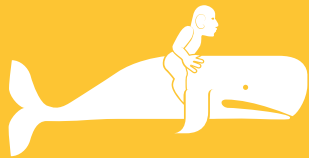




**WHANGARA
FARMS**



The vision of the Whangara Farms partnership is to be an outstanding agribusiness, delivering on-going sustainable returns.



Introduction

New Zealand is a country in the southwestern Pacific Ocean, it comprises of two main landmasses — the North Island (or Te Ika-a-Māui), and the South Island (or Te Waipounamu), both islands are marked by volcanoes and glaciation.

Māori are the tangata whenua, the indigenous people, of New Zealand. The first Māori are said to have sailed to New Zealand from Hawaiki their mythical Polynesian homeland more than 1000 years ago. Today Māori make up 14% of New Zealand's population and their history, culture and traditions are central to New Zealand's identity.

Livestock numbers in New Zealand, consists of 10 million cattle (includes 6.5 million dairy animals), 29.1 million sheep and 0.9 million deer (data from 2015).



14%

Today Māori make up 14% of New Zealand's population

Top 10

New Zealand is one of McDonald's top ten beef producing markets



Whangara Farms

Located on New Zealand's East Coast near Gisborne, the Whangara Farms Partnership was formed in 2006 when two neighbouring Maori owned farms, Pakarae A and Whangara B5, joined to form a 5,600-hectare property.

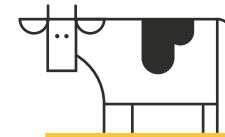
The current General Manager, Richard Scholefield joined Whangara Farms in 2007 and a major development programme was started focusing on water, fertilizer use, genetics and infrastructure. In 2009, having made some huge improvements Whangara Farms won the Ahuwhenua Maori Farmer of the Year.

In 2010 Whangara Farms purchased Tongataha, a 1,500-hectare block of land Northwest of Wairoa, bringing the total land holding to 7,100 ha. Then in 2015 another neighbouring Maori farm Tapuwae Whitiwhiti joined Whangara Farms, bringing another 1,400-hectares. The total area of the farming partnership is now 8,500ha (approx. 21,000 acres).

There are 2,500 joint shareholders and Whangara Farms is governed by a Board which is made up of three representatives from the Maori Incorporations and two appointed independent directors.

Whangara Farm runs a total of 2,500 Angus breeding cows, 300 breeding heifers, 4,750 rearing/finishing cattle and 60,000 sheep.

Whangara market their cattle through Silver Fern Farms who supply beef into McDonald's New Zealand, USA and throughout Asia.



2,500

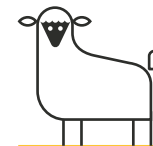
Angus breeding cows

300

Heifers

4,750

Rearing/finishing cattle



60,000

Sheep

The vision of the Whangara Farms partnership is to be an outstanding agribusiness, delivering on-going sustainable returns.

Whangara Farms is one of New Zealand's leading East Coast farms, producing an economic farm surplus (operating profit) of NZ \$380 per hectare in 2016; which is a NZ \$300 increase over 2007 figures. This is also around 60% higher than other farms benchmarked in the region (Beef + Lamb New Zealand economic service).

With support from Beef + Lamb New Zealand, McDonald's and Silver Fern Farms, a farming model has been created which measures and benchmarks farm sustainability across key areas of the business (see page 13).

Over the last seven years, NZ \$7 million has been invested in development and infrastructure projects.

Economic farm surplus (operating profit)

\$380

per hectare
in 2016

\$300

increase over
2007 figures

60%

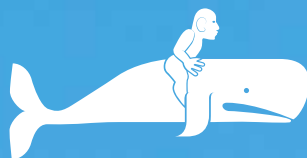
higher than
comparable farms
in the region

Core Values and Goals:

- Strive to achieve high levels of performance for its family based shareholders
- Do so in a highly sustainable way to protect and enhance its assets and resources for future generations
- Maintain skilled and motivated staff by focusing on training and development, internal succession and long-term opportunities
- Be an innovative, market orientated business — customer focused
- Focus on technology and science
- Develop partnerships with key business experts and advisors to take the farm to the next level
- Benchmark and monitor performance



WHANGARA
FARMS



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Whakapapa, our family bloodlines and lineage will be the reason Whangara Farms endures centuries into the future. The land created our people. Our people cultivated our land. Our people return to the land. Our land turns over and provides a fresh bounty to our people.

