gain and the value of the land asset has often been low, and chicken farms are valued only on the number of birds they grow. Therefore, extra land purchased for buffers does not make economic sense. As animal welfare regulations put downward pressure on stocking densities, valuations are coming under pressure. In many areas, poultry farms are tightly held which limits opportunity for upwards movements in valuations. Pressure on the ability to invest constricts the industry and its value. In Canada the quota system is a barrier to entry, and in the US, UK and France, if a farmer does not already have land, his/her ability to enter the chicken industry becomes cost prohibitive, due to competition from both other agricultural uses, and peri-urban uses (C. Poisot, personal communication, 20 June, 2013).

3.2.3 People

The chicken industry competes directly with other industries for great people, and for the next generation of workers. Due to the rural disconnect, agriculture is not perceived as a viable, valuable career path. Lack of demand has led to a lack of opportunity to study in the field of agriculture, and poultry in particular. In the United States there are now only six university campuses that have dedicated poultry departments (D. Jones, personal communication, 14 March, 2014). In Australia there is just one (L. Roan, personal communication, 18 October, 2013).

3.3 Sustainability

Sustainability has suffered from 'green-washing' and has been hijacked by low-input, low-output farming (K. Daynard, 2013). However, food retailers and manufacturers are now using the concept to develop policies and drive growth; for example Wal-Mart in the US has a commitment to 70% sustainable purchases by 2017 and McDonalds uses a system called a Global scorecard (McInnes, 2013). Corporate Social Responsibility is now a serious goal, so farmers must also be considering how pressure to be 'sustainable' will affect them. Sustainability of agriculture needs to be defined by agriculturalists, not by the supermarkets and fast food chains (Smith, 2014). The pressure on farm sustainability comes from the sources detailed in this chapter. If control of the chicken meat industry is hijacked by third-party animal welfare accreditation requirements, industry costs will inevitably increase and there will be an increasing push from retailers to access lower cost product, possibly from beyond Australian shores. Therefore, sustainability of the poultry industry as a whole, and of individual farmers, are both important concepts.

3.4 Waste management

Overseas experiences show that waste management is one of the main environmental pressures poultry farmers face. On the Delmarva Peninsula, where there are more broilers per square kilometre than in any other area in the United States, the poultry industry has suffered adverse media attention and legal challenges over perceptions of polluting the Chesapeake Bay through the last two decades (SaveFarmFamilies.org, 2011). The most recent concerns are their contribution to nitrogen and phosphorous overload on farmland that is inhibiting their ability to remove and to use the valuable resource of poultry litter (K. Bounds, personal communication, 22 March, 2014).

3.5 Value in the supply chain

The perception of low-cost, high-value production has put pressure on the poultry industry's ability to maximise margins. In particular, the farmer's margin of the retail dollar has been eroded. A Victorian Farmers Federation survey in April 2014 showed that from a basket of fresh food groceries the average return to the farmer on a product was 28%. The return to farmers on the retail price of chicken breast meat was just 2% (Wagstaff, 2014). Australian farmers grow 94% of the total volume of food consumed in Australia. Australian poultry farmers grow all of the chicken consumed in Australia, apart from a tiny percentage of canned and ready-made meal preparations imported as cooked product. The Australian chicken industry must protect its ability to supply, and farmers' must champion their role in that.

The sacred cow is the contract growers' relationship with their processor. The vertically integrated poultry system lends itself to being able to enhance value along the supply chain, but there is a general perception of distrust between producers and processors (Peters, 2013). There is no development of a team brand or a partnership mentality. In a survey of 1344 growers conducted by the University of Delaware, 73% of growers expressed overall satisfaction with their poultry business but less than half said they felt they were full and equal business partners with their company or that company management understood their concerns. More than half (57.4%) thought that the company would retaliate if they raised concerns. Forty-seven percent said that communication with the company was inadequate. The majority of growers (52.8%) were not satisfied with the income they received from their poultry operation (Ilvento & Watson, 1998).

3.6 Food safety

In the latest attitude study by Food and Farm Care Canada (2012), food safety was the number one concern for consumers (29% of those surveyed). Similarly, Ontario farmers ranked food safety as the most important issue to them personally. The pressure, therefore, is to consistently supply a safe product for consumers. The high media profile of food poisoning incidents linked to *salmonella* and *e.coli* in chicken meat has created a perception issue around the safety of chicken meat (Risky Chicken and Burgers, 2013).

Pressures in poultry farming are felt in a number of areas, including those discussed above. These pressures are as a result of perceptions about how the industry operates, and how farmers farm. Unless farmers champion their success and good practices, these pressures will continue to squeeze farm and industry profitability.

Chapter 4: What needs to change?

The key to understanding the need for change is that perception is reality. It does not matter what the chicken meat industry is doing, it is what the industry is seen to be doing that is most important. If consumers are left in the dark about industry practices, then extremists and activists, fuelled by junk science, will fill the space with industry vilification (J. Grimes, personal communication, 15 March, 2014). Farmers, and poultry farmers in particular, have been content to do what they do, and not be concerned about the opinions of the people who buy what is produced. By assuming that if poultry farmers supply a high quality, safe, low-cost product, that consumers will understand and respect the way that farms operate, poultry farmers have done themselves a disservice.

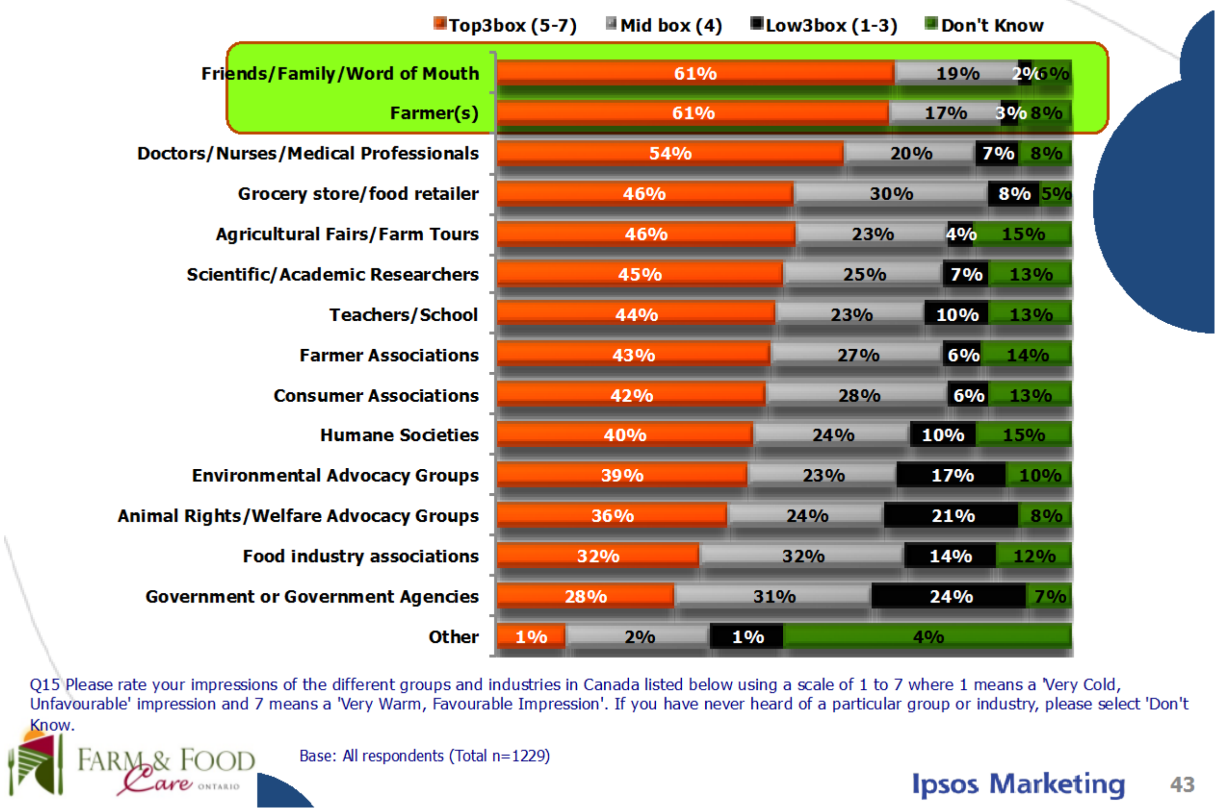
The reason, in the end, to challenge the negative perceptions of the industry is to increase profitability. Farmers do nothing unless it is profitable, and that is not a fault as 'big-business bashers' portray. Farmers need to get maximum value from the attributes that are in demand, which is product farmed in a welfare-friendly, environmentally sustainable way (J. Reed, personal communication, 30 August, 2013). Farmers then need to get the message that they do that out to consumers.

The following eight topics detail how the above can be achieved by discussing what needs to change and who needs to engage.

4.1 Farmers speaking up for themselves

An industry's best assets are farmers as credible spokespeople (K. Daynard, 2013). Food and Farm Care Canada's surveys every four years clearly show that farmers are credible sources of information (Figure 8). Farming organisations have a vital part to play, which is discussed later, but the most valuable and credible person to get information to the consumer is the farmer (K. Daynard, 2013). Farmers are on duty 24 hours a day, 365 days a year, whether they like it or not. Instead of feeling that an on-line presence such as blogging takes time away from the farm, farmers have to consider communication and engagement a new part of farming (K. Ludlum, personal communication, 17 March, 2014). Farmers need to embrace the shift in the thinking of what it means to be a farmer (R. Bonanno, personal communication, 27 March, 2014).

Figure 8: Impression of Food and Farming Information Sources



Survey results showed that 61% of people rated farmers as having a warm and favourable impression, the same percentage as for family and friends and for word of mouth information.
Source: *Farm & Food Care Canada, 2012*

Food and Farm Care Canada run a variety of workshops for farmers, including workshops called 'Speak Up' Team Training. Some of the strategies that they teach are invaluable skills for farmers, in areas that farmers are not traditionally strong. Practical strategies that farmers can adopt include:

4.1.1 Be better at communicating

With the poor perception of, and overall lack of knowledge about farming, first impressions count. Either in person or on-line, the farmer must consider every interaction an opportunity to build understanding and appreciation for what they do. The farmer should talk about what he/she knows, using personal and specific examples. Industry terms should be avoided or explained, so the detail is not overwhelming. Farm language tends to be technical and specific: yields, feed conversions, batches. The consumer identifies with general language like food, environment and providence. The farmer has to treat people of differing opinions with respect, and understand what their concerns might be. Body language speaks volumes, so it must stay positive to invite discussion but avoid debate (Tobin, 2013).

The farmer must find and focus honestly on his/her strengths and play to them. In the chicken meat industry, that is emphasising the availability, safety and popularity of chicken meat. It is also building on the back of the values with which agriculture is associated: environmental stewardship, independence, self-reliance, family and community. Aligning the chicken industry with general agriculture, acknowledging its place in the grand scheme of food production in Australia and partnering with the good messaging work being done in other farming are advantages that should be capitalized upon.

Poultry farmers have truth and science to back up how they farm but they must present information in an interesting and entertaining way. Kelli Ludlum (personal communication, 17 March, 2014) said that a criticism they receive at the AFBF is that they talk about science, science and science that the consumer does not want. The consumer just wants to know the chicken can 'flap its wings'. In Food and Farm Care Canada's (2012) survey, over 50% of farmers said that the message they wanted to convey was that they care about their animals. Therefore, farmers need to fill in the gap between science and what consumers can identify with - a message of care for the birds.

In answering allegations that farming practices harm the environment or create health risks, having the science to refute such perceptions is not enough. Activists use emotional hooks, so in turn, farmers should use the family farm angle and the nostalgic view people have of farming (K. Bounds, personal communication, 22 March, 2014). When asked whether intensive industries can do as good a job as broadacre farmers in spreading a good news message that can be well-received, Kelli Ludlum (personal communication, 17 March, 2014) answered that intensive livestock farmers have to work harder but the wins resonate better when people understand what they do.

4.1.2 Media training

There is a wealth of information on how to interact with media in many industries, and it is vital information for all in farming. It is not learned overnight. It takes practice, confidence and training. Some salient skills are:

- Respect others' opinions
- Never guess or generalize, but refer to someone more appropriate if the answer is not known
- Focus on key messages

- Deliver messages in quotes and sound bites
- Use blocking and bridging as interview techniques.

4.1.3 Become social

Companies in many industries now recognise the value of social media to connect with customers and influence decision-making. Farmers must be a part of that space too (Campbell, 2013). Once the farmer has figured out the message to convey, he/she must own it, and then talk to some people (figuratively). The farmer should plan, think of the audience (imagining the audience as one person in the target demographic), and have a commitment to maintain engagement. Progress can be tracked using analytics to better develop content based on audience, and to monitor the efficiency and consistency of the social media platform.

The livestock industry has fallen behind activists messaging in this space. As Tom Super (personal communication, 17 March, 2014), Vice President, Communications for the National Chicken Council put it, bloggers even have their own conferences where 'the crunchy-granola types get together' to discuss how they can force issues and 'drive traffic' on their blogs. The 'yummy mummies' and the 'millennials' are the big users of social media and they can be engaged with to spread farmers' messages. Tom said that they often simply do not have the information; they actually want to know what happens on farms, rather than just get their information from 'on-line activist bullies'.

The Internet provides a free, powerful and limitless platform for farmers to be heard. Brent Royce is a turkey farmer in Listowel, Ontario. He has found there is genuine interest, and also a genuine ignorance, about how birds are raised. He says, 'The point is to be talking about it' (B. Royce, personal communication, 29 March, 2014). When it is said that farmers have to learn how to use social media, what they need to learn is to communicate with consumers (Campbell, 2013). Increasingly, that communication is done through social media. Brent uses his twitter account @brfarms09, to highlight how comfortable the birds are in his barns when the weather outside is cold and uncomfortable.

Ohio farmer, Mike Haley, coined the term 'agvocate'; a combination of agriculture and advocacy (Haley, 2011). The term is extensively used in the #agchat twitter community and is 'representative of Ag proactively telling our story' (Agchat Foundation, 2014). AgChatOZ is an online discussion group, founded in 2010 with inspiration from the American model. The

Centre for Food Integrity (2014) in the US also has many on-line farmer resources to empower farmers to tell their story, and the aim is to do the same here in Australia (Mills, 2014). In Canada, http://www.agriculturemorethanever.ca was begun just two years ago. It is funded by Farm Credit Canada but is industry-led with 177 partners, including Farm & Food Care Canada, to improve perceptions and create positive dialogue about Canadian agriculture. It has 'resonated with farmers to provide a platform to share positive stories about the industry and life they love' (agriculturemorethanever.ca, 2014). The role of farming organisations in steering consistent, positive messaging is discussed in more detail later in this report.

4.1.4 Be 'nimble and informed'

Farmers must take the time to know what is going on in the news, both rural and urban, to know the big issues for consumers and the media (Emmott, 2013). For example, farmers can use the message of increasing health care costs and increasing obesity that are currently top-of-mind stories in the press to emphasize the health benefits of high protein low fat chicken meat. The Australian Farm Institute points out that the strongest connection between the Australian community and agriculture is through food. Food can be 'the entry point of any narrative of Australian farming' (Keogh, 2013).

4.1.5 Have an open door policy

An open door attitude strengthens community connections. Farmers tend to be invested in the community as it is their home, but rather than taking community criticisms personally, a better policy is to be conspicuous in the community (like serving on the school P&C or volunteering) so the community can see the farmer has a moral compass, and 'nothing to hide'. In Germany, the 'Day of Open Doors' for farming is 15 June each year. At one dairy farm alone they can get upwards of 8,000 people visiting (F. Plumeyer, personal communication, 22 August, 2013). Open Farm Sunday in the UK is the first Sunday in June every year. This year over 205,000 people experienced farm life on 375 farms (openfarm.org) (Appendix 1: Farmer Case Study: Claire Bragg).

An open door policy is effective on-line too because farmers are able to demonstrate to detractors that 'we tweet photos of our chickens' (T. Super, personal communication, 18 March, 2014). Going visual is an effective way to get a positive message out.

4.1.6 Partner with the processor

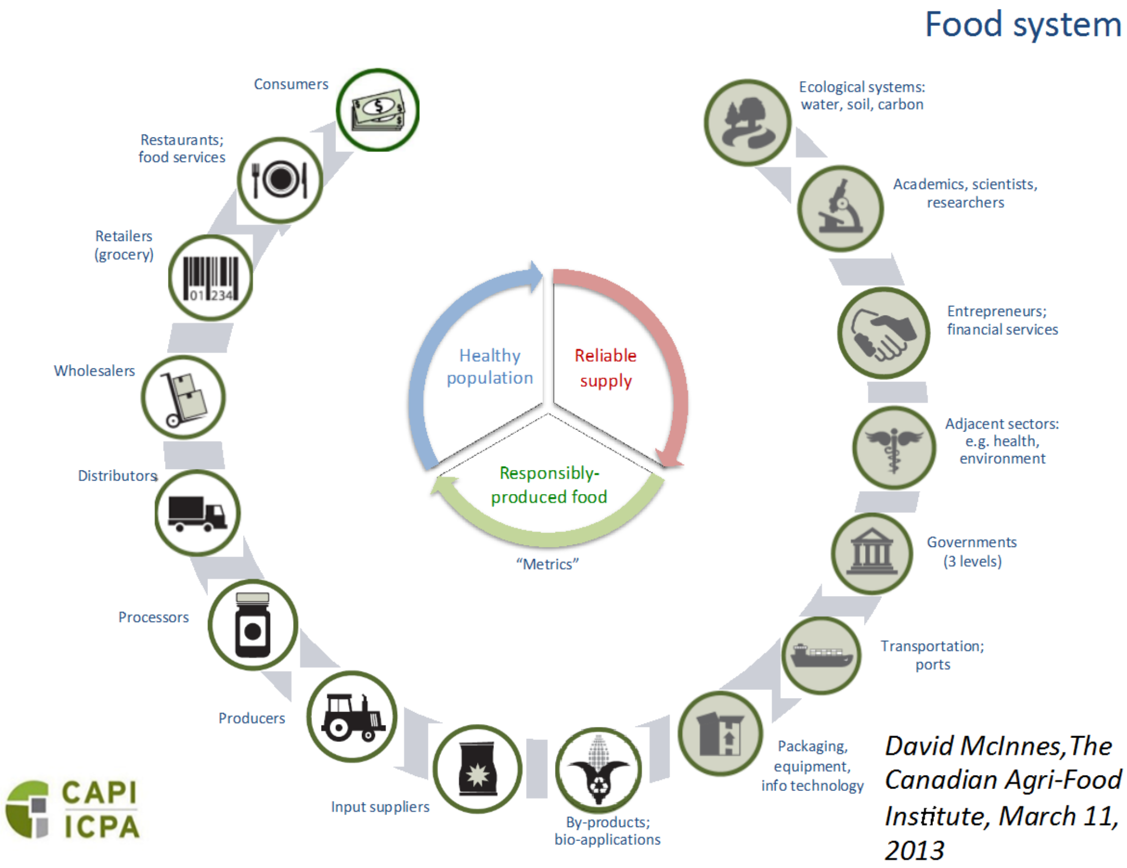
Bill Matteo, President of the Californian Poultry Federation, saw it as a strength that their association, like most other United States poultry associations, are not just grower organisations but processors and growers around the same table so that issues can be dealt with at a whole-of-industry level (personal communication, 7 March, 2014). The Delmarva Poultry Industry Inc. (DPI) has very strong links to banks, grain producers and allied industries, all of whom have seats on their board. They use those relationships to provide a strong voice to community and to government (K. Bounds, personal communication, 22 March, 2014).

Moy Park, one of the most successful processors in the UK, has a remarkable attitude of partnering with their farmers. They help raise money for new farmer investment with tripartite agreements with banks. Moy Park bought their own shavings business to supply bedding materials to farmers, they run an insurance scheme for farmers, and have a bulk gas deal. They are in the planning stage for a power plant in Ireland that will take all contract farmers' manure. They run their processing plant on two shifts plus the cleaning shift and the weekend shift: their philosophy? 'Since retailers don't close, and farmers don't stop, neither do we' (E. Reid, personal communication, 5 September, 2013). The number one message from Irish poultry farmer and founder of the Irish Poultry Council, Alo Mohan, is "Do not consider yourself a grower, but a farmer" (personal communication, 4 September, 2013). Alo says that the term 'grower' is perpetuated by processors, and trivializes the important job that farmers do. It fosters a self-perception of having less importance and less value in the chicken industry food chain than other sectors of the chain. The farmer must be proud and positive with the self-belief that he/she is a person with brains and guts, doing a difficult job that is not without risk.

4.2 Change where the consumer sits in the supply chain: Systems Thinking

As discussed in Chapter 3.5, there needs to be an improvement in how much of the retail dollar the farmer gets. In fact, margins for all parts of the value chain need to improve. John Reid, Chairman of the British Poultry Council, and Agricultural Director, Cargill Meats Europe said: "*We have been very efficient, and we have given that away* "(personal communication, 30 August, 2013). So the market in general needs to place a higher value on our product. In a survey of the Canadian beef industry, David McInnes (2013) found no alignment across the food chain, no shared long-term strategy, too many voices, and a need for leadership. The same could be said about the intensive broiler industry.

Figure 9: The feedback loop food system



Source: *McInnes (2013).*

4.2.1 The role of information

The food chain should be thought of as a feedback loop, not a horizontal chain (Figure 9). Consumers and farmers are important in that loop, and relationships must be enhanced all the way along the chain (McInnes, 2013). If a relationship can be built with the consumer by telling them how farmers do what they do, because this is what the demand is, that puts the onus on the consumer and the retailers to affect change if it is necessary (M. Cooper, personal communication, 29 August, 2013). Farmers are the part of the loop that the consumer wants to see. Without farmers, there is no chicken, and there can be no meaningful connection to the consumer. Whilst it is true that chicken farmers predominantly contract grow, they are not protected from the pressures to farming detailed in Chapter 2. Systems thinking can work, because '*a high tide floats all boats*' (S. Gregory, personal communication, 30 August, 2013).

At present, there is evidence to show that the well-documented importance that consumers place on animal welfare concerns whilst becoming more considered, do not necessarily reflect their purchasing habits (Grimshaw et al, 2014). In the UK, 80% of consumers say welfare is important, but only 20% buy anything but standard chicken (J. Reid, personal communication, 30 August, 2013). Marc Cooper, Senior Scientific Manager for the RSPCA in the UK thinks it will be a stepwise change. As responsible consumerism means people become more aware of issues over time, they become more interested, more concerned and more willing to purchase on those expectations (personal communication, 29 August, 2013). A Chicken Meat Usage and Attitude Survey (Brunton, 2009), funded by RIRDC, found that the industry has taken for granted their number one position as an automatic consumer choice because of chicken's popularity in the household and perception of value for money. The survey recommended that consumers could be motivated to purchase more by emphasizing support for Australian farmers. The survey also found that concerns such as antibiotics use, the (false) perception of steroid and hormone use, animal welfare and safe food handling do not motivate a change in purchasing behaviours.

Rather than look at 'traditional' ways of increasing profitability along the supply chain by decreasing input costs, farmers need to use a systems thinking model to look at marketability and building consumer trust in our food system. For example, the US Farmers & Ranchers Alliance (USFRA) runs a recurring series of 'Food Dialogues' for consumer influencers that are then available online (fooddialogues.com). These are to specifically 'market' the good work that farmers do. Whether that then translates to consumers buying more chicken, or paying more for chicken remains to be seen. However, it can certainly be helpful in addressing misinformation and inaccurate perceptions.

4.2.2 The role of processors

The industry needs to work in harmony to change the importance of the consumer in the supply chain. Processors need to expand opportunities, so that instead of cannibalising the meat protein 'pie', (increasing chicken consumption by decreasing that of red meat), they can grow the total amount of meat protein consumption by consumers. How that might be done is discussed in Chapter 4.6. Processors also need to embrace the potential of a powerful online presence. It is glaringly obvious when comparing the websites of overseas processors that the Australian industry needs to spend more time and money presenting a professional, educational and responsible face to the consumer through company portals.

Even within the processors' business the overarching integration of sections of their business must be harmonized; for example, cost-based decisions between least cost ingredients and pellet quality in feed inputs. Better pellet quality that the bird will like and that will improve feed conversion is balanced with the cost benefits of a cheaper grain that makes an inferior and less palatable pellet (A. Fahrenholz, personal communication, 15 March, 2014). As consumers' understanding of our industry increases, such decisions must be justifiable with the goals of bird welfare and good farming practices.

4.2.3 The role of animal welfare groups

The Australian chicken meat industry is in the process of allowing an animal welfare organisation (RSPCA) to control the industry's agenda with a set of accreditation standards. The retailers have embraced this, but the industry must now work to proactively suggest an alternative accreditation scheme that encompasses more than just animal welfare as a better option. In the United States, the American Society for the Prevention of Cruelty to Animals (ASPCA) have now turned their attention to broiler production and are working with HSUS. Their involvement in exclusively domestic animal issues will change, just as it has in the UK, EU and in Australia. Foster Farms' marketing now emphasizes their relationship with the American Humane Society. Whilst other sections of the industry see this as 'dancing with the devil' (K. Ludlum, personal communication, 17 March, 2014), Foster Farms believe they are catering to their consumer base and the issues their consumers see as important (Foster Farms, 2013). There are some who would say that the Australian industry as a whole now finds itself 'dancing with the devil'. The point to remember is that the strategy of animal welfare groups is to gradually reduce the 'toolbox of options' for farmers. When they achieve success in changing an industry practice, they move on to the next practice to gradually achieve their goal of people eating less meat (K. Ludlum, personal communication, 17 March, 2014).

4.2.4 The role of retailers

The AFBF have a similar view to that of the RSPCA in the UK, that if consumers want it, farmers will have to produce it. In other words, the market decides on production standards, since it should behave rationally from a cost standpoint. The difficulty in the Australian context is the inordinate power the two major supermarkets have over the market and consumer choice. If the whole chicken meat market moves to a standard that has significant costs to production (as RSPCA accreditation does), the ability to demand a higher price for a niche product is lost and the entire input cost structure of the industry moves up with resultant pressure on price. Food retailers and manufacturers are developing policies to drive growth and differentiate themselves in the market place but understanding choices and consequences does not resonate with the average consumer. Consumer habits change when retailers change which products are available and how they are marketed: choice editing for consumers by deciding what the consumer wants.

Chipotle is a quick service restaurant chain in the United States that uses on-line advertisements and billboards that focus on animal welfare. They advertise that they only use antibiotic free and free-range chicken. However, the unintended result of that marketing decision is the difficulty in guaranteeing supply. Some companies with similar strategies have had to renege on such pledges (K.Ludlum, personal communication, 17 March, 2014). Chipotle's fine print says 'try to use…when available'. 'Occasionally we'll experience a supply shortage of our naturally raised chicken, but we'll let you know in the restaurants if that happens' (Chipotle Mexican Grill, 2014). The market may not in fact catch up to this imbalance in supply caused solely by marketing decisions, if cost pressures make those choices unsustainable to the farming sector.

In the UK, the market share of the major supermarkets is decreasing (Tesco down 3.1%, Morrisons down 7.1% in the twelve months to May, 2014) while that of the discount chains such as Aldi and Lidl is growing exponentially (sales increases of 35.9% and 22.5% in the same period). It appears that consumers are more than willing to trade choice for price. The major supermarkets' answer to this has been to announce price cuts and bargains. Yet the cumulative effect is an erosion of Britain's share of production of their own food (down to 60% from a peak of 78% in 1984), and farmers walking away from farming because there is no profit in it (Rayner, 2014). If the agricultural sector does not reinforce to Australian consumers that we need to keep our agricultural base thriving by paying an equitable amount for food to support our farmers, retailers will begin to look offshore for our basics, including chicken. As the multi-national discounters gain a foothold here, rather than dilute the power of the supermarkets, it will unfortunately only exacerbate the consumer indoctrination to look for cheaper and cheaper options. In the UK, consumers are worried about rising food prices yet poultry remains an inexpensive and important category for retailers to drive up spend per grocery trip. When consumers make purchasing decisions at the supermarket, chicken is compared to pizza, not red meat, as the cheapest option to feed the family (L. Manning, personal communication, 30 August, 2013). Price of chicken, followed by promotions, then quality/performance of the product are the key drivers for purchasing (Burch, 2013). Paul Burch's solution to market the product is to use the time-convenience value of chicken, along with its health benefits. He sees the biggest opportunities in the value-added area, and in marketing on provenance (buying local). The Australian poultry industry needs to improve consumer awareness of both the value and provenance of our industry.

4.3 Attract talented people

Agriculture is in the unique position to be able to train the universal employee (Bonanno, 2014). This can help tilt the balance in the competition for resources, including encouraging the next generation of innovative farmers. Future farmers may very well come from urban backgrounds with different skill sets. Profit is not a dirty word, and farmers should be proud of the fact they want to do well. They should promote that to young people, including their own children (Bonanno, 2014). There has been a gap in educational opportunities, as already discussed in 3.2.3, and in industry training schemes to demonstrate a career path in poultry. The industry needs to raise the level of community awareness, open up more to the public and run public affairs programs to influence the influencers (J. Reed, personal communication, 30 August, 2013).

There are some good efforts being put into keeping young farmers in agriculture rather than working outside the farm. Poultry farms in the US have generally been bolt on, supplementary income streams, so the industry there is encouraged to be seeing poultry farms becoming the main income source (K. Bounds, personal communication, 22 March, 2014). The AFBF works closely with Future Farmers of America (ffa.org, 2014) and The Young Farmers & Ranchers Association (YF&R). These organisations run programs geared to attracting and supporting young farmers. They increasingly focus on social media and messaging. In Australia, the Future Farmers of Australia (FFN) is a similar organization that must be supported by all agricultural industries to raise the profile of farming and involve the next generation (futurefarmers.com.au, 2014).

4.4 Influence government

The efficiency and vertical integration of the poultry sector mean that it usually has a small influence on governments. However, experiences in other countries show that a policy perspective is a vital cog in the systems-thinking wheel.

In the EU, the CAP is the main mechanism advocating for solutions in agriculture. The positioning of agriculture at the heart of the European project is a lesson Australia can learn from. The rationale is that support of agriculture provides for the public good and serves the broader economy (Tuckwell, 2013). There is an acknowledgement of the social contract of agriculture. Australian agriculture could use that as a platform to protect the value of the entire sector.

In Canada, the government-mandated national supply management system protects poultry farmers from the high highs and deep lows of general agriculture by keeping prices good compared to operating in an open market. They have an almost exclusively domestic loop like Australia, and the quota system has been able to keep their industry healthy and viable (G. Zellen, personal communication, 28 March, 2014). The industry operates under a Chicken Farmers of Canada Code of Practice that means there is consistency across the industry and a common focus for animal welfare, food safety and waste management that is well-regarded by government. It is extremely difficult to argue that subsidised or closed systems are good for innovation and industry growth. On the other hand, strong policy lobbying to protect Australian farming is vital to ensure that the government is aware of industry issues.

The United States Department of Agriculture (USDA) is, in general, opposed to regulation and legislation as an intrusion into farm practices. Their stance is to support voluntary implementation of guidelines and best practices, as opposed to mandatory codes. That is always a better way to do it, to get it done more quickly, with less conflict and it is defensible in a very litigious country (K. Ludlum, personal communication, 17 March, 2014). On the environmental side however, there is very little that is not already regulation in the US. Agriculture there has always been quite bipartisan, and having nutrition as part of the Farm Bill has meant that issues can resonate more generally than just with the Agriculture Committee in the House and Senate (J. Greene, personal communication, 18 March, 2014). Having agriculture acknowledged in the more general fabric of wider issues provides a better platform to be heard.

The Congressional Research Service (CRS) is a non-partisan research organization that works for members of Congress and their staff to provide objective and credible information on issues of concern. In the agriculture section, the CRS work on farm bill policy, livestock and poultry related policy issues and rural development. Those in the CRS see that issues get into the public eye through activist activity. It takes far longer for the same issues to get into the congress's realm, so they advocate engagement on multiple fronts (J Greene, personal communication, 18 March, 2014). Animal welfare issues, apart from humane method of slaughter, are all dealt with at the US state level. Some State Farm bureaus are pursuing 'right to farm' laws as a consequence of suburban encroachment, and Mike Williams, Department Head at the Prestage Department of Poultry Science at North Carolina State University said that the general sentiment from county government is that they do not want the 'hassle' of neighbour complaint issues. The pervading sentiment is 'hey you're moving into a rural area, if you don't like it move out again' (C.M. Williams, personal communication, 15 March, 2014). The AFBF is focusing on preserving technologies at the grass-roots level - the 'toolbox of options' available to farmers to grow healthy and profitable enterprises and address the imbalance of emphasis on welfare with food safety and bird health. Those states with a high population density like Michigan (agriculture at the suburban interface) have instituted programs that are more stringent than regulations, like self-checklists to get nuisance protection and safe harbour protection (K. Ludlum, personal communication, 17 March, 2014). Bill Satterfield, Executive Director of Delmarva Poultry Industry Inc., said that the Delaware state legislature has a positive view of the chicken industry as the DPI spends time making sure they understand the issues and that they are at least neutralizing environmental groups (personal communication, 21 March, 2014).

In Australia, the National Farmers Federation is working hard to be the one voice of agriculture to government. President Brent Finlay's comments to Queensland Country Life (Bettles, 2014), that the federal government needs to align its Agricultural White Paper's policy priorities and direction with those in the NFF's Blueprint for Australian Agriculture, call for a consistent and common focus for wider agriculture.

4.5 Maintain R&D and innovation

Innovation and information sharing are the keys to success in the agri-food sector, and the success of the poultry industry depends in no small part on these two things. The industry needs to continue to squeeze out efficiencies as most poultry markets are as delicately balanced as the Australian market. The Australian industry is a strong supporter of two main research bodies: the Poultry Cooperative Research Centre (Poultry CRC) and the Rural Industries Research and Development Corporation (RIRDC).

According to Vanessa Goss, CEO of the Council of Rural Research & Development Corporations, the biggest challenge facing Australia is who is delivering the ‘E’: extension (Goss, 2013). Australian agriculture needs public-private partnerships to create processes to increase transparency and linkages. The CRRDC is the single voice to government of research so it must increasingly look at things like optimising resource use, ensuring demonstrable returns, and making sure that the money that industry puts into R&D is spent with a focus on performance, not administration and compliance. At a time when agricultural R&D funding is being cut, the whole agricultural industry needs to unite. Vanessa’s opinion is that if there was a consistent, persistent message at both a high level and at community level, industry would have much more sway with R&D funding than arguing about whether one RDC has enough money for the bad years (Goss, 2013).

It also makes sense to reduce duplication by developing global R&D. The poultry industry is adept at transplanting technology from one environment to another. There are world hubs for research like the University of Georgia (US) where there is money invested into research infrastructure and scholarships. There is some excellent work in many areas being done at the University of Delaware (B. Brown, personal communication, 21 March, 2014); The University of Maryland has done excellent research on poultry behavior, and North Carolina State University (NCSU) is one of the only universities to offer a graduation major in feed manufacturing (D. Jones, personal communication, 14 March, 2014). The Prestage chicken processing company has contributed US$2million to NCSU. They have one of the six university poultry science departments in the US, and the state produces almost 10% of the country’s poultry, (C.M. Williams, personal communication, 15 March, 2014). Extension services in the US are celebrating 100 years since foundation and the ties between agriculture and the university system have never been stronger. This research and its effective extension have the potential to impact not just on the US poultry industry but globally. The Australian industry must continue to work hard to maintain the linkages to such global R&D to gain maximum advantage from industry advancements, and disseminate it through local extension to farmers. The Nuffield program is precisely the type of investment in global capacity building that can tap into the global R&D arena, which is why the CRRDC in Australia supports the program.

4.6 Develop markets

4.6.1 Niche markets

There are profitable alternatives to intensive farming. The nostalgic consumer view of farming allows for a growth in niche farming systems to appeal to other markets. Contract farmers can grow in a different system with a different payment structure and a different supply chain, or farmers' co-operatives can have their own vertically integrated supply chain. Looking at global trends, such alternatives are a way to grow the Australian market, without detracting from the sales of other meat protein groups, as discussed in Chapter 4.2.2.

In the current intensive poultry contract system, the bigger a farmer gets chasing economies of scale, the higher debt servicing costs that farmer may have, and the less diversity he/she is able to implement. As an alternative, there are opportunities like those realized in the pork industry. Pork has gone from mixed farming to specialised farming, and back to mixed farming as farmers buy land to control their own inputs. According to Kurt Fuchs (personal communication, 21 March, 2014) alternatives in chicken farming such as heritage breeds, slow growing breeds, higher welfare systems and identity preserved breeds are all generating a lot of interest in the US. In the north east of the United States, the farming landscape has changed dramatically with the attrition of all types of farms. What are left are those farms close to urban markets that have built a relationship with the community, on which to capitalize and value add. In Australia, 90% of the population is now urbanized; therefore we have the concentration of population to similarly market provenance and alternative farming systems. For a chicken farmer, that would require development of a business plan, development of the needed contacts to sell the plan, access to inputs and development of labelling and branding (J. Ferguson, personal communication, 11 June, 2013). There are also opportunities for waste utilization. Chicken litter is a valuable and saleable commodity either as fertiliser, or as fuel for biodigestion. Gord Surgeonor (2013) characterized it thus; there is no such thing as waste, just an opportunity to make something else.

4.6.2 Traditional markets

The vertically integrated structure of chicken farming is ubiquitous because it works. Yet there is the distrust between the farmers and the processors, discussed in Chapter 3.5 that must be addressed. With the second highest global consumption of poultry there is potentially consumption saturation in Australia. The industry must capitalise on its ability to stretch chicken into more and more products in the marketplace. The processors perhaps have to shift their thinking from ‘How do we sell more?’ to ‘How do we all make more money on this item of chicken?’ It is a shift in focus from profits only in volume to making more money per unit. At present the Australian chicken industry has an almost exclusively domestic focus (Australian Commodities Statistics, 2013). The nearby markets of Hong Kong and Japan, for example, have a clearly demonstrated appetite for quality Australian beef. One day that may also be an appetite for quality Australian chicken. As the emerging Asian economies grow their middle classes they will grow their market for safe, high quality animal protein. At the beginning of this century, 14% of the world’s middle classes were in Asia. By 2050, 68% will be in Asia (Rayner, 2014). As Asian wages increase, Australia will become more comparatively competitive (Liddell, 2013). We cannot compete at the moment on land prices and labour, but we can already compete on other things like good quality farmland, skilled and educated labour, strong R&D, good water, and good access to markets (McInnes, 2013). Major poultry exporters such as Brazil and Thailand are able to effectively supply the Asian region, so it will be only on the back of high quality and safe product that we will gain a foothold in those markets (Witham, 2014). There are also opportunities to increase value-added exports, especially of exotic varieties such as quail, and niche products such as chicken feet into the Asian markets.

Exporting is at this stage just an interesting string being slowly added to the Australian poultry industry’s bow. The developing nations have the goal of increasing local production to reduce reliance on imports (T. Daynard, 2013). Nevertheless, the Australian poultry industry must be mindful that focusing only on the domestic market encourages a lack of competitiveness, limits growth and limits ‘thinking outside the square’ (Seguin, 2013).

Finally, a discussion of market forces and economics on a macro level does not take individual farmers into account. It is the job of farmers to make sure that there is a focus on maintaining profitable farmer businesses. This is discussed in the next section. Farmers and the poultry industry need to work in collaboration to create a team brand that gives equal importance to food safety, animal welfare, sustainability and waste management, and equal footing to the farmer and other sectors of the industry. As previously mentioned in Chapter 4.2.1, farmers are the drawcards for the consumer. Improving Australian labelling laws and an agriculture-wide, agriculture-led branding scheme should have strong roles to play (Stone, 2014). Such advancements can proactively lift the profile of Australian poultry farmers and protect our market, *before* the industry comes under pressure from chicken meat imports.

4.7 Attract funding to farming

Poultry farmers contribute approximately 40% of the industry's capital expenditure through farms, housing and associated infrastructure (Witham, 2013). Investment goes to industries that are seen as positive and smart, so keeping the poultry industry abreast of global competitors, investing in capacity and leading with innovation is necessary. Other agricultural industries advocate vertical integration as key to making money (T. Beck, personal communication, 8 July, 2013), so that is strength the chicken industry already has which attracts investment. If farmers cannot access capital themselves, vertical integration will drive the shift from individually based family equity. Farmers in the intensive contract system have the difficulty of making the jump from small to large enterprises, whilst still wanting surety of price. Therefore they need to maintain strong ties in farming groups so that they do not all compete to get to the bottom. There is certainly some anecdotal evidence to suggest that chicken farming is seen as a good agricultural investment currently and the strength of 'family farm' perception can be used as an advantage to grow rather than erode family farming enterprises.

Conclusion

What is it worth to Australians to grow our own food? In a country that cannot produce everything it needs, protecting industries and produce that can be grown is critical. If farmers do not value what they do, and get a positive, proactive message out to the general public they will lose the competition for resources, and the competitive ability to supply chicken to consumers.

Farmers need a paradigm shift in what it means to be a farmer. Agriculture is changing and evolving, and farmers must evolve too and take a stance for agriculture. Poultry farmers have been insular for too long. They need to get involved in getting the message out to consumers that along with the importance of biosecurity and food safety, the chicken industry has high animal welfare standards, responsible waste management, a high value-cost-efficient product, and a sustainable, valuable system. These are the messages farmers need to tell people, in simple, evocative ways that will stick. Then others can recognize and respect what farmers do. It is farmers, with the vital support of farming organisations, that are the credible champions in education and advocacy. Farmers must convince government to support pro-agricultural policies, more R&D and better extension; convince processors to engage more in whole-of-industry issues and embrace a partnership mentality with them; and convince retailers to acknowledge the value of farmers. A clear, consistent, and positive message must be delivered to retailers and activists who are shaping consumer perceptions, driving the shopping trolley dollar and affecting the potential for profitability of the whole industry.

Recommendations

The principal recommendation for further investigation is to build the agricultural brand, with poultry farmers sitting squarely in the front seat. Agriculture needs a stronger identity: that is, what people think about and expect from agriculture to build relationships, loyalty, and profitability. There are information-sharing roles to be filled by two sectors in the poultry industry: farmers and farming organisations.

The role of farmers

Chicken farmers must take responsibility for the industry's future directions: thinking globally, positively and proactively.

Farmers need to:

- Provide a confident, proud and united voice for farming.
- Embrace communication as a new part of farming.
- Care about what resonates with consumers.
- Become social.
- Be informed.
- Have an Open Door policy.
- Partner with processors and industry.
- Partner with wider agriculture.
- Participate in media training and communication workshops.
- Project a professional and business-like image with partnership branding exercises.
- Have 'Industry champions' to lead and mentor, supported by the farming community and supported by farming organisations.

The role of farming organisations

Appendices 2 and 3 discuss in more detail some of the work being done by farming organisations in the US and Canada respectively. Organisations such as The National Chicken Council (NCC), the Animal Agriculture Alliance, the US Farmers and Ranchers Association

(USFRA), and Farm & Food Care Canada, are leading the world with agricultural leadership initiatives giving farmers tools to communicate effectively.

Farming organisations need to:

- Provide separate but connected organisations for governmental lobbying and consumer outreach.
- Connect the right people in the right places in government and community, particularly at agriculture-wide levels to gain maximum leverage and exposure.
- Strengthen the ties between processors, farmers, and allied industries.
- Provide more professional and engaging on-line channels (websites, YouTube videos and blogs).
- Host farm and industry tours for media, politicians and consumers.
- Facilitate professionally produced farmer stories and stories of the next generation, including involvement in public television programs.
- Monitor activist activity to get ahead of the issues with influencer outreach campaigns.
- Provide media training and educational workshops for farmers.
- Provide increased marketing and promotion of agriculture to connect with the consumer, including professional advertising campaigns.

The poultry industry requires a central communication and positioning platform to overcome misconceptions, and expand the profile of 'Australian produced' (Brunton, 2009). The industry already has a peak body recognized by the Federal Government that represents all state grower organisations and the majority of the processor organisations. The Australian Chicken Meat Federation (ACMF) has begun a blog linked from their website, which is a positive step for the organization to engage with the community (www.chicken.org.au). However, ACMF, or an affiliated body, could take a more active role in farmer engagement. This could include:

- Regular webinars and seminars so that farmers feel informed and involved with broader industry, and to ensure consistent messaging and language.
- A Linked-In group so that farmers can offer opinions in a regulated and safe forum.

- A wider survey of consumers and producers for detailed analysis of how farmers can best influence consumers and their purchasing decisions, and to assess perceptions of welfare and environmental responsibilities of farmers.
- More engagement with the good work being done by wider agricultural organisations like the Australian Farm Institute and NFF.
- Encouragement of, and training in, social media channels for farmers (for example, #chickenchatOZ).

Further research could examine the power of marketing in food retailing to influence consumer choice. Investigation into using the very powerful and still relevant medium of television could be done (see Appendix 2). As an illustration, the Dodge Ram truck advertisement that first aired during the 2013 Super Bowl is a remarkably powerful and positive message of the value of farmers (‘Official Ram Trucks Super Bowl Commercial “Farmer”’, 2013). It has been viewed over 17 million times on YouTube. It contrasts powerfully to the YouTube-only Chipotle advertisement ‘The Scarecrow’ (2013), viewed by 13.7 million people that recently took first prize in the PR category of the advertising awards in Cannes (Krasselt, 2014). The Chipotle advertisement unashamedly and blatantly promotes erroneous perceptions of farming. Research into what types of marketing resonate best and gain maximum exposure would be valuable.

With strong and active farming organisations, vocal and proud farmers, the other things that need to evolve in our industry can be achieved: attracting people, influencing government, retailers and activists, maintaining R&D and innovation, developing markets and attracting funding. Farmers and farming organisations can build consumer relationships, foster the processor-farmer-consumer value chain links and build the agricultural brand.

