



Promoting positive incentive measures for biodiversity conservation in agriculture

2nd June 2016 – Paul Melville

New Zealand Ministry for Primary Industries
(fisheries, forestry and agriculture)

Growing and Protecting New Zealand





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.

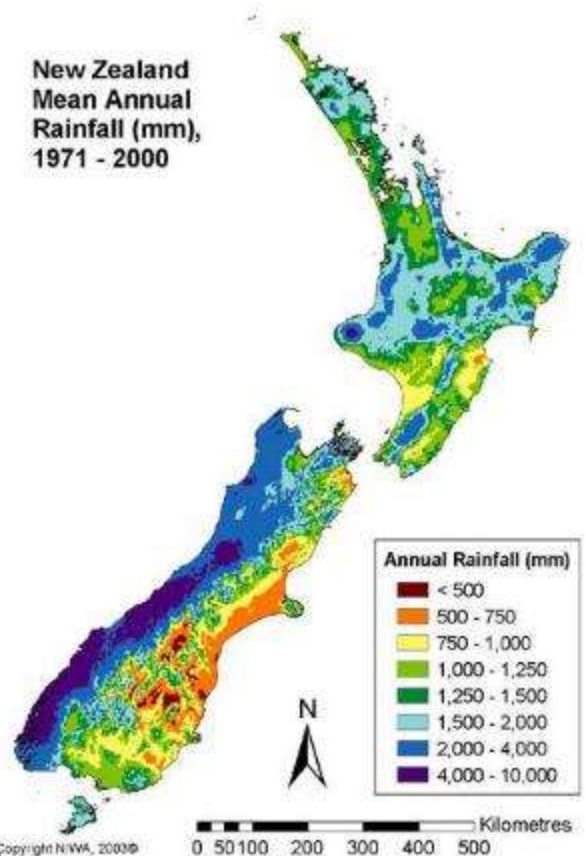
Part one: Context of New Zealand Agriculture

