BIOECONOMY SCIENCE INSTITUTE | agresearch
āta mātai, mātai whetū

IMPACT CASE STUDIES

The impact of research involving Māori Agribusiness partners

Our kaupapa has always been simple: Build trust. Deliver value. Serve with integrity.

From a single voice advocating for Māori parternships and research within AgResearch, the Māori Agribusiness and Partnerships team has grown from humble beginnings into a force with national influence and enduring partnerships that uplift whānau, whenua and the wider economy.

Through it all, two decades of mahi, our focus has always been on delivering value. But sometimes, telling the story matters too.

It helps us reflect on where we've come from, the impact we've had, and why this work continues to be essential—for Māori agribusiness, for Aotearoa's economy, and for the future of research in this country.

The Māori Research and Partnerships Group was never about claiming space—it was about holding space: for mātauranga Māori, for collaborative science, and for Māori aspirations in agribusiness. From the outset, we've held a clear vision: that kaupapa Māori and mātauranga Māori should sit alongside science as equal contributors to innovation and progress.

Over the years, we've contributed to real economic returns, strengthened cultural capability, and brought Māori-led innovation into mainstream research. These gains are not ours alone—they belong to the Māori agribusinesses and communities we walk alongside.

The legacy of our work, as outlined in the following pages, lies in the relationships we've nurtured and the meaningful, measurable impact those partnerships have delivered. None of this has happened by chance. It has taken commitment, collaboration, and belief in a different way of doing science—one that honours te ao Māori and delivers impact that goes beyond the lab or the ledger.

We are proud of what's been achieved, and even more excited about what lies ahead. With a committed team, strong relationships, and a growing recognition of the value we bring, we're well placed to keep delivering research, solutions and new knowledge that empowers, connects, and transforms.

As the environment around us evolves, so too does our role. We are better equipped than ever—with a clear direction and strong evidence base—to serve a strategically vital part of Aotearoa's future. With deep gratitude for those who paved the way and belief in the path ahead, we remain committed to kaupapa Māori research and values based partnership that creates lasting impact for generations to come.

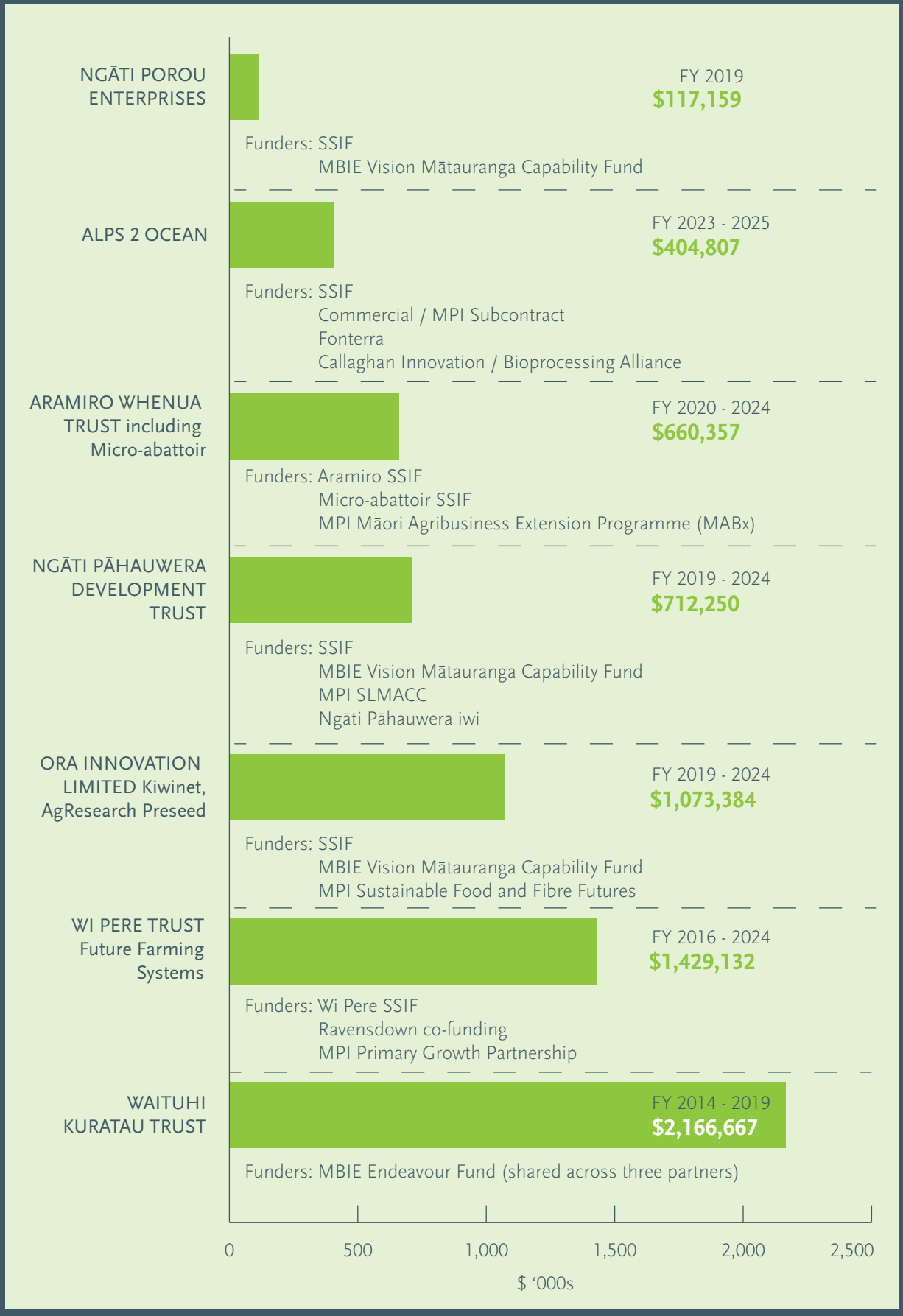
VALUE DELIVERED

1. **Each dollar** of internal investment on Māori related capability building **has leveraged another dollar of external research funding** for AgResearch.
2. **Each dollar** of research spending with Māori partners – for case studies that were quantified – **produced 1.59 dollars of commercial benefit**.
3. Using a holistic framework of value, we show that **commercial return is just one part of the value produced** by AgResearch's investments involving Māori. Nearly all projects supported the values and capabilities of the Māori partners, building a base for future benefits.

