

Te Ara Pūtaiao submission to Te Ara Paerangi -Future Pathways Green Paper 2021

Te Ara Pūtaiao is a group of tier two Māori senior Managers across the seven Crown Research Institutes (CRIs) which aims to work collectively to provide strategic science advice to CRIs and Science New Zealand on how best to deliver desired outcomes to Māori.

In addition to having the potential to achieve impact for Māori and New Zealand communities, Te Ara Pūtaiao members have a specific mandate from their individual Chief Executive's to create impact for the CRIs. This includes, improved culture, new knowledge and partnerships, attraction of excellent staff etc. The group is also *particularly* well positioned to collaboratively develop Māori led, cross-CRI initiatives that leverage the members' extensive networks both across CRIs and out into Māori communities.

Te Ara Pūtaiao make the following comments specifically in relation to Crown Research Institutes (however, we note the submission of the Māori collective led by Te Rauika Māngai and broadly, support the overall tenor of that submission).

Research Priorities

CRIs have long-standing and deep relationships with iwi and Māori primary sector/agribusiness and research partnerships. If the RSI sector is to re-design and operationalise a single set of system level research priorities, it will be important to leverage these longstanding Māori relationships held by CRIs.

The current state of the research, science and innovation system does not instinctively include hapū, iwi and Māori as either Treaty or research partners. A future desired state will include improved collective collaboration and stronger partnerships with Māori which will result in a Māori-led or partnered approach to science, research and innovation. The future state is obtainable if all parts of the RSI system are working together to achieve the outcomes that Māori want.

Te Tiriti informed participation requires Māori to be involved at all levels of the research, science, and innovation system, including in decision-making, planning, development, and delivery of research outcomes. Māori want to be part of the design and delivery of research.

TAP also considers that any national research priority setting exercise must involve meaningful and ongoing engagement with the National Iwi Chairs Forum (NICF). This forum is the best available proxy through which a relationship can be formed with the Crown's Te Tiriti partners *at a national level*. However, one caveat here is that not all iwi participate in the NICF (e.g. Tuhoe). For this reason, additional targeted engagement with non NICF participating iwi would also be needed.

Te Tiriti, Mātauranga Māori and supporting Māori Aspirations

The Treaty relationship is an essential component of partnership with Māori. Partnership involves working together with iwi, hapū, whānau, and Māori communities to develop strategies for engaging effectively with the research, science, and innovation system.

Several CRIs have already taken the first tentative steps towards explicitly committing to honour Te Tiriti and applying the principles of partnership, participation and active protection in how they do their science and research. TAP suggests that the Crown could "roll out" these commitments to apply universally to all CRIs such as mandating this in the current CRI legislation or any future legislative

framing of new structures. This would drive closer collaboration between CRIs, with shared Te Tiriti values providing the platform to work across institutes.

At the same time the Crown could provide more direction to CRIs to collaborate to support Māori aspirations particularly in the area of indigenous data sovereignty. Most CRIs hold collections and databases over which Māori have indigenous interests. TAP suggests that a joined-up approach to these interests could be initiated through the seven CRIs, broadening out the approach, if successful, to include other collections and data holders in the Aotearoa landscape. TAP supports a system shift that directs and resources CRI's to support/employ a Te Tiriti-led co-governance model across the institutions for indigenous data and collections.

The Funding system

In seeking research investment or any funding for research initiatives, a major challenge for Māori and Iwi is that Māori aspirations and Mātauranga driven research does not yet have the track record of "science excellence". As a result, research proposals that would meet high expectations of "science relevance" by showing very strong co-innovation and engagement in order to meet Māori aspirations, may not make the excellence cut.

TAP recognises the struggles (over many years) of Māori researchers across CRI's working with Māori communities to secure funding for kaupapa Māori research projects within the current science funding system. The heart of the issue is that the Te Ao Māori world view of science excellence, impact and success are not well recognised and resourced adequately within the current science funding system. This presents issues with how Māori research is (1) assessed (i.e. fitting a square peg into a round hole) and (2) funded within the current science funding system (e.g. Endeavour Fund). The Crown needs to reset the framework and metrics for how Māori research is assessed (and by whom), and how it is funded to better recognise Te Ao Māori priorities and aspirations. This process needs to be co-designed with Māori within a framework of Te Tiriti guiding principles.

Further to this, the quantum of science funding allocated specifically for kaupapa Māori research (e.g. VMCF) has been woefully low (as a percentage of total RSI funding) within the science system. TAP acknowledges and supports the new Extending the Impact of Vision Mātauranga funding of \$33million (over four years) and we recommend that further thought be given to addressing the full funding gap between short-term projects (e.g. VMCF) and longer-term Endeavour programmes. This would help progress Māori entities along the implementation and capability building pathway at a faster pace and broader scale.

