

Thursday 4 September 2025

DAY TWO

Te Whakatipu – Growing the Vision

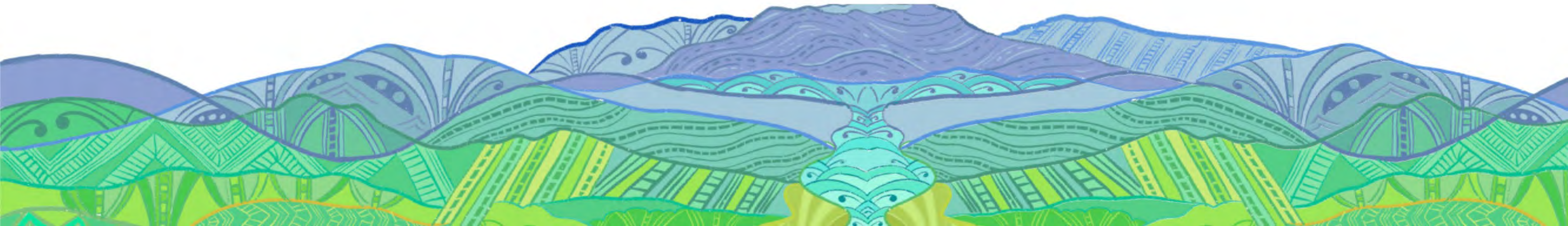
Speakers

Paul Morgan
Richard Manning & Kiran Dayaram
Simon Karipa
Andy Macfarlane (Kōrero Kōpaka)
Chris Insley (Kōrero Kōpaka)
Dr Andy West
Dr John Roche
Wallace Haumaha

Panels

Local and Regional Authority Partnerships
for Infrastructure Investment

Innovation Panel: *Unlocking the Next Frontier*





TE ARAWA ARATAUA

E whakapohewatia te pae tawhiti o ta tatau whenua tuku iho



CHRIS KOROHEKE
AG EMISSIONS CENTRE

WE ARE LOOKING
for PARTNERS IN
the MĀORI SPACE

HOW DO WE ATTRACT
YOUNG PEOPLE to FARMS
& WHENUA

the WAY they
THINK, AND ADOPT
TECH TOOLS!!



TUAKANA
TEINA TECH
INVESTMENTS



DIVERSIFICATION
IS KEY



NZ BIOFORESTRY

NEW ZEALAND
HAS A PACKAGING
ISSUE



PAUL MORGAN

WE'RE
BUILDING A
BIO REFINERY

USING the WHOLE
TREE

PINUS RADIATA REPORT
UNDERSTANDING ALL OF
IT'S CHEMICALS

STARTING
with CUPS



COSMETICS

SEMI-CONDUCTORS
there are PLENTY
of things YOU CAN
DEVELOP



@LIVEILLUSTRATORS

NOTES Key Themes

Chris Koroheke

Speaker



Key Themes

Climate Action and Tools for Farmers

- Focus on cost-effective emissions reduction tools.
- Vaccines, inhibitors, and genetics as part of the low-emissions toolbox.
- R&D funding and shaping programmes through the Ag Emissions Centre.
- Mission: put tools in the hands of farmers.

Mātauranga and Mauri

- Ancestral knowledge and mātauranga Māori must inform farm-systems and decision-making.
- Blend of mātauranga and western technologies offers practical, future-focused pathways.
- Climate change action must be values-led, not just technical.
- “Don’t be koretake” – urgency: climate change is here now, solutions need to scale fast.

Rangatahi and Future Generations

- Capability and capacity-building is essential — rangatahi need opportunities to step into leadership.
- Kohanga reo children are seen as taonga for future resilience.
- Rangatahi are more engaged in knowledge systems and aware of geopolitical complexities.
- They are adopting tech tools quickly — tuakana-teina models can strengthen tech adoption.
- Diversification of land use is key for resilience.

Partnerships and Collaboration

- Partnerships and knowledge-sharing critical for seamless mahi.
- Need more partners (government, Māori entities, tech innovators) to move faster.
- Tuakana-teina tech investments encourage intergenerational learning.
- Seeking Māori-specific partnerships for innovation and adaptation.

Innovation and Exploration

- Exploration into soil and emissions: e.g., biochar and other emerging tools.
- AI tools (e.g., Mātai Whenua) can help map and find resources for adaptation.
- Markets and end-customers are increasingly progressive, open to innovation.

