Manawatu 'Growing for good' Workshop, 16 Febraury 2005

Key Take-home Messages

This section lists the key take-home messages from the Manawatu workshop only.

The Importance of Farming to New Zealand's Wealth
- Risk – variety of perception on immediacy.

Effects of Intensification on Natural Capital
- Variation in understanding of intensification drivers
- Water is a finite resource and soil.

Understanding the Impact of Economic and Social Drivers

Drivers – Economic
- True environmental cost of production is not accounted for
- Reduced profit margins leading to inappropriate intensification and diversification
- Change of ownership because of reduced competitiveness and impact on land price (urban sprawl lifestyle blocks, corporatisation)
- Hip – pocket: driver
- Our markets are overseas have to perform to overseas standards.

Drivers – Social
- *No key take-home messages*

Incentives To Change
- Need a market signal to encourage farmers (e.g. internalising cost or earning more $)
- Recognise price is the bottom line
- Customer pull for change is key – provide incentive.

Performance of Research on Delivering Needs
- Fund tech transfer at similar levels to research $ to speed it up
- Good science proven and funded
- Government must support relevant research in the short and long-term!

Understanding Redesign
- Matching land use to land capability
- Match land use with resource limitations
- Sell message differently – "redesign your farm" is not an easy to take message! Say this differently
- Focus on whole systems change
- Provide concrete examples of whole system redesign e.g. using native trees/plants within the system – these best suited to soil/climate needs, could have many benefits
- Indicators for this – practical, simple, viable
- What is "redesign"?
- Need whole farm systems not just individual components
- Different farming systems have their own range of challenges
- One model does not fit all but all models have a common purpose i.e. food production.

Education Models for Farmers

- Need for farmers to get a greater understanding of natural resources and their long-term capabilities and limitations
- Information flows – translation required to make sense?
- Facilitate ongoing education of farmers especially about these issues e.g. a TV programme
- Any initiatives in this area need resourcing. Key areas in which projects should be initiated or expanded include demonstration, monitoring, education/information. Some resourcing should be by refocusing existing expenditure
- Need for dissemination of "appropriate" information relevant to farmers and all actors
- Emphasise the good news stories - there are many out there about sustainable land use
- Need clearly defined Best Management Practices.

Team New Zealand

Education and Communication

- Focus on getting out message to all people – not just those 'already converted' like who's at this meeting
- We need a real understanding of our systems – not prescription. This is not just for farmers but for society / consumers / bankers / community.

Working Together

- All levels of communities / agencies / agricultural sector and central government FUND about sustainable farming
- Collaboration will achieve success (e.g. ICM); further research on effective ICM is needed
- Sustainability Is achievable at farmer level "Where there is a will there will be a way"
- This is OUR Issue and needs to be addressed with a "NZ incorporated" perspective, i.e. it needs to be based on common understandings and commitments by all (urban/rural, central/regional government).

Questions of Strategy

- Need to get people to want to pay $
- Currently lacking policies that encourage good land use/land management practices (incentives)
- Need to link farmers to environmental/community outcomes more strongly
- Money! Solving insufficiencies/cost sharing
- We need flexible policy instruments which bring environmental values into the market (and feed these environmental drivers back to farmer)
- Recognition of value of regulatory framework at a catchment scale - through research and broad consultation e.g. Taupo catchment.

Leadership

- More resources from central and local government to support change of thinking (farmers)
- ICM critical – bottom up
- Farmer is the unit of change
- Government taskforce to address detailed solutions
- Need community or catchment approach

Leadership is critical. Leadership on this issue should:

- Be drawn from the grassroots
- Not be statutory or dominated by government officials
- Recognise that regulation is "at the door" or a "back stop" if we do not make progress

- Value farmers' knowledge and encourage communities to develop catchment visions. Also recognise the success of existing initiatives such as e.g. Landcare groups/SUBS groups/Taupo and Waitomo catchment initiatives
- Agricultural industries need to take responsibility for leadership in the changes needed for sustainability
- Is there really a need for another organisation to discuss this – this is a regional council role!

Manawatu Small Group Discussion Notes

This section lists all points of discussion recorded from the Manawatu workshop small group discussions. The questions used to prompt 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 environmental impact of farming become important to those markets.

