Nelson/Marlborough 'Growing for good' Workshop, 2 Feb 2005

Key Take-home Messages

The Importance of Farming to New Zealand's Wealth

- New Zealand needs to retain its special advantages: low cost farm system, 'clean' image
- Put profit before increasing production
- Choose products for markets
- Risk: quality production reduces it, politicians increase it
- The higher the value the higher the risk, risk at all levels
- Ability to move from price taker to maker.

Effects of Intensification on Natural Capital

- Nitrogen – S&T- maximise return, minimise impacts
- Farmers – need concrete information showing damage and potential solutions/measures to change
- Land use change very important here
- Need good indicators - sustainable on farm indicators, environmental indicators
- Rate of change exceeds capacity to manage it.

Understanding the Impact of Economic and Social Drivers

Economic Drivers

- Economic drivers are the key cause for unsustainable practices
- 'Run faster to stand still' → not sustainable economically/socially
- Retailers – position of dominance questioned/mitigated (free trade) - equitable
- New Zealand urban and rural responsibility → e.g. urban consumers of rural products currently buying on 'price' rather than quality/impact.

Social/Political Drivers – No Key Take-home Messages

Incentives to Change

- Motivation change: saving money, making money. On farm trials, visible evidence, leading farmers
- Not until market (global) tells us we have to be environmentally sensitive will/does New Zealand respond
- Financial incentives - have to be better off for doing some things – profitability drives change.

Performance of Research on Delivering Needs

- Availability of quality, understandable information: soil research, NZ cases, unbiased
- Sharing of knowledge/research - positive, robust, long term
- Independent research needed
- Sustainable farming practices: knowledge should not be a cost to farmers. Research and development need to be nationally funded → Farming: national interest, needs national ownership.

Understanding Redesign

- One system doesn't fit all, has to evolve sensibly/practically - takes time, constant re-evaluation/diverse models
- Farmers are motivated to make environmentally sound decisions. A lot can be done without losing production (focus on efficiencies, not extremes)

- Need profit to be able to redesign
- Need good audit/quality assurance.

Education Models for Farmers: Are They Leading To Change?
- Monitor farm concept: transfer of knowledge, helps to lead farmers
- Extension not relevant to Marlborough - old news.

Team New Zealand
Education and Communication
- Isolation of farming from urban - need understanding.

Working Together
- Team New Zealand approach – identify advantages
- Bold vision – Supported by innovative approach
- Team approach to agriculture and any changes.

Questions of Strategy
- Drivers must be home grown/local rather than from off shore
- Change farm ownership model – young investors
- Consistent government policies
- Encourage 'farm-family' co-operation - sense of ownership drives stewardship – cost of land.

Nelson/Marlborough Small Group Discussion Notes

This section lists all points of discussion recorded from the Nelson/Marlborough workshop small group discussions. The questions used to prompt the small group discussion are listed under each of the seven key themes.

The Importance of Farming to New Zealand's Wealth

The PCE talks about the risks of losing important overseas markets if issues like the environmental impact of farming become important to those markets.

1. How much risk do you think there really is? (high, medium, low)
2. What kinds of things do you think would make that risk higher?
3. How immediate do you think that risk is?
4. Do you think farmers and the farming industry have a good understanding of this risk and the impact it might have on their farm income?
5. What are some of the ways farmers and the farming industry can improve their understanding about the risk of losing important overseas markets?

- Wealth lies in healthy soil, clean water, money.

How much risk do you think there really is? (high, medium, low)
- POV #1: High risk of losing overseas markets - NZ has dependency on agriculture e.g. tariffs being imposed, companies building in environment standards concerning quality of product and environment
- POV #2: Limited risk - manageable?: dependent on type of farming e.g. wine/dairy

- Markets based on a perception – clean and green
    - need to retain diversity of production – risk always present
    - variables of risk – Kyoto demands/unknowns
- Three levels of risk - the whole sector/ farming sector/individual
- The higher the value the higher the risk
- Currently – risk associated with food safety (not environmental impacts)
- NZ has seen risk already
- Reality of compliance: reports/gate-to-plate auditing systems. There is a risk of not meeting these
- Dependent on market demands.

What kinds of things do you think would make that risk higher?