New Zealand's economic profile

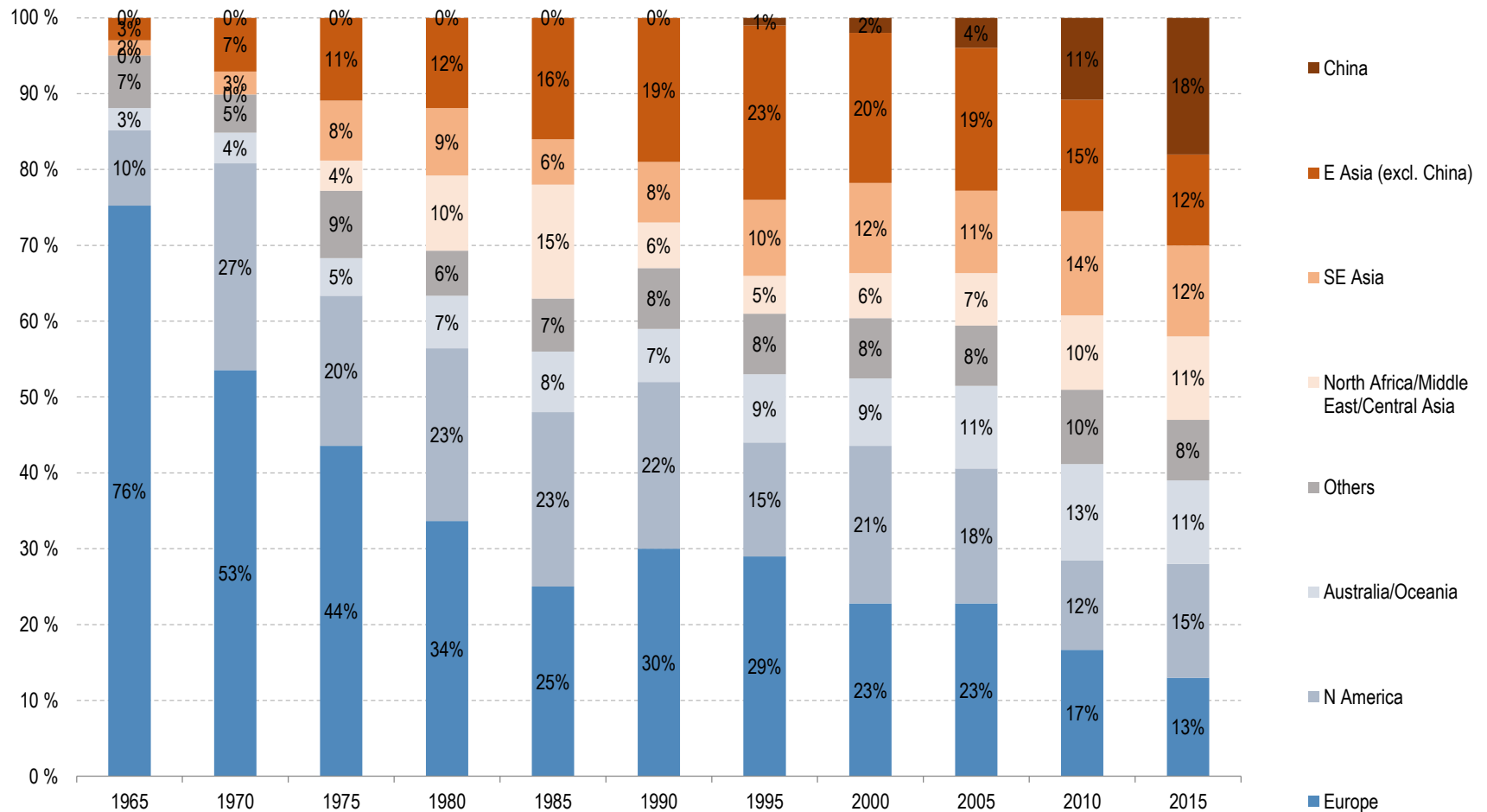
- Developed country – GDP per capita equal to France
- Small and urban population – 4.5 million people (=Ireland)
86% urban
- Temperate climate. Latitude and size of Italy. High rainfall + high sunshine.
- Agriculture, fisheries and forestry
 - Export orientated: around **85%** of New Zealand's agricultural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