Source: Māori Research Impact: Economic Report on value generated by AgResearch's investment in research involving Māori

FUNDING INDEX

Total Funding FY 2014 - 2025
$ 6,563,756



ECONOMIC OVERVIEW

Economic importance of Māori farms

Māori farms are geographical units belonging to Māori authorities or other Māori enterprises. Having an AgResearch strategy to ensure our relationships are fit-for-purpose is essential to helping grow the Aotearoa New Zealand economy.

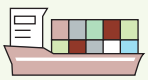
PRIMARY INDUSTRY LAND USE

Māori freehold land available for primary industry use

1,515,071 ha

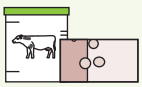
EXPORTS

Māori authority exports



$816m of goods in 2023

29% exported to China



Milk powder, butter and cheese make up ¼ of all exports.

Consistently 21-27% between 2017-2022

TOP BUSINESS ACTIVITIES

Top five farming activities for Māori farms

Number of farms

1,686 Sheep + Beef

1,209 Dairy

1,101 Other agri

321 Forestry

234 Other hort

AVERAGE FARM SIZE

New Zealand Farm		Māori Farm
285	HECTARES	795
1,723	STOCK UNITS	3,433

STOCK HOLDINGS

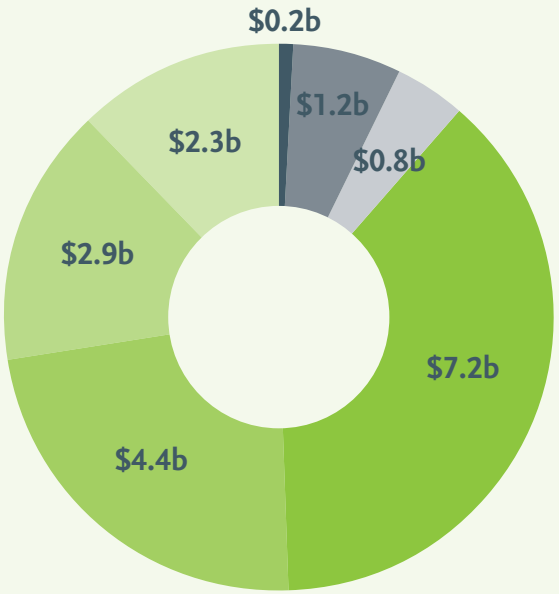
Compared to New Zealand farms, Māori farms have on average

2.7x Beef Cattle

2.6x Sheep

1.5x Dairy Cows

PRIMARY INDUSTRIES ASSET BASE FOR COLLECTIVES



- Other agriculture
- Kiwifruit growing
- Other horticulture
- Sheep and beef farming
- Dairy
- Forestry
- Fishing

AGRESEARCH TE AO MĀORI TIMELINE

A journey built on foundational relationships, advocacy, and the gradual integration of Māori perspectives into science and governance, management and delivery of science.

1980's

The first steps towards the integration of Māori perspectives into science and governance, management and delivery of science are taken when Dr Oliver Sutherland from the DSIR champions a new korero about the need for government departments to consider their social responsibilities toward Māori, influencing policy changes.

1984

A summit is held and the Taumata Directive is passed the hui that calls for Māori representation on DSIR boards (which sets a future precedent for CRIs).

EARLY 2000's

Roger Pikia is appointed to a Māori-focused role within AgResearch. This is the first dedicated Māori operational role marking a significant step toward including Māori perspectives in the organisation.

Māori Science & Engagement Team Formed: Tanira Kingi joins as scientist/economist; the team expands with Hoani Ponga, Irene Kereama-Royal, Orewa Barrett-Ohia fuelling growth in Māori partnerships and research.

Māori Advisory Committee Established (and Disbanded): A Māori Advisory Committee is established to review research programmes and identify opportunities for Māori input. Its members included Mavis Mullins, Ingrid Collins and Kingi Porima. The committee was later disbanded when senior leaders to deem it was unable to influence decision-making.

1992

The newly formed CRIs, including AgResearch, adhere to the policy of having Māori board members, a legacy of the Hui Taumata directive.

2011

Chris Koroheke is appointed to the position of Māori Agribusiness Portfolio Leader. Chris was mentored by Dr Tānira Kingi who acts in a science delivery role.

2012

Chris Koroheke creates a formal Māori Business Plan and secures SSIF funding—first of its kind—for Māori engagement and science delivery. This is a first for a CRI.

AgResearch develops a notable partnership with Hare Puke of Ngāti Wairere (tangata whenua of Ruakura campus area) during the establishment of animal containment facilities at Ruakura, fostering closer ties with local iwi.

2014

Dr Tānira Kingi and his team leave AgResearch leading to a reset in relationships and strategies.

2015-2019

Ariana Estoras joins AgResearch as a Māori Agribusiness Account Manager bringing her extensive experience in Māori agribusiness, science, economics and government policy including funding.

Selai Letica transitioned from a social scientist role into the Māori partnership team.

The partnership model shifts strategy towards to focus on relationships, not services with Māori values underpinning the approach.

A series of new partnerships are established with Māori trusts, incorporations and iwi settlement groups reflecting the transition to new leadership and relationships held by the new team and key scientist networks.

Funding and Engagement Grow: MPI's Māori Agribusiness initiative further shapes AgResearch's Māori science strategy

Relationship building accelerates on the success building connections rather than selling services aligning with Māori values of longevity and mutual trust, intergenerational and community-focused frameworks (e.g., land as Papatūānuku).

Acknowledgment of Contributions:

Recognition of foundational figures, including:

Board members – Tania Simpson, Rukumoana Schaufhausen, Paul Reynolds.

Staff members - Irene Kereama-Royal, Orewa Barrett-Ohia, Roger Pikia, Tānira Kingi, Hoani Ponga, Chris Koroheke, and George Haremate for their groundwork.

Contributions from staff like Megan Callaghan and Kevin Musa Taukiri for their enduring support.