- What is increasing risk?
    - less land being farmed
    - more compliances
    - cost from government
    - relying on petroleum based fertiliser
- Carbon tax risk
- Politicians put practical people on land at risk
- Distance from market - high energy input increases risk
- Level of information? - perception vs reality in markets
- Risk based on perception of environmental impacts of farming, not always grounded in facts, or a realistic understanding of farming
- Higher risk will result from bad publicity (makes news faster than good news): lack of quality assurance and links back to producers
- Competition increases risk overseas.

Do you think farmers and the farming industry have a good understanding of this risk and the impact it might have on their farm income?

- Community not with that process: there is a lack of knowledge about the connection between quality and value
- Varying level of understanding risk
- Farmers awareness of risk is increasing - not certain about how fast the potential impact is.

The Effects of Intensification on Natural Capital

Research in New Zealand and overseas has demonstrated that intensification of farming can lead to pollution of surface and ground water. Some farmers have responded by building bridges, fencing off waterways, and riparian planting.

1. Is this enough to fix the problem? If no – what more needs to happen?
2. Can farms in New Zealand survive with less synthetic fertiliser?
3. How does a farmer know that his/her farm is sustainable?
4. What kinds of information does a farmer need to know that his/her farm is sustainable or unsustainable?
5. Is this information readily available to farmers at the moment? Is this enough?
6. How well do we understand the impact of nitrogen on our natural capital?
7. How well do we understand the impact of irrigation on our natural capital?

- Dramatic change in short time - can be detrimental
- Intensification is linked to profitability
- The rate of change faster than ability to respond

- Intensification can be thought of as a spectrum - for different reasons people will be at different places (might be conscious, might not) e.g. initial land values, personal philosophy, risk taking level etc
- Some aspects of current management systems are positive but intensification is still strong.

Marlborough-Specific Comments
- Land use is strongly connected to intensification. Connected to market drivers. Use changes around farm can affect viability
- Farming sustainability is complex, influenced by drought, connected to appropriate nutrient balance
- Value of land here very high
- Overgrazing is also an issue
- Councils allowing subdivisions and lifestyle blocks: lack of 'big plan'
    - conflict between farming practice and those who want views etc
    - overseas investments
    - e.g. dams
- Climate dominates here: adapt.

How does a farmer know that his/her farm is sustainable?
- Most farmers don't know if they are farming sustainably. They need:
    - soil information
    - water quality information
    - different levels of monitoring
- Need more indicators
- Need quality assurance systems
- Nutrient budgeting - soil fertility
- Inputs/outputs (stock sold): feed budget
- Farmers are always aware of input/outputs, but they tend to underestimate/guesstimate
- Concern: we currently have no way of determining cumulative effect of minor effects.

Impact of Nitrogen on Natural Capital
- Nitrate leachate – most from animals not fertiliser application: needs education
- Moving away from use on hill country for environmental reasons: long term use detrimental to 'whole farm'
- Wide range of opinions about fertiliser
    - fertiliser reps: because have vested interest in their products
    - farmers have own perceptions/experiences
- Cost of fertiliser vs products will influence a response to nitrogen
- Differences of impacts: pasture species/growth patterns/suited to different areas
- Is excess fertiliser killing or enhancing soil? - probably killing.

Understanding the Impact of Economic and Social Drivers

1. What are the key drivers behind the intensification of farming in New Zealand?
2. Do we have enough understanding of these drivers?
3. Are too many of our farming/food business models incompatible with long term maintenance of our natural capital?
4. What are some of the ways these drivers can be addressed?
5. What will it take for farmers to become 'price makers', rather than 'price takers'?

What Are The Key Drivers Behind The Intensification Of Farming In New Zealand?