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)**

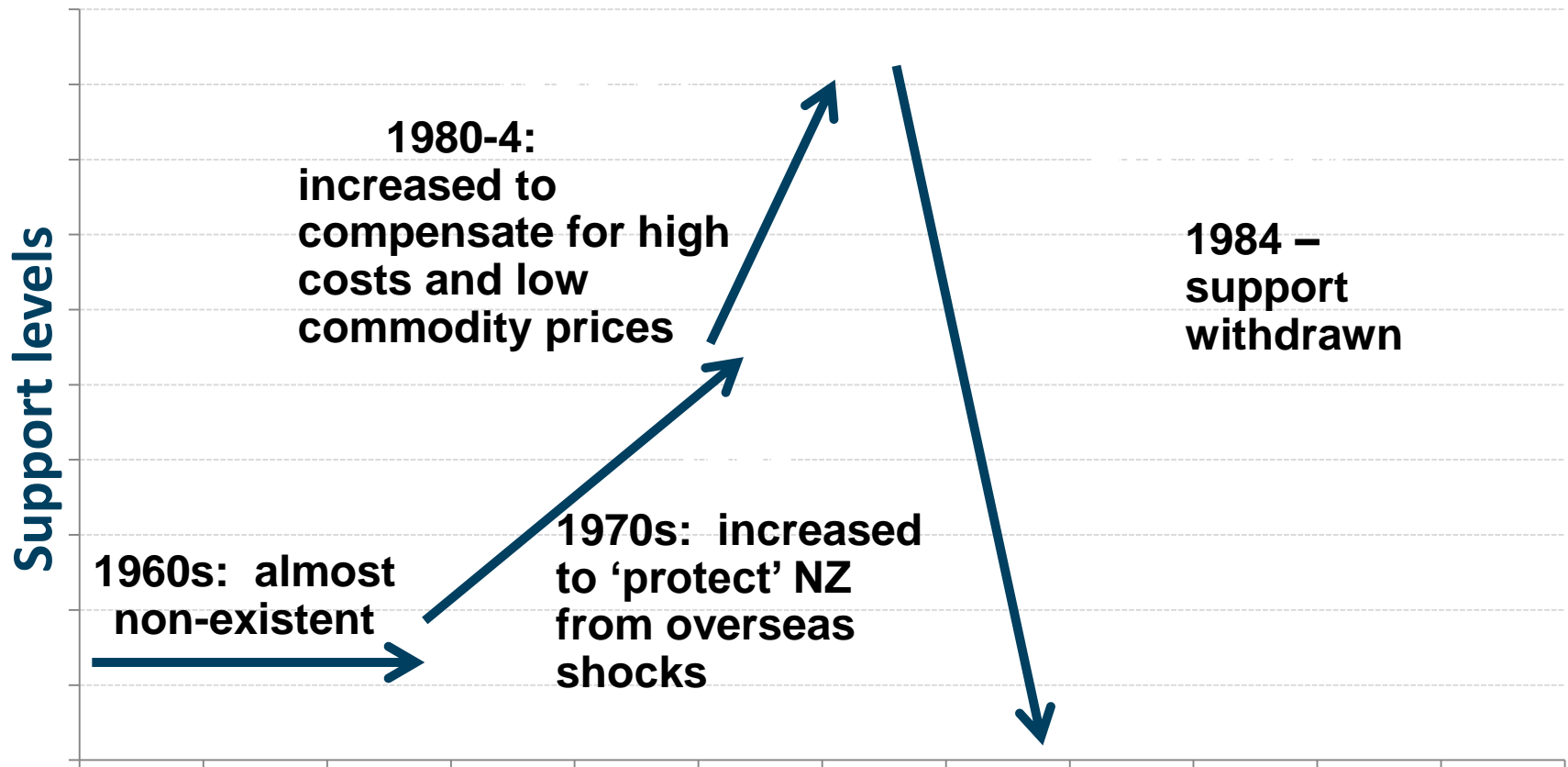
**Market and consumer
incentives**

Community values

Getting incentives right



Agricultural Policy Reform in New Zealand

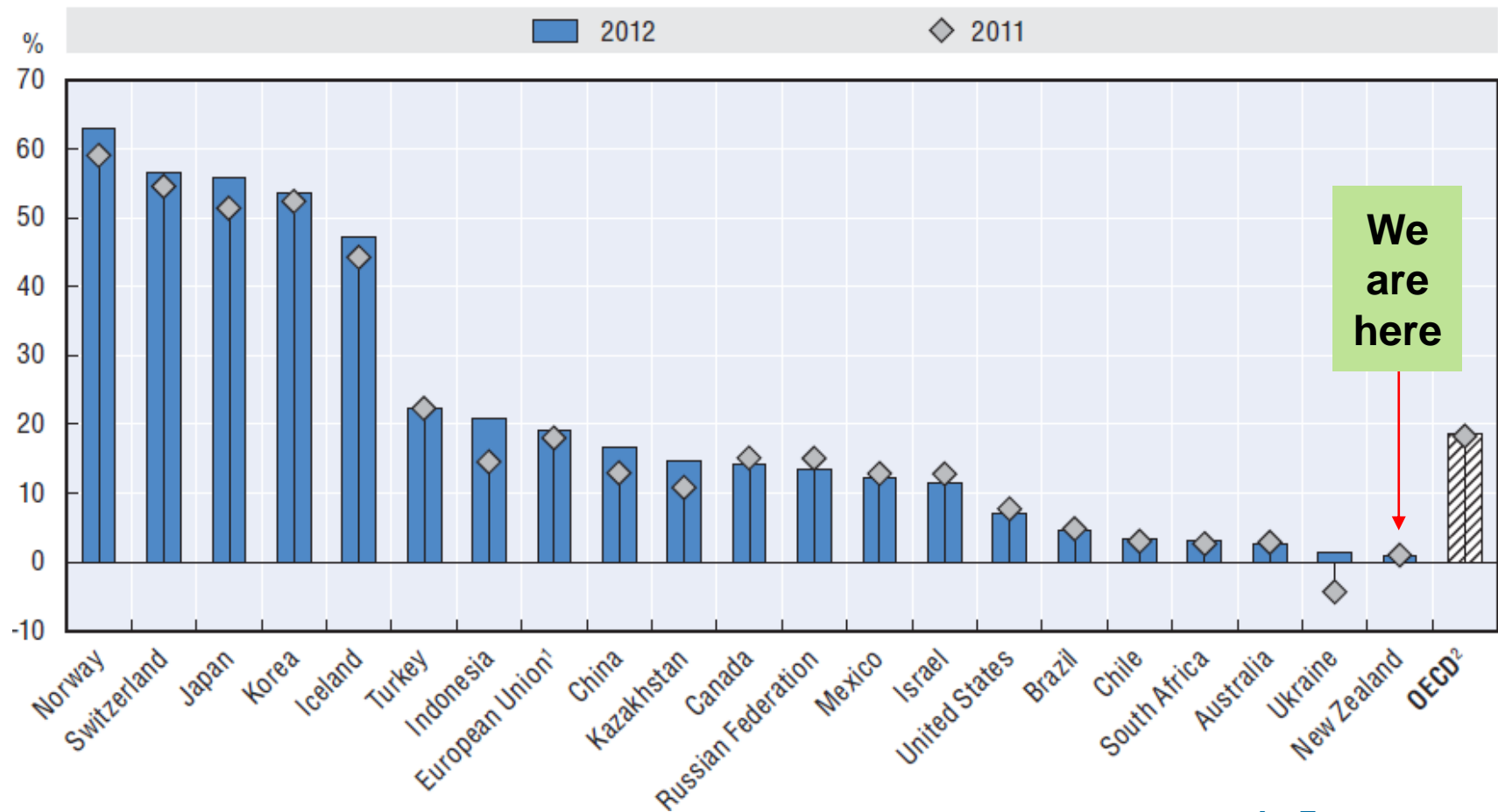


See: 'Removal of agricultural and fisheries subsidies'

<https://www.cbd.int/doc/case-studies/inc/cs-inc-newzealand-technical-en.pdf>

Now: Very low levels of government support for farmers

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



Legislation: the 1991 Resource Management Act

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)).



National Policy Statement for Freshwater Management (2014)