NOTES

Chris Koroheke

- Vision and goals must stretch 50 years ahead.
- Farmers need practical, cost-effective tools for low-emissions farming.
- Ag Emissions Centre shaping R&D: vaccines, inhibitors, genetics.
- Markets are progressive — Māori-led solutions can meet demand.
- Climate change is urgent: “We’ve only got a short time to get this done.”

Rangatahi

- Capability-building at all levels is essential.
- They are adopting technology quickly but need pathways into leadership.
- Kohanga reo and whakapapa foundations anchor future resilience.
- Must support rangatahi even if they don’t take formal training routes.

Partnerships

- More collaboration needed across Māori space, research, and government.
- Tuakana-teina models can help scale tech and investment adoption.
- Partnerships make solutions faster, more seamless.

NOTES Key Themes

Paul Morgan

Speaker



Key Themes

Using the Whole Tree

- No residual waste: all parts of the tree (trimmings, waste products, fibre) can be used.
- Geothermal heat and steam make processes easier and more efficient.
- Every economy requires energy, chemicals, and materials — forestry can supply them.
- Viewing the tree as a chemist: biofuel conversion, carbon storage, and fibre use.
- Aim is to lift forestry into higher-value markets, beyond logs and paper.

Product Value and Resource Potential

- Pinus radiata is a major resource: 2 million hectares in Aotearoa.
- Understanding the full chemistry of a log (30+ chemicals) creates new opportunities.
- Product value is much higher than raw log prices.
- Building biorefineries in NZ to capture this value.
- Examples: high-end veneer, bioenergy, biochemicals, biomaterials.

Business Operations and Local Jobs

- Investment mindset: setting our minds to create value.
- Risk mitigation is necessary given price oscillations.
- Need to create opportunities for Māori and local people.
- NZ can create jobs through biorefinery operations and advanced forestry.

Manufacturing and Packaging

- Starting with packaging (cups) and exploring broader bioproducts.
- Addressing NZ's packaging issues in partnership with Taiwan.
- Potential applications: semiconductors, women's cosmetics, and more.

International Partnerships

- Partnerships with Asia (Taiwan, Hong Kong, Singapore, Middle East).
- Building relationships with international companies (Nestlé, Lego, etc.).
- Taiwanese partnerships in science research, implementers, and manufacturers.

Entrepreneurship and Opportunity

- "I shouldn't be an entrepreneur at my age, but I can't help it. This is a huge opportunity."
- Forestry seen as the base for a high-value, low-emission, scalable industry.

NOTES

- NZ Bioforestry is positioning itself as an Asia-Pacific biotechnology group.
- Core business: converting wood biomass into **bioenergy, biochemicals, and biomaterials**.
- Leverage geothermal energy in Aotearoa to scale operations efficiently.
- Goal: lift forestry into higher-value industries, reduce waste, and create domestic jobs.
- Partnerships with Māori are critical to ensuring local benefit and intergenerational opportunity.
- International markets (Asia, Middle East) offer scale and demand for bio-based products.
-