Economics

- Economics – main driver: survival first, environment second
- Cost of production: running to stand still, world wide trend
- Premiums tend to become the norm: "running to stand still"
- Commodity based industry
- Cheap product – big driver for market place – quality vs niche, quantity
- Move toward premium production vs commodities produced
- Drivers can depend on ownership structure i.e. family farm/corporate etc, land values
- Interest rate/exchange rate
- Further intensification/commoditisation - too expensive? Have to work off the land
- Interest rates: owner
- Fiscal process/taxation methods
- Other products produced in countries with very few environmental regulations e.g. China,
- Price/cost differential: free trade
- Low importing from the Pacific Islands
- Cost of land and water – resources of farming
- Decreasing area of productive land in New Zealand (going to 'urbanisation')
- Growing population requires food
- Smaller areas (higher value) of land being utilised more 'efficiently' e.g. intensity on smaller size high profit lots vs farming marginal land on scale
- International issue
- Strength of the New Zealand dollar.

Land Prices

- Price of land - younger people can not afford it
- Conventional farmers 'priced out' by grape growers
- Land values, foreign ownership.

Markets

- Overseas markets: good quality focal enjoyment of eating
- Not enough good markets – over supply
- 'house wife' demanding quality (what producer told) but then buy on price
    - depends on supply – can demand quality and low price
    - over supply = price taker
    - under supply = price setter
- Commerce Act prevents collective bargaining (i.e. price setting) - not getting price for product to enable 'farmer' to grow sustainably
- New Zealanders now concerned about environment impact/awareness in other countries
    - e.g. buying non New Zealand produce based on price
- Consumer awareness of what they are buying.

Costs of Production

- OSH, RMA, holidays (staff)
- Compliance costs - not related to production
- Rates.

Food Industry

- Held at supermarkets whim – whole sector vulnerable - can limit risk of value added product
- Retreat from cooperatives to big enterprise

- Bigger supermarkets/amalgamations: supermarket demands e.g. health standards.

Other
- There is no salesmen encouraging products to look after the land
- Drivers do not encourage creativity, thinking outside the square.

Do We Have Enough Understanding Of These Drivers?
- Impacts and drivers not well understood
- Selling quality of streams by selling cheap products
- Price doesn't reflect 'true cost': environment/inputs.

Moving Forward: Economics
- Outside influences will force re-design
  - increase in oil prices
  - profit vs production
- Exports and NZ dollar
- Applying the 'business model' to farming e.g. corporate based in Auckland versus individual farm family owner/operator
- Vision (e.g. olive industry): farm family (autonomy) collectively working together, cooperation e.g. marketing, volume of product, rational inputs, share machinery est – efficiency
- Need to increase viability of small unit.

Moving Forward: Markets
- Innovative marketing tools: create market
- Gain control of markets:single desk marketing
- Increase demand by marketing to increase profit: supply and demand/niche market
- Overseas buyers/access overseas markets
- Better networking of systems
- How do we influence UK supermarkets?
- 'Less stick'
- Lead by market driven: e.g. consumer health concern - ability to get high prices
- People in charge need to change
- Understanding dollar value of green
- Will overseas buyers 'buy in' to redesign?

Moving Forward: Food Industry
- Need to retain strength of primary production through local ownership
- Meat industry - $$ for quality lambs, increase profit
- Veer away from growing committees: look at what and how they grow: will this work?
- Producers need to be more proactive communicating realities of production to controllers of retail outlets (e.g. M&S)
- Branding: go back to smaller niche markets.

Moving Forward: Other
- There are other methods for NZ e.g. organic
- Farmers very able to adapt - if 'drivers' are changed
- Profit before production: need to work with mother nature - is this achievable?
- Review rates system: we are paying for what we are not getting
- Farmers need to maintain product quality: product quality could be achieved through genetic improvement and technology
- Sense of ownership is a driver for 'stewardship'

- Issue: enabling ownership: re: cost of land and capital gains from subdivision
    - focus should be on production not 'capital gain'?
    - land is a finite resource – price will always increase
- Profitability and fashion drives change/action.

Constraints to Moving Forward
- OSH/RMA - complicates possible solutions to intensification
- Reducing freedom to manage e.g. costs of compliances
- Costs from/standards of varying priorities/import product safety stands vs bureaucracy/lack of understanding about farming systems.

Understanding the Effects of Intensification
- Testing water will help show impacts
- Effects depend on level of intensification at any point in time
- Methods should/are improving quality over time
- Success depends on location/geology etc
- Farm systems more at risk/less suitable = monocultures
- High dependency e.g. N2 dependency
- Economic driver is greater than the understanding of the impact of farm practices on natural capital - varies around the country
- Drivers of intensification are understood but not their impact.

