



Transforming the Dairy Value Chain PGP

Delivering now and for the future...



November 1, 2016

A photograph of a man and two children standing on a grassy hill, looking out over a misty landscape. The man is wearing a dark hooded jacket and blue jeans, with his hands clasped behind his back. The two children are also wearing dark jackets. The background is a soft, hazy view of a body of water and distant hills.

The Mission:

**\$170 million, seven-year
collaboration
between MPI and industry
to build a smarter, more
sustainable dairy industry**

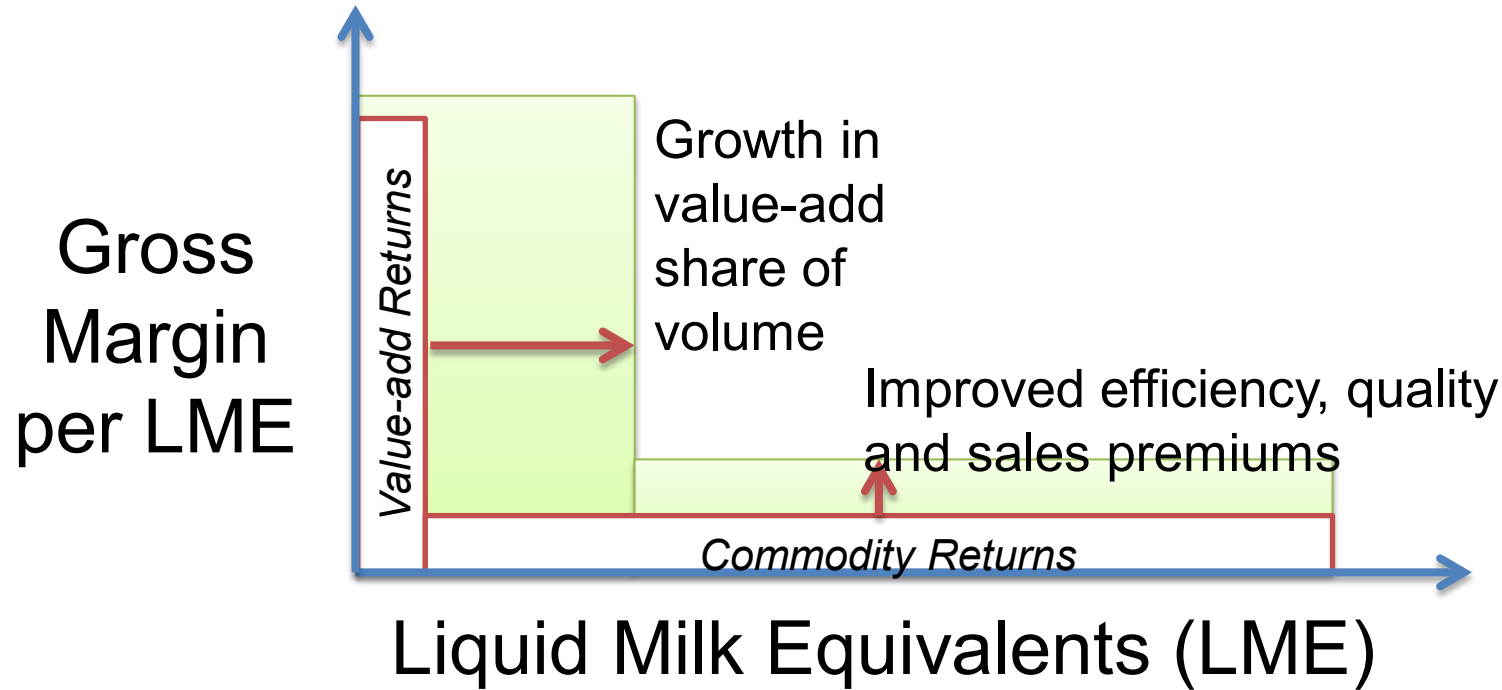
Three key challenges . . .

