

## **Whakaora ngā whenua whāma: Utilising mātauranga Māori and western science to protect and restore the soil on rural farms in Te Tai Tokerau**

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Industrial farming practices are drawing increased attention as major contributors to poor soil health, environmental degradation, and escalating climate emergency. In this presentation, the researchers will contribute ideas to transform poor soil health by drawing on te reo Māori me ngā tikanga, specifically, Mātauranga Māori. More broadly, the researchers will present ideas of a cultural interface of Mātauranga Māori and regenerative farming approaches to rejuvenate ecosystems, reducing atmospheric carbon and mitigating global warming and other injurious climate effects. The Te Tai Tokerau-based project that was formed in 2019 is supported by UNESCO NZ, Unitec, NorthTec, Creative Northland, and Northland Regional Council. The pilot project is a collaboration of kaumātua and landowners at Takahiwai and Waiotu, regenerative and organic farmers, scientists, business educators, artists, and regulators to explore how a cultural interface of Mātauranga Māori and western science methodologies could support the urgent uptake of healthier farming practices in food production, such as milk. Through the dialogues with the landowners, workshops, field trials, photographic research, and a literature review the team is documenting factors and processes that could influence better farming practices. Longterm, the aim is to expand the awareness-raising, outreach and community engagement associated with the project, taitamariki [young Māori adults] affiliated to Te Parawhau hapū, and NorthTec students through a photographic exhibition hosted by a local marae. Through the research at the cultural interface of Mātauranga Māori and western science, story and art, the study will not only create practical information to support urgent transformation in the agricultural field; but, also reinforce the significant legitimacy and worth of Māori values and practices in climate mitigation and adaptation efforts.