- How much risk do you think there really is? (high, medium, low)
- What kinds of things do you think would make that risk higher?
- How immediate do you think that risk is?
- 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?
- What are some of the ways farmers and the farming industry can improve their understanding about the risk of losing important overseas markets?

General Comment

- Depends on market
- EU risks greater – Germany, Swiss
- QA – European audits, are becoming more interested in environment now, nutrient budgeting
- Food safety still the key concern
- North America less concerned about environmental outcomes
- Animal welfare still the key concern
- Consumers a key driver
- Regional variation understanding
- Media affects perception
- Fonterra – focus on food safety as important for customers, not yet getting premium to environment.

How much risk do you think there really is? (high, medium, low)

- POV#1 High Risk – due to risk of damage to trade and the importance of agricultural trade to NZ's economy
- POV #2 Medium risk – if it was high-risk farmers would be leaving farming
- Possibly 20 years away?

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

- Water priority in terms of risk – Rotorua Lakes
- If we say we're clean and green, we need to be it

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

- Some thought the risk was more immediate and farmers were aware of risks.

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 fresh 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?

General Comments

- Farming is about risk management, especially of more sensitive environments
- Methods to control unacceptable effects of intensification could be made mandatory
- Recognise that there are multiple objectives to manage
- Nutrient budgeting is a useful, educational and management tool
- Is there a tipping point – best practice will not ameliorate effects. There is a finite limit.

Is this Enough to Fix the Problem?

- Fencing on farms etc not enough – need to work in the whole catchment
- No – not enough farmers doing what is required: whole catchment approach needed.

What kinds of information does a farmer need to know that his/her farm is sustainable or unsustainable?

- Large chunks of landscape are farmed sustainably
- How do farmers know they are farming sustainably? Lots of denial?
- Not all farmers have the right information
- Farmers need to understand if they are farming sustainably
- Farmers may be unaware of their effects on the environment
- Need targets to aim for, for example, x tonnes N out of catchment
- Need SoE info communicated to land owners
- Casual linkages
- RC – contribute info to farmers about catchment context
- Need biological indicators (these exist already – use them!)
- Greater understanding capabilities limitations/finite
- Level of risk immediate or long–term
- Reach everyone – information flows
- Facilitate ongoing education – TV, taskforce
- Appropriate relevant information for all
- Soil and H2O quality measures – and relevant information to answer so what!!!

Nitrogen

- Intensification-driven nitrogen problems are obvious already.

Can Farms in New Zealand Survive with Less Synthetic Fertiliser?

- Not without P and N
- Unless consumers willing to pay more for products not grown with fertiliser
- What is your definition? of success?

Water

- A disastrous event focus the mind – Cyclone Bola
- Water – mixed messages between Fonterra – district (pro) councils and residential councils (anti) – Canterbury
- Water storage needed
- Water availability
- Changing land use
- Intensification.

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

- Profit drives production
- Limited land – competition for
- ROI / wealth
- True environment cost not accounted for
- We are not factoring in the cost of use of natural resources
- Farmers caught in a bind: have to produce more for less
- If there is no pressure to internalise costs – farmers just focus on the bottom line ($)
- Cheap food: drivers all through the world. Beef in the US 50% subsidy
- Change in ownership structure
- Environmental costs not all captured on farms.

Land Values

- Land prices
- Price of Land
- Need to earn more
- Increase intensification
- Banks – lending on equity
- Urban sprawl
- Availability of suitable land = more pressure of less suitable land.

Markets

- Competition for markets
- Customer 'pull' key driver
- Social pressures: how overseas purchasers see our products
- Retail differentiation a driver
- Supermarket concentration a driver.

Supply Organisations

- Signals from consumers about environmental expectations are filtered by the market, and through 'middle men' agencies like Fonterra
- Executives (e.g. Fonterra) make decisions; farmers more into farming
- Fonterra shift in focus more to market and sustainability.

Costs of Production

- Cost of inputs: cost of business
- Compliance costs: costs of business
- Labour driver / cost
- Traceability: cost to farmers
- Animal health requirements
- Higher processing costs
- More need to push system.