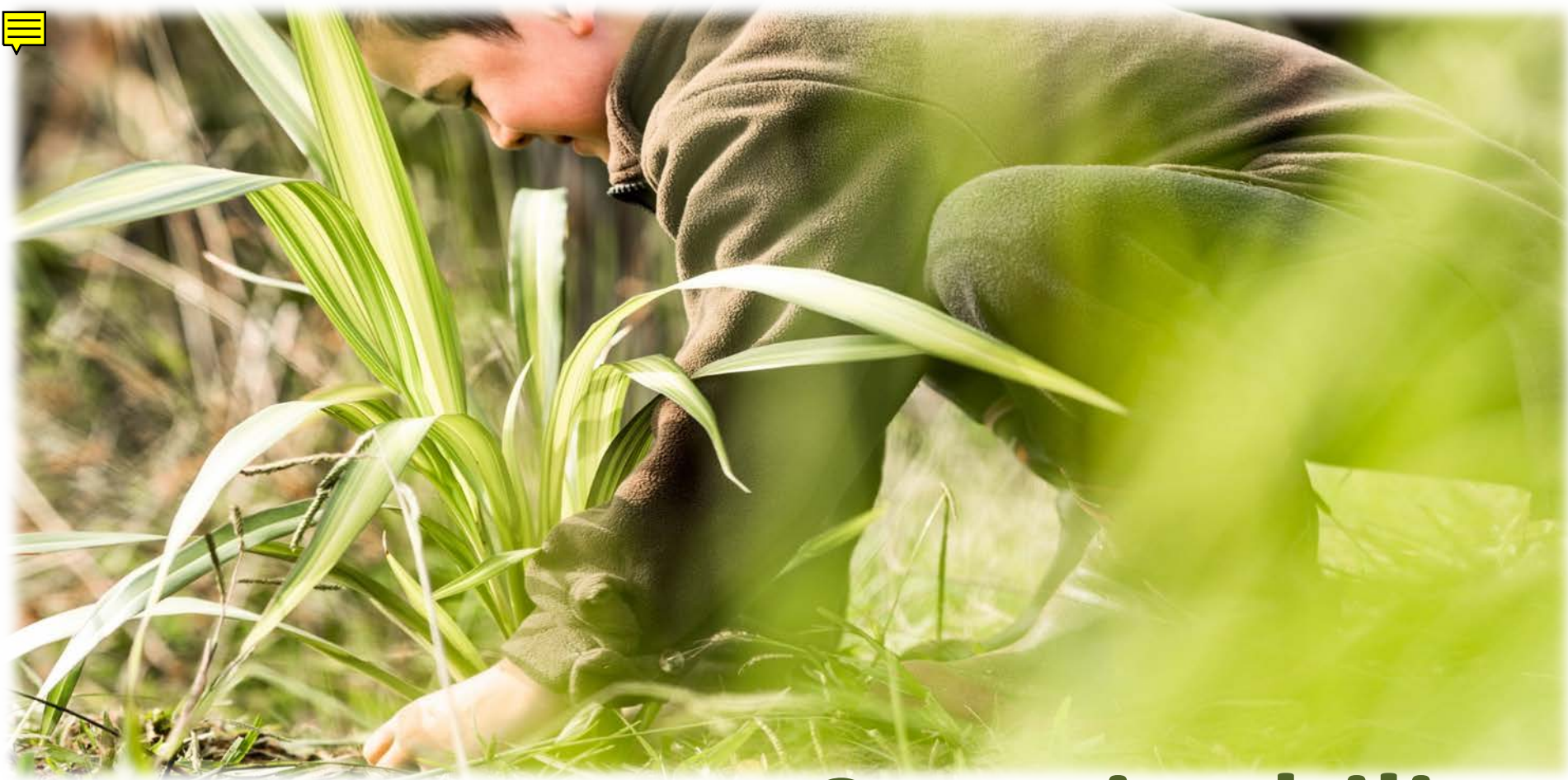


Economic



Post-farm Impacts

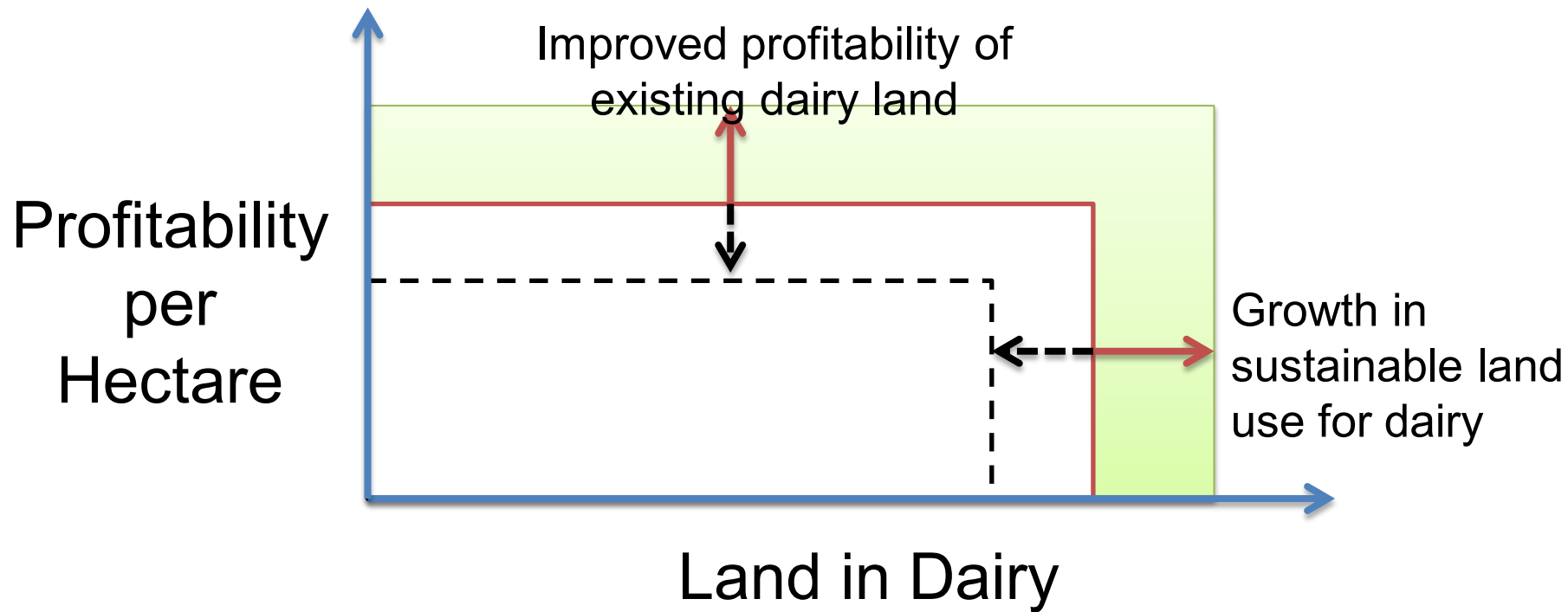




Sustainability



On Farm Impacts





Building capability

Transforming the Dairy Value Chain PGP



Delivering now . . .



On sustainability . . .



IrrigationNZ
22 Accredited



**Nutrient Management
Adviser Certification
Programme**

117 certified



QCONZ

*21
certified*



**NZ Institute of
Primary Industry
Management**



DairyNZ
252 certified

**Dairy Farm Systems
People Management**
In progress



96%

Waterways
on NZ
farms
fenced off

**\$1
billion**

Farm spend
over past 5
years to protect
environment

Slashed

Significant
farmer non-
compliance
from 15% to
5.8%

3-5 years

Path to Good
Management
Practice (10-15
without PGP)

\$40/ha

Value to farms
each year of
better
nutrient/effluent
management

On the economics . . .





300m

Pizzas topped with
Fonterra
mozzarella each
year, including half
of all pizzas in
China

\$36b

Global
pizza
market

\$72m

Development of
Clandeboye on
back of PGP
innovation

6 hours

Time to produce
Fonterra mozz –
from traditional
three months





On building capability. . .





9000+

Young people
introduced to Ag
careers through TDVC
initiatives

60

Students
engaged in
ag research

1000

People given
mental
health
training

3000

Farmers
at Health
PitStops



~1,000 rural professionals and farmers trained
14 organisations licenced



Rabobank



Australia and New Zealand Mental Health Services Conference
Best Mental Health Promotion/Illness Prevention



The Australian and New Zealand Mental Health Awards 2016

GoodYarn

WellSouth Primary Health Network
Dunedin, New Zealand

Has been awarded the



for

Mental Health Promotion or Mental Illness Prevention

In recognition of the achievement of excellence,
innovation and best practice in mental health services

Authorised by

Lynnette Dunbar
Manager
Awards Committee

Presented by

Kevin Allan
Mental Health Commissioner
Office of the Health and Disability Commissioner
New Zealand

TheMHS Learning Network Inc.