LAND-BASED AUTOMATED RECIRCULATING AQUACULTURE SYSTEM



KIRAN
DAYARAM

RICHARD
MANNING



INNOVATIVE
FISH FARMING
SYSTEM

HAPPY
FISH

ACCESS
TO EXPERTISE:
CUSTOMERS
IN ASIA

WASTE IS
MANAGED.
'NO DEAD-
ZONES' IMPACTING
THE OCEAN



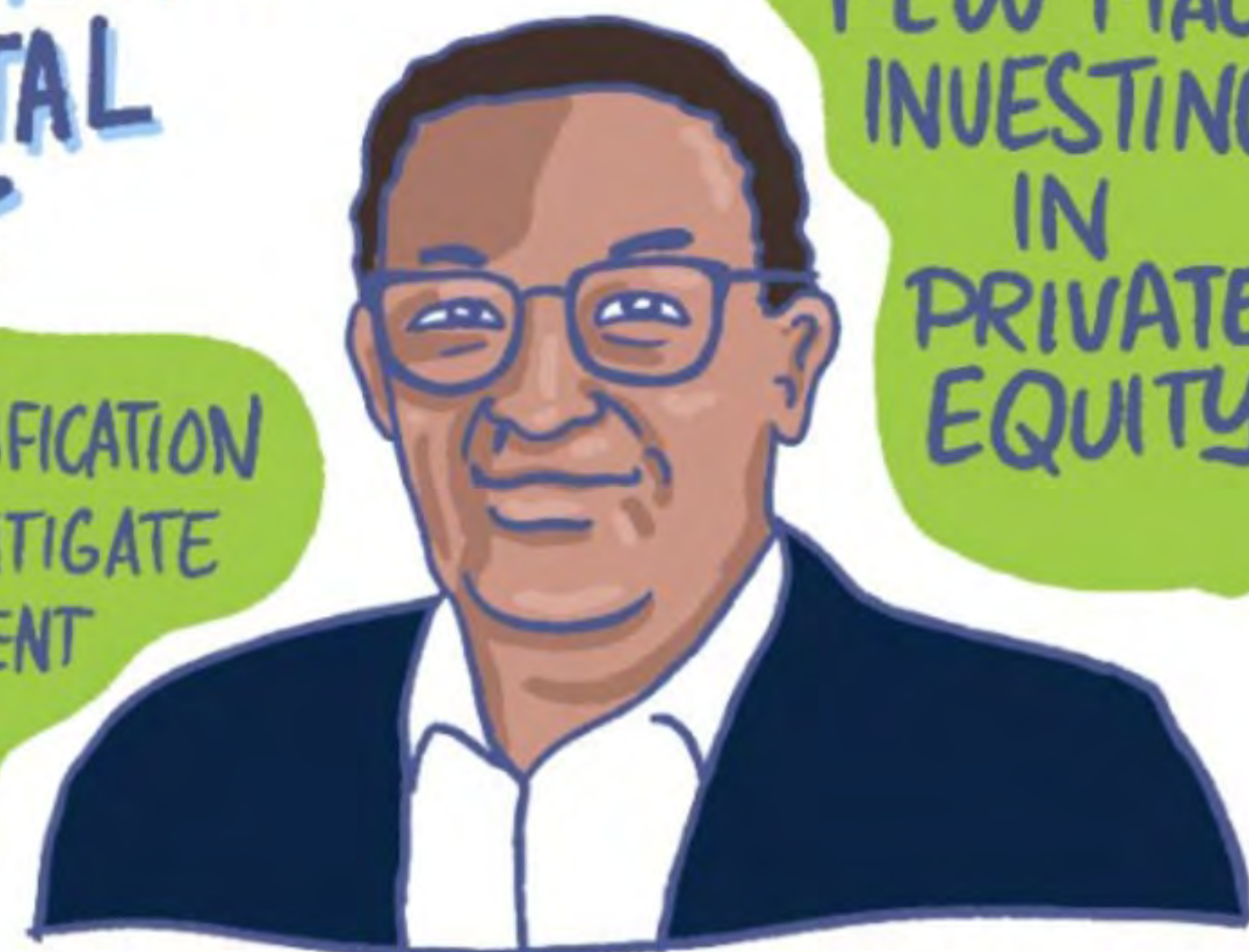
TE ARAWA ARATAUA

The future of land: Visualising the horizons of our ancestral land

USING WASTE
BYPRODUCTS
TO GROW
FOOD

INFRASTRUCTURE: INVESTMENT & CAPITAL

DIVERSIFICATION
WILL MITIGATE
INVESTMENT
RISK



SIMON KARIPA

THERE ARE
FEW MĀORI
INVESTING
IN
PRIVATE
EQUITY

WE NEED TO
MAKE MATHS
AND ACCOUNTING
EXCITING

REALLOCATION
OF REVENUE TO
DIFFERENT
ASSET CLASSES

YOU CAN
PLAY LEAGUE
WHILE YOU'RE
STUDYING
AT UNI

LONG-TERM
STRATEGY for
CASHFLOW FROM
HARVEST

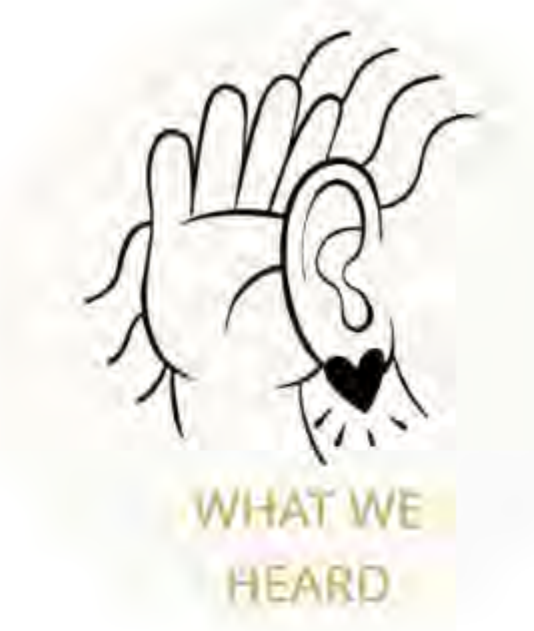


@LIVEILLUSTRATORS

NOTES Key Themes

Kiran Dayaram & Richard Manning

Speaker



Key Themes

Environmental Sustainability

- Circulating water in a closed-loop system reduces impact on oceans.
- No dead zones; waste is fully managed.
- Sludge reused as fertiliser or biogas; nitrogen supports aquaponics.
- Recirculation helps mitigate waste and improve sustainability.
- Value lies in precise control of environment, including water quality and temperature.