Performance of Research on Delivering Needs

"Soil is one area where there are a number of issues which require better understanding if soils are to continue to have the capacity to support farming" *Growing for good* pg 184.

General Comments
- Need independent data about effects of fertiliser
- R+D – need to spend money on this to increase environment quality and profit
- We like to dwell on mitigation because we understand it, but need to move to research to discover unknown
- Need independent research
- Research – funded by the state, not just farmers
- 'Intellectual property': cost of buying prohibits use of knowledge
- Most research focussed on production rather than sustainable practices
- Research into long-term issues is not immediate
- Compared to farmers the government invests little in R&D
- Currently research is reactive
- User pays research - myth
- Balance: 'verification acknowledgment of working knowledge' anecdotal evidence
    - weighing in consideration
    - long-term observation and experience
- Scientists - if can communicate well
    - process of scientific method hinders progress
    - intuitive answer from farmers vs proof. Takes a long time
- Need understandable science back to the owners
- there is little independent research about good use of fertiliser, and how much to apply. Reps (who sell fertiliser to make money) tell farmers what to do. Market driven advice
- NZ research funding by fertiliser companies - corrupt

- Research funding lacking for agriculture and rural sector
- Researchers only research what paid for
    - there are different drivers and funding for research
    - Crown Research
    - commercial vs pure research
    - government should sponsor research
    - government funding is ill spent
- Irrelevant to Marlborough (research done elsewhere) - cannot use information
- Variety of production systems and each is small, so does not attract much research.

Research Areas
- Need better science and understanding and use of inputs e.g. water
- Nitrogen – look at growing legumes (research)
- ICM schemes
    - initiated from impacts on aquaculture, mountain to sea impacts
    - have lots of info related to how information can be used in practical application
    - valuable data to discussion
- Soil health vital - there is lack of information about soil health.

Understanding Redesign

1. How necessary do you think it is to redesign New Zealand farms?
2. Do some farm types need to be redesigned more than others?
3. What kinds of things make it difficult to redesign a farming system?
4. What kinds of information or assistance would help farmers redesign their farms?
5. Is it necessary for the whole system (refer to diagram below) to be redesigned to achieve sustainable agriculture in New Zealand?
6. What changes are essential to achieve sustainable agriculture?

General Comment
- Do we need to re-design farming?
- Concept is concerning – agriculture has come a long way in unsubsidised rural economy – have to make a living
- Farmers ARE more efficient
- There is a misconception that farmers want to harm the environment
- 'Redesign' concept is simplistic - will take time and change in attitude
- Evolution rather than change design
- Can't afford extreme practices e.g. low stocking rates – can't afford to reduce production. Need stock to manage plant pest/pasture fertility, graze, pests, maintain biodiversity
- Concentrate on efficiencies rather than whole farm design
- Can't wholesale redesign systems but can make gradual changes
- Farmers will not take to the extremes.

Where should information come from?
- Farmers (sort out best solutions)
- More discussion groups: target good farmers as case studies - need credibility to their practices
- Learn from other countries - but we are independent
- Collective solutions, farmers are the solution
- Re-design is all about education and reliable information: certify information.

Difficulties in re-design

- Habits
- Debt
- Old school
- Lack of information.

Constraints to Redesign

- Ability to change influenced by: profit, bank pressures
- Change in rating?/ land use
- Less government interference needed and less cost
- Price taker not price makers
    - are making more money but compliance costs eat this up e.g. ACC
    - quality
    - premium price compliance ok
- No control over players that effect farm prices
- Problems – lack of knowledge how to go organic (very hard).

Enabling Redesign: Big Picture

- Needs to be profit (short and long term) to drive change
- Value of utilising land more effectively: e.g. lifestyle blocks under-utilise
- Green system: wine growing: still not spending less, savings are through integration
- Redesign → concentrate on farmers in better financial position
    - not driven by banks
    - need money to take risks
    - changing thinking in older farmers can be hard. If it works, they can be good examples
    - need credible research
- Sustainable farming: unless you can mitigate effect, it does involve reducing production
- Depends on the farm system.