2020-2024

TE AO MĀORI INTEGRATION IN AGRESEARCH: Significant progress in acknowledgement, acceptance, understanding, and incorporating Māori perspectives in organisational strategy, structure and development.

INCREASED RESOURCES AND STAFF (ONGOING): Growth in team size, SSIF allocation and leadership positions reflecting Māori representation.

Strategic Shift nationally in acceptance of Māori knowledge and perspectives:

- Adoption of Taiao Ora, Tangata Ora, aligning Māori values with agriculture and food sciences.
- Increased recognition of mātauranga Māori (Māori knowledge) within AgResearch and broader agriculture contexts.

2025 AND BEYOND

TE AO MĀORI LEADERSHIP: A 13-member Māori Research and Partnership Group was established in AgResearch, alongside Māori directors at leadership levels.

COMMITMENT TO VISION MĀTAURANGA: Emphasis on unlocking cultural value in research proposals and partnerships to align with government and Māori aspirations.

TWO MĀORI LEADERSHIP ROLES IN SLT: Recognition of Māori leadership at a senior level.

KAUPAPA MĀORI RESEARCH TEAM: Establishment of a dedicated team to elevate Māori people, knowledge and resources.

NZBIDA PROJECT SUCCESS: Transdisciplinary research approach with equal leadership and knowledge input from a Māori collective alongside science.

$5.2 MILLION ENABLING MĀORI SSIF INVESTMENT: Funding allocated to build Māori research capacity and strengthen partnerships with Māori organisations and science.

TE PUAWAITANGA PROGRAM GROWTH: Support for young Māori to have a well supported summer experience in AgResearch to encourage a future science career ideally with AgReearch.

AGRESEARCH AND ARAMIRO WHENUA TRUST

Where Innovation Meets Whenua

On the edge of the ancient Pirongia forest in the Waitetuna Valley lies a stretch of whenua rich in heritage, ambition and potential. It's here, across 1,800 hectares of rolling hills, pasture, pines, and native ngahere, that the Aramiro Whenua Trust is redefining what it means to farm with both the future and the past in mind.

Guided by kaupapa Māori and anchored by the values of kaitiakitanga, manaakitanga, whanaungatanga, and whakapono, the Trust has a bold mission: to build successful, sustainable Māori-owned businesses that create jobs, nurture leaders, care for the environment, and return real value to the people they serve.

Since 2019, AgResearch has been walking alongside Aramiro on that journey — not as a distant institution, but as a trusted partner, co-designing science-backed solutions to meet local goals.

KEY NUMBERS FROM THE ARAMIRO PARTNERSHIP

TOTAL LAND MANAGED BY THE ARAMIRO WHENUA TRUST – 1,800ha

In native ngahere	In first rotation pine forest (currently harvesting)	Pasture
900ha	**560ha**	**330ha**

35ha (10% of pastoral area)

now under deferred grazing - up from an initial 5ha trial.

$21,700 estimated annual return

from implementing deferred grazing on 35ha, based on AgResearch modelling and pasture regrowth benefits.

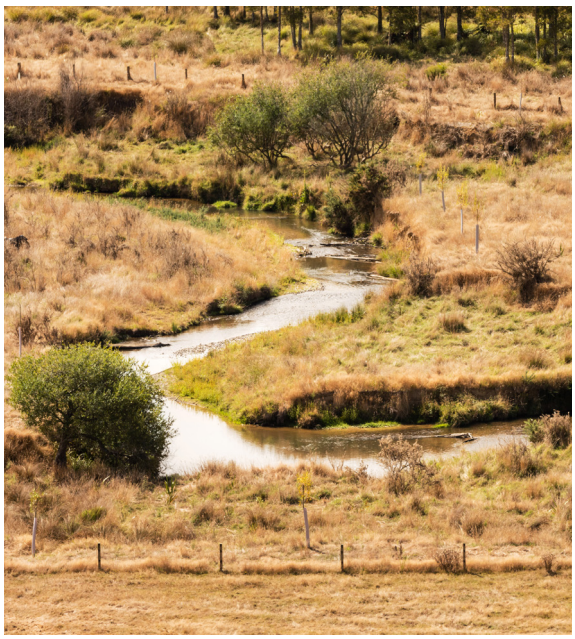
100%

of riparian zones on partoral land fenced and planted, following modelling of water quality and profitability outcomes.

SCIENCE THAT STRENGTHENS DECISIONS

The partnership took off when Brett Te Whare, a respected figure in Māori farming, took up the role of farm manager. With his deep knowledge of both land and people, Brett helped connect the Trust with AgResearch's Māori partnerships team. What followed was a relationship built not only on shared knowledge, but on shared trust.

The first challenge was environmental — and a vital one. The Trust wanted to protect their waterways while still maintaining a productive farming system. Using scientific modelling and mapping, AgResearch helped show how riparian planting could reduce sediment and faecal contamination without sacrificing farm performance. The numbers stacked up, the values aligned — and every stream on the farm's pastureland was eventually fenced and planted. The result? Cleaner water, thriving biodiversity, and a practical example of kaitiakitanga in action.



INNOVATION IN KAI SOVEREIGNTY

Next came a more radical idea: a mobile micro abattoir. The Trust saw an opportunity to bring meat processing closer to the farm — reducing cost, waste, and emissions while strengthening the local food system. AgResearch had already been exploring the concept with a range of partners, and a formal agreement was signed to investigate how it might work at Aramiro.

Over time, the vision evolved. Rather than a mobile unit, the focus shifted to a permanent micro abattoir and the challenge of building a farm system to supply it. AgResearch stepped in again — redesigning the forage plan, modelling beef finishing systems for year-round supply, and exploring how to use offal and byproducts to increase carcass value and lower costs for local whānau. This wasn't just science — it was sovereignty, circularity, and sustainability rolled into one.

Although Cyclone Gabrielle and funding shifts paused the abattoir's rollout at Aramiro, the project is now being picked up at a larger iwi level through Tainui Group Holdings — with Aramiro poised to be a key supplier. The work done has laid the foundation for a value chain that keeps the benefits of kai close to home, in every sense of the word.

FARMING SMARTER, NOT HARDER

Science has also helped Aramiro unlock new productivity from the land, without adding cost or compromising values. A trial in deferred grazing — resting pasture during the spring flush to save feed for leaner months — proved successful enough to scale from five to 35 hectares.