Fish Production

- Flat fish (e.g., flounder, sole, turbot, brill) are popular species for farming.
- Fish feed production opportunities in Aotearoa.
- Potential for wild fish integration.
- Happy fish = healthy growth, sustainable outputs.

Distribution and Business Model

- Hub-to-hub distribution approach ensures viability.
- Assured prices help build farmer confidence and support scaling.
- Strong focus on viability and growth through controlled systems.

International Partnerships

- Customers in Asia drive export opportunities.
- Partnerships with Vietnam (crab and lobster farming).
- Potential in vertical aquaculture: groper, prawns.
- Access to expertise globally strengthens NZ innovation.

NOTES

- Environmental design and density ratios (water-to-fish capacity) are key for efficiency.
- Aquaculture offers a controlled, sustainable protein pathway for Aotearoa.
- RAS (Recirculating Aquaculture Systems) align with Māori aspirations for sustainable water and land use.
- Asia is a major market for expansion, with opportunities for niche species and new farming techniques.

NOTES Key Themes

Simon Karipa

Speaker



Key Themes

Investment Strategy

- The “three F’s” (Farming, Forestry, Fishing) remain central but need diversification.
- Diversification mitigates investment risks.
- High returns are possible, but must be pursued mindfully.
- Reallocation of revenue into different asset classes strengthens resilience.
- Long-term strategies needed to manage cashflow from harvest.

Collectives and Funds

- **Tōtara Investments Collective:** 194 iwi/Māori investment partners; deal-by-deal commitments; multiple active investments.
- **Te Pūia Tāpapa Fund:** \$115.5m capital committed; Māori investors pooling resources to access high-value sectors (infrastructure, health, transport, etc.).
- Collective action enables Māori to scale investments and compete in larger markets.

Barriers and Challenges

- Too few Māori in the investment/finance sector.
- Need more Māori investing in private equity funds.
- Non-Māori advisors must better understand Māori objectives.
- Internal challenges: liquidity, cashflow, internal capacity.
- External challenges: lack of visibility, weak networks, competition, and perception.

Capability and Knowledge Building

- Capability building = risk mitigation.
- Put rangatahi alongside advisors to absorb financial knowledge.
- Excite rangatahi about maths and finance for long-term capability.
- More Māori expertise is needed across private equity and high-return funds.

NOTES

- Diversification is key for sustainable growth and resilience against shocks.
- Collective Māori funds (Tōtara, Te Pūia Tāpapa) are powerful models but need scaling.
- Internal and external barriers continue to slow Māori capital growth.
- Building Māori financial capability is a generational project — rangatahi are critical.
- Partnerships with aligned non-Māori advisors can accelerate Māori participation in high-value markets.

WHEN MUM SAYS

"I DON'T
GET YOU
BOY"



I KNOW WE'RE
MISSING IT

UNDERSTAND
WHO YOUR TRUSTED
TRANSLATORS ARE
GET DOWN TO
GRASS ROOTS LEVEL



TE ARAWA ARATAUA

E whakapohewatia te pae tawhiti o ta tatau whenua tuku iho

IN CALIFORNIA there is
A NEW LAW: PRODUCERS
MANUFACTURERS & CONSUMERS
HAVE TO PAY FOR THEIR WASTE NOT
THE TAXPAYER.



HILTON COLLIER RICHARD MANNING SIMON KARIPA PAUL MORGAN

WORK with NATURE



learn what a success case
looks like DEVELOP
YOUR MODEL from NATURE

LOCAL REGIONAL AUTHORITY
PARTNERSHIPS
FOR INFRASTRUCTURE
INVESTMENT

My 90 year
OLD KUIA
AND My 10 year
OLD TAMARIKI
Need to be
ABLE to
UNDERSTAND
WHAT'S GOING ON



I LIKE HAVING A TRUSTED
LOCAL TRANSLATOR

Give me
A VIDEO

@LIVEILLUSTRATORS

NOTES Key Themes

Local and Regional Authority Partnerships for Infrastructure Investment

Panel



Key Themes

Business and Adaptation

- A business case must be simple and effective — interest and passion alone aren't enough.
- Climate disruptors are global and increasing; adaptation must evolve over 20 years.
- Work with nature: learn from success cases and adapt models.
- Science knowledge + mātauranga must guide farming decisions; ignoring them is unproductive.