- 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

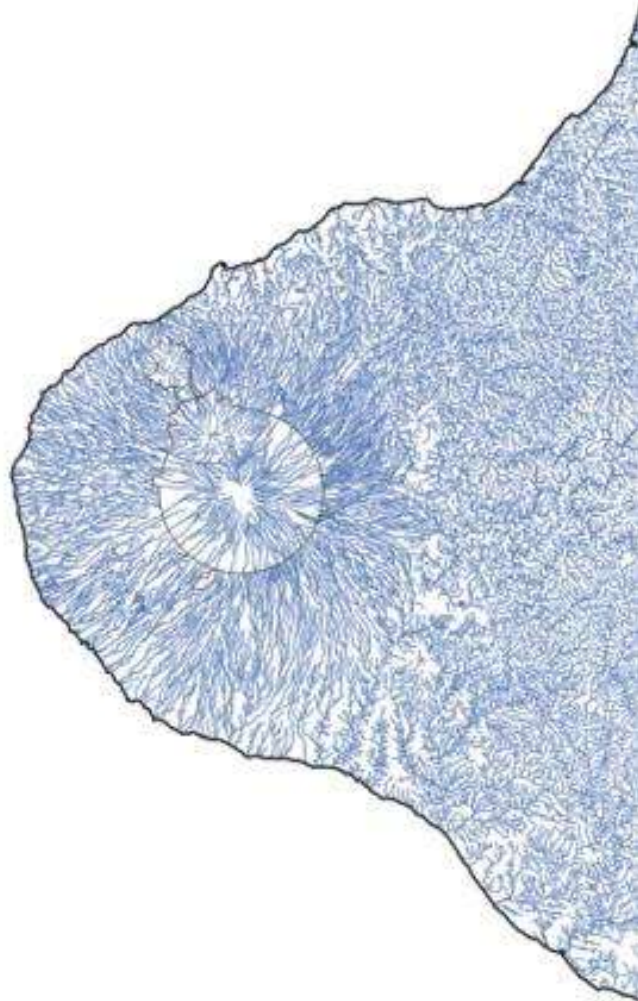


Part 3: Mainstreaming through positive incentives for biodiversity

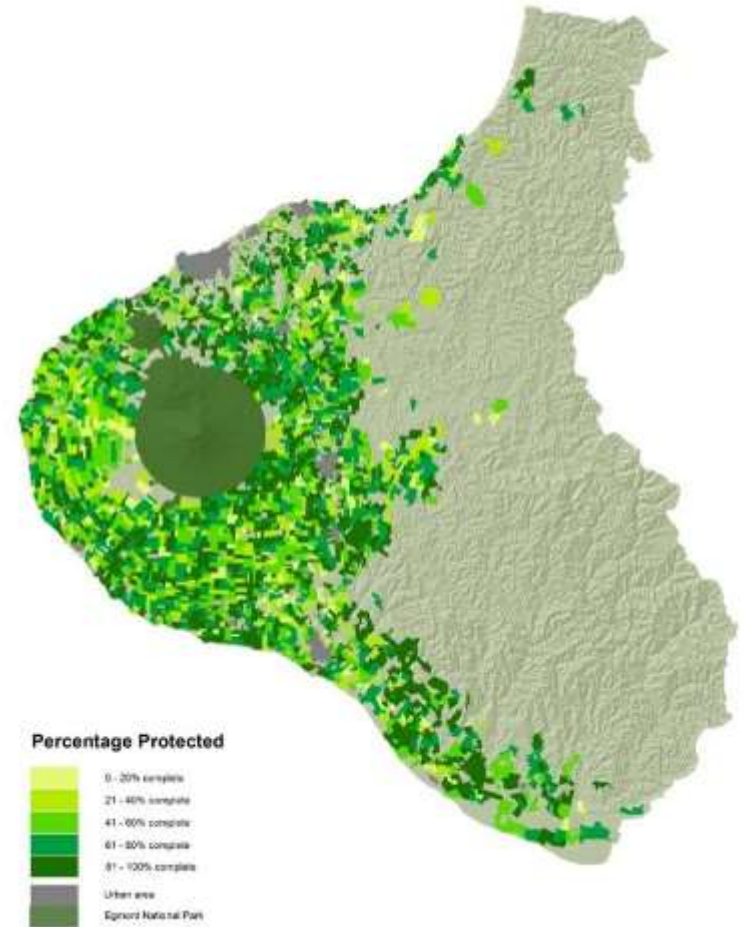
Case study 1: Riparian planting



Case study: Riparian planting



Riparian plans - Streambank protection to June 2014



Supports community development and regional economic development



Ruka Holden and David Rangitawa
grow native species at Kii Tohi
Nursery for the riparian plant scheme