AgResearch modelling suggests the approach could deliver over $21,000 in annual returns across the farm, while also making life easier for staff by reducing the need for supplementary feed and allowing smarter allocation of time. It's a prime example of how even small shifts, backed by data, can have ripple effects across a whole system.

BIOCHAR AND BEYOND

Now, the partnership is breaking new ground again — quite literally — with the launch of Aotearoa's first long-term field trial into biochar in pastoral systems. Biochar, a charcoal-like substance made from forest waste, has potential to improve soil quality, boost pasture growth, reduce greenhouse gas emissions and lock carbon into the soil.

With AgResearch and the New Zealand Agricultural Greenhouse Gas Research Centre, Aramiro is testing how different types of biochar from their own forests perform on their soils. It's a decade-long exploration of how the whenua can heal and feed itself — and what that might mean not just for Aramiro, but for other farms in the region and country.

AI Generated Image

THE TRUE RETURN ON INVESTMENT

For Aramiro, the science has delivered more than numbers. It has empowered decision-making. It has preserved and enhanced the land. It has created opportunities for innovation that are grounded in tikanga and tailored to the aspirations of the people.

For AgResearch, the return has been just as powerful: a deep, durable partnership; a living lab for sustainable systems; and insights that can shape the future of Māori agribusiness across Aotearoa. With Brett Te Whare now working with Tainui Group Holdings across more than 2,700 hectares, the relationship is set to grow even further.

This is what science looks like when it's embedded, responsive, and values-led. Aramiro isn't just farming differently — they're showing the way forward for others who want to combine innovation with integrity, and profitability with purpose.

FIND OUT MORE

A

ONLINE
https://aramiro.co.nz/

ag

READ
https://www.agresearch.co.nz/news/aramiro-where-innovation-meets-whenua/

TURNING DAIRY BEEF INTO A HIGH-VALUE SUPERFOOD:
AGRESEARCH AND ALPS2OCEAN FOODS

A New Future for Young Dairy Beef

What if young dairy beef, often considered a waste stream, could be transformed into a high-value, nutritious, and sustainable food product? That's exactly what AgResearch and Māori health food company Alps2Ocean Foods have set out to prove with ***Mīti***—a protein-packed beef snack bar designed to showcase the potential of young dairy beef as an ethical and environmentally friendly food source.

Māori agribusiness growth is on track to be worth

$100b/year

to the New Zealand economy by 2030.

THE SCIENCE BEHIND *MĪTI*

With funding from the Ministry for Primary Industries' Innovation Fund, AgResearch worked closely with Alps2Ocean Foods to develop ***Mīti***, testing different ingredient combinations to optimise its composition and nutritional profile. By analysing 30 different blends of ingredients and fortification levels, the research team identified the ideal recipe, ensuring ***Mīti*** is not only tasty but also rich in high-quality protein and essential nutrients.

This groundwork has allowed Alps2Ocean Foods to refine ***Mīti*** to a market-ready product, with successful sensory trials and flavour testing completed.

"*Mīti* is just the beginning — a proof of concept for how surplus dairy calves can be transformed into high-value, low-carbon products. We're excited about the possibilities this protein unlocks for other use cases, as innovators step up to add value and create impactful brands right here in Aotearoa."

– DANIEL CARSON, FOUNDER OF ALPS2OCEAN FOODS

PROVING THE SUSTAINABILITY AND NUTRITIONAL BENEFITS

The next phase of research, supported by the Bioresource Processing Alliance, focused on building a strong evidence base for *Mīti's* sustainability, welfare, and nutritional claims. This included measuring the carbon footprint of young dairy beef, assessing animal welfare improvements, and validating the snack bar's nutritional benefits.

As a result, the research partnership has expanded, bringing in key industry players such as:

ALLIANCE FARMERS' PRODUCE SINCE 1948 · DUNCAN NEW ZEALAND VENISON · Fonterra · PĀMU · SPCA

This collaboration strengthens the industry's ability to repurpose dairy beef into a valuable, scalable, and sustainable food product.

MAKING AN IMPACT

ECONOMIC GROWTH

New knowledge on incorporating by-products, like young dairy beef and offal, into high-protein health foods creates opportunities for innovation in the food sector.

ENVIRONMENTAL AND ETHICAL BENEFITS

By transforming a waste stream into a valuable product, *Mīti* contributes to a more sustainable food system, reducing waste and improving animal welfare.

INDUSTRY COLLABORATION

The project has fostered strong cross-industry relationships, bringing together Māori agribusiness, food producers, and researchers to create a product that aligns with growing consumer demand for ethical and sustainable food options.

A BRIGHT FUTURE FOR MĪTI

With the research complete and industry support growing, *Mīti* is well-positioned for success in the market. It's more than just a snack—it's a proof of concept for how innovative thinking and strong partnerships can turn overlooked resources into high-value, sustainable food products.

FIND OUT MORE

ONLINE
www.miti.nz

READ
www.agresearch.co.nz/news/dairy-beef-offers-potential-for-significant-emissions-savings/

LISTEN: What's next from AgResearch, Ep.5
www.agresearch.co.nz/podcast/

AGRESEARCH AND NGĀTI POROU ENTERPRISES

Reclaiming Value Through Cultural Storytelling

KEY NUMBERS AND OUTCOMES FOR NGĀTI POROU ENTERPRISES

PEOPLE AND BUSINESS

92,349

Estimated Ngāti Porou population (2018 census)

4 KEY BUSINESSES INVOLVED IN VALUE CHAIN TRANSITION MAPPING

Pakihiroa Farms Ltd (red meat, wool)

Ngāti Porou Miere (honey)

Ngāti Porou Seafoods Ltd (fisheries)

Ngāti Porou Forestry (logs & timber)

COMMERCIAL OUTCOMES

Carbon offset and product partnership with

Air New Zealand

Smoked fish and mānuka honey

incorporated into tourism and retail chains

ENDURING IMPACT

Development of

WHAOWHIA TE KETE MĀTAURANGA

– a cultural value chain transition tool

Ongoing use of value chain maps in business strategy

PARTNERSHIP

2-YEAR RESEARCH PARTNERSHIP FUNDED BY

agresearch
āta mātai, mātai whetū

AgResearch Strategic Science Investment Fund (SSIF)

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

MBIE Vision Mātauranga Capability Fund

VALUES THAT CREATE ECONOMIC GROWTH

Ngāti Porou is one of Aotearoa's largest iwi, and behind its business success lies a simple but powerful idea: when cultural values are brought to the forefront, economic potential grows. Across their farms, fisheries, forests, and food ventures, the iwi wanted to do more than just produce — they wanted their products to tell a story.