Social/Political Drivers

- The technological advances
- Greed consumers/farmers
- Less localised knowledge
- Farmers knowing impacts: would it change behaviour?
- Productivity culture
- Desire to move forward
- Older farmers are more complacent about environmental improvement (but retiring earlier)
- There's a trend to more group/corporate ownership of farms – for capital gains, therefore profit, so the environmental messages may not be acknowledged so readily by farm managers on the ground.

Moving Forward: Economic

- Financial benefits motivate changes
- Demand pulls e.g. price premiums (doubts about these), restricted access to markets (considered more likely)
- Ensuring farms remain profitable (focus on added value)
- Motivation to learn/change: need a price signal
- Purchase of product: pay more for sustainable product – pay less for unsustainable product.

Moving Forward: Social/Education

- Negative incentives/reason to not do something
- Need to make it easier to get younger people on farm.

Moving Forward: Markets

- Signals to encourage
- People need to want to pay

- New Zealand has to perform
- Growing consumer awareness.

Constraints to Moving Forward:
- QA system – but consumers still looking for cheap food: promoted by supermarkets (hard to get people to pay more for food).

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
- Research coming through but needs to be packed for better communication
- Translation of science needed
- Soil quality management systems – need tools for farmers
- More research needed especially on soil science / water science linkages
- Getting information out to farmers and agencies is important
- Prove and funded
- Short and long-term
- How get through to policy: not happening
- On tap
- Move away from applied science
- Need for good science: not nitrogen but urine
- Need farm sustainability measurement tools
- Government commitment through research into soil - research and relevant areas is also required
- Clarity? Better understand what environmental indicators mean
- Develop indicators with farmers to ensure relevance
- Visual soil assessment kit – look at soil resource underneath, rather than what is happening on top.

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
- Farmer is unit of change
- One model doesn't fit all
- Whole systems: use examples and indicators
- Need to consider global environment as well as local effects
- "Redesign" – what do you mean? – need explanation
- Need "achieved" status description, who sets these standards?

- Do we need to re-design farming?
- “Evolution” rather than redesign
- Don’t know if we need to redesign
- Some farm systems / farms do but not others
- Need to ID farm types / systems and match to locations
- Yes – do need to respond to NZ’s environment problems, e.g. buffering of floods / droughts etc a matter that farmers need to get better at
- Higher productivity now on permanent pastures reflecting a shift to greater use of forage crops – new issues will arise from these changes
- “Need to redesign” is a poor message to give farmers
- Jargon word not understood: sell message differently.

Constraints to Redesign:
- Do regional councils have tools/info to give good advice?
- Cost of change
- Structure of ownership, e.g. family farm in middle of system that now includes lifestyle properties, corporate farms
- Structure of lease arrangements goes against sustainable practices in some situations
- In absence of agreed indicators, lease agreements are a problem because lessee not necessarily farming to particular environmental objectives
- Price of land is a major problem
- People’s inherent conservatism needs to be recognised
- Slow speed of technology transfer between researchers and farm
- Reduced profit margins
- Short term – who pays the cost.

Enabling Redesign: Big Picture
- Soils – unsure if good enough info? If poor soil information, compromises effectiveness of nutrient budgets
- RC – should place decision making on what tool to use with farmers
- Need more focus on the whole farm, focusing on one issue a risk because other problems often occur
- Soils Underpinning Business Success (SUBS) – successful
- Working groups a way to do it
- Financial support
- Too narrow to focus on just farm – must be system level
- Need to look at this differently – should take on challenge of choosing to change before we need to
- What’s public/private land – this debate key – environment requires this to change
- Need different ways to sell this message
- Financial
- Market / buyer – incentives – market access has been a key - has seen significant change in horticulture systems within 5 years
- Get info out to farmers – use media etc
- Tech transfer at on-farm level – beyond monitor farms – need to get other people
- Get the buyer out on the farm – this has worked in horticulture
- Need incentive
- Continuity of ownership.

Ideas for Redesign

- Nutrient budgeting 3% - 17/18% farmers using
- Nutrient budgeting can be used across the redesign spectrum
- Catchment nutrient budgets important, farm outputs should be put in the context of a catchment.

