TĀNGATA HUAWHENUA

MĀORI HORTICULTURE COUNCIL AOTEAROA

Tāngata Huawhenua Panui #2 Year-End Update, December 2023

Message from the Chairman, Kia ora koutou katoa,

As we approach the conclusion of the year, it's time to reflect on the bustling activities of Tāngata Huawhenua and its dedicated members. In this newsletter, we're thrilled to bring you updates from key individuals within our community.

Manu Caddie: A Visionary in Action

Manu Caddies shares his latest endeavors, showcasing the exciting projects he's currently involved in. His updates promise to inspire and captivate our readers, shedding light on the innovative spirit within Tāngata Huawhenua.

Dr. Andrew West: Insights from APEC

Te Whai Ao Group Ltd Chairman, Dr. Andrew West, has returned from San Francisco and APEC, armed with a thought-provoking paper. Dive into his reflections and gain valuable insights into the global landscape.

TeHoripo Karaitiana: Celebrating Success in Malaysia

TeHoripo Karaitiana brings us news from Malaysia, where he explored markets and strengthened Te Awanui's long-standing relationship with Natures Best. Discover the successes of the Return Home of Kiwifruit Programme and the expansion of value-added exports.

Māori Hort-Tech Project Update

Learn about the latest developments in the Māori Hort-Tech project for Callaghan Innovation. As we navigate uncertainties under a new government, Manu Caddie provides insightful glimpses into the impactful work undertaken.

Advocacy Initiatives in Motion

Our advocacy efforts are gaining momentum, with early initiatives like Willie Te Aho collaborating with Tama Potaka in the Eastern Bay of Planty. Tama, appointed as 'the Māori Minister for everything,' marks the beginning of our engagements with key Ministers and officials in the coming quarter.

Membership Opportunities

Joining Tāngata Huawhenua is a straightforward process. There's no joining fee or subscription—just send us an email expressing your interest. We welcome Māori collectives (Trust or Incorporation under Te Ture Whenua Māori, PSGE, etc.) or businesses majority-owned by Māori with activities in horticulture, related value chains, research, etc. Email a short profile of your organization to Ngaria@teawanui.co.nz.

Explore Our Website

For more information and updates, explore our website: Tāngata Huawhenua.

Wishing you all a wonderful conclusion to the year. Stay tuned for more exciting updates from Tāngata Huawhenua!

Ngā mihi nui, E mihi ana kia koutou katoa, **Rātahi Cross, Chairman**

Manu Caddie: A Visionary in Action

Manu Caddie (Ngāti Pūkenga, Ngāti Hauā) grew up in Tauranga Moana and is now based between Ruatōrea and Tauranga. After studying design and working at Mt Maunganui and Wellington, he spent the past 25 years in Te Tairāwhiti.

Manu spent his first 15 years in Tairāwhiti working in community development including the establishment of a school for teenage parents and their tamariki, a Puna Reo run by his wife Natasha Koia, and supporting a range of rangatahi focused projects, in 2015 Manu had a change of direction. The whānau moved to Makarika, just south of Ruatōrea where they built a house next to Natasha's marae on a 130 hectare land block.

Together with Panapa Ehau and others, Manu established Hikurangi Enterprises Ltd (HEL), a charitable company based in the Waiapu Valley with a focus on establishing sustainable industry and job creation. Much of the HEL story is captured in a Master thesis by Jack Barrett (https://tinyurl.com/jacksthesis).

One of the ventures started by HEL is Hikurangi Bioactives Limited Partnership (HBLP), a joint venture between Hikurangi Enterprises and Enquire Limited, an investment vehicle established by Manu and an old school friend from Tauranga. HBLP partnered with Honey Lab (now TRG Natural Pharmaceuticals) to develop products for treating eczema and acne using Kānuka oil as the active ingredient. One of these products has been proven to treat eczema as effectively as steroid creams and is now in market with a significant US deal under development with a US pharmaceutical company.

The other major investment by HBLP was establishing Rua Bioscience (originally Hikurangi Cannabis Company). Manu was a co-founder and the first CEO, helping the company receive the first medicinal cannabis licence in New Zealand. RUA became the first company founded by a Māori community to list on the NZX after raising \$46m pre-IPO with the first \$2m invested by locals via crowdfunding on the East Coast. The company now has a cannabis breeding facility at Ruatōrea and is selling cannabis in Germany and Australia, with distribution deals for the UK and other EU countries.