Whangara Sustainability Objectives

Economics

- Optimize livestock production and farming operations that achieve an agreed level of profitability
- Create added value for our products through brand recognition
- Financial returns in top 5% of Economic Farm Surplus
- Maintain dividends to shareholders

Environment

- Effectively utilise our resources in the most sustainable and scientifically based manner
- Efficient business with a reduced environmental footprint

Ethics

- Create a shared vision and value for our staff
- Develop a highly motivated team

Whangara Sustainability Priorities

- Implement recommendations from Land Environment Plans
- Improve livestock genetics through artificial insemination
- Optimize pasture productivity via rotational and targeted grazing
- Improve animal health via strategic planning
- Drench efficacy testing to ensure livestock health, welfare and productivity is optimised
- Grow new forages to improve livestock productivity (fodder beet, plantain, clover, lotus etc.)
- Capital investment for the development of troughed water systems, land drainage, fencing, and pasture management
- Improve efficiency of farm and livestock by utilising decision support software for feed budgeting



Land Environment Plans

The **Land Environment Plans** (LEP) are promoted by Beef + Lamb New Zealand and have been implemented on farm. These plans form the foundation of current land management as well as setting out clear environmental objectives and deliverables for the future.

The LEPs have been identified as key to the future of the farm and business and play a central role in operational and strategic decisions.



Key Outcomes & Actions

- NZ\$250,000 has been budgeted for investment in LEP objectives over the next ten years
- Targeted planting of 3,500 trees per year in areas at risk of erosion
- Fence off all waterways and tributaries to exclude livestock
- Retire 200 hectares of marginal coastal land
- Match available land class with type of livestock



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GRSB

Rotational Grazing

The farm operates a **Rotational Grazing** policy across the farm, which has numerous advantages over continuous or set stocked grazing. The system involves moving animals through a series of pastures, to match the forage availability with the animals' production requirements. This also benefits the pastures by providing them time to recover and regrow and be more productive.



Key Outcomes & Actions

- The farm produced 88kg liveweight gain per livestock unit more than the national average, improving animal efficiency and reducing days to slaughter (2016 data)
- Optimise livestock forage intakes based upon body condition & required growth rate and pasture availability
- Pastures can be rested and allowed to regrow for up to 50 days if needed
- Integrated stock grazing (cattle and sheep) to clear pastures



Water Availability

Providing troughed water systems across the farm has been a key priority. Whangara has invested heavily in a piped water infrastructure around the farm to ensure animals have easy access to clean water. Moving away from the traditional methods of providing water via reservoirs or ponds has improved water access and quality for stock and provided easier management of the grazing and livestock.



Key Outcomes & Actions

- \$2 million investment with a 30% return on investment
- Easy access to good quality water provided to stock
- Improved stock health & productivity
- Enables full utilisation of rotational grazing system



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Global Roundtable for Sustainable Beef



GRSB





Decision Support Software

The farm uses decision support software as a tool to help management decisions and strategic planning for the farm's livestock holding capacity and grazing strategy.

Six weather stations and 87 pasture cages are positioned across the farm to provide information around current rate of grass growth along with predicted rates. With the addition of livestock weights and growth targets, feed budgeting can be projected 3-4 months out.



Key Outcomes & Actions

- Maximise feed efficiency of pastures and grazing livestock
- Livestock marketing decisions can be based on analysis and assessment of predicted pasture growth verses required livestock growth rates



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GRSB

Animal Health Plans

Animal Health Plans are reviewed annually with an independent vet and formulated specifically for each group of livestock.

The farm also carries out faecal egg count and drench efficiency testing every five years to determine which drench type to use, as resistance is becoming a bigger challenge. For sheep a triple active wormer is used, and for cattle a dual-active.

All calves get a five-way clostridial vaccination and Copper bolus.

Cattle are vaccinated against Bovine Viral Diarrhea (BVD) and Leptospirosis.



Key Outcomes & Actions

- Total farm mortality is currently 1.2% with a target of 1%
- Calf mortality is currently 1.6% against an industry average of 6.4%



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GRSB

Genetic Improvements

Whangara Farms operates an integrated breeding and finishing farm. It has carried out artificial insemination on cattle for the last 5 years and is focused on **Genetic Selection** and improving breeding values and indexes.

Ten years ago, mature cow weights were 700kg (1,540 lbs), they have been reduced to 580kg (1,280 lbs). This reduces cow nutritional requirements, whilst a smaller cow helps reduce damage to pastures during wet periods.

The aim is to maintain a consistent body condition and for each cow to produce a 240kg (530 lbs) live-weight weaned calf.



Key Outcomes & Actions

- Calving index of 92% for breeding cows and 85% for heifers
- Heifer conception rates have improved from 68% in 2007 to 94% in 2016
- Calving interval of 407 was 42 days shorter than national average (Data from 2015/16)

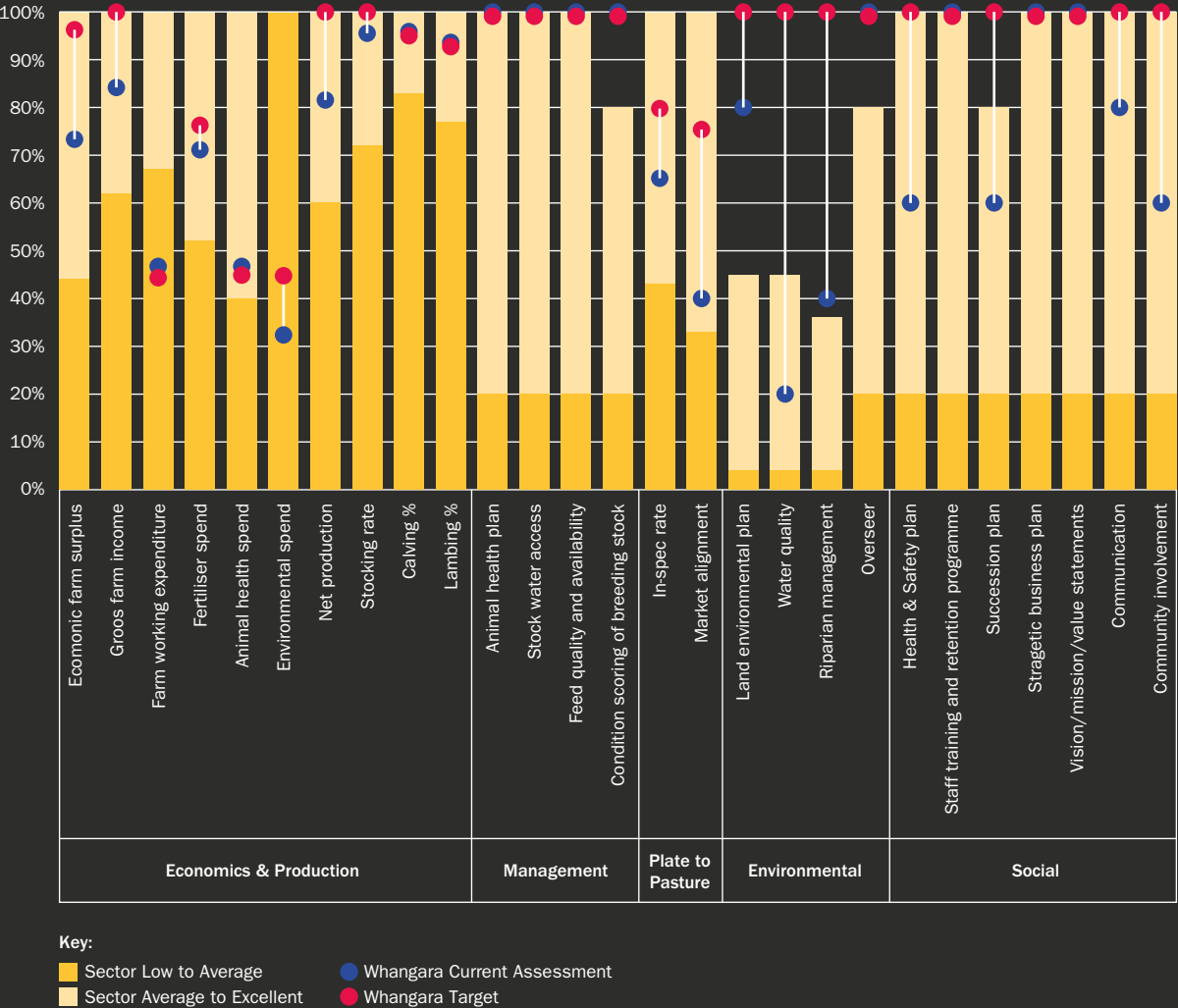
Benchmarking

Whangara data is annually benchmarked to monitor performance against the Beef + Lamb New Zealand national database. This ensures the farm is operating efficiently and provides opportunities to identify areas for improvement.

Through support provided by Beef + Lamb New Zealand, and Silver Fern Farms, Whangara have piloted a farm assessment tool that measures the sustainability of the farming enterprise. The aim is to provide visibility and transparency to the customer which demonstrates the sustainability of the beef produced.

The model captures the goals and aspirations of Whangara farms and is driven by on farm measurement and reporting enabling a balance between investment, production, efficiency and financial goals.

Sustainability Assessment Tool



Actions



1

Land Environment Plan has identified areas on farm where there is a high risk of erosion and land slip

2

3,500 trees are being planted in these areas to help stabilize the soil and protect the land

3

A tree nursery has been established on farm which will produce all Whangara's annual tree requirements

Actions



4

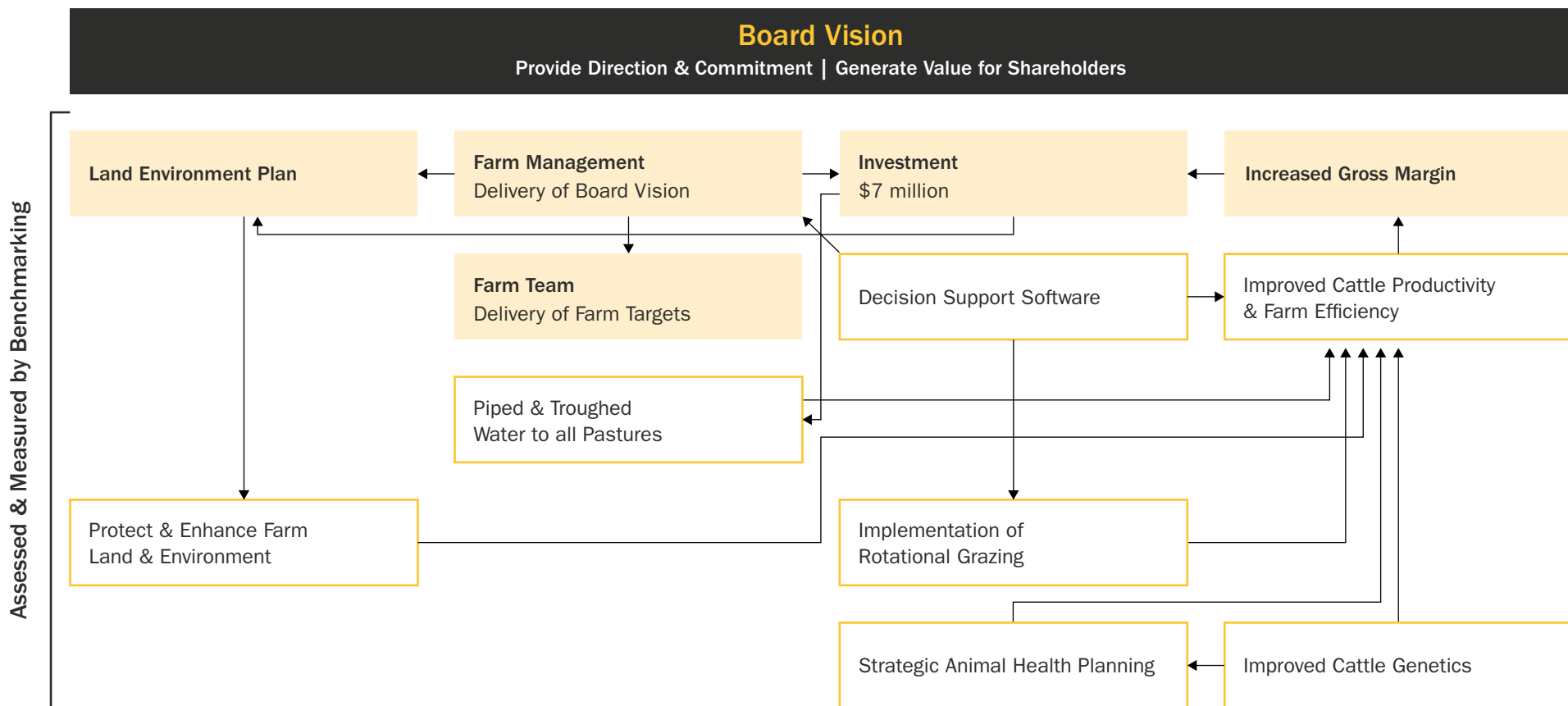
All cattle have electronic identification tags for traceability purposes and monitoring of individual animal performance which is collated and reported via farm management software

5

Comprehensive staff training is undertaken to develop employee skills and knowledge, providing opportunities for promotion and succession within the business

6

A focus on Health and Safety has created a safe working ethos and environment which protects the well-being of staff, contractors and visitors



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Sustainability is part of every decision made on the farm. If you do what you have always done you will get what you have always got.

Richard Scholefield
General Manager Whangara Farms

Contact

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