But the transition from commodity-focused agriculture to high-value, culturally connected markets isn't something that happens overnight. It takes the right knowledge, the right partners, and a willingness to rethink how value is defined. That's where the partnership with AgResearch came in.

WHAT WE'VE DONE

Over two years, AgResearch scientists worked alongside Ngāti Porou's economic arm — Ngāti Porou Group Holdings Ltd (now Nāti Growth) — to co-develop a tool that would guide businesses through this transition. Its name: Whaowhia te kete mātauranga, or fill your basket of knowledge. The tool gave Māori agribusinesses a culturally grounded way to assess where they were in existing value chains, where they could go next, and how their identity and values could strengthen their market position.

Using Pakihiroa Farms (red meat and wool), Ngāti Porou Miere (honey), Ngāti Porou Seafoods, and Ngāti Porou Forestry as real-world case studies, the partnership went deep — exploring everything from brand identity to value chain participation. Hui and shared reflections helped build trust and grow confidence in the direction they were heading.

WHAT'S BEEN ACHIEVED

The results were tangible. Ngāti Porou didn't just learn how to better tell their story — they built new relationships and unlocked new business opportunities. One standout was a deal with Air New Zealand that combined tourism, smoked fish, mānuka honey, and even a carbon offset arrangement.

Behind the scenes, AgResearch was evolving too. Working in a tikanga-led partnership helped their staff grow cultural competency, and gave rise to a dedicated Māori Agribusiness Research Unit, with expertise now available to other iwi and Māori enterprises looking to shift from volume to value.

The core return on investment? Building a model for how Māori agribusinesses can hold fast to identity while confidently stepping into the future.

FIND OUT MORE

N

ONLINE
https://www.ngatiporou.com/

ag

READ
https://www.agresearch.co.nz/our-research/te-runanganui-o-ngati-porou/

AGRESEARCH AND ORA INNOVATION LTD
A SCIENCE-LED PARTNERSHIP FOR MAMAKU-BASED SKINCARE

Unlocking the Potential of Mamaku Through Science and Tradition

A research partnership between AgResearch and Ora Innovation Ltd has enabled a small Māori-owned business to scale up the extraction of bioactive compounds from the New Zealand tree fern, Mamaku. Founded in 2009 by Ngāti Kahungunu sisters Tessa Davis, Adele Anderson, and Karen Renata, Ora Innovation sought scientific expertise to complement their traditional knowledge (Mātauranga) of Mamaku's healing properties. With AgResearch's support, they have successfully developed extraction processes, secured intellectual property rights, and expanded their business into international markets.

MĀTAURANGA MEETS MODERN SCIENCE

AgResearch and Ora combined their strengths to develop a robust and scalable extraction process. Ora contributed their deep understanding of Mamaku's traditional medicinal use, while AgResearch applied cutting-edge scientific techniques such as metabolomics and 16S rRNA metagenomics to analyse microbial and metabolic profiles. A series of trials—including kettle, slurry pump, preservative dosing, pasteurisation, and extraction filter trials—helped refine the process and optimise Mamaku's bioactive potential.

HELPING ORA UNLOCK THE POTENTIAL OF MAMAKU FOR SKINCARE

When Ora Innovations set out to scale up their Mamaku extraction for skincare products, they needed the right facility, equipment, and processes. AgResearch stepped in to help, using our pilot plant in Ruakura, a facility typically used for dairy processing, to demonstrate best practices for processing raw Mamaku into high-quality extracts.

Through hands-on trials, Ora explored equipment options, gaining a deeper understanding of heat treatment, handling, and extraction methods. A key breakthrough was identifying a shortcut using AgResearch vats to efficiently separate fibre and liquid, streamlining their process.

We also demonstrated an effective pasteurisation method, helping Ora refine their approach to quality control and infrastructure planning. With this knowledge, they could confidently assess their equipment needs and make informed decisions about their new facility.

By working alongside our scientists, Ora not only tested and costed large-scale extraction equipment but also developed product spec sheets outlining key quality parameters. They now have the capability to describe the scientific attributes of Mamaku, perform routine tests, and have already created at least one new skincare product using the extract.

This collaboration didn't just equip Ora with technical know-how—it also set them on a path for long-term growth. With a clear understanding of large-scale extraction,

efficacy testing, and new R&D opportunities, they are well-positioned to expand their product range and bring innovative Mamaku-based skincare to market.

In 2021, Ora took a significant step by leasing a pilot plant at AgResearch's Ruakura campus. This allowed them to further refine their processes and scale up production, bringing them closer to full commercialisation.

By sharing our expertise and resources, AgResearch has helped Ora bridge the gap between raw Mamaku and a premium skincare product—ensuring they have the right tools, knowledge, and confidence to grow their business.

A MUTUALLY BENEFICIAL PARTNERSHIP

The collaboration has delivered significant benefits for both AgResearch and Ora:

For Ora, AgResearch provided the technical expertise needed to validate Mamaku's skincare properties, ensuring that their traditional knowledge was backed by rigorous scientific evidence. This scientific validation strengthened Ora's market credibility and enabled them to patent their extraction process.

For AgResearch, working alongside Ora deepened their understanding of how traditional Māori knowledge can inform and enhance modern scientific practices. The collaboration also opened avenues for new research, including a partnership with the Chinese Academy of Medical Sciences to characterise Mamaku's bioactivity.

BUILDING A THRIVING BUSINESS AND A SUSTAINABLE SUPPLY CHAIN

Ora's success has been remarkable. The company now employs seven people and has built a strong customer base in New Zealand and China. Their Mamaku-based products, particularly those aimed at eczema relief, have received positive testimonials, reinforcing the value of their science-backed approach.