Manu is currently involved in a range of horticultural and biotech projects with whenua Māori partners across Aotearoa including a research programme with three iwi entities developing pharmaceuticals from an indigenous moss, a marae-based clinical study using native psychedelic mushrooms, research on native berries with a large land trust and a biodiscovery project with his own iwi. He recently chaired a science review panel for Plant & Food Research looking at progress on a ten year \$50m project building capability around Controlled Environment Agriculture and vertical farming.

In November Manu participated in a meeting at the UN Food and Agricultural Organisation in Rome that focused on biodiversity and ecosystem restoration, with an emphasis on the rights of Indigenous peoples to utilise and protect indigenous ecosystems. Manu is passionate about the potential for taonga species and ecosystems to be restored on the whenua and sustain whānau and hapū into the future. He enjoys working with Māori landowners and sees Tangata Huawhenua as an exciting vehicle for Māori to move up the value chain from commodity producers and price-takers to IP owners and truly sustainable kaitiaki of taonga that whānau, hapū and iwi have rights and responsibilities to protect and utilise.

Dr. Andrew West: Insights from APEC

APEC Multistakeholder Forum on a "Just transition" of underserved communities to a net zero carbon global economy

Friday 10th - Sunday 12th November, San Francisco

Background

APEC is a group of 21 economies bordering or close to the Pacific, comprising Russia, China, Chinese Hong Kong, Taiwan, the USA, Canada, Mexico, Peru, Chile, The Philippines, Indonesia, Brunei Darussalam, Viet Nam, Thailand, Korea, Japan, Malaysia, Singapore, PNG, Australia and New Zealand. APEC members are called economies (not countries) because the APEC cooperative process is predominantly concerned with trade and economic issues, with members engaging with one another as economic entities. In combination APEC's members represent 40% of the world's population, 60% of its GDP and 50% of its trade.

Each year one APEC economy plays host to the most senior APEC events including the annual Economic Leaders' Meeting, Ministerial Meetings and Senior Officials Meetings. This year it's the USA's turn at San Francisco. APEC leaders are advised by governmental officials and a standing committee of businesspeople called The CEO Summit. This brings together CEOs and entrepreneurs with the most senior political leaders from the Asia-Pacific region for two days of korero on global opportunities and challenges shaping economic trends in the Pacific region. There has been no opportunity for First Nations Peoples, labour organisations, youth organisations, gender organisations, NGOs and the like to have any input. They are disenfranchised.

Consequently, independent (NGO-style) entities affiliated with the APEC movement secured an unofficial Multistakeholder Forum of said disenfranchised "groups" to meet ahead of the APEC Leaders meeting and discuss a just transition to a net zero carbon economy by 2050, with the various groups preparing their own statements for APEC leaders at the end of the forum. The to-the-point, draft First Nations Peoples' statement is accessed at

https://docs.google.com/file/d/1GNR6ed0PZFAllpgB6bb2t6tZB0gQCJls/edit?filetype=msword

It calls for a standing Forum to be created equal in standing, value and resourcing as the CEO's Summit. This is a bold statement, likely to be ignored because some APEC economies do not recognise First Nations Peoples, including effectively Australia, China and Thailand.

Analysis

The Forum struggled with the concept of "just" and the notion of "transition". It unanimously agreed that its member groups were disenfranchised by APEC and wanted that rectified.

It made the erroneous assumption that a net zero carbon economy meant an economy free of hydrocarbons and instead of focusing on carbon it focused on renewable energy sources. This was a mistake, but one that is very frequently made.

Energy There is zero chance the world will be hydrocarbon-free by 2050 (28 years' time). They will continue to be burnt and fossil fuel use has been rising not falling. What is critical is carbon capture and storage (CCS) of the CO2 produced by burning coal, oil and gas. Whilst it's not PC to state this, it's a fact. Once its widespread CO2 emissions will collapse. However, there is a lot of fossil carbon in the atmosphere and especially in the oceans and that is going to cause considerable global heating and dislocation even if all GHG emissions ceased today. Moreover, whilst CCS is a pivotal technology renewables are important and these include geothermal, wind, solar and fissile nuclear. They will continue to be deployed.