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 as a result of these programmes?
4. What kinds of learning opportunities would help farmers to redesign their farms? (e.g. Monitor farms? Field days? Websites?)
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

- Farmers do respond to community "pressure" - they are part of the community
- Plenty of goodwill on farmers part to maintain healthy environments
- More information on impact of changes and practical ways to change is needed by land managers
- There is evidence of a "slow' shift in thinking
- Farmers know little about soils and water – need a deeper understanding/soils/ecology
- Farmers: change will be gradual – support has to be there forever
- Better question: how do you make it more worthwhile for farmers to farm sustainably? Support from regional councils – advice – incentives - $ for planting – disincentives
- What do regional councils do for farmers? Not sure!

Types Of Extension Models

- MWES monitor farms
- Landcare Trust – (?) NZ
- Use feed quality assurance
- SFF project. Internal parasites
- Dairy discussion support group (Dexcel)
- Massey annual conference
- Media: - human interest/ideas. Sustainability focus growing - esp. 10-15 years
- Money for farms
- SUBS – Soils Underpinning Business Success (understanding soil types, behaviour, production, long-term sustainability)
- Green Tick (Farm Sure)
- Sustainable Farming Fund Project SLM Group
- Clean Streams Accord
- Agricultural media – info
- VSA workshops
- Field Days / Workshops – single focus
- Public Good Science funded programme i.e. transfer of research
- Polytech programmes – rural, tertiary
- Farm Discussion Groups
- 1:1 Consultancy

- Local initiatives
- Growsafe
- Legislative Formal Training
- Internet
- Environment management officers talking to farmers
- How soils would react under change management
- Farm environment awards: field days, education, pamphlets
- Learning from leaders? Themes and threads from winners/ success stories
- 1 monitor farm in Manawatu – not operational any more.

Programmes	**Focus (Production / Sustainability / Awareness raising / Action)**	**Reasons for effectiveness for those considered most effective**
Monitor / focus farms	Production	Raise awareness through wide exposure Demonstrate the benefits
Discussion groups - sector groups - regional council groups	Mixed Primarily Production Sustainability & Production	
SFF Projects e.g. SUBS discussion groups	Sustainability and production, Raising awareness of alternative systems	Farmer driven Good funding support
Field days e.g. NZFFA	Production Special interest	
Land Based Training	Production Health and Safety Risk reduction	
Commercial Professional Development – workshops / field days	Product promotion Production oriented	
Awards / Competitions e.g. environment awards	Mixed (production and sustainability) Some have a specific focus	
Annual conferences	Production with some environmental sessions	
Environmental Education in Schools	Awareness / Action	

What Is Working With Current Extension Models?

- MAF sustainable farming fund: funding for farmers to do their own stuff solve problems v successful – communities of interest.

What Is Not Working With Current Extension Models?

- Extension still production
- Focused some shift in dairying
- Hill country still profit focused
- Some are focused on production and not looking at how that affects sustainability
- Those providing the “education” have different “drivers” not necessarily sustainable

- Define sustainable?
- Measure /indicators?
- Answer is always more N!!!!! (i.e. beware of those with something to sell)
- Beware of simple bandwagons/themes
- Market focus. Fonterra run
- Not many block courses
- Information is available – but not being used by farmers because the information often lacks relevance?
- Farmers are not aware of the information
- Benefits to farmers of information and acting on information are not clear
- Often focus on single aspect, not systems as whole
- Farm environment awards (can be a superficial look at a farm. Things not as good as they seem on the surface) limited to existing? Systems? How do we know this is enough?
- No one is really shifting to redesign
- Monitor farms: focus on soil mapping – strong focus on $. But not a tool for moving environment knowledge into farming community
- Fertiliser reps / consultants. Selling product – industry has been responsible but farmers don't always listen
- 83% dairy farmers still to have comprehensive nutrient budgets
- Confusing messages being given to farmers
- Little capacity to do farm plans. Need more resources: Varies across region to council and staff.

Enabling Change:

- More resources for people to understand: SUBS programme – not followed up, into always need to be available all the time to everybody/ farmers need ongoing support. Need more resources
- Monitoring
- Collaboration
- Good news
- Sustainability outcomes: - variation case by case
- How can we improve the effectiveness of educational programmes? Build in monitoring of programmes to measure their success
- How do we best reach the unconverted?
- Start young (in schools)
- Provide financial support for effective programmes
- Encourage and promote the "converted", others will follow
- We are talking to converted population not parishioners, need to engage them through demonstration
- Unique solutions
- Learning opportunities weaken over time, must be reinforced
- Getting advice going out to farmers aligned
- Producing food fit for purpose - economic model
- Good news stories
- Need for whole farm approaches not in compartments
- Need to ask farmers what would cause them to change?