Knowledge and Industry Depth

- You need a depth of global industry knowledge to diversify portfolios and create local jobs.
- Everyone transfers information, but complexity can be overwhelming — clarity is needed.
- Success comes from exploring new opportunities with deep understanding.
- Translation of complex issues into accessible forms is critical.

Communication and Understanding

- Beware jargon and acronyms — they alienate people.
- Communication must connect across iwi, hapū, and whānau.
- Rangatahi and kaumātua alike need explanations they can understand.
- Requests for explanatory videos and accessible resources.

Trust, Networks, and Equity

- Old-boys' networks keep knowledge locked up.
- Rangatahi value "trusted local translators" to navigate complexity.
- Sharing success stories from trusts builds collective learning.
- Diverse portfolios and transparent communication can break silos.

Innovation and Risk

- Some are sceptical of new tools (e.g., crypto), but others see value in leveraging them for Māori.
- Climate risks such as cyclone-induced slips require proactive land-use planning.
- Opportunities in energy, logistics, and global partnerships must be explored carefully.

PROTEIN
NUTRIENT
DENSITY

PROGRESSING IN
A PLANT-BASED,
ANIMAL OPTIMISED
WORLD



TE ARAWA ARATAUA

The future of land: Visualising the horizons of our ancestral land

CLIMATE
FORECASTING

WE ARE IN A GOOD
LOCATION to DEAL
with CLIMATE
CHANGE AS
AN ISLAND, SEA
DOESN'T HEAT
UP AS MUCH AS
LAND

ANDY
MACFARLANE

WE NEED THE
MĀORI
FONTERRA
TEAM TO BE
STRONG

LIFE IS
CIRCULAR



THE FUTURE
OF MILK IS
IN THE
BREAKDOWN OF
PRODUCTS FROM
ITS COMPONENTS

THE MAGIC
INSIDE THE MILK
DIVERSIFICATION OF
PRODUCTS

WE HAVE ADVANTAGES
IN NZ. NON HIERARCHICAL
SOCIETY & ACCESS TO
CAPITAL



CLIMATE
REFUGEES
HAVE STARTED
COMING HERE
NOW

WE
DON'T KNOW
HOW FAST &
HARD CLIMATE
CHANGE
will HIT

DR ANDY
WEST

OUR FOCUS
WILL BE to FEED
AUSTRALASIA

BUT WE
ARE PUTTING
HOUSES ON
OUR BEST
SOILS

WE MUST
PROTECT THE
ABILITY TO FEED
40 MILLION

@LIVEILLUSTRATORS

NOTES Key Themes

Andy MacFarlane

Speaker



Key Themes

The Farming Legacy and Advantages

- Life is circular — resilience comes from adaptation and reinvestment.
- Pastoral agriculture leverages natural advantages:
 - Dairy's efficient conversion of grass to milk.
 - Donor protein is regenerative, not depletive.
 - Industry is open for new entrants.
 - Maximising collective capital and effort mirrors iwi models.
- New Zealand has natural strengths but faces global competition.

Diversification and Value Creation

- "The magic inside the milk": the future is in breaking milk into high-value components.
- 23% of high-value ingredients deliver most of the wealth.
- Diversification is essential for resilience against disruption (e.g., palm oil).
- Activate collective systems for shared benefit, not just individual gain.

Operations and Reinvestment

- Dairy co-op models work because of daily commitment and reinvestment.
- Weighted average cost of capital is high (5.3%); efficiency is crucial.
- Strategy shift: fewer, larger customers to improve margins.
- 60:40 ratio — basic expenses vs reinvestment into future growth.
- Food safety and animal welfare are non-negotiable expectations.
- Sustainability must start with soil, water, and air quality.
- Reliable delivery is critical for market reputation.

Challenges and Competitiveness

- NZ competitors are offshore; scaling is difficult in a small domestic market.
- Customers ideally should be close, but NZ must operate in global markets.
- Capital efficiency and scale are essential for survival.
- Risk: if dairy doesn't innovate, it will be disrupted by palm oil and plant-based alternatives.

NOTES

- Māori presence in Fonterra leadership is vital for strengthening collective models.
- Farming is a long game: requires resilience, planning, and confidence-building over decades.
- Non-hierarchical, collective approaches are cultural strengths that can be leveraged in global competition.
- The industry must think globally about fair wages, sustainability, and ethical production to maintain NZ's edge.

NOTES Key Themes

Andy West

Speaker



Key Themes

Global and Long-Term Drivers

- By 2080, global population projected to peak at 11 billion.
- 50–200 year drivers: population, climate, biodiversity, soil.
- Birth rate in Aotearoa rising to 12 million by 2060.
- Climate refugees already arriving; flows expected to grow.
- Strategic focus: Australasia, with food coordination alongside Australia.

Environmental Risks and Responses

- 96% of species on the planet are humans and livestock — biodiversity collapse risk.
- Stop deforestation and rainforest destruction, starting with the Amazon.
- Biodiversity and moss extinction are early warning signs of ecosystem collapse.
- Soil and plant growth can be enhanced with fungal/mycorrhizal additives.
- Pine for harvesting won't work long-term; need to plant natives for carbon sinks.
- Protect productive soils to ensure food for 40 million.
- Carbon storage could become a major export.

Aotearoa's Strategic Position

- NZ must protect its ability to produce food sustainably.
- Surrounded by ocean: not as hot or vulnerable as other regions.
- Brilliant strategic location in a warming world.
- Climate resilience gives NZ an edge in feeding others.

Future Outlook (Next 50 Years)

- Fusion energy, bioplastics, and advanced renewables push toward net-zero.
- Robotics and AI may extend human lifespans (150+ years).
- Biotech may remove cancer.
- Skyrocketing food and water demand, with soil and biodiversity pressures.
-

NOTES

- Climate change is a **geopolitical as well as ecological challenge** — migration, security, and food systems are all interconnected.
- Aotearoa must lean into its strategic strengths: sustainable soils, surrounding ocean, and capacity to feed millions.
- Natives should replace monocultures like pine for resilience and long-term carbon capture.
- Innovation (AI, biotech, fusion) may transform human systems, but food, water, and biodiversity remain foundational.

IN NORTH AMERICA
FAILURE IS SEEN AS
AN OPPORTUNITY
IN AOTEAROA
IT BRINGS
A LOT OF
SHAME



TE ARAWA ARATAUA
E whakapohewatia te pae tawhiti o ta tatau whenua tuku iho



INCREASE
SOIL
HEALTH

OUR WORK WITH SCION
PROCESSING
SEAWEED
INTO
CRYSTALS



NATURE-BASED CARBON
CREDITS



RONGOĀ
TAONGA
SPECIES
BOTANICALS
PHARMACEUTICALS
MAMAKU etc.