Energy storage There was a pre-occupation with existing battery technology, principally to power vehicles. This is short-sighted. Existing batteries are too heavy to power heavy vehicles such as lorries and even buses. Battery-powered EVs look likely to collapse multi-storey car parks. https://www.telegraph.co.uk/news/2023/06/05/electric-cars-too-heavy-old-multi-storey-car-parks/ Many energy storage/ generation devices will enter use, including lighter weight organic batteries, supercapacitors, hydrogen fuel cells and diesel fuel cells with CCS. An EV powered by a diesel fuel cell produces 80% less CO2 than an internal combustion equivalent. https://cordis.europa.eu/article/id/92846-diesel-fuel-cell-generates-clean-onboard-power

Carbon Again, there was confusion about net zero meaning zero carbon (which would extinguish all life). The real focus needs to be a "managed carbon world". Presently we have one of the lowest atmospheric CO2 concentrations on record. The world generally likes it to be hotter and wetter. So why are we worrying? Because a hotter world has no ice caps and to melt those will rise sea levels by 80 metres, submerging most the world's principal cities, as well as making it too hot to grow staple foods (rice & corn) where we do now. It's those problems we strive to avoid. Carbon management involves: Ceasing taking of fossil carbon stored at enormous depths underground and burning it, thus placing it in the above ground/ in ocean ecosystems where it is not meant to be; and Trapping if we can some of the excess CO2 already in the atmosphere;

The best forms of trapping involve the soil (boosting its organic carbon content) and by growing trees that store vast amounts of carbon. Presently we are cutting down 42 million trees every day and we aren't replanting them. Soils lose carbon as a result.

Biomaterials Whilst CCS lets us continue to burn fossil hydrocarbons, it doesn't solve the serious problem of micro-plastics and forever chemicals. The only way to solve those are to stop using fossil hydrocarbon materials and replace them with biomaterials. This is where the focus rapidly needs to be with the most obvious source of said materials being trees and algae. There is a real urgency to make this switch, but it's a long way off happening at scale.

Population It now seems likely that the human population will peak in just 28 years or so at "just" 8.5billion., only 400million more than the 8.1billion now. By 2,100AD humans may "only" number 7 billion (20% less than at 2050) and one hundred years later they may comprise <5billion or perhaps much lower. This has happened before; >50% died in the Black Death.

https://www.nature.com/articles/s41559-021-01652-4

Much of Europe rewilded. Having said that, 5billion humans consuming as many resources annually as the average American will still need (under current technologies) about 2-3 Earths to meet their consumptive demands.

Mass extinction and biodiversity Extinction is forever. Synthetioc biology may bring some species back from the dead, but in reality, very few. Humanity has to reduce an extinction rate 10,000 times the natural background rate, caused by humans.. As the human population shrinks so it will have to manage a retreat from the land and a rewilding of the far fewer remaining species. This coincides with the steady collapse of the human population as per above.

First Nations Peoples and biodiversity This is THE CRITICAL point. A full 80% of the world's remaining biodiversity remaisn on First Nations Peoples land. There is where the real power in the future lies. It is the principal negotiating point for First Nations Peoples.

In conclusion

First Nations People need to get self-organised the storm the ramparts of economic orthodoxies built on a non-replenishing world. Their time is coming.

TeHoripo Karaitiana: Celebrating Success in Malaysia

Te Awanui Huka Pak Celebrates the Return Home of Kiwifruit Programme and Expansion of Value-Added Exports at the penultimate Federation of Māori Authorities Conference in Tauranga-Moana.

Gathering from across the nation, influential Maori economic leaders convene at the esteemed FOMA Business Summit in Tauranga-Moana on 23 - 24 November 2023. During this event, Te Awanui Huka Pak, a foundation member of FOMA, unveils a collaborative marketing program focused on Kiwifruit.

FOMA Chairman Traci Houpapa said "With an asset base of circa \$70billion, Maori business and innovation is critical to the success of Aotearoa. We congratulate Te Awanui Hukapak for its leadership on this initiative".

Te Awanui Huka Pak (Te Awanui), a proudly Maori-owned collective in the heart of New Zealand's Kiwifruit industry, announces a significant milestone in its journey with the return of its Kiwifruit programme 'home.' The collaborative marketing programme, approved by Kiwifruit New Zealand, is set to commence in April 2024, marking a pivotal moment in Te Awanui's commitment to sustainable practices and the growth of indigenous-led businesses.