Motivating Farmers

- Find out what others are doing and what can be done
- Individual can make a difference even if only within their own boundaries

- Don't always have to be economic social? Pressure. Collective action
- Increasing levels of knowledge and understanding
- Want to be early, adopt leading edge.

Barriers to Change
- Uptake can be slow
- How do you get farmers to recognise they are not farming sustainably?
- Farmers know they are not farming sustainably but argue they are the backbone of the country and that they have to do it.

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

Can we do it? Yes

Are we being strategic enough in our development of our farming systems – pulling together as 'Team NZ'?

Questions of Strategy
- Need to develop environmental bottom lines so industry knows what their targets are
- Set absolute environmental bottom lines e.g. which protect human health?
- How do we generate on-farm charge?
- How do we generate whole system change i.e. the food / farm system?
- How do we generate a "whole of NZ", shared approach to these issues?
- What is the role or place of wider public interest in land use and farming systems?
- How do we raise awareness in the rural community that this may be our last chance before significant intervention?

What will make it possible?
- Leadership
- Good indicators/measures of sustainability
- Demonstration and promotion of effectiveness of measures put in place e.g. improvement in State of the Environment or other sustainability indicators.

Suggestions for Strategy
- Education – needs to be thru whole chain
- Policy makers (need to learn: for farmers to farm sustainably, they need to earn $), schools (understanding how everything fits together), consumers, retail industry – have to take responsibility
- Programmes available, but not enough resources e.g. SUBS programme – group learning environment
- Quadruple bottom line – supermarket chains have to understand impacts of their policies – more customer demand
- People have to have a better understanding of the trade-offs of our choices, to make future decisions e.g. ecosystem services; how to use in a sustainable manner? How they are utilised and monetary value
- Education does not always lead to voluntary change – have to combine with incentives and regulation
- Combination of fiscal tools / education/ regulation – problems with RMA: not being implemented / variable / wimpy
- Regulation driven by community/agency/industry? (Accreditation system).

Is there enough understanding of growing urban/rural tensions, re environmental expectations, in our politically urban dominated society?

- The “urban effect”
- How much will they pay to support the transition? They already do through regional council spending
- Is this occurring to best effect now? Does current spending reflect a real commitment to sustainability? Perhaps not
- Urban society too much removed from producers
- How much pressure will they exert? This could very well be our “last chance” before significant intervention
- Urban/rural: educated what is sustainable farming.

Working Together

- Catchment plans needed
- Whole community (e.g. tourism) need to be involved, assist farmers
- Industries to take responsibility for leading change
- Community or catchment approach
- Vision including everybody.

What type of Leadership Organisation is needed?

- One that operates across the whole community and establishes this as OUR problem
- One that fosters awareness raising and education to galvanise interest and involvement
- One that is made up of people who are known and respected (not just officials)
- One that is well resourced and can resource action
- One that has a long-term commitment behind it i.e. that will evolve, that will work on “what’s between peoples ears”.

Pan Sector Organisation

- A leadership organisation like that which hosts the Environmental Awards
- Do we want another QUANGO? Could the NZ Landcare Trust or PCE provide this leadership?
- We need a new group with a clean sheet (although it could/should be serviced through an existing organisation to avoid building up additional bureaucracy)
- Should it be national or should there be regional leadership organisations?
- Should be tiered, regional organisations with national affiliation.

Comments from Manawatu Evaluation Sheets

This section lists regional-specific comments gathered through workshop evaluation sheets.

Positive

- Well written, good layout, good used diagrams
- It has got a reaction, the issues are now in to public arena, it is important
- I liked the use of 'dash-board' indicators - need more of these and wider publicity
- The environmental workshop was well worthwhile. It allowed us all to share ideas in this important issue. Well done
- Well balanced and highly likely to advance awareness and progress towards sustainability
- Haven't had the opportunity to read the report yet. The workshop was interesting
- Looking forward to seeing the change when I return to NZ. Keep up the great work PCE and Landcare
- Thrust/message absolutely correct. Some omissions and errors detect for some but I argue these should not (comment not finished)
- Addresses the key issue for NZ in the 21st century
- Opportunity to put forward a farmers' perspective to the people who have little indepth knowledge of practical farming.

Comment on Workshop Process

- The number of farmers compared to other sectors of our industry is very low to get a level playing field for comment on the subject
- Keep it in balance. It is those that have 'no investment that appear to be having a lot of the say'
- Seems that those groups with the least invested might want to have a bigger say
- I think unfortunately this workshop has attracted the same old faces
- Too few farmers present
- Allowed views to be put - were they 'the converted'?
- Raised concerns about who has interest in all this
- Identified need to look at how to interact with farmers - very few present!

Challenges

- Look forward to seeing how redesigned system gets implemented
- How do you get the breadth of farmers reading this sort of material?

Moving Forward

- There is a need for people without farming knowledge to be more aware of the importance of farming to our total economy. Farming is a very complex business and there is not going to be any quick fix solution, sustainability is a community issue as well as an individual issue
- Raise profile of issues at government level - get local buy-in, make this a priority for New Zealand - redesign/pre package/renew/reinvent
- Soil science and farming research must combine the productivity and health of the product and the sustainability and effect on biological resources Farmers won't buy in unless they are incentivised by dollars
- Great report; but we need action; what next? How are communities being engaged in the debate?
- Would be good if this is progressed and not end up in the filing cabinet
- We have been taking these issues for 15years + - now lets do/implement it

- Needs government support/resources to deliver the message to farmers/landowners of support research and extension for informed changes
- Good to see issues addressed at the national scale. Solutions need to be national but recognise the knowledge and projects already happening at a local level
- We need to concentrate on out comes and rather inputs because of differences in farming systems
- It needs to be taken out to rural NZ/smaller rural towns. Great report, but someone must be given ownership of the responsibility to implement it. The term balance must not be allowed to displace or dilute the term sustainability: the primary focus must remain on 'natural capital sustainability'. Individual agricultural industries need to take responsibility for causing their suppliers to become knowledgeable about the content of the report; e.g. VegFed, Fonterra, Meat and Wool NZ etc. Talk to the supermarket industry
- Don't get stuck into the 'education leading to voluntary change' solutions, for two reasons: 1 - we can't wait; 2 - history shows it has seldom worked. The fact we have the PCE's report in 2004 proves the previous approach hasn't worked
- Excellent. Does need to be taken out more
- Good stimulus for discussion but needs ownership/leadership from farming industry and whole government
- Needs more disseminations of the report i.e. a series on Country Calendar - raise urban awareness
- Need to manage the total messages - media and lobby groups sensitively focus on 'unsustainable farming'
- Generate article for publishing
- Didn't do much - more discussion needed to take place between science and landowners as other stakeholders. It is part of a process
- Education needed.

Feedback

- Was it printed on recycled paper? i.e. try practising sustainability
- Serious errors of fact in the report were not addressed but an opportunity was created to address those at a later date
- Good work, however seems to dwell on inputs rather than the desired outcomes. Also take (and has produced a similar) broad brush to farming systems. Agree there are issues that need addressing but these aren't right across the whole sector
- I found the marketing argument e.g. organic and economic opportunities to a degree unnecessary to justify the need for change
- In general a very valuable report, bit disappointed that the environmental credentials of commercial forestry, especially farm forestry, as land use almost invisible. Forestry especially valuable for soil conservation, low nitrogen emissions, but generally profitable land use. Current low radiata log prices probably not end of forestry, and other species currently selling well
- It did not go far enough making recommendations as a guardian of the communities' environment.

Other

- Intensification is not unique to NZ. It is happening all over the world. NZ farmers follow good sustainable practices when compared to farmers in Europe and North America. The difference is while NZ economy depends mainly on agriculture, agriculture is a minor component in the economy of Europe and North America so we have to adapt better sustainable practices mainly to protect our economy. 'Economic sustainability is a prime reason for environmental sustainability'
- Provided reinforcement for GFG messages
- Added a bit to my understanding of issues
- Good confirmation of stuff I already have knowledge
- Chance to catch up with people.