KIRAN DAYARAM

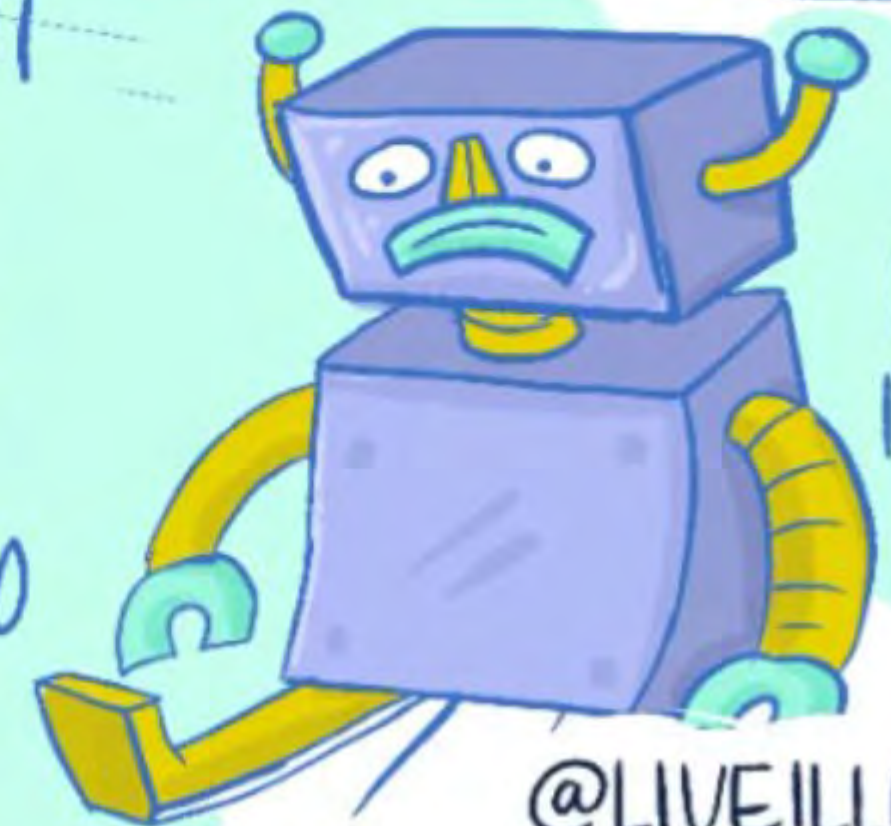
ARIANA ESTORAS

ANDY WEST

CLARE BRADLEY

UNLOCKING the NEXT FRONTIER

WHEN YOU GET
to A CERTAIN
SIZE YOU'VE
GOT to START
TAKING PORTFOLIO
RISKS



LOW MĀORI
INVESTMENT
IN NEW TECH

@LIVEILLUSTRATORS

NOTES Key Themes

Unlocking the next frontier

Panel



Key Themes

Soil and Sea-based Innovation (Clare Bradley & Kiran Dayaram)

- Focus on **increasing soil health** through carbon and nitrogen investment.
- Processing of kelp and seaweed offers potential for fertilisers and soil enhancers.
- Rethinking failure: in Aotearoa, failure is seen with shame; internationally it's viewed as a learning opportunity.
- North America's approach reframes failure as resilience-building.

Bioeconomy Science and R&D (Ariana Estoras & Dr Andy West)

- Bioeconomy Science Institute: positioning Aotearoa as a hub for innovation.
- **Kānuka oil** and other native products offer new market opportunities.
- Nature-based carbon credits linked to indigenous flora.
- Advanced tools for food safety and processing are needed.
- Research partnerships crucial for scaling innovations.
- Current challenge: almost none of the \$2.5 billion in NZ science investment is directed to the bioeconomy — huge underinvestment.
- Innovative Māori companies can lead by leveraging mātauranga and new tech.

Te Kautuku – Manuka Honey Transition

- Moving beyond honey into **land-use transitions**.
- Potential for manuka and other native-based systems to underpin climate resilience.
- Supports diversification away from vulnerable monocultures.

NOTES

• Q & A Highlights

- Questions around risk in innovation and leadership in science.
- Responses emphasised:
 - Choose strong collaborators ("choose your friends wisely").
 - More funding and structural change are needed in R&D spending.
 - Innovation requires both courage and long-term partnership.

• One Action

- Connect iwi/hapū with research and shore up partnerships.
- Suggestions for piloting projects and scaling successful models.
- Support rangatahi pathways into science and leadership.
- Notes
- Soil and sea-based innovation are central to resilience — kelp, nitrogen, and carbon are levers.
- Māori companies can lead, but they face underinvestment in science.
- Reframing failure as a learning process is essential for innovation.
- The bioeconomy requires Māori-led pathways, tied to whenua and mātauranga, to achieve true scale.



FARMERS ARE
the ORIGINAL
SCIENTISTS

DR JOHN ROCHE

NZ's PRODUCTIVITY IS
A LOT LOWER THAN AUSTRALIA
OR IRELAND



BUT like IRELAND we CAN TURN IT AROUND



TE ARAWA ARATAUA

The future of land: Visualising the horizons of our ancestral land

TECHNOLOGY
is GOING to
TAKE US
FOR A RIDE



THERE
ARE STRATEGIC
OPPORTUNITIES
AHEAD
DIVERSIFICATION,
ECONOMIC SOVEREIGNTY,
TECHNOLOGY, COLLABORATIVE
PROSPERITY

WE NEED IMMEDIATE
ACTION to PROTECT
the HEALTH of
OUR WAI

THERE HAS
BEEN A FAILURE
to HONOUR MĀORI
FRESHWATER
RIGHTS

WE HAVE
INADEQUATE
PROTECTION
for WAI



WALLACE HAUMAHA

TE ARAWA HAVE A SPECIAL CONNECTION to
OUR LAKES



OUR DNA is
EMBEDDED in these
ROTO, AWA, AND
GEOTHERMAL FEATURES

@LIVEILLUSTRATORS

NOTES Key Themes

Dr John Roach

Speaker



Key Themes

Farmers as Innovators

- Farmers are described as the original scientists, constantly experimenting and adapting.
- Innovation and adoption must keep farmers at the centre — they are best positioned to apply new tools.
- Productivity growth is currently low and unsustainable — innovation is essential for resilience.

Technology Integration

- Tools and practices emerging:
 - Real-time, data-driven farm management.
 - Virtual fencing to manage livestock individually.
 - Simulated outcomes using AI for decision-making.
 - Data sensors in soil for water management.
 - Robotic mustering (e.g., drones).
 - Spraying seaweed compounds on silage.
 - NZ Institute for Advanced Technology could support scaling.
- These innovations aim to balance productivity and environmental sustainability.

