Indigenous framework: Measuring the performance of New Zealand's primary-based industries from a Māori cultural perspective

Establishing a sustainability dashboard according to a Māori worldview

To establish a set of Indigenous sustainability indicators for Māori farming and fishing enterprise, it is crucial to understand what Maori want to sustain. Determining what Māori want to sustain requires an exploration of the Māori worldview. This worldview is structured on the fundamental notions of whakapapa (interconnections) and mauri (life supporting capacity). Generally speaking this way of seeing the world asserts that the health of the environment is dependent upon on the quality of its life-supporting capacity. Or, in others words, the ability of the environment to support diverse and abundant life. The more mauri an entity (e.g. a river) possesses the more abundant the life it can support.

However, maintaining mauri requires that entities are related to in a respectful manner, or in a way that either maintains or increases their health. Māori articulate a number of cultural values that offer an ethical guide on how to relate with, and behave toward, both social and environmental entities. These relational values are consistent with the Maori worldview, and have been well-articulated by various researchers. These values are defined in the adjacent table.

These values provide a guide for discerning between social and environmental practices that might be considered ethical (sustainable) or unethical (unsustainable). However, to actually determine whether practices increase the mauri of social and environmental entities

- The development of indigenous sustainability indicators requires an understanding of the Māori worldview and its fundamental notions of whakapapa and mauri.
- Sustainable practices are consistent with Māori relational values.
- The effectiveness of the outcomes of these practices is measured by KPIs.
- Such measures would determine the level of mauri expressed by different entities such as water, land or cummunity, and provide an evidence base for the modification, rejection or adoption of different practices.

Table 1

Māori Worldview and Relational Values		
Worldview	Value	Meaning
Mauri Whakapapa Mana	Tino rangatiratanga	Acts of self-determination
	Manawhenua	Legitimacy to control resources
	Whanaungatanga	Bonds of kinship – togetherness
	Manaakitanga	Acts of Giving
	Whakakotahitanga	Respect for individuals and desire for consensus
	Tūrangawaewae	Connection to a place that gives standing, identity, and security
	Kaitiakitanga	Guardianship
	Te Aotūroa	Interdependence with the natural environment
	Taonga tuku iho	Holding protected treasures passed on

Table 2

Practices Aligning with Relational Values	
Practice	**Definition**
Governing	Building and maintaining, competent, strong, and capable governance
Managing	Building and maintaining capable management
Leading	Decisive, yet inclusive decision-making, based on relational values
Relating	Strategic partnerships, networks, and joint ventures with 'outsiders' with required skills and strengths
Communicating	Communication and conflict resolution processes
Navigating /Learning	Processes for continual skill development and knowledge acquisition
Innovating	Identifying unique and innovative development options
Sustaining	A range of farming and fishing practices that maintain or build the mauri of the environment.
Protecting	Protecting taonga tuku iho (i.e. sacred sites)
Building	Enhancing the mauri and therefore mana of whanau, hapu, iwi and community
Revitalizing	Supporting and strengthening Māori culture and identity

evidence is required. Following a detailed literature review practices within Maori enterprise were identified that were consistent with Maori relational values, and in turn have been recognized to increase the mauri of environmental, and societal, entities. The practices were grouped under eleven headings and are articulated in table 1.

It can be logically determined that the presence, or absence, of these practices within Maori enterprise would indicate the extent to which an enterprise was engaging in sustainable behaviour according to Maori values. In other words, monitoring and evaluating a Maori enterprise based on its practices could act as a mechanism for reporting on its sustainability from an indigenous, and more particularly Maori point of view. This type of reporting, in dashboard form, is illustrated in the figure 1.