Incorporating into productive farming systems

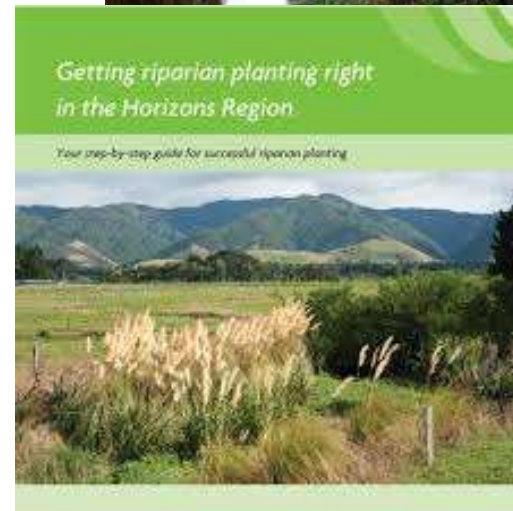
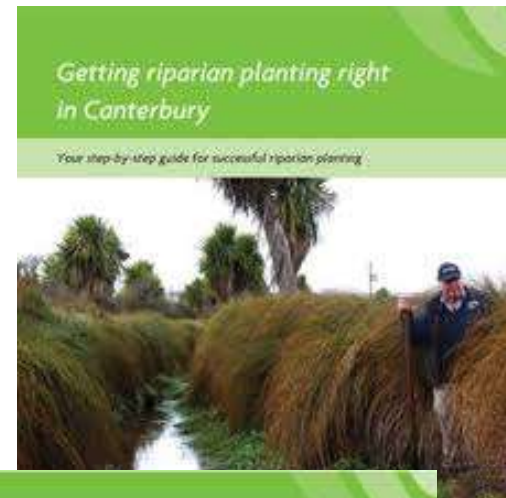
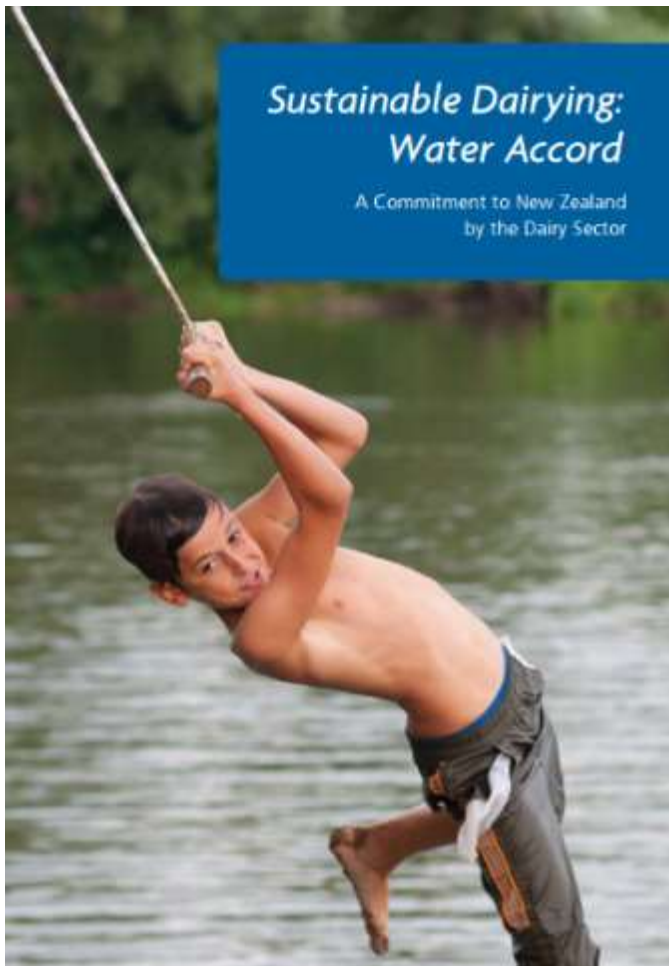
“When I first got my riparian plan from the Taranaki Regional Council, I worried that it was going to be such a daunting task,” he recalls.

“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



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



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

Emissions trading scheme	Standard carbon credits for removal
Afforestation grant scheme	Receive first 10 years of credits on planting
Permanent forest sink initiative	Land placed in forest covenant
Erosion control funding programmes	Grant for afforestation of erosion prone land
Open Space New Zealand	Charitable trust which has covenanted 180,000 ha forest
Private revegetation	Tools available to identify uneconomic farm land



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)