Promoting positive incentive measures for biodiversity conservation in agriculture

2nd June 2016 – Paul Melville

New Zealand Ministry for Primary Industries (fisheries, forestry and agriculture)
Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Target 3
By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.
Part one: Context of New Zealand Agriculture
New Zealand’s economic profile

- Developed country – GDP per capita equal to France
- Small and urban population – 4.5 million people (=Ireland) 86% urban
- Temperate climate. Latitude and size of Italy. High rainfall + high sunshine.
- Agriculture, fisheries and forestry
  - Export orientated: around 85% of New Zealand’s agricultural produce is exported
  - Comprise 75% merchandise exports

*Dependent on natural environment for our economic wellbeing*

- New Zealand is the world’s…
  - 12th largest agricultural exporter (by value)
  - #1 dairy product exporter (3% world production, 33% world trade)
  - #1 sheep meat exporter (6% / 75%) - #2 wool exporter (14% / 27%)
New Zealand’s agricultural export markets over time from 1965-2015.

Source: Ministry for Primary Industries 2016.
Biodiversity context

- **Island biodiversity** - high level of endemic fauna and flora. Almost mammal free – only native mammals are bats and marine mammals.
- New Zealand was the last major land mass to be settled (1200AD Polynesian settlement, European early 1800s). Land use change associated with both settlements.
- **Key focus**: Invasive Species management (both at the border and in-country); freshwater management; revegetation.
New Zealand – a country of diverse land use
Native forest and conservation land
New Zealand farm systems
New Zealand farm systems
New Zealand farm systems
New Zealand farm systems
Part 2: Agricultural Incentives in New Zealand
Agriculture incentives

Natural incentives flow to farmers

Government policy

+ Ensuring the ability to respond (research agenda, information transfer)

Market and consumer incentives

Community values
Getting incentives right
Agricultural Policy Reform in New Zealand

Historically farmers received little support; removing subsidies was politically difficult, but helped industry.

1960s: almost non-existent
1970s: increased to ‘protect’ NZ from overseas shocks
1980-4: increased to compensate for high costs and low commodity prices
1984 – support withdrawn

See: ‘Removal of agricultural and fisheries subsidies’
Now: Very low levels of government support for farmers

OECD Producer Support Estimates by country, 2011 and 2012
Per cent of gross farm receipts

We are here
The Act provides for the management of aspects of indigenous biodiversity through the following sections:

- safeguarding the life-supporting capacity of air, water, soil and ecosystems (section 5(2)(b))
- protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna as a matter of national importance (section 6(c))
- having regard to the intrinsic values of ecosystems (section 7(d)). In this case, intrinsic values include genetic and biological diversity (section 2(1)).
• Collaborative management approach with industry, community, and indigenous participation
• Sets national bottom lines and timelines for regional authorities
• Objective A1(a):
  – “To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, of fresh water”
Market and consumer incentives
Part 3: Mainstreaming through positive incentives for biodiversity
Case study 1: Riparian planting
Case study: Riparian planting
Supports community development and regional economic development
Incorporating into productive farming systems

“When I first got my riparian plan from the Taranaki Regional Council, I worried that it was going to be such a daunting task,” he recalls.

“We discovered that once you see what you are achieving, it sows the seeds to wanting to do more.”

“We must accept that riparian planting is not something that might be nice to have, it’s absolutely essential to securing the future of dairy farming in Taranaki.”
National focus – Government, industry and community
Local government advice

Common weeds to remove in the Wellington Region

Blackberry  
Barberry  
Convolvulus  
Gorse  
Pampas  
Tradescantia

To find out how to manage weeds visit the Greater Wellington Regional Council website www.gw.govt.nz/pest-plants.

FAST 5 PLANTS FOR THE WELLINGTON REGION

1. Cabbage tree
2. Pukio
3. Spring-flowering toetoe
4. Karamū
5. Manuka

These five go-to plants are ideal to start your planting with – they are hardy, fast-growing, can be planted straight into pasture and don’t require shelter. Ask your nursery for eco-sourced plants as they are grown from local wild seed and are best adapted to your climate.
Case study 2: Revegetation of marginal land

Variety of options available to land owners

<table>
<thead>
<tr>
<th>Variety of options available to land owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions trading scheme</td>
</tr>
<tr>
<td>Afforestation grant scheme</td>
</tr>
<tr>
<td>Permanent forest sink initiative</td>
</tr>
<tr>
<td>Erosion control funding programmes</td>
</tr>
<tr>
<td>Open Space New Zealand</td>
</tr>
<tr>
<td>Private revegetation</td>
</tr>
</tbody>
</table>
Part 4: Conclusion
Key Points

• Understanding local context important – for both agriculture and biodiversity

• New Zealand policy framework is focused on ensuring efficiency and sustainability – and responsiveness and flexibility to market signals

• Building capacity, use of technology and information to enhance productivity has to be central to policy frameworks – for social sustainability and also to allow farmers capacity to respond to government and market signals

• Macro policy/incentive framework will direct investment and actions. Policy coherence key:
  – Biodiversity is mainstreamed through productivity and sustainability policy
  – Both the wider policy framework and individual policy measures lead to the experienced outcomes (not a single policy focus)