Ideas for Redesign

- 'Tweaking' of system rather than redesign: focus on inputs e.g. number/level of inputs e.g. fertiliser
- Reduce costs/target inputs better: spray programme/drench/fertiliser/soil tests
- Any essential changes will vary due to local conditions using relevant tools for fertiliser – (Overseer etc) - more how fertiliser is applied rather than actual quantity. Often it's the process that needs to be questioned
- Depends on the farm system
- Need smarter use of fertiliser
- Sustainable soil management is essential ← Key issue.

Education Models for Farmers: Are They Leading To Change?

1. What kinds of farmer extension/education programmes are happening in your area?
2. What is the main purpose of these programmes? (e.g. increasing production, addressing sustainability issues, animal health)
3. What kinds of things are farmers changing because of these programmes?
4. What kinds of learning opportunities would help farmers to redesign their farms? (e.g. Monitor farms? Field days? Web sites?)
5. What kinds of things encourage farmers to adopt new ideas about sustainable farming practices that will not necessarily increase their income or save them money?

General Comment

- Tide is starting to turn – people are aware there are problems
- Draw on experience/lessons from other countries
    - e.g. Israel – good, UK bad
    - e.g. effects of water use
    - different context for New Zealand.

Types Of Extension Models

- Monitor farm concept v good/working
- Good farm participation
- Awards: positive/pull approach
- Raise awareness of different approaches
- Dexcel: production levels main focus. Farmers need to be proactive and push other topics
- Environment Awards: highlights different practices
- SI Dairy Event and Road Show: provides research information.

What Is Working With Current Extension Models?

- Makes you question your practices
- Makes you consider change
- Makes you research facts and figures.

What Is Not Working With Current Extension Models?

- Can be narrow focus, too technical
- Consultants need to be more practical
- Tend to focus on economic performance and technology application - not achieving anything concerning sustainability. Need to extend focus - e.g. sustainable/environment/holistic.

Enabling Change

- Good examples (unbiased) of improvements
- Extension models – focus on individual needs (e.g. age etc)
- Better transfer of technology – researchers to farmers
- Need to see evidence – sort out wheat from chaff
    - monitor farms (use good examples)
    - e.g. direct drilling
- Changes have been forced in the past/farmers need to be led to next change. Needs to be led by good information/workshop ideas
- Need to highlight good operators, demonstrate success, environmental awards
- Production is integral, as production and profit are linked
- Need more publicity about local good examples
- Practising farmers are the best way to promote different technique
- Landowners need workshops/clear information about nitrogen and irrigation
- Need information on soil management: - local magazines/papers should summarise research in good publications
- Need more discussion groups.

Motivating Farmers

- Chris Dawkins – rarely drench sheep due to management tools. SAVING: motivation
- Motivating – cost: cheaper products not necessary
- 'Better to see it than be told it'
- Proving things that are difficult to see:
    - graphs

    - pictures
- See it: farm visits e.g. soil profile
- Farmers have to believe the information.

How To Encourage Changes In Farming Practices Not Related To Cost Saving Or Profit Making
- Use of fines (stick)
- Assistance e.g. $ - provided by public for planting. Community support (carrot).

Barriers to Change
- Farmers not picking up new information – hard to sort out the chaff from the good stuff
- Farmers can't be bothered getting together
- Change cannot happen over night
- Education providers look at things in isolation
- Loss of knowledge over generations - e.g. 'carrot' plants: good for sheep
- 'Farmers don't know what they don't know'
- Farmers do not change quickly.

Moving Forward: Making the Transition from the Production to the Sustainability Era

Working Together
- Need a 'Team New Zealand' approach
- Top down bottom up › inclusive
- Nelson/Marlborough - concept of unitary authority delivers practical outcomes effectively
- Need guidelines of responsibility rather than rules
- Industry responsibility – develop their own rules
- Council audit/ownership buy industry sector
- Farmers are only one element in the solution
- New Zealand society has to work out an agreed 'balance' for farming
- Visual/emotional effects as opposed to environmental integrity
- Proactive rather than being regulated
- Needs to be an acceptance that progress takes time
- Regional groups and sub catchment groups - address environmental issues
- Government policy/legislation: the day it becomes prescriptive – get negative response from farmers
- All New Zealanders urban and rural - perhaps need to accept a lower standard of living
- Need a greater awareness of the link between environment preferred and product value
- Not putting different types of farmers or farmers/DOC etc against each other
- Great when local groups form to come up with locally relevant solutions – bottom up approach
- Role of agencies: information, facilitation, promoting, research/international/national practices - come up with some possible measures
- Need the 'vision', then what/how we need to do to get there/stay there
- New road is underway but not well supported.