Supported by the Australian Government and the New Zealand Government

Transforming the Dairy Value Chain PGP



Delivering for the future . . . It's about people




Cecile de Klein:
Principal
Scientist,
AgResearch

**Helen Thoday: Animal welfare
and husbandry team developer**



Nick Tait and Logan Bowler:
Environment extension specialists

 **ad Harland: LIC PhD student
and researcher, Belgium**



Callum Eastwood and Dana Carver: DNZ

**Andrew Cooke:
Rezare Systems**





Cather Simpson:
Auckland University
Associate Professor

Aaron Fanning: Research Scientist, Fonterra



Sunny George Gwanpua, Zespri, and
Graeme Gillies, Fonterra

WE'RE WORKING ON THE VALUE CHAIN, GANG

BIG AMBITION. BIG COMMITMENT

A world-leading partnership between government and industry that is growing capability on-farm and beyond and developing new products to boost the dairy industry and economy

\$170 M
TOTAL INVESTMENT

\$27 B Goal for boost to economy every year
7 YRS Length of programme
\$85M Each from MPI and industry
\$98M Pre-farm-gate investment
\$72M Post-farm-gate investment

SUCCESS — IT'S IN OUR DNA

The industry is saving many millions from a drained research by UC into the genetics of the national dairy herd

20 MILLION
GENETIC MARKERS TARGETED IN NATIONAL DAIRY HERD

120,000+ Genotyped animals in LD database
\$15M Value to industry every year of preventing good genes and removing bad ones
6 PATENTS FILED

MANAGING BETTER RETURNS

Part of the PGP capability drive is about improving on-farm management and advice. Research shows this can be worth a lot of money to the industry

3000

NUMBER OF FARM PLANS DELIVERED TO IMPROVE FARM MANAGEMENT

\$1000
Potential return per hectare for farmers who go from average to excellent management

100+
Trainers building farm staff/animal husbandry skills nationwide

BOTTOM-LINE BOOST

Forterra is putting more and more milk into higher return, value-added products and the benefits are showing on the balance sheet

\$834 M
2016 PROFIT

380 MILLION LITRES Extra milk put into value-added business
41% Growth in profit for consumer food service
191% & 90% Increases in profit from China and Cosetta

PRODUCTIVE, HEALTHY PEOPLE

It's also about building the numbers and talent to sustain our dairy workforce, and keeping them safe, happy and producing

9000

CHILDREN INTRODUCED TO AGRICULTURE CAREER POSSIBILITIES THROUGH TDVC PGP

60 Students whose research is supported by PGP
\$3M Spent on mental health and well-being initiatives
3000 Farmers at Health PPGs
800+ Rural professionals trained in mental health awareness
\$100 M Annual cost to industry of fatigue and stress

AND A HEALTHY PLANET TOO

The programme is helping farmers grow their production while limiting their impact on the environment

100%

DAIRYING REGIONS WITH TAILORED RIPARIAN PLANTING GUIDELINES

8600 Nutrient budgets processed (75% of industry)
117 Certified nutrient management advisers
50% Fertiliser industry certified
5.8% Significant non-compliance for dairy effluent discharges - lowest on record

NEW PRODUCTS AND POSSIBILITIES

The PGP investment has enabled the creation and development of exciting new products that are making money for the dairy industry. Just one of those success stories is Forterra's mozzarella

6 HRS

HOW LONG IT TAKES TO MAKE THE NEW, NATURAL INDIVIDUAL QUICK FROZEN MOZZARELLA

THREE MONTHS

How long it takes for their traditional product

130 M Cakes topped with Anchor Cream each year
3M Milk finger prints each year to measure quality
\$72 M Expansion to Forterra's Clondroby site on back of product advances
300 M Pizzas topped with their own mozzarella each year