Instead of focusing solely on harvesting, Ora has shifted towards developing partnerships with Māori landowners, encouraging them to become commercial suppliers of Mamaku. This approach creates economic opportunities for Māori communities while allowing Ora to focus on processing, manufacturing, and marketing. Partnerships with whānau land blocks in Hokianga, the Kaimai Ranges, and Matakana Island have explored Mamaku as a viable alternative land use.

INTELLECTUAL PROPERTY AND KNOWLEDGE TRANSFER

A key milestone in the partnership was the 2023 Deed of Assignment, which formally transferred the IP rights of the Mamaku extraction methodology from AgResearch to Ora. This ensured that Ora retained ownership of the knowledge and processes developed through the collaboration. As a Māori agribusiness working with rongoā Māori (traditional medicine), this ownership was crucial for Ora's ability to establish itself as a leader in the global skincare market.

A SCIENCE-LED APPROACH TO GROWTH

Ora has evolved from a small start-up into a research-driven enterprise. Since partnering with AgResearch in 2018, the company has increased its sales tenfold and launched a new international-facing brand, focusing on functional, natural skincare. Their commitment to research and development is reflected in their high R&D spending, unusual for a business of their size, and their proactive engagement with scientific institutions.

RETURN ON INVESTMENT: A MODEL FOR RESEARCH PARTNERSHIPS

The AgResearch-Ora partnership has demonstrated how strategic collaboration can drive innovation and commercial success. Ora has led or co-led several successful contestable funding applications, including two projects funded by the Vision Mātauranga Capability Fund (VMCF) and two Sustainable Food and Fibre Futures (SFFF) projects with the Ministry for Primary Industries. The initial investment from AgResearch's Enabling Māori Science for Innovation Fund (SSIF) has led to multiple robust research projects and sustained revenue, making this partnership an exemplar of how research funding can create long-term impact.

A PARTNERSHIP WITH LASTING IMPACT

AgResearch and Ora Innovation have forged a collaborative model that blends traditional knowledge with modern science, demonstrating the power of co-design and benefit-sharing. By combining Mātauranga with scientific rigour, the partnership has positioned Mamaku as a premium skincare ingredient with verified efficacy. The success of Ora's products highlights the potential for indigenous-led enterprises to thrive in global markets when supported by robust scientific research.

This partnership not only strengthens Ora's business but also enriches AgResearch's approach to working with Māori enterprises, setting a precedent for future collaborations that honour both traditional knowledge and cutting-edge science.

FIND OUT MORE

ONLINE
www.ora.co.nz

READ
www.agresearch.co.nz/news/unlocking-the-secrets-of-aotearoas-native-tree-fern-mamaku/

AGRESEARCH AND TE MANAWA O TŪHOE

A Shared Vision for the Land

In the heart of Te Urewera, where rivers carry the stories of generations, lies the whenua of Te Manawa o Tūhoe (TMOT). This is no ordinary patch of land—it is a living connection to tīpuna (ancestors), stretching across 8,600 hectares and representing the interests of 6,500 Tūhoe shareholders. At its core sits Hatupere, a 250-hectare dairy farm that has long stood as a symbol of Tūhoe mana and self-determination.

TODAY'S CHALLENGES

But Hatupere faced a challenge shared by many in farming today: how to remain productive and profitable while upholding deep commitments to environmental guardianship—kaitiakitanga. That's where the partnership with AgResearch began.

In 2019, TMOT and AgResearch launched a three-year collaboration to explore sustainable farming practices that aligned with Tūhoe values. The goal? To reduce the farm's reliance on palm kernel extract (PKE), a common but controversial imported feed, and to find smarter, more sustainable ways of using the land.

From the outset, the project wasn't just about numbers. It was about tikanga—the right way of doing things. Hui were held kanohi ki te kanohi (face-to-face), where the AgResearch team listened and learned. They heard about the importance of protecting taonga (treasures), not just in a spiritual sense, but as tangible assets—soil, water, animals, and people—interwoven in Tūhoe life.

APPLYING SCIENCE TO THE LAND

The early science showed that simply removing PKE wouldn't significantly change the farm's footprint. So, the team broadened the scope. Together, they explored everything from better feed systems to nutrient mapping, to more efficient effluent management. This wasn't theory—it was practical, applied science tailored to the land and its people.

One year in, the results were already being felt. The first major report was called "the most relevant and useful" TMOT had received to date. It provided the evidence the Trust needed to make bold decisions:

Lucerne was planted across 17 hectares, reducing the need for imported feed.

Soil testing and nutrient mapping meant fertiliser could be applied precisely—cutting use by more than 10%, saving money and reducing nitrogen runoff.

Effluent systems were upgraded, doubling the application area and reducing pressure on synthetic inputs. The introduction of a "weeping wall" system separated solids from liquids, making nutrient recycling safer and smarter.

These changes weren't just good for the environment. They were also good for business. TMOT began to see Hatupere not only as a productive dairy operation, but as a flagship farm—one that other Māori landowners in the Rūātoki region turned to for inspiration and advice.

And the ripple effects didn't stop there.

A WHOLE FARM PLAN

With a Whole Farm Plan now in place, TMOT extended its sustainability efforts into its forestry assets and began planning for freshwater protection. The insights gained gave them the confidence to seek further investment—applying to the New Zealand Agricultural Greenhouse Gas Research Centre (NZAGRC) to pilot emissions reduction strategies across Māori land.

For AgResearch, the partnership offered more than scientific success. It was a lesson in true co-development. By working closely with TMOT, researchers deepened their understanding of Te Ao Māori—of how science, tikanga and whenua are not separate but intertwined. Cultural competency grew not from workshops, but from walking the farm together, sitting in hui, and weaving science into the aspirations of the people.