However, practice-based reporting is limited to some extent because it is largely dependent upon the honesty of those using the reporting tool. Consequently, it is also considered necessary to establish sets of Key Performance Indicators (KPIs), which measure the outcomes of practices within an enterprise. In this way a mechanism for validating whether sustainable behaviours are in fact being practiced, or whether practices thought to give rise sustainable outcomes actually do so. Such measures would determine, according to the Maori worldview, the levels of mauri expressed by different entities (for example, the mauri of land, water, and community), and provide an evidence base for the modification, adoption, or rejection, of particular practices. An example of how a performance based dashboard could look from a Maori perspective is outlined in figure 2.
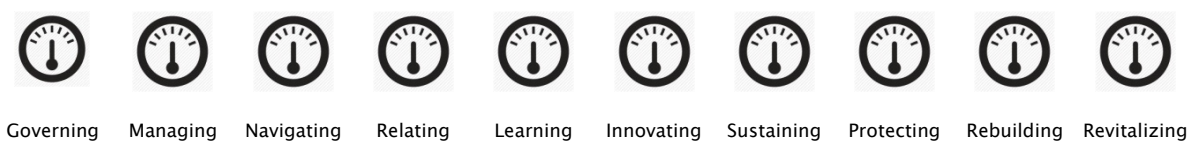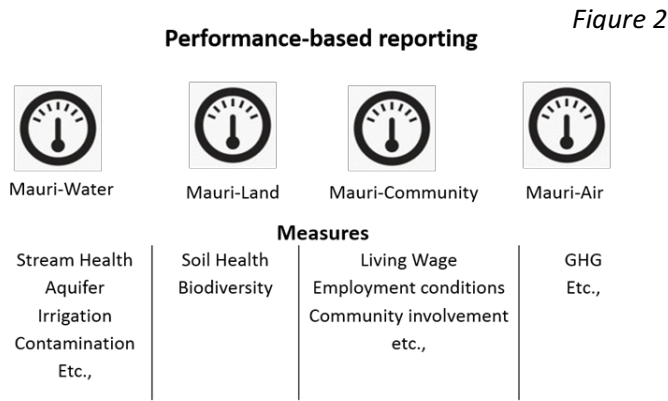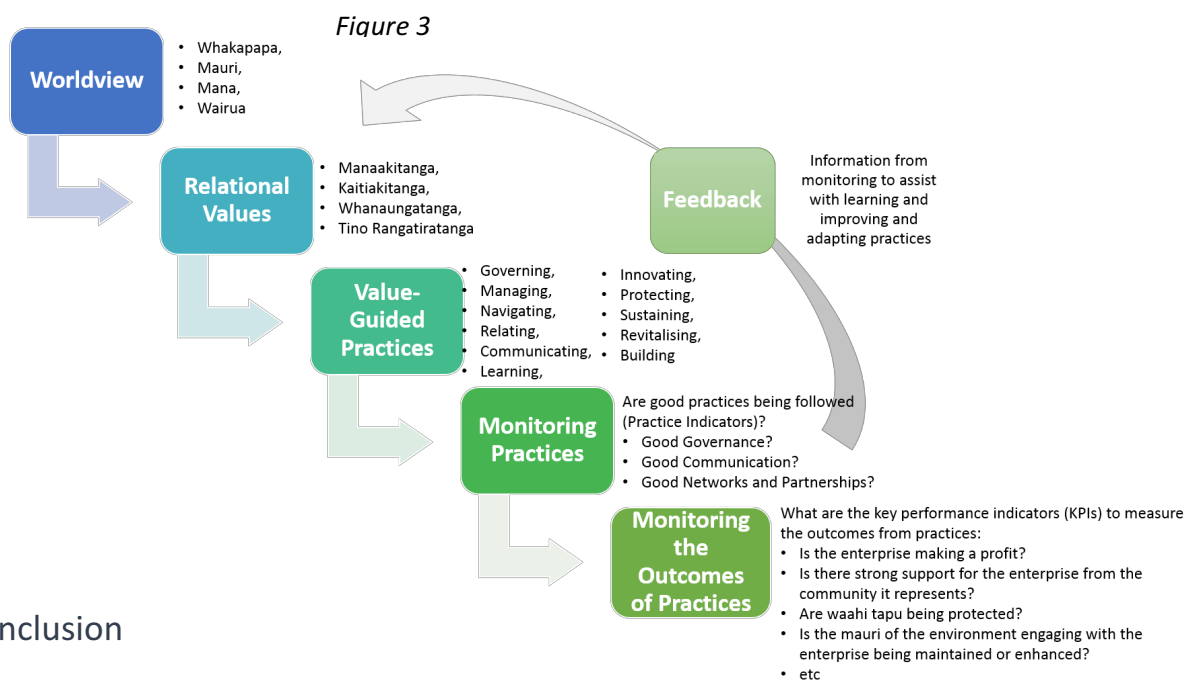

Governing　Managing　Navigating　Relating　Learning　Innovating　Sustaining　Protecting　Rebuilding　Revitalizing

Figure 1

Figure 2

Performance-based reporting

Mauri-Water	Mauri-Land	Mauri-Community	Mauri-Air

Measures

Stream Health	Soil Health	Living Wage	GHG
Aquifer	Biodiversity	Employment conditions	Etc.,
Irrigation		Community involvement	
Contamination		etc.,	
Etc.,			

Figure 3

Worldview
- Whakapapa,
- Mauri,
- Mana,
- Wairua

Relational Values
- Manaakitanga,
- Kaitiakitanga,
- Whanaungatanga,
- Tino Rangatiratanga

Value-Guided Practices
- Governing,
- Managing,
- Navigating,
- Relating,
- Communicating,
- Learning,

- Innovating,
- Protecting,
- Sustaining,
- Revitalising,
- Building

Feedback

Information from monitoring to assist with learning and improving and adapting practices

Monitoring Practices

Are good practices being followed (Practice Indicators)?
- Good Governance?
- Good Communication?
- Good Networks and Partnerships?

Monitoring the Outcomes of Practices

What are the key performance indicators (KPIs) to measure the outcomes from practices:
- Is the enterprise making a profit?
- Is there strong support for the enterprise from the community it represents?
- Are waahi tapu being protected?
- Is the mauri of the environment engaging with the enterprise being maintained or enhanced?
- etc

Conclusion

Sustainability indicators from an indigenous point of view have been constructed based on the fundamental notions of whakapapa (interconnections) and mauri (life supporting capacity). This worldview gives rise to relational values, which in turn are given effect by ethical or sustainable practices. However, it has been outlined that monitoring the outcