

Animal welfare, environmental, & ethical issues affecting the value of NZs pastoral products.



**A report for the New Zealand Nuffield
Farming Scholarship Trust.**

By Alec Jack, 2009 NZ Nuffield Scholar

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Foreword

By introducing myself from the outset, I hope to help you understand where I'm coming from ... my perspective, my personal bias, my motivation, my interests, i.e. an insight into why I may see the world differently from you.

I am the current owner operator of our intergenerational family beef farm, which I hope will provide a solid base for our family for many generations to come.

In 2006 we were the winners of the inaugural Northland Ballance Farm Environment Award, and from 2007 to 2009 we were the Far North, Meat and Wool NZ monitor farmers.

Our beef farm, like most NZ pastoral businesses, is committed to profitable and repeatable means of producing high quality animal protein products from resident pastures grown in conditions (soils, climates, locations, etc) unsuitable for growing crops for direct human consumption.

NZ pastoral farmers have made great productivity gains since subsidies were abruptly removed 25 years ago, to the point that many now feel they are pushing the boundaries of environmentally sustainable profitability. With a productivity glass ceiling reached, our products need to become more valuable in order to compensate for rising costs, and to enable us to lift production to satisfy the demand of the growing world population.

I sought the travel opportunity which a Nuffield NZ Farming Scholarship offers, to understand better the multitude of factors affecting the value of NZ pastoral products, to see how other farmers are responding to similar challenges, and to bring home ideas which may assist in sustaining greater profitability for NZ pastoral farmers.

It was my privilege to visit England, Wales, Brussels, Brazil, Canada, Mexico, USA, Hong Kong, Korea, China and Australia during 5 consecutive months of travel during 2009.

In an effort to give this report a focus, it primarily regards the rise of animal welfare, environmental and ethical issues on the global stage, and in particular, in our UK lamb and US beef markets. I will digress towards the end of the report and touch on other observations which may impact on the long term viability of farmers like myself.

Having always considered myself an optimist, my Nuffield experience was quite sobering. The cost of food will continue to rise, but I see no end in sight to the rising compliance costs of farming, or to the costs of accessing the global marketplace.

In the year ended 30 September 2009, the pastoral farming sector produced 42% of the FOB value of NZ's total merchandise exports (data provided in email from Meat & Wool NZ Agricultural Analyst).

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Thank you to Nuffield NZ (trustees, selectors & Barbie) for allowing me this opportunity; and to John Horrell, Joe Ferraby, and AgFirst Northland for supporting my application.

Thank you to Nuffield Australia and the nine 2009 Aussie Nuffield Scholars who shared their Global Focus Program with me, and for the subsequent tour of China.

Thank you to the Nuffield family and friends overseas for your warm hospitality, your generosity, and your willingness to share your knowledge.

Thank you to the NZ Embassy staff in Washington DC, London, Seoul, Hong Kong, and Beijing. Thank you to Silver Fern Farms Ltd for sponsoring the flight changes which facilitated my visit to MAC, and the McDonalds headquarters in Chicago.

Thank you to my staff Matt & Tim, and especially my parents Ned & Amber for managing the farm in my absence during 2009, and to Chris Boom for his advice.

My greatest thanks is to Kelly, my fit young wife, and our precious children Olivia (8), Todd (6), Jessica (3) and Kate (3) for allowing me this time of personal growth at your expense. I missed you all *terribly* while I was away.

Abbreviations

AFBF - American Farm Bureau Federation (a.k.a. the Farm Bureau)

BSI – British Standards Institution

CA – California

CIWF – Compassion in World Farming (a.k.a. Compassion)

DEFRA – Department for Environment, Food and Rural Affairs (UK)

FOB – Free on board (value of goods delivered to ship for shipping)

GE – Genetic Engineering

GHG – Greenhouse Gas

GMO - Genetically Modified Organism (product of genetic engineering)

GWP – Global Warming Potential (impact of emissions on the heat radiation absorption of the atmosphere)

HSUS – the Humane Society of the US (a leading US animal rights group)

IP – Intellectual Property

MAF – Ministry of Agriculture and Forestry (NZ)

NRC – Northland Regional Council

Nuffield NZ – New Zealand Nuffield Farming Scholarships Trust

NZ Inc – “NZ Incorporated” (colloquialism describing the combined interests of NZ)

NZVA – New Zealand Veterinary Association

OIE – World Organization for Animal Health

PAS2050 – Publicly Available Specification (promoted by The Carbon Trust, UK.)

QSR – Quick Service Restaurant

R&D – Research & Development

RDC – Retail Distribution Centre

SPCA – Society for the Prevention of Cruelty to Animals

☺ - humour (medium dry)

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The aim of this report is to contribute to the discussion that we as NZ pastoral farmers need to have to remain relevant in the rapidly evolving marketplace. I am a beef farmer with no experience in marketing, but I recognize the need for pastoral farmers to think more about the values, wants and needs of the consumers of our products. In particular, we can no longer take for granted the ease with which our production systems have met the environmental, animal welfare, and ethical expectations of our customers in the past.

Animal Welfare

You can be on the right track, heading in the right direction, but if you're not moving fast enough you'll still be flattened by the train.

Animal welfare is a huge and rapidly evolving subject encompassing a broad spectrum of situations, but for the purposes of this report, I shall focus on those issues affecting NZ pastoral farmers.

Animal Welfare Groups

There is a world of difference between animal rights groups, whom we will never satisfy, and animal welfare groups with whom we share common objectives and with whom we must closely align.

Animal welfare groups generally accept the right of humans to use animals provided that they are well cared for in life, and treated humanely in death. An example of an animal welfare group is the UK based CIWF (Compassion in World Farming). Also known simply as “Compassion”,

“Compassion in World Farming is working strategically toward a whole food system that is truly kind, caring and honest - kind to animals; caring for the environment and consumer health; and honestly labeled.” Philip Lymbery, Chief Executive” www.ciwf.org.uk

Joanna Lumley is their patron, and their principle goal is to end factory farming. CIWF have been credited with banning veal crates, sow crates and barren battery cages for laying hens across the UK and EU. They continue to campaign against long distance transporting of animals (seeking a maximum journey time of 8 hours) and successfully eliminated export subsidies for EU farmers transporting live cattle to the Middle East.

I met Philip Lymbery, the CEO of CIWF in London. Philip was complimentary of NZ’s free range pastoral farming, and of the contribution to global animal welfare that New Zealanders like Barry O’Neil (OIE), David Bayville (MAF) and David Mellor (Massey University) are making. But he expressed grave concerns about talk of the resumption of live sheep exports from NZ to the Middle East.

Considering the challenges NZ lamb faces in the coveted and protected UK lamb market, it would be a mistake to make enemies of sympathetic groups like CIWF and the consumers they represent and influence, by allowing live sheep exports from NZ to the Middle East to resume.

Animal rights groups

Animal rights groups take animal welfare a considerable step further generally believing that animals should be viewed as legal persons, not property, and that they should not be used as food, clothing, research subjects, or entertainment. They are often criticized for fund raising on the mainstream animal welfare platform, to further a more “extreme vegan” agenda ... which also appeals to those critical of the carbon emissions of livestock. Indifference toward animal welfare on our part will allow standards to slip, and give animal rights groups the evidence they seek to undermine our rights to farm livestock.

The HSUS (Humane Society of the US) is an example of an animal rights group, and is probably the primary antagonist of US farmer organizations such as the AFBF (American Farm Bureau Federation, “the voice of US agriculture”) on animal rights issues. Many US agriculturalists have concluded that there is no pleasing the HSUS, and they’re tackling the animal rights industry head on.

Bob Stallman, President of the AFBF has drawn a line in the sand. Here are 3 separate quotes from his speech at the January 2010 annual meeting in Seattle:

“...a line must be drawn between our polite and respectful engagement with consumers and the way we must aggressively respond to extremists who want to drag agriculture back to the day of 40 acres and a mule.”

General George Patton was very quotable. He said that in times of war, “Make your plans to fit the circumstances.”

Are we going to let animal rights activists destroy our ability to produce the meat that Americans want to eat? I say: No, we are not!”

The frustration of an industry under siege and feeling unappreciated is understandable, but it is vital that we in NZ identify who we can work with, and who we can’t. As an industry based upon harvesting pastoral production with ruminants, to produce saleable animal products, we can never hope to satisfy the desires of the animals rights movement.

We must take care though, that we don’t alienate consumer/voters who don’t understand the distinction between animal welfare and animal rights groups. We must therefore strive to work closely with animal welfare groups, to ensure our consumer/voters recognize how much we value the high and improving animal welfare standards within our industry.

By building this relationship we can also tap into the resources of groups and individuals who are passionate and well informed on global animal welfare trends, and that can advise and guide our ongoing animal welfare standards evolution. This partnership approach, and process of continual improvement will ensure that our solid reputation for world leading animal welfare in non confinement agriculture retains its integrity.

Although our contact with representatives of the SPCA and MAF Animal Welfare is rare, we should recognize them as fellow team players and take any opportunities to be supportive and acknowledge the good work they do for our industry.

Proposition 2

In November 2008, Californians voted (63% for, 37% against) in favor of **Proposition 2**, an initiative introduced to the State elections by public petition, which enacted the Prevention of Farm Animal Cruelty Act. The Act deals with the confinement of 3 types of farm animals requiring that calves raised for veal, egg-laying hens and pregnant pigs be confined only in ways that allow these animals to lie down, stand up, fully extend their limbs and turn around freely.

This has rattled the cages of agricultural USA in more ways than one.

First and foremost, by 2015, Californian farmers must have implemented the new space requirements at significant capital expense. Chicken farmers globally tend to operate on slim margins, as large corporates tend to own the genetics, the processing & marketing, and control every portion of the supply chain in between. The farmers are left with the production risk and the manure ... many won't be able to afford the new standards. The cost of animal protein production will rise.

It has also been a crash course in modern lobbying techniques. The HSUS led the "Prop 2" campaign making excellent use of internet social media. No doubt you have heard of twitter, facebook, and youtube to name a few. Animal rights lobbyists can convey their message at low cost, and with emotive music, narration or text, by posting digital video of appalling animal welfare scenes on the internet. We all wish we had embraced computers sooner, and social media is here to stay. We can either embrace it or be confused and abused by it. If a picture says a thousand words, youtube must say a million.

Agricultural US's fears of dwindling political clout have been realized. It lacks the voting numbers, and political representation to stamp out legislative change which moves against them. In an increasingly urban population, their once great political influence is now more bark than bite, and they need to pick and plan their battles carefully. Sound familiar?

It demonstrated that those livestock farmers' perceptions of acceptable animal welfare standards have slipped out of step with the voter/consumer. Farmer attitudes to the importance of animal welfare are like a big ship that is turning, but is turning too slowly. Even if we feel the science of our position is strong, we need to make sure that the voter/consumer is on board. There are obvious parallels with other issues like GE and HGPS.

The rest of the US watches these developments in CA (California) knowing that CA, like the UK, has "progressed" further into the future of animal welfare standards than the rest of the US, and these are all lessons with relevance to NZ pastoral farmers. If we don't do a better job of telling our story and we don't keep our own house in order, we can expect significant changes to be brought upon us which will be costly to implement and damaging to our relationship with consumer/voters.

I had the opportunity to sit in on the California Farm Bureau, Animal Health & Welfare Advisory Committee whose membership is comprised of academics, vets, a diverse range of animal agriculture representatives (aquaculture, equine, goats, beef, dairy, etc) and is hosted by the CA Farm Bureau. There I overheard a farmer representative reflect that while US agriculture was making positive changes in animal welfare, they just hadn't been moving fast enough. He summed it up with "*You can be on the right track, heading in the right direction, but if you're not moving fast enough you'll still be flattened by the train.*"

How food is produced has become a significant part of a products intrinsic value to many of today's consumers, and we need to ensure we are producing a complete product that consumers value.

Animal Welfare Act

Our obligation to care for animals is central to NZ's Animal Welfare Act 1999.

For a guide, see <http://www.biosecurity.govt.nz/legislation/animal-welfare-act/guide/index.htm>

This care is based on providing the internationally recognized essential needs of animals, summed up by the 5 freedoms:

- (1) Proper and sufficient food and water.
- (2) Adequate shelter.
- (3) The opportunity to display normal patterns of behavior.
- (4) Appropriate physical handling to minimize the likelihood of unnecessary pain or distress.
- (5) Protection from, and rapid diagnosis of, any significant injury or disease.

Codes of welfare support the Animal Welfare Act. They set out the detail of minimum standards, and are able to be used as evidence of the failure to meet the obligations of the Act where prosecution is necessary.

We have an impressive animal welfare safety net, but the rate of animal welfare evolution is picking up, and NZ pastoral farmers need to consider how some of our farming practices look on youtube or international TV. For example, on our farm we now only buy polled breeding bulls because I know I'd feel more comfortable explaining that process to the media than I would the dehorning process. I also want to encourage the breeding of polled cattle because I believe that dehorning may soon become more costly and regulated due to rapidly evolving consumer expectations of animal welfare.

Pastoral NZ

Our animal production systems have been shaped by the physical resources this country provides, and the expertise of the people who settled here. We've never had enough of the land and climate necessary to produce the vast amounts of crops required to support a confinement agricultural system, but we do have significant areas of land suitable for grazing ruminants on perennial pastures.

As a result, almost all of NZ's dairy and red meat production systems are free range and grass fed. The perception is that this non confinement provides for better animal welfare standards because the animals are better able to exhibit their natural behavior. We benefit from this perception even though we have made little conscious effort to earn it, and as humans, we don't tend to appreciate what we haven't had to work for. Easy come, easy go.

The fact is that we face animal welfare challenges which are unique to us, and we must ensure that we don't squander our head start in the ongoing race to keep up with consumer expectations.

Of the 5 freedoms, whether or not we provide "adequate shelter" is the focus of criticism by northern hemisphere farmers. There are pros & cons to any system, but my conscience is clear ... we have the tools at our disposal to provide adequate shelter. But it is vital that we recognize what is perceived by these critics to be our Achilles' heel, and that we take action, employ those tools (timing of lambing, shelterbelts, natural shelter, aspect, timing of shearing, genetics, etc), and ensure we don't present our critics with evidence to be used against us ... particularly in the sensitive UK (therefore lamb) market.

We need to maintain great animal welfare housekeeping to ensure we're never pressured by the EU to house our ewes and lambs at lambing. Scenes in the media of NZ farmers heaping piles of dead lambs from the snow exclaiming "there's nothing we can do" don't impress our urban public or UK farmers who house for lambing and don't consider unattended lambing as acceptable.

If we don't reinforce the perception, at every opportunity, that farmers are worthy of the right to own and manage this country's land and livestock resource, then those rights will be eroded by the urban majority, and one day we may bare the cost of having to be licensed to care for animals. We should consider our right to farm animals a privilege, and recognize the weight of responsibility in having animals completely reliant on us and our ability to care for them.

The more we demonstrate respect for the responsibility of caring for our livestock, the more likely we are to earn the understanding of our consumers/voters when things go wrong. For example, when responding to the media, perhaps we could show more concern for the plight of new born lambs dying of hypothermia, before counting the financial cost of unexpected weather events. We tend to forget that death is a part of life that we are probably more accustomed to than our urban consumer/voters, but it is important to show compassion to the animals first and foremost when dealing with the media.

In the US & UK I heard on several occasions that the dairy industry is likely to be the next major target of welfare criticism, and not just for the confinement agriculture, which we are essentially immune from, but also the very basis of dairying ... producing a bobby calf with no purpose other than to initiate another season's milk production. Obviously many calves are essential replacement heifers, but the treatment of the bull calves during their short lives will come under intense and emotive scrutiny, and the industry will be challenged to justify its actions.

Dairy operations which use sexed semen to produce the number of heifer replacements they require, and then follow up with a beef bull to ensure surplus progeny are valued, will serve the industry image well. The beef industry would do well to look upon the dairy industry as its breeding herd, and get proactive in supplying dairy farmers with beef genetics. Dairy beef also has a lower carbon footprint than traditional single suckled breeding cow systems because most of the dairy cows' carbon footprint is attributed to dairy production.

We promote the assumption that livestock farmed with good animal welfare practice, produce better, and therefore farmers naturally strive to be better guardians of the animals they farm. The same could be said for long term environmental sustainability, yet on the fringes there are those of us who push the limits for short term financial gain, and threaten the positive image of our pastoral industry.

Our culture of not dobbing in law breakers, flashing your lights at a speeding driver who is unwittingly approaching a speed camera or police car, is naive and counterproductive. Farmers need to know there are channels of communication available through MAF (0800 008 333), the Rural Support Trust, and Federated Farmers, where suspected animal welfare abuse can be reported confidentially, to action an assistance process without the risk of negative publicity damaging the wider industry. Farmers can feel confident that their concerns will be addressed in a manner which will lift animal welfare standards within our industry, and assist farmers who are struggling. This helps keep our house in order, ensuring we have a good story to share. The ultimate indicator of trust would be if farmers who weren't coping felt their best option was to seek the assistance of MAF or Federated Farmers for themselves.

Animal welfare is a component of added value, often bundled up with other product qualities, and while it may not appear to provide a premium, the great value of affluent market *access* itself is often unacknowledged. Farm assurance audits will increasingly become a core part of modern farming (as it is overseas) as consumers demand evidence that their animal welfare expectations are met.

Environmental issues

Environmental sustainability is an intensely emotive topic and this report is not about to deliver solutions to issues like world population growth, the release of fossil fuels into the atmosphere, depleting oil and fertilizer reserves, or climate change.

In the foreword I touched on the sobering effect my Nuffield experience was. In my contact with diverse groups such as EU politicians, The Carbon Trust in London, and financial gurus in Hong Kong, I found well informed people who are deeply concerned about the lack of real solutions to these challenges. It seems that for all our good qualities, as a species, human beings are competitive, selfish, and unwilling to relinquish our standard of living relative to anyone else's. We'd rather all go down together. As consumer/voters feel the cost of climate change mitigation starting to bite into their personal standard of living, climate change skepticism will rise. We need a benevolent dictatorship to rule the world ☺.

I don't consider it my role to convince you that climate change is real. The global reality is that the prevailing political and commercial opinion says that mankind can, by reducing GHG emissions, make this world a better place to live in. This report presents some ideas to help NZ pastoral farmers respond to the evolving political and consumer sentiment toward environmental issues.

What clean green premium?

I would suggest that the clean green *premium* which NZ pastoral farmers keep hearing we receive, amounts to market access maintenance. While that is vital, there are other sectors within NZ Inc that benefit just as much from the time, cost and physical efforts we make to retire bush and waterways.

The bulk of our pastoral products are essentially bulk commodities, competing against similar product specifications from around the world. What opens doors for our products is often quota access (eg UK lamb quota based on trade when the UK joined the EEC in 1973) but more specifically, our food safety record and our competitive pricing ... both of which are related to our free range pastoral grazing systems, our island isolation, and the investment we commit to maintaining our food safety record.

Our food safety record and ability to supply product at the right price, to specification, in a timely manner is paramount. Being clean & green is a given; an entry level prerequisite standard for NZ Inc to operate in the marketplace. It's a largely subjective baseline which all developed nations claim to have attained, or to have equivalence on. Its *premium* benefits in the marketplace are sometimes overstated, especially in markets outside the EU and US, and for processing cuts and ingredients.

Ask not what we can do for NZ Inc.

By simply excluding our livestock from waterway margins and native bush, for example, pastoral farmers make a *capital* improvement to NZ's environment and biodiversity. Native bush that is grazed and unable to regenerate is doomed, like any population unable to reproduce is doomed. NZ Inc (the interests of all New Zealand individuals and industries) benefits when landowners make such changes for the better. Who should therefore *share* the cost? NZ Inc.

In my travels, nowhere did I see greater fiscal accountability from farmers for their environmental impact ... whether that be compared with foreign farmers' exclusion from carbon emissions accountability, or their taxpayer funded subsidies (e.g. modulation fund portion of the UK Single Farm Payment) for their entry level environmental stewardship.

What was more common in fact was a plucky stand from landowners who pointed out that the manner in which farmers have tended the land, the forests, and the waterways throughout history, has shaped and now maintains the landscape their countrymen enjoy. Their tourism and wider industries sell their wares on the back of those images of what makes the English countryside, for example, so beautiful. Good on them! All the more reason to suggest to their domestic consumers that buying local is the ethical choice.

I'm not suggesting annual environmental subsidy payments to qualifying landowners because NZ farmers would simply capitalize the income into land values, thereby cultivating a culture of dependency. What I believe would be more effective is a taxpayer contribution to a national Environment Fund (similar to that operated by the NRC for example) for *capital* projects on farms which protect the waterways, and native flora & fauna ... the biodiversity which is so uniquely NZ.

Help us, help you

There are limits to what the economics of NZ's free market agriculture can deliver; because NZ's pastoral exports are *not* competing on a free market level playing field in the global marketplace. There is, therefore, a gap between the financial returns to NZ's pastoral farmers, and our ability to meet the full cost of the environmental aspirations of the citizens of NZ. All of NZ Inc enjoys the benefits of being clean & green, some sectors arguably more so than pastoral farmers, yet only the sector which has the nations natural biodiversity and water resources inextricably entwined through it, is being asked to bear the bulk of the cost.

The manner in which farmers treat the natural resources situated within their farm boundaries, *but outside their operating business area*, affects all NZ businesses that hang any portion of their image on that of NZ's image as a clean green country. Essentially I'm suggesting that pastoral farmers contribute to NZ Inc by retiring (not selling) a small proportion of their freehold land from the business of pastoral farming, for the cost to NZ Inc of only a fence and perhaps a water trough.

I hear the rustle of NZ Inc reaching for its wallet ☺, keen for the opportunity to assist landowner's investment in national good environmental *capital* projects ... with perhaps a 2 tier approach:

Tier 1. The landowner prevents livestock access to waterways and/or native bush ... much like the current Environment Funds of our more progressive Regional Councils, it is a 50:50 agreement with the materials paid for by the fund, and the construction completed at the landowners' expense.

Tier 2. If the landowner agrees to the fund manager's enhanced protection proposal, which would require more land retired for riparian protection for example, the fund covers materials *and* labour.

We can't change the past, we can only effect change from this point forward. The physical state of the country is what it is right now. With regard to NZ's wetlands, native flora & fauna, and water quality, there are improvements that can be made from this point forward, on private land as well as public, that will provide benefits to all New Zealanders at very little cost.

The essence of my proposal is a partnership approach, with NZ pastoral farmers obliged to protect NZ Inc's precious environmental resource, but supported by a fund to get the job done as soon as possible, rather than when the business of farming can afford it.

Carbon Footprint

The 2 big issues for NZ pastoral farmers, beyond our basic national house keeping, come down to carbon, water and their footprints on our pastoral products. Although climate change has been brought about principally by the burning of fossil fuels releasing CO₂ into the air, unless food products are exempted from the Kyoto and successor protocols (like food is exempted from GST in Australia), we pastoral farmers will be required to play a part in mitigating those effects.

This link http://randd.defra.gov.uk/Document.aspx?Document=FO0103_7898_FRP.doc takes you directly to the DEFRA project: “FO0103, Comparative Life Cycle Assessment of Food Commodities Procured for UK Consumption through a Diversity of Supply Chains”.

I recommend downloading it, and reading the executive summary, the sections on NZ lamb and Brazilian beef, and the table near the end of the report. It provides an insight into the complexity of assessing the environmental impact of any given products production & consumption, but also helps understand where the hotspots influencing the result lie.

GWP (Global Warming Potential) is the Kyoto Protocol term for quantifying the impact of GHG emissions on the heat radiation absorption of the atmosphere. This is more frequently referred to as a carbon footprint which is determined by the PAS2050 format which was developed by the Carbon Trust, DEFRA and BSI in the UK, to provide a common basis for comparison. A carbon footprint is a subset of the more comprehensive LCA (Life Cycle Analysis).

It concluded that the GWP of NZ lamb delivered to the UK was roughly 20% less than that of lamb produced in the UK. The GWP for the shipping component of products with high GWP burdens per ton of production (like lamb or beef) is low relative to products like apples for example, where the shipping component represents a far greater proportion of the products total GWP or carbon footprint.

So that was good news. Of more concern to my beef farm business, was the comparison between UK and Brazilian beef. The GWP of Brazilian beef was about 30% greater than UK beef.

This is essentially due to slower animal growth rates, and a reliance on weaners from breeding cows (with a low weaning efficiency) leading to greater maintenance feed costs per kg produced, in Brazil. Once again, the shipping GWP had a negligible effect, but the higher UK animal growth rates, and larger proportion of replacement stock sourced from dairy cows gave UK beef the advantage, despite significantly higher primary energy use in the UK beef production system. Essentially, the more feed expended maintaining animals, the more CO₂ equivalents are emitted per unit of beef produced.

We need to explore the impact on profitability of reducing stocking rates, and increasing animal growth rates. These measures would result in lower feed utilization, and lower production per ha, but if carbon footprints become subject to non tariff trade barriers, or strong consumer preference, we need to know where the cost/benefit lies.

From an animal welfare perspective, lower stocking rates also look better to consumer/voters; particularly to those who are accustomed to the lower stocking rates of their own subsidized countryside. It may be time for the pendulum to swing back from productivity per ha, to emissions & feed efficiency per kg of meat produced (with local environmental benefits to soil & water as well).

It is significant to note that their report was completed at the end of 2008 but based on 2005 statistics ... and several years into **our** future, our systems will be judged and classified based on our actions **now**.

Carbon labeling

The global climate conference in Copenhagen demonstrated how difficult it will be to come to a global consensus on how to tackle climate change. Affluent consumers, the kind that can afford NZ lamb, in the UK/EU are making informed choices about their personal impact on climate change by heeding carbon labels, and/or learning about the carbon footprints of the products available to them.

The Swedish National Food Administration has published a guide for its consumers to make food choices based upon their own health, and that of the planet:

[http://www.slv.se/upload/dokument/miljo/environmentally effective food choices proposal eu 2009.pdf](http://www.slv.se/upload/dokument/miljo/environmentally_effective_food_choices_proposal_eu_2009.pdf)

The result is that consumers are advised, for example, to eat carrots rather than cucumbers and tomatoes because carrots have a lower carbon footprint. If consumers are serious about climate change, they will choose it, and choose how much they are willing to pay for it, when they select the goods & services they require.

This month the UK “Telegraph” reported (<http://www.telegraph.co.uk/earth/earthnews/6936658/Food-labels-to-show-carbon-footprint-under-Government-plans.html>) on the UK governments intention to encourage efforts on voluntary carbon labeling, and with environmentalist pressure mounting, it will invariably become mandatory. It reports on the spread of this concept from the EU to Japan, and even to Australia where the carbon reduction labeling of the Carbon Trust is to be established by agreement with “Planet Ark”, an environmental organization.

(<http://www.environmentalleader.com/2010/01/07/uk-government-calls-for-food-labels-to-show-carbon-footprint/>)

A survey of 400 UK supermarket shoppers by the Newcastle Business School at Northumbria University showed that 72% of respondents want carbon labels.

<http://www.environmentalleader.com/2010/01/12/72-of-uk-consumers-give-us-carbon-footprint-labels-on-food/>

It is a different paradigm which should effect carbon emissions from the market/consumption end of the supply chain, rather than from the production end of the supply chain which is proving too difficult to get agreement on, due to the conflicting histories and aspirations of developed and undeveloped economies. It is a paradigm which groups like the Carbon Trust promote to enable low emission production systems to thrive, regardless of their source ... a global solution to a global issue.

Domestic emissions tax

The acronym would sound like debt wouldn't it. Maybe that's why we have an ETS instead ☺.

There are pitfalls in trying to solve global problems locally. For example, the carbon footprint of NZ lamb, delivered to UK RDCs (Retail Distribution Centres), may be 20% lower than the carbon footprint of local UK production delivered to the same RDC. Therefore we do the planet a disservice if we in NZ, tax lamb production emissions to the point that NZ lamb production is reduced, sheep & beef farms are converted to dairy or lost to lifestyle use, and the void filled by lamb produced in less carbon efficient countries.

How can NZ lamb on Hong Kong supermarket shelves compete with Australian lamb of a similar sized carbon footprint, but with no domestic agricultural emissions tax of their own? Is NZ going to carbon tax Aussie beef imports, and what will the WTO make of that non tariff trade barrier?

If our politicians *insist* on forcing food products into an elevated taxation scenario (not what ETS stands for) with no rebate for those products leaving our shores, then the point of obligation must be at the farm gate. A production levy at the processor adds insult to the injury of carbon efficient farmers whose efforts to minimize our carbon footprint, effectively subsidize those who use the carbon intensive farming practices more commonly seen overseas.

Pastoral emissions auditing opportunity?

We need to understand the carbon footprint of our products ... how we can improve it, how it compares with others, and therefore how we can differentiate ours from other global sources of meat or dairy products ... so we can prove “if you want to eat red meat, eat low carbon footprint NZ red meat!”

Last year (2009) Fonterra completed the carbon footprint study of its NZ operations. It showed that 1 litre of liquid milk produces 940g CO₂; 85% of emissions occur on the farm, and so on. It provides a basis for comparison with competitors’ products which will assist in debunking myths about food miles. It helps identify emission hotspots, but perhaps most importantly it has shown leadership in setting standards for future developments in dairy carbon footprinting methodology. Well done!

Perhaps the NZ pastoral science IP (Intellectual Property) that developed models like StockPol, Farmax and Overseer may form the basis of a new hybrid model suitable for modeling any given farm enterprise, to verify the carbon footprint of its products, and to recommend how that footprint might be profitably managed. This would be a better basis for an ETS of red meat & dairy, ensuring carbon costs are captured where they are created. It could then be adapted and adopted by pastoral producers all around the world as *the* carbon auditing standard of global pastoral production.

Clean green premium / market rebate

I’m sure the *theory* is that consumers of NZ lamb will provide the producers with an “emissions tax rebate” to offset the emissions tax paid in NZ, in the form of a premium over non taxed lamb. Yeah right ☺! The consumer whose purchases are swayed by carbon considerations will make that decision based on the carbon footprint (labeled or otherwise), i.e. their perception of the products’ direct effect on emissions, not the taxation web it struggled through ... the ends justify the means.

My opinion is that NZ lamb producers won’t see any such reward. The potential for a premium will be negated by the need for NZ lamb to offer something more than UK lamb just to counter the growing preference of UK shoppers to support local food. If enough shoppers valued the carbon footprint over the value of local food and there were to be a premium paid by the consumer, I can’t imagine enough of it escaping the supermarket’s grip, or the grip of the other links in the supply chain, to negate our domestically imposed carbon emissions tax.

Value added products (eg carbon neutral NZ made) are invariably higher cost, and therefore higher risk. These niche products are especially vulnerable during times like these of global economic recession, when consumers become more sensitive to price ... and less altruistic.

Of course, a consumers' purchasing decision is based on a multitude of factors as unique as each individual, and we mustn't be blinkered in our pursuit of emissions minimization forsaking all other characteristics of value to the consumer. That said, in the affluent UK lamb market, I believe carbon labeling will become a leading factor in purchasing decisions, and a low carbon footprint will be the key to countering other important factors like local food, or the dated concept of food miles.

In my conversations with meat importers in Asia, and the US, it was clear that they saw no room for a premium for our beef having been through our domestic ETS. Once again, in these markets our appeal is first and foremost our food safety record, but beyond that we're competing primarily on price ... especially since the Australia/US free trade agreement makes us slightly less competitive already.

The integrity of our clean green environmental and animal welfare image is vital to maintaining access to the affluent markets of the world. While that image doesn't appear to provide a *premium* in those markets, it meets the *valuable* entry level requirements of accessing those markets. Unless we're prepared to slug it out with the high volume, low cost producers of the world, we must strive for continual improvement to ensure we satisfy customer expectations.

Water

We must consider how others around the globe see the world, because their standards and expectations (not ours) will be brought to bear upon us. How others view their world, is how they will view ours.

In many parts of the world, water scarcity and pollution are major concerns, and we must expect far greater scrutiny of our water issues as a result. I'm not saying that we will fall short of their requirements; I'm suggesting this is an area of opportunity for NZ to *exceed* their expectations and really shine in. New Zealand's late colonization and low population have delivered us a head start. We must recognize the importance to our national reputation of what I suggest we should consider "clear gold". If we handle our water issues well, they will help make us money.

Water footprint

A water footprint is simply the volume of water needed to produce a product or service; water which is often referred to as "virtual" or embedded water. Countries with a limited and costly water resource can make a conscious effort to prioritize their own domestic water usage by importing products which require a lot of water to produce (that have a large water footprint).

The water within a water footprint can be classified under the following categories:

1. Green water. This is the water that falls from the sky, is stored in the soil, and naturally irrigates the plants that grow where it falls. No energy is expended, and nothing else is denied this water.
2. Blue water. This is surface or ground water; water that has been captured or stored, for immediate or later use. Energy is required to construct, maintain, and often to operate, the storage and distribution infrastructure. For better or worse, the natural flow and supply of water downstream is manipulated.
3. Grey water. Polluted water; water required to restore used water to an agreed quality standard.

These colours can be used in water footprint labeling to show what kind of water the footprint contains. Products with a large, but green, water footprint may have less environmental impact than a product with a smaller, but primarily blue, water footprint.

Some consumers boycott products with a large water footprint from sources they know to be short of water, especially if they have reason to believe that the welfare of the less fortunate there go without quality water as a result. It's their way of persuading those producers that there are better ways to be using their scarce water resources. They may also boycott those products if they perceive there to be a detrimental environmental impact to a production process.

As the world population grows, so too do the demands and tensions surrounding water. In coastal CA (California) landowners drill and pump water from greater depths to secure the water they desire, and to avoid water contaminated by subterranean sea water being drawn inland into the "vacuum" created. Agriculturalists clash with environmentalists over habitat degradation, and inevitably we will hear of disputes of water theft by means of cloud seeding with silver oxide ... stripping clouds of precipitation that would've otherwise fallen elsewhere.

The NZ pastoral industry is blessed with abundant (relative to many of our trading partners) green/rain water, which is free of pollutants and the salinity which plagues irrigated agriculture. Best of all, it's free of charge.

Our red meat and wool industries in particular, are built upon green/rain water which makes importing our virtual water a guilt free choice for foreign consumers ... providing we have evidence that the social and environmental impacts of NZ pastoral farming compare favorably with our competitors.

Our challenge is therefore to improve the quality of our clear gold ... the water entering our streams, rivers, lakes and oceans. We must consider the social impacts and alternative uses of the water resources we need.

Some innovative NZ pastoral farmers are taking charge of cleaning up their environmental impact by forming catchment groups alongside Dairy NZ and the NZ Landcare Trust. These groups have achieved improved water and habitat quality, as well as better relationships with other stakeholders in the area. These are great stories of positive social and environmental impacts which will serve us well.

Storing winter river flows for summer use facilitates predictable seasonal production with positive outcomes for animal welfare and business viability, providing such infrastructure is affordable. Water storage can also have amenity values, enhance native biodiversity, support fish and game, and even provide the basis for aquaculture or duck farming as it does on an immense scale in China. Long term this must be a better option than pumping summer flow from rivers and ground water.

Ethical Consumerism

Wikipedia defines Ethical consumerism as *"the intentional purchase of products and services that the customer considers to be made ethically. This may mean with minimal harm to or exploitation of humans, animals and/or the natural environment. [Ethical consumerism is] enabled by increased understanding and information about businesses practices."*

The concept of ethical purchasing brings together the complex matrix of issues which the consumer, often subconsciously, considers when they choose one product over another.

A UK study conducted in August 2008 found:

- 17% of shoppers said they bought more Fair trade products than six months ago;
- 22% of shoppers bought more products promising high animal welfare standards;
- 17% bought more local food in the last six months.

<http://www.ethicalconsumer.org/CommentAnalysis/Features/theendoftheethicalmarket.aspx>

Media reports claim that Waitrose supermarkets (UK) have banned NZ hoki and orange roughy because they are harvested by bottom-trawling, a method they consider to have a negative ecological impact. UK supermarkets won't stock Australian lamb that has been mulesed. HGPS, GE and deforestation are other examples of the components of ethical considerations which apply pressure to the supply chains of various countries supplying the affluent UK/EU marketplace.

Lamb quota access is no use to us if supermarkets, in response to consumer sentiment, refuse to stock our products if they have reason to believe an aspect (social, ecological, environmental, animal welfare, etc) of that products supply is in their mind unethical. The consumer/supermarket has immense power to drive change back down the supply chain to the production system.

Supermarkets are simply the result of human shopping evolution, and aren't going away anytime soon. We need to adapt, and ensure our products promote themselves, so that supermarkets and their shoppers seek our products out. Visit www.tesco.com to see the near future of the supermarket near you.

Local Food

The component of ethical consumerism which is growing rapidly in popularity around much of the world is the appeal of local food. The preference "locavores" exercise to buy locally produced food is part of a broader sustainability movement which aims to enhance the economic, environmental and social well being of the community lived in.

UK farmers tell me that since the Foot & Mouth crisis there, the wider public has been more sympathetic toward, and interested in, the role the agricultural sector plays in sustaining the social and economic fabric of rural UK. There has been a resurgence in farmers markets, government support in establishing farm shops, and regional branding in retail outlets.

While sound science has shown food miles to be an unsound measure of a products environmental impact, local food will remain a dominant component of ethical consumerism ... elevated by food security fears in those communities.

We generally supply products which those foreign markets can't fully supply domestically themselves anyway, so our imported product will generally be required. However, we need to be vigilant to make sure our animal welfare and environmental standards don't give the consumers and regulators cause to look elsewhere.

While we will never secure a local food premium, the provenance of our products is sound. If we continue to develop credible ways to provide the marketplace with auditable, objective evidence that our food safety, animal welfare, and environmental standards are competitive, there is no reason to believe we will lose our favoured status.

Ask not what the world can do for us.

NZ pastoral farmers export goods that people want but don't need. If we want to trade on the world stage, in the premier markets, we need to continue to bring something special to the table.

The Centre for Agricultural Greenhouse Gas Research which forms the basis of the Global Research Alliance (initiated by NZ at Copenhagen) on agricultural greenhouse gas mitigation is a great example of showing the world how NZ and its farmers are giving something back from the livelihood it draws from the global community, and that we are serious about doing our share. The Pastoral Greenhouse Gas Research Consortium is another great example where farmers are making contributions with global effect ... being good global citizens by investing R&D into our future.

We need to contribute global solutions to global issues, and consider the unintended consequences of our efforts as we go. As the only government in the world to include agricultural products in our ETS, ours will have unintentionally contributed to an increase in global emissions if red meat production in NZ is taxed into decline, only to be substituted by producers elsewhere who are not taxed, yet conceivably have a higher carbon footprint.

Without “bible bashing” our competitors, we need to tell the story of our subsidy free economy, and particularly its effect on developing nations. Our farmers respond to market signals, and don’t disadvantage developing and unprotected economies which suffer suppressed prices when US or EU export subsidies distort signals to their producers who then continue to oversupply goods that aren’t in demand. Poor farmers from unsubsidized developing nations can’t compete with low world prices, and this fosters their dependency on importing food and aid rather than developing their own agriculture.

This is a story not just for our foreign consumers, but also for our domestic voters ... many of whom don’t realize that NZ’s farm sector is the least subsidized farm sector among industrial nations.

The OECD's data show that agriculture subsidies account for just 1 percent of the value of agriculture production in New Zealand and consist mainly of scientific research funding. By contrast, subsidies represent 22 percent of the value of U.S. farm production.

http://www.cato.org/pub_display.php?pub_id=3411

The key to unlocking the benefits of ethical consumerism is to tell our story better ... “[*Ethical consumerism is*] **enabled** by increased understanding and information about businesses practices”. Possibly our greatest struggle is to convey to consumers that we *do* produce the ethical product they seek. Retailers are naturally reluctant to invest in brands other than their own, and the costs of sharing our story with the consumers of our global marketplace directly can be daunting. We need to reach the consumer directly as visitors to this country; with honest product labeling; with internet promotions and links at the point of sale; and via low cost social media, which can feel personal, be spontaneous, and “risk” being genuine.

Like the components of ethical products I have already mentioned (our clean green image, environmental impact, and animal welfare) the reality is that NZ pastoral products won’t appear to return a significant ethical premium. The less exciting but vital important benefit which ethical consumerism will bring the products of pastoral NZ is ongoing access to the rapidly evolving affluent markets which we supply with the most valuable of our pastoral products ... access we tend to take for granted.

I Digress:

It has been suggested that our Nuffield reports may include other observations made while traveling which may sit outside our core topic, but be of relevance to NZ farmers. Therefore, I digress.

Quota market protection

Are we too reliant on the protection of restrictive quota access of lamb into the UK, and beef into the US? Our Australian and Uruguayan competitors are lobbying for a bigger share of these quotas.

Our Australian friends are quick to point out that NZ has a zero duty EU sheep meat quota exceeding 227,000t where theirs is 18,650t (www.mla.com.au). They're not so quick to highlight their 7,150t EU high quality beef quota, compared with ours at 1,300t (which we in turn bleat about ☺). These volumes were based on trade levels around the time of the UK's entry into the EEC in 1973.

At 213,402t, (www.nzmeatboard.org) our US beef quota is more than 20 times that of Uruguay, for example, whose beef (and lamb) is Certified Natural, EU GlobalGAP compliant and HGP free. They have 20,000t US beef quota and in 2004-2005 they were supplied the US with 157,000t and paid a 26% tariff above quota to do so. (http://beefmagazine.com/mag/beef_looming_large/)

If these quota havens were opened to our competitors, there could be a lamb production response out of Australia as UK/EU lamb prices became available; and a food safety standards response from South America if the US market became more about the product, and less about the quota.

I would suggest that NZ pastoral farming has developed a culture of dependence on those markets where we have privileged access. According to the Meat & Wool NZ Economic Service, in the 2008-2009 year, the EU accounted for 62% of export lamb receipts (50% by volume) and North America accounted for 49% of the value of NZ beef exports (56% by volume).

I'm not suggesting we should give it up; it's one of the few factors skewed in our favour in a global marketplace where domestic subsidies, tariffs, and quotas generally work against our ability to supply consumer demand. However, NZ farmers need to be aware of the risks their businesses face if our privileged status is lost. Hopefully global trade liberalization will open more doors than it closes.

Our ability to farm unsubsidized is an admirable survival story, and possibly part of our products' ethical appeal, but I think we are at times a little too self righteous in our criticism of other country's domestic policies. As an exporting nation we desperately need the world, but the world only *wants* what we provide, it doesn't *need* it.

HGPs

I think that NZ pastoral farmers should agree collectively to officially ban the use of HGPs in NZ.

The use of HGPs in NZ is minimal, yet totally incongruous with our natural image. We must keep up with competitors like Uruguay and ban their use in the interest of competing for positive consumer perception. The EU/US HGP squabble has heightened UK/EU consumers' abhorrence of HGP use, and although no HGP treated NZ beef products are exported to the EU, I believe it is a practice that we will regret if we don't tidy it up ourselves.

In initiating this ban, we should recognize that there is a gap between what consumers believe is safe,

and what science says is safe. We are therefore not pushing to ban HGP use in other countries (acknowledging there is currently no scientific basis for banning them) but seek to assure consumers that NZ farmers are aware of consumer sentiment on the issue, and we want them to be assured that if they're eating NZ produced red meat in NZ or overseas, there is no chance of it containing HGPs. It's a question of the integrity of our natural image.

There may be difficulties in ensuring HGP meat can't also be imported into NZ. If so, imported beef should be required to be labeled as such to alert the consumer that the same universal guarantee can't be applied to all products *available* in NZ.

GE

I have always felt that GMOs will inevitably be sanctioned in the NZ food chain. The sentiment I have picked up on my travels though is cautionary ... from EU politicians to general talk with a broad range of farmers. The main concern is that the benefits of GMOs tend to be overstated, and the long term financial benefits to producers are questionable. My perception is that our affluent target markets tend to err on the side of buying GE free foodstuffs. There are many degrees of genetic engineering, some of which hardly seem like GE at all, but I sincerely hope that our authorities ensure that consumer demands are our *principle* consideration, regardless of how comfortable the science community feels with the science.

Asia

I visited Hong Kong, Korea, and China and believe there is great potential for NZ to supply the growing middle class and affluent consumers of the region ... especially if we are prepared to better understand our differences, and their desires. I intend only to touch on a couple of aspects of my visit which I considered significant.

Guanxi (pronounced *gwan shee*) is the most important concept we must grasp before doing business in China. Guanxi is the deep personal non transferable connection that is developed between people doing business, and favours for each other ... which must be kept in balance, and requires frequent personal contact. Failure to understand this relationship has been common with NZ companies who expect to "do the deal" then leave them to it. At the very least, google "guanxi" before you visit China.

I would suggest that the **reputation of our beef in Korea is so poor** that we need to work towards a completely new product and brand. Our beef has the reputation for being too lean, and difficult to secure continuity of supply through our winter months. It was a humbling experience realizing that generally speaking, NZ beef is the cheap option, and not a patch on Aussie beef which is the darling of Asia.

Until we produce a "health & well being product" made of beef (branded on its health & vitality promoting active ingredients), we will struggle to get off that bottom rung. Red wine became much more popular than white in Korea when they learned of the relative health benefits. Manuka honey is a luxury item for its measurable Active Ingredient content. New Image Group Ltd is excelling in Asia selling colostrum based health products.

Traditional Chinese medicine has always revolved around treating ailments with good food. We need to identify the health benefits of grass fed beef, find ways to enhance and quantify those healthy "active ingredients", and market their presence in our beef products.

Koreans are very health and body conscious, but our lean beef is unappealing because it tastes too dry (compared to the taste they have developed for marbled beef) after being grilled in their traditional cooking style. Koreans know that too much marbled grain fed beef is not good for their health, but it is a treat which they don't have every week ... they view it as we might view the occasional bottle of wine or box of chocolates, but if we can prove that our beef is a box of healthy chocolates we'll move into the league of luxury brands. Our beef must be tasty and tender too!

In Asia, environmental and animal welfare standards are less important to consumers and more emphasis needs to go on to the health characteristics of end product (healthy, tasty, safe & natural), less on the (clean green grass fed) production system ... in Asia the ends justify the means.

We can either try and imitate Australian/US white fat, marbled beef and compete head on with them and their resources, or develop a new beef product *based* on grass feeding, but focused primarily on elevating the quantifiable well being characteristics of it's contents, as well as the feel good taste factor of its eating experience. An R&D stitch in time saves nine.

The **seasonality** of our production is a huge problem due to steady Korean summer demand during our winter. Importers are giving up stocking our chilled product ... it's just easier to stock Australian beef.

I found Australian lamb in Hong Kong supermarkets to be more expensive and more popular than ours, and Australia Inc is simply a far bigger brand that consumers want a bite of. The popularity of the successful Aussie beef brand carries across to Aussie lamb. NZ lamb is better known than NZ beef in China ... we should piggy back NZ beef in on the back of NZ lambs brand recognition. That way they will both be welcome on the menu.

Traceability

Domestic beef traceability is electronic and mandatory in South Korea. At the chilled meat counters of Korean supermarkets, the Australian electronic NLIS (National Livestock Identification System) and it's assurance of food safety is explained. This unique point of difference over US or NZ beef production is not lost by those importing beef into Korea.

While visiting the McDonalds head office, and a burger pattie grinding plant with Kim D'Anella from MAC, the meat procurement arm of the group of grinders who supply McDonalds, I was struck by the importance of traceability to these customers. The integrity of their brand rests on their ability to guarantee food safety, and our competitors' (especially Australia's) ability to raise the bar on traceability has forced our hand.

Our competitors can offer our customers individual electronic animal traceability, and regardless of whether we think they *need* that level of traceability, it is available, and they *want* it. We can step up with traceability, or scrap it out in the frozen bargain bins with other low cost producers who are unwilling or incapable of meeting the demands of high value markets.

It is a classic example of an innovation becoming a commodity. However, the benefit of Australia's early adoption of electronic traceability is that they have firmly established themselves as the darlings of Asian beef consumers, and they are reaping the rewards which will ensure they are well placed to continue to innovate ahead of us. It's a sound lesson in the perennial rewards of R&D investment.

Assuming *our* standards are good enough for our customers results in substandard customer service, and ultimately the loss of those markets.

Land Tax

Farming businesses have 2 components, the tax free capital value of the real estate and the taxable farm operating business. Our obsession with real estate (rural & urban) in NZ is fueled by the fact that we aren't taxed for the wealth we accumulate in capital gain, except in a small minority of situations. Investing in our operating businesses, or providing capital for shares in other peoples businesses, is considered riskier than pouring savings into whatever will improve the resale value of our real estate.

This taxation loophole, available exclusively to those wealthy enough to be able to afford real estate, skews our investment behavior away from those sectors producing goods & services, and all the employment and social benefits that go with it. We are left with property inflation instead, which the Reserve Bank attempts to curb by lifting interest rates. Higher interest rates are a burden on the operating businesses of the export sector directly, but also indirectly, as our high interest rates attract overseas deposits which lift the value of our dollar and reduce returns to exporters.

Now we are hearing talk of another land tax (my farm operating business is already being sapped by almost \$10,000 per annum in local government rates) which will bleed property owners of an amount in proportion to their capital value, regardless of the amount of cash that property generates. It will accelerate land use conversion from food production, into lifestyle/residential use on the valuable land (over the threshold) surrounding residential areas ... areas settled initially due to access, and the agricultural productivity of the area. It's time our urban areas grew up, not out.

I'm disappointed that a National government may be about to sanction sucking cash from our already anemic operating businesses, to pay for unrealized gains in the real estate portion of the business. Surely it makes more sense to have a capital gains tax requiring cash payment when that cash is *realized* at the point of sale.

I believe a diminishing capital gains tax would be fairer to everyone. To illustrate the diminishing concept; if I buy a house, farm or any other significant asset and sell it within the first year of ownership and make \$100 profit, \$40 (40%) capital gains tax would be paid. If instead I sold it after 5 years, \$20 (20%) would be paid. After 10 years the tax would be \$4 (4%), and beyond that the capital gains tax would have diminished to nothing. An exemption should apply in the event of death, and an allowance could be made for CPI inflation, but otherwise the same "diminishing" rules apply to all.

It would help realign asset values with yield (farm succession benefits), dampen debt growth, reduce speculative purchases, and reduce purchases made to subdivide for a quick buck. It would discourage semi retired farmers from sitting on their land bank, and would free up land for the next generation of innovative, motivated young farmers. A clear career path encourages good staff into farming.

It effectively exempts family homes and farms, encourages long term investment in the tradeable sector (businesses actually producing saleable products and services) and allows operating businesses to get on with the job, unencumbered by ongoing taxes attributed to the completely separate real estate part of the business. Retired people on low incomes, like asset rich / income poor farmers, wouldn't be taxed into prematurely selling their property. No one need pay a property/land tax until the profit in that transaction is realized.

It's time to tax the real estate portion of the business separately from the *export receipt and employment producing* operating business of farming.

Family farm succession

As ours is an intergenerational family farm, one of our key objectives is to pass it on to the next generation in better condition than we received it. This objective motivates us to critically review our farm management to ensure *long term repeatable profitability* ... what we regard as “sustainability”.

Our land is borrowed from our descendants, not bought from our ancestors.

Rightly or wrongly, consumers don't trust corporate farms to care for animals, the environment, and rural communities as much as owner operated “family” farms. Family farms therefore contribute valuably to the image of agriculture. The variety of options for successful family farm succession needs more promotion in rural NZ to attract instinctively skilled young people into farming.

I met with Lyn Sykes (Communication Consultant) in Australia. She gave me an excellent publication she had contributed to called “A Guide to Succession. Sustaining Families and Farms”. There is a great opportunity for a NZ company (perhaps a co-op or financial institution) to sponsor the publication of a handbook like this. The entire booklet can be downloaded in 6 pdf files for free from the Grains Research and Development Corporation (Australia) website:

<http://www.grdc.com.au/director/events/grdcpublications/Succession%20Planning%20Guide.cfm>

I would strongly recommend reading this publication before you engage the services of costly professionals. It contains advice from the varying viewpoints of different professionals as well as 16 different case study examples to help you appreciate the wide diversity of options available to you.

Red meat industry consolidation

This will never happen unless we have leadership guiding us to a vision, and evidence that it will provide farmers with significant financial benefits. Farmers en masse will need to lead this just as dairy farmers have (via their cooperatives) in their quest for supply chain efficiency and control via Fonterra.

I envision a farmer owned cooperative incorporating joint venture (JV) marketing companies. The cooperative would own the processing plants and logistics, as well as a significant shareholding in the marketing JVs. The key is that the cooperative then manages the marketing rights of its JV partners to ensure that NZ products aren't undercutting NZ products in the marketplace. The JV marketing partners bid to supply specific markets with specific products, but must convince the cooperative that they remain worthy of them on an ongoing basis ... “if you don't use it, you loose it”.

Specific farmer groups could also become JV partners to supply new customers with their products. The provision for new entrants to join as JV marketers safeguards the incentive for market exploration.

The plan is NOT to extort unreasonable prices from the marketplace, but to facilitate long term customer relationships, unobstructed information flow between producers and consumers, supply chain efficiencies, and a focal point for leveraging industry R&D, counter seasonal supply relationships, etc.

Summary

I've seen the future, and there's a lot of paperwork ☺. Foreign consumers want evidence that their animal welfare, environmental, and social expectations have been met from pasture to plate. Producers unable to provide such evidence run the risk of being denied access to these lucrative markets.

Increasingly the internet and its social media applications are sources of detailed data and imagery which can be positive (search "NZ Farm Environment Awards" on www.youtube.com) or negative. We need to participate in the communications shared about us ... use it, or be confused and abused by it. We must be proactive and take more responsibility in meeting consumer/voter animal welfare and environmental expectations, because you can be sure that if MAF or your Regional Council are forced to prosecute, social media will be there to broadcast all the gory details at the bottom of the cliff!

Consumers want authentic products with honest labeling to be backed up by trusted assurance schemes that have integrity to their auditing process (we can't mark our own homework). Their purchasing decisions are affected by a bundle of values which can be brought together in a glance with recognized assurance labels which can be as simple as the name of the supermarket, or inclusive of animal welfare check offs, carbon & water footprint data, and assurances of donations to worthy causes.

Proposition 2 in California illustrated the consequences of getting out of step with your consumers expectations. We must ensure, first and foremost, that we are in step with the views and desires of the markets we serve, regardless of how comfortable the scientists are with the science of HGP's and GE.

I consider there is a strong case for the government to invest in a National Environment Fund to enable farmers to make the capital investment necessary to retire native bush and waterways from grazing livestock. NZ pastoral exports aren't competing on a level playing field, so unless NZ Inc is willing to wait for prosperity in farming, we'll need a partnership approach to meet its environmental standards.

Climate change, believe it or not, is an accepted reality in the marketplace. Carbon footprinting as promoted by The Carbon Trust (UK) has become the common measure of any products contribution to climate change. Carbon footprint information provides the opportunity for producers to modify their emissions profile and for consumers to modify their own; thereby signaling the need to drive change back down the supply chain to producer groups who don't modify emissions of their own volition.

The carbon footprint will undoubtedly evolve, and is only one component (albeit with the potential to dominate) of a bundle which the consumer considers, but it may be a fad that lasts our lifetime and beyond. We need the evidence for example to assure the consumer with integrity: "If you're going to eat red meat; choose safe, tasty, free range, low carbon footprint, high green water footprint NZ meat".

By investing R&D in developing existing pastoral software IP, NZ has an opportunity to become world leaders in pastoral emissions management and auditing. This valuable IP would give us the ability to create a unique point of difference between our pastoral products, and similar products produced elsewhere with a larger carbon footprint. This software could assist farmers in identifying the economic optimum in balancing farm management (e.g. stocking rate, animal growth rate) with carbon footprint.

If the government persists with its current ETS plans, modeling could facilitate an accurate point of obligation for emissions taxation at the farm gate. An unintended consequence of NZ including agriculture in our ETS may be to increase agricultural emissions in countries excluding agriculture.

Let's not risk losing precious market access, or the enviable reputation built for us by our "forefarmers". We wouldn't last long scrapping it out in the frozen bargain bins with the South Americans. The outlook for pastoral New Zealand is good, providing we collectively embrace change, and show more commitment to investing in the future of our industry.