Strategic Opportunities Ahead

- Diversification into high-value horticulture, forestry, and aquaculture.
- Building economic sovereignty through collective Māori ownership and partnerships.
- Technology integration as a driver of productivity and sustainability.
- Collaborative prosperity: partnerships across government, industry, and iwi.

Economic and Global Context

- Compared internationally, NZ GDP per capita lags — not wealthy by global standards.
- Productivity growth is flat; innovation is the only pathway forward.
- “Leprechaun economics” — highlighting misleading productivity comparisons internationally.
- Technology adoption is expanding rapidly but must be steered by need, not hype.

Take-Home Messages

- Productivity must rise sustainably through innovation.
- Costs must be lowered while diversifying outputs.
- Technology offers exponential possibility but adoption must be strategic.
- Farmers must be placed at the centre of both **design** and **deployment** of innovation.

NOTES Key Themes

Wallace Haumaha

Speaker



Key Themes

Freshwater Governance and Rights

- 60 organisations presented to the Crown on Treaty Settlement water issues.
- Tikanga Māori provides inherited rights and responsibilities for water (wai).
- There is a **failure to honour Māori freshwater rights** — the Crown has not met its Te Tiriti o Waitangi obligations.
- Inadequate protection exists for wai, despite iwi responsibilities and cultural connections.

Legal Challenge

- Lakes returned to Te Arawa in the 2006 settlement.
- Risk remains that legislation can be overturned with the stroke of a pen.
- Example: 32 licences were returned to Ngāi Tahu, but the Crown still failed to meet freshwater obligations.
- Ongoing litigation highlights Crown breaches.

Environmental Concerns

- Phosphorus and nitrate pollution damaging lakes.
- Te Arawa has a deep spiritual and cultural connection to their lakes.
- Freshwater ecosystems are embedded in Te Arawa identity — waiata, haka, and cultural narratives.
- Immediate action is needed to protect freshwater health.

Regional and Scientific Perspectives

- Regional iwi capacity and leadership need strengthening (“we need regional iwi gaining”).
- Scientists (e.g., GNS) are researching geothermal energy linked to lake environments.
- Hotbeds of geothermal activity: Rotoiti and Rotomahana.

Cultural and Community Anchoring

- Te Arawa’s identity is tied to their 14 lakes.
- Governance, science, and tikanga must work together to secure protection.
- Social media tiles used to raise awareness and call for accountability.

NOTES

- Central issue: **the Crown has repeatedly failed to uphold Māori freshwater rights under Te Tiriti.**
- Pollution, weak governance, and inadequate protections threaten lake ecosystems.
- Te Arawa iwi continue to assert inherited rights and responsibilities, backed by science and tikanga.
- Regional iwi capacity building is essential for long-term freshwater governance.

OVERVIEW

Day 2



Key Themes

1. Freshwater Rights and Governance

- Ongoing litigation highlights the Crown's failure to uphold Māori freshwater rights under Te Tiriti.
- Pollution (phosphorus, nitrates) threatens lake health, demanding urgent protection.
- Tikanga Māori anchors inherited rights and responsibilities, with iwi calling for stronger regional capacity and leadership.

2. Climate Change and Long-Term Futures

- Population growth, food security, biodiversity collapse, and climate refugees will reshape Aotearoa's role.
- Aotearoa is strategically positioned as a resilient food producer and climate refuge.
- Native planting, carbon storage, and protecting soils are critical for future generations.

3. Innovation, Science, and Technology

- Farmers recognised as the original scientists, needing to stay at the centre of innovation.
- Tools emerging: AI, virtual fencing, soil sensors, methane inhibitors, aquaculture systems, biotech.
- Productivity growth is flat — innovation is the only pathway forward.
- Mātauranga Māori and western science must be integrated for effective solutions.

4. Investment, Capital, and Global Trade

- Māori underrepresented in investment and capital markets; capability building is essential.
- Need to excite rangatahi about maths, finance, and business.
- Trade diversification, indigenous frameworks, and collective partnerships will ensure resilience.

5. Food, Fibre, and Bioeconomy

- Plant-based, animal-optimised systems are reshaping dairy and protein futures.
- High-value products, biotech, forestry residues, and bio-forestry industries hold opportunity.
- Scaling exports requires investment, efficiency, and stronger global positioning.

6. Intergenerational and Cultural Anchoring

- Rangatahi engagement is essential — from governance to tech adoption.
- Tikanga and intergenerational thinking guide land use, investment, and innovation.
- Decisions must honour whakapapa, protect whenua and wai, and create prosperity that benefits future generations.