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1. Homecoming of the Kiwifruit Programme:

Te Awanui Huka Pak takes immense pride in the return of its Kiwifruit programme, a venture that was initially established in Malaysia before regulatory frameworks were put in place. Post-regulation, Seeka Ltd continued the program, but the roots of this initiative remain deeply connected to Te Awanui. Te Awanui Chairman Ratahi Cross says 'Firstly we want to thank Seeka for the guardianship of the programme, the approval of the collaborative marketing programme by Kiwifruit New Zealand signifies not only a strategic triumph for Te Awanui but also a homecoming that reflects the collective's dedication to sustainable practices and ethical business.'

2. Diversifying Value-Added Exports:

Te Awanui is not only a leading player in the Kiwifruit industry but has also been making significant strides in the value-added sector. The company is already known for its exports of Kiwifruit purees and refined Kiwifruit seeds, with key markets in Korea, Japan, and Southeast Asia. Te Awanui's CEO Te Horipo Karaitiana says 'the return of the Kiwifruit programme aligns seamlessly with Te Awanui's existing business of value addition to Kiwifruit, creating a comprehensive approach to meet global demands. This expansion reinforces Te Awanui's commitment to providing high-quality, innovative Kiwifruit products to consumers worldwide.'

3. Collaborating for Sustainable Market Beachheads:

Te Awanui Huka Pak understands the power of collaboration in building sustainable markets. With a vision beyond individual success, Te Awanui aims to work closely with other Māori food and technology exporters. Ngaria Rolleston says 'By fostering collaboration, sharing knowledge, and creating synergies, Te Awanui envisions a stronger, interconnected network that not only benefits individual businesses but also contributes to the growth of the entire Maori export community. Together, these collaborations seek to establish sustainable market beachheads that promote indigenous values, traditions, and products on a global scale.'

Māori Hort-Tech Project Update - Report key findings:

- · Māori use a wide range of Hort-Tech; what they use depends on the size, purpose and type of operation.
- Māori in horticulture appreciate the importance of Intellectual Property Rights and want to be owners of unique genetics and breeding programmes.
- There are differences between small and large operations in terms of where they go for information about new Hort-Tech. For larger entities, information often comes from relationships with suppliers, consultants and research organisations, but smaller companies spend a lot of time doing their own research to solve technical problems.
- Māori entities are generally governed with an understandably conservative investment approach; this can be a barrier for adoption of new technologies into production systems, let alone investing in higher risk tech ventures based on novel Intellectual Property.
- Smaller entities have less capacity to invest kaimahi time into researching and learning new systems, so they stick with basic technologies unless they find shortcuts to selection and adoption through collaboration with other producers and/or consultants.

- Māori share wider public and industry concerns about data sharing; this can be a barrier to maximising the benefits of computing power to help improve analysis and decision-making.
- The way government agencies allocate R&D funding is not conducive to building companies with global reach. Māori companies and entrepreneurs that succeed globally from New Zealand will continue to invest in other Māori enterprises after they have gone global.
- · Leaders of Māori-owned companies and investment funds generally seem to have a very conservative approach to investing and will usually continue to invest heavily in the sectors they have traditionally been involved with, such as property and primary production. New industries, start-ups and high tech companies usually find it difficult to attract any funding from Māori institutional investors.
- · There is no major conflict between Te Ao Māori and technologies per se. In fact, big data and new tech platforms can support a Māori worldview by demonstrating the interconnectedness and indivisibility of all living systems and even inanimate things like rocks and air.
- · There can be a tension for Māori adoption of technology depending on the kaupapa upon which an enterprise is based, especially if technology is displacing workers and income for local whānau.
- · Māori in horticulture may place more emphasis than other parts of the sector on a triple bottom-line for their enterprises that look for positive results in profit, employment and environment.
- · Collectives of Māori producers have been powerful forces both traditionally and in recent years for creating economies of scale, sharing technical information and technologies, accessing channels to market and improving practices.
- · There are many opportunities to leverage the power of collectives to maximise opportunities to both utilise and develop new technologies that create value for Māori investing in innovation.
- · Māori should increase investment in technical skills development amongst our people as much as we invest in any new technological solutions.