Urban Population
- Children do not visit farms so much - risk – OSH etc
- Need for mind-set change: urban majority
    - making milk and meat sexier
    - isolation of farming from urban: because of rules and regulations

- a minority influences others.

Pan Sector Organisation/Leadership
- Farming community is not shaping its own destiny - decision making by land owners important/more say in local initiatives
- Landowners' ability and opportunity to articulate needs - not necessarily a pan-sector organisation, but - rather a change in the way conversation/consults take place. More 'informal' talking amongst sector interests
- Relates to forum for discussion - are (???) talking to people on the farm - re practical issues
- Farmers have a huge impact on New Zealand economy/social/environment but difficult for them to be involved in government processes because self employed/cannot take the day off
- Cynicism around consultation process
    - government already has pre-determined agenda
    - submission process inadequate to gather meaningful inputs
- Existing structures need to be tweaked adjusted.

Other – Comments on 'Growing for good' report
- Report is balanced but interpretation may not be: things taken out of context, depends on point of view
- Comprehensive
- Balance of interviewees: not enough farmers
- Practical experience essential
- Positive in that it recognises farmers are responding to 'drivers' – not necessarily in control (manipulated).

Comments from Nelson/Marlborough Evaluation Sheets

Positive
- Thought provoking day – thanks
- A great spring board to start and facilitate change
- Excellent
- Overdue
- An exciting report – have needed this level of information to combine several strands of concern to a holistic picture
- Well done!
- Nice to know that 'farming for food' is NZ's biggest asset!

Moving Forward
- Be bold, but not authoritative. Stimulate and lead don't push
- Deciding on a suitable forum to continue dealing with key issues – preferably a forum already in existence but with widening of scope
- Above all, there must be understanding between all ?? groups in NZ
- Rather than creating a whole new department I feel the message can be gotten across with the people you have in landcare, together with Dr Morgan???… by meeting land owners at monitor farm days a….

Feedback on Process

- Consultation needs to be across all land use groups. Meeting could have been better advertised to canvas (sic) parties. Few viticulture industry representatives (Marlborough Grape Growers Contacted?)
- Reduce noise level in hall
- Workshop questions rather difficult and long
- Have a sound system for us deafys!
- Don Ross did a good job under the circumstances. Landcare got people thinking with them.

Other

- Helped key people network with a view to future cooperation.

Notes submitted by a Landowner – attached to evaluation form

- Economics, economics, economics – we are all dependent
- Sustainability for human life is reliant on agriculture
- Other political regimes such as the EU place huge value on ensuring fair standard of living for the agricultural community and the stability of farm incomes
- Since 1984, NZ has systematically reduced agricultural incomes, factors such as high interest/high exchange rate policy, regulations, compliance costs, local rates have disadvantaged agriculture culminating in the RMA and now the land access policy, which seems to be more about getting control of rivers and river banks, than it does about walking access
- During the 1980s, many of the best and brightest brains were lost to agriculture because of the brutal restructuring entered into by the labour government. Today, the effects of this are still obvious with the age of farmers, and the lack of graduates taking interest in agricultural concerns
- The 'run fast to stand still' philosophy is not sustainable. Before anything else is addressed the CAP objective of 'ensuring fair standards of living of those involved in agriculture' must be addressed
- The more economic pressure put on farmers will only mean more stress, deaths, accidents and short cuts. The environment comes second to the short term survival in New Zealand
- With a balance of payment crisis here, 6% of GDP, NZ cannot afford to continue to plunder and abuse agriculture
- In my Tu rangi wai wai (sic), the upper Waihopai Valley, 20 years ago, there were thriving, productive pastoral farms supporting families. Now there are weed infested hunting blocks, some forestry and a very few surviving traditional farms – most of which are struggling.