To assist with the establishment of this fund and setting research priorities, the Crown could look to establish a Māori Science & Research Forum to work alongside the Crown. Its role would be to collaboratively develop and analyse policy and funding options on science needs that have an impact on Māori based on phased engagement with Māori groups and Iwi to ascertain Māori / iwi science current and future aspirations. TAP supports an approach to NICF as the first step for creating such a group.

The level of SSIF CRI investment in the past 25 years in Māori related projects has been and is minimal relative to the need and opportunity. CRIs only invest a small portion of MBIE SSIF to Māori-related projects, however as there are competing priorities and skill shortages that means there are relatively few Mātauranga-led projects funded in this way. TAP proposes that there be an increase of investment focused towards Māori related projects by setting a mandatory minimum level of SSIF toward Vision Mātauranga

Mātauranga and Mātauranga Māori research proposals should be proportional in quantum to the Māori population. This is best achieved through a funding signal from MBIE. It will always be less effective if left to the discretion of the CRIs themselves because the presiding system heavily “up weights” revenue generation, consequently denying/stifling/oppressing the progress of Mātauranga Māori led research.

We consider that a bespoke funding pool that supports Mātauranga Māori led research programmes is one of the most effective means of including Māori in the RSI. This will also enable research in successful Vision Mātauranga Capability Fund projects to advance. It will also encourage Māori to participate in Māori led and designed research programmes.

Role of CRIs in Growing the Māori Science & Research Workforce

It is important that the RSI system creates pathways for our rangatahi Māori coming through the education system. Issues such as systemic barriers to rangatahi Māori in participating in science needs to be addressed if we are to grow more Māori scientists and scientists who are Māori (there is a difference). This includes addressing the out of cultural context in which science education is communicated to Māori students, the necessity for students to travel away for university study therefore being separated from whanau networks, university fees that deny accessibility to higher learning and greater certainty of employment to name a number of barriers.

To encourage an increase of Māori involvement in the RSI system Te Ara Pūtaiao propose that effort is required throughout the education system. We need to support programmes that link primary, intermediate and secondary (STEM schools and academies) with Universities CRIs and Cores to create a career pathway based on Mātauranga Māori for Māori students. This can be complimented by more certainty of employment of Māori researchers within the RSI system.

CRIs also play a crucial role (as a nursery) in developing the next generation of Māori researchers and scientists. Many have extensive cultural supervision/mentorship networks, and career pathways through Māori internship programmes, PhD scholarships and Māori post-docs. These programmes are currently working well for CRI’s and the science sector can learn from this. Te Ara Pūtaiao will be working collectively to take a pan-CRI approach to better understanding the barriers and supporting change that will attract and retain more Māori in the science system

Māori thought leaders and research partners should be encouraged to participate in the RSI system through changes to the current funding criteria. Currently co-investment is required in funding proposals, such as the Vision Mātauranga Capability Fund, which disincentivises Māori involvement. Māori communities and Mātauranga Māori experts generally do not have the investment capital to co-fund research initiatives, whereas CRIs rely heavily on this community to provide Vision Mātauranga and Mātauranga Māori support for MBIE Endeavour fund Vision Mātauranga requirements. Te Ara Pūtaiao propose that the co-investment requirements in these should be waived or at the least the co-investment portion should be provided through SSIF in recognition of the Te Tiriti Partnership.

In addition, most of the CRIs are now looking to grow more Māori co-led and Māori co-designed research platforms as this becomes more of a baseline requirement from our funders, in keeping with Vision Mātauranga. The Crown needs to invest and do more to grow and develop the talent pool and keep more Māori in the science system.

The Pūhoro STEM Academy partners with several CRI’s. It has a proven track record of retaining taurira Māori through the pipeline between secondary school and tertiary STEM fields. For most CRI’s this is nascent work and funding is conservative. However, Te Ara Paerangi presents the opportunity to

purposefully invest in taura to meet STEM outcomes which directly resources the inclusion of Mātauranga Māori

TAP is keen to ensure that any structural reforms do not negatively impact - and preferably enhance – the hard-fought gains made across CRIs in recruiting and retaining a significant and valuable Māori science workforce. In fact, we see the green paper process as an opportunity to think more strategically, and we expect Te Ara Paerangi to authorise an environment of favourable conditions which will support CRIs to play a greater role in growing the Māori science & research workforce.

Māori Co-Governance / Co-leadership in the Science Sector

We note the positive examples of experimentation with Māori co-governance and co-leadership in the National Science Challenge space. This has taken the form of partnership at the board level - e.g. in the BioHeritage Challenge, where the Kāhui Māori has been effectively merged with the challenge board. However, Māori co-leadership has also been demonstrated with joint Kaihautū-Māori and Challenge director positions, as well as co-theme leadership of Research Priority Areas.

TAP supports these initiatives to “re-balance” the RSI sector in favour of the Tiriti partner. National Science Challenges will have useful learnings for CRIs, in the way large research programmes are governed and overseen and have worked towards honouring Te Tiriti and equitable outcomes for Māori in the RSI system.

Te Ara Pūtaiao is available to discuss this submission.

Ngā mihi

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