FIND OUT MORE

T ONLINE
https://www.temanawaotuhoe.co.nz/

ag ONLINE
https://www.agresearch.co.nz/

AGRESEARCH AND TE ORANGANUI O NGĀTI PĀHAUWERA

Supporting Ngāti Pāhauwera to realise land aspirations through science and partnership

AT A GLANCE

PEOPLE AND LAND

8,000 + tribal members

80 + hapu

146,000 Maori land parcels <10ha across New Zealand face similar challenges

40 land blocks (1-185ha) included in modelling and interviews

ECONOMIC POTENTIAL

$203-550/ha

modelled improvement in returns through collaboration with NPDT farms

$25.4m

potential annual production increase from optimising Maori land use in Hawkes Bay (PwC)

$870,000

potential benefit if 10% of landowners reduce facilitation costs by 25%

CAPABILITY AND NETWORK GROWTH

35 landowners interviewed

10 individuals/whānau directly engaged in land planning

25 more interested following initial engagement

SKILLS DEVELOPED

- GIS mapping
- Interview analysis
- Land optimisation modelling

ENVIRONMENTAL IMPACT

Climate change awareness integrated into land-use planning

Indigenous plant research focused on tutu and alternative high-value uses for contaminated honey

SCIENCE THAT STRENGTHENS DECISIONS

Ngāti Pāhauwera, a confederation of over 80 hapū with deep ancestral ties to northern Hawke's Bay, is navigating the future of its whenua with vision and care. Since settling its Treaty claim in 2010, the Ngāti Pāhauwera Development Trust (NPDT) has taken stewardship of its lands while many whānau continue to hold smaller, individually owned land blocks. These parcels often face complex challenges—small scale, governance fragmentation, and limited development capital.

In partnership with AgResearch, NPDT has developed a robust programme of science-led support to explore viable land-use options that align with cultural values, unlock economic potential, and build climate resilience. Together, we've focused on five impact areas: building capability, lifting economic performance, enhancing environmental sustainability, strengthening collaborative networks, and honouring socio-cultural values.

WHAT WE'VE DONE

Beginning in 2016 with the Resilient Rural Communities Programme, we applied AgInform®—AgResearch's farm optimisation model—to NPDT sheep and beef farms, enabling informed decisions that balanced financial, environmental, and cultural goals. From there, we expanded our mahi to include small-block whānau landholders through a kaupapa Māori research programme, Te Oranganui o Ngāti Pāhauwera.

Over time, our work evolved to include:

- Interviews and modelling to support whānau aspirations across 40 land blocks (ranging from 1 to 185 hectares)
- Frameworks to connect whānau with similar goals—ranging from micro-scale food growers to large commercial operators
- Advice on governance, land aggregation, and market access
- Building climate change awareness and planning into long-term whenua strategy

In 2021, the partnership also turned its attention to native plants with high-value potential. A tutu plant research project investigated how to capture value from contaminated honey—a current waste stream—by exploring non-food applications such as wound healing or pest control.

WHAT'S BEEN ACHIEVED

UPSKILLED COMMUNITIES: NPDT members and individual landholders now have the tools and training to make informed land use decisions, engage in land modelling, and run collaborative projects.

CLEAR ECONOMIC UPLIFT: Engagement with NPDT's commercial farms shows potential returns of $203–550 per hectare. Modelling indicates that even modest collaboration (e.g. 10% of Māori landowners working together) could unlock benefits of around $870,000 by reducing facilitation costs.

CLIMATE RESILIENCE: Landowners now factor climate change into their decision-making, with personalised reports and guidance helping them plan for a changing future.

GREATER COHESION: The mahi has helped strengthen whanaungatanga—building shared understanding and collective strategies across diverse landowners.

This work is about more than productivity; it's about rangatiratanga over whenua and supporting Ngāti Pāhauwera in shaping a thriving future—economically, culturally, and environmentally.

FIND OUT MORE

NP ONLINE
https://ngatipahauwera.co.nz/

ag ONLINE
https://www.agresearch.co.nz/

AGRESEARCH AND WAITUHI KURATAU TRUST

Sheep Dairy Research Drives Farm Productivity Gains

A research partnership between AgResearch and the Waituhi Kuratau Trust (WKT) has had a major impact on farm productivity, boosting milk production and improving animal performance. Thanks to this collaboration, the WKT's dairy sheep farm near Lake Taupō has seen milk production increase by up to 70%, while lamb survival rates and overall farm efficiency have also improved.

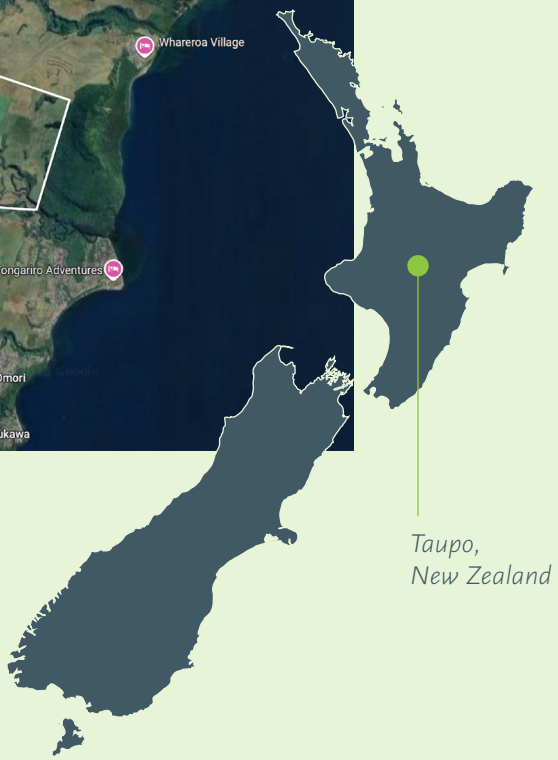
Māori agribusiness growth is on track to be worth

$100b/year

to the New Zealand economy by 2030.

A GROWING INDUSTRY WITH LOWER ENVIRONMENTAL IMPACT

The WKT operates a 500-hectare dairy sheep farm and has been involved in milking sheep since 2005. Recognising the potential of the dairy sheep industry, WKT partnered with AgResearch to explore ways to optimise farming practices and assess the environmental impact of sheep dairy farming compared to traditional dairy systems.



Taupo, New Zealand

RESEARCH AND INNOVATION

As part of a wider programme funded by the Ministry of Business, Innovation and Employment (MBIE), AgResearch worked with WKT to refine farming practices, focusing on key areas such as ewe nutrition, pasture management, supplementary feeding, and environmental sustainability.