Appendices

Appendix 1

Case Study: Claire Bragg (personal communication, 31 August, 2013)

Claire and Nick Bragg grow Freedom Foods birds (a standard backed by the RSPCA) in Somerset, England. They were Sainsbury Poultry growers of the Year in 2012 (retailers have a much more direct connection to farmers in the UK), and Claire is a 2013 Nuffield scholar. They have participated in Open Farm Sunday and Open Schools Days for the past five years with more than 5,000 people through their farm. They installed a purpose-built viewing area to the barns they built in 2012 so that visitors can see inside without compromising biosecurity. In February 2014 they launched a cooking school in a converted barn less than 200 metres from the chicken houses. They hire out meeting rooms and lease offices on their farm complex (Figure 10). They are only one kilometre from the nearest village. Although farming right on the suburban interface, they have embraced that consumer connection and used it to their advantage to expand their farming enterprises. Claire's openness about farming is in stark contrast to the attitudes of many in the Australian poultry industry who feel besieged by complainants, hide their farms behind as much vegetation as possible and try to 'fly under the radar'. Claire comments: 'People have an almost universal lack of knowledge. We need a commitment to transparency and integrity on each and every farm'.

Figure 10: Aerial view of FrogMary Green Farm (Claire and Nick Bragg)

This shot of their farm is from 2012, before they built their last two poultry houses on the right. It shows the house and barn, now a cooking school, on the left, and the other business offices in the middle of the farm.
Source: *Google Earth, 2012*

Appendix 2

United States farming organisations

- The National Chicken Council (NCC) recently took 30 members of the media through a farm, processing plant, feed mill and hatchery. It illustrated to the NCC that there were preconceived expectations of an uncomfortable farm environment as participants expressed surprise that they were not overwhelmed by ammonia (W. Roenigk, personal communication, 17 March, 2014). The NCC has a website, The Chicken Roost (2014) that does an excellent job of answering consumer questions, and hosts videos of industry practices. The NCC also uses this platform to rebut activist media: The Meat Racket (Leonard, 2014) is answered with a four-page 'National Chicken Council Myth-busting – 'The Meat Racket'' (2014).
- The Animal Agriculture Alliance (AAA) is a non-profit organization that shapes strategic outreach plans to encourage farmers to think long term. Emily Metz Meredith, Director of Communications from AAA said that every agricultural industry defaults to a 'wait and see' position that gives activists lead-time to get their message out instead. Her recommendation is to educate people with information, and get in front of the issues that will come up next. In the chicken industry those are antibiotics, stunning, stocking density, lighting, animal health, and the assumption that vertical integration is detrimental to farming (E. Metz Meredith, personal communication, 17 March, 2014).
- The United States Farmers and Ranchers Association (USFRA) was formed in late 2011, purely for promotions and marketing. Their whole mission is connection with the consumer. According to Kelli Ludlum (personal communication, 17 March, 2014), they tried for years to get everyone on the same page, and it was very difficult because all the agricultural organisations were fairly independent. They hired a professional communications firm to help keep feelings neutral and help each commodity group feel included and equal. Their website, www.fooddialogues.com, hosts a wealth of consumer-friendly, media-savvy information.
- The Delmarva Poultry Industry Inc. has been very happy with a recently produced Maryland Public TV miniseries on agriculture called 'Maryland Farm & Harvest'. DPI were approached to help find farmers to participate in the program, but had no

editorial influence. The series has been remarkably successful in counteracting activist views, and a second series has been commissioned (http://www.mpt.org/programs/farm/, 2013).

Appendix 3

Farm and Food Care Canada (personal communication, K. Daynard, 28 March, 2014)

Food and Farm Care Canada grew out of several other organisations in 2012 to provide a whole chain approach to advocacy to reach consumers and promote responsible farming. They have environmental specialists, media training staff, and a specialized information service that monitors activists' work. They created this as a separate arm of the organisation, so that the organisation as a whole was not spending all of its time on negative issues.

Some of the initiatives they have created include:

- The Real Dirt on Farming: a facts and figures resource published yearly.
- Faces of Farming calendar, illustrating that farmers are well educated, well spoken and not just 'gumboot-wearing, flannelette-shirt-wearing hicks'.
- Virtual farm tours website: it showcases 23 family farms and uses no last names. It receives 150,000 unique views each year.
- Breakfast on the Farm: an idea from Michigan, US, that attracts 2,000 to 4,000 people for an annual farm breakfast and tour.
- The Canadian National Exhibition: it includes a 'chicken mobile' run by Chicken Farmers of Ontario, which is like a bay of a chicken barn inside a van, with a Plexiglas wall, for those who cannot get to a real farm. It is seen by two million people annually.
- Culinary Tours: They have found that even aspiring chefs do not know much about where their food comes from, and they have successfully run six tours.
- Media Tours: They have hosted 300 reporters on 18 tours since 2004. Kelly Daynard said that ten years ago they could not get any reporters interested, but now the local food movement has changed that.
- Gourmet Taste of Ontario: this is a lunch every year that focuses on three different visits to showcase local food success stories.
- Farm and Food Care Canada are trying to build long-term relationships with journalists so that they know where the resources are if they need a story or to check facts.

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Plain English Compendium Summary

Project Title:	Something to Crow About
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Objectives	To understand the perceptions of the poultry industry and who drives them; to understand how perceptions of poultry farming have let to the pressures farmers face; to understand what needs to change and be strengthened; to recommend that the agenda for change is set by farmers with the supporting scaffolding of farmer organisations.
Background	Farming worldwide suffers from inaccurate information about practices and consequences. The Australian poultry industry, as an intensive animal industry, suffers greatly from inaccurate consumer perceptions driven by activists and retailer marketing. The aim of this report was to examine the perceptions of various groups and understand how they contribute to industry pressures, and then to formulate some ways to correct misinformation to contribute to the strength of and growth of the industry.
Research	Research involved speaking with farmers in poultry and other agricultural industries about pressures that they face, meeting with different sectors in the poultry supply chain, and with representatives from farming organisations, to discuss how they help farmers and help agricultural industries in lobbying, outreach and education. Countries visited included England, Ireland, the USA, Canada, France and Germany.
Outcomes	This report concludes that farmers, and poultry farmers in particular, with the support of farming organisations, need to be proud, positive and confident about what they do. They need to make communication central to farming, to get accurate messages to consumers that will resonate with them. Farming organisations can help navigate the change by giving farmers tools to engage with the public, by fostering strong relationships in all parts of the value chain and by media-savvy on-line portals.
Implications	This report advocates future work in the building of the agricultural brand to strengthen relationships and loyalty to ‘Australian-produced’ so that we do not lose the competition for resources, nor the competition to supply our nation’s food.