KEY OUTCOMES FOR FARMERS

HIGHER MILK PRODUCTION

Research-driven improvements led to 25–70% increases in milk production, significantly boosting farm revenue.

BETTER ANIMAL PERFORMANCE

Enhanced ewe nutrition and lamb-rearing techniques resulted in healthier animals, higher birth weights, and reduced lamb mortality.

ENVIRONMENTAL BENEFITS

A partnership with Waikato Regional Council confirmed that dairy sheep farming has a lower nitrogen footprint than traditional bovine dairy systems, making it a viable option for environmentally sensitive areas.

$4.1m
in annual on farm benefits

$25m
in value chain benefits

up to
70%
increase in milk production

ECONOMIC IMPACT AND INDUSTRY GROWTH

The success of this programme coincided with the expansion of New Zealand's dairy sheep industry. WKT's involvement helped attract investment and partnerships, including a deal with Maui Milk, which connected the industry to global markets. The research also played a role in the broader growth of the sector, with the number of sheep dairy farms in New Zealand increasing from five to thirty between 2013 and 2023.

The economic benefits of these research-driven improvements are substantial. A national analysis estimated an annual on-farm benefit of $4.1 million, with broader value chain benefits reaching up to $25 million. The sector has expanded beyond milk powder and cheese into high-value niche products, including infant formula, sports drinks, and even sheep milk-based gin.

RESEARCH THAT MAKES A DIFFERENCE

This partnership between AgResearch and WKT demonstrates how science-backed farming innovations can directly translate into increased productivity, economic growth, and sustainability. With continued research and investment, New Zealand's dairy sheep industry is well-positioned for long-term success.

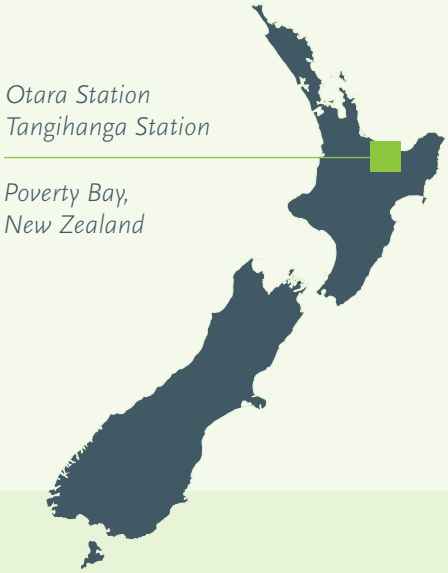
FIND OUT MORE

ONLINE
www.mauimilk.co.nz/

READ
www.agresearch.co.nz/our-research/sheep-milk-science-supporting-industry-growth/

BOOSTING FARM PRODUCTIVITY:
AGRESEARCH AND WI PERE TRUST

Helping Increase Profits by 20%



A breakthrough in weed control and pasture management has delivered significant financial and environmental benefits for Wi Pere Trust. Research led by AgResearch, in collaboration with Ravensdown and Wi Pere, has helped increase earnings before interest and tax (EBIT) by 20% at one of the Trust's properties—transforming farm productivity and profitability.

At the heart of this success is an innovative approach to managing variegated thistle, a persistent weed that was limiting pasture growth and reducing livestock productivity. Traditional herbicide methods were costly, only offered short-term relief, and contributed to herbicide resistance. AgResearch scientists tested a smarter strategy: applying a clover-friendly herbicide earlier in the season—before the thistles were even visible—while also boosting legume establishment to naturally outcompete weeds. The results were game-changing.

Māori agribusiness growth is on track to be worth

$100b/year

to the New Zealand economy by 2030.

"Farm economic modelling suggests substantial economic benefits from applying the insights in this research. It has been a massive success."

– TIM RHODES,
WI PERE TRUST

SMART SCIENCE, REAL-WORLD GAINS

The research, supported by AgResearch's Strategic Science Investment Fund (SSIF), identified key improvements for Wi Pere Trust's hill country farms, Tangihanga and Otara. These included:

BETTER WEED MANAGEMENT

Targeted spraying of thistle earlier in the season reduced its spread while preserving valuable pasture species.

MORE RESILIENT PASTURES

Oversowing white clover into existing grassland improved soil nitrogen levels and pasture growth, leading to healthier livestock.

SMARTER GRAZING STRATEGIES

Adjusting stocking rates and grazing timing helped ensure pastures thrived long-term.

The impact has been substantial. Areas where white clover was introduced now maintain a 30-40% clover base—compared to just 10% before the project. Improved pasture quality led to higher weight gains in cattle and lambs, translating to farm revenue increases of $420 to $1,960 per hectare annually.

CUTTING COSTS AND ENVIRONMENTAL BENEFITS

Beyond financial gains, the research has also delivered environmental benefits and reduced farm costs. Wi Pere has lowered herbicide use by approximately 40%, saving about $100,000 per year in input costs. Less herbicide means reduced environmental impact—better protecting waterways and soil health while also aligning with the Trust's values of sustainable land stewardship.

With stronger pastures, the need for synthetic nitrogen fertilisers has also declined. Previously, some paddocks received around 46 kg of synthetic nitrogen per hectare annually; now, the same or better growth is achieved naturally, cutting costs by $112 per hectare.

SCALING UP FOR AOTEAROA NEW ZEALAND

Wi Pere's success offers a model for other hill country farms across New Zealand. Through on-farm demonstrations, field days, and factsheets published by Beef + Lamb New Zealand, AgResearch is helping share these insights nationwide. If widely adopted, the approach could improve productivity across millions of hectares of hill country farmland, boosting farm incomes and reducing reliance on agrichemicals.

A STRONGER FUTURE FOR FARMING

For Wi Pere Trust, founded in 1899 to preserve and grow its whānau legacy, this research is a win-win. It strengthens the commercial performance of its farms while ensuring long-term sustainability. The partnership with AgResearch and Ravensdown has delivered practical solutions with lasting impact—helping New Zealand farmers stay productive, profitable, and environmentally responsible.

By combining science with smart farming, the Trust is not only honouring its past but also securing its future for generations to come.

FIND OUT MORE

ONLINE
www.wipere.com

READ
www.agresearch.co.nz/our-research/weed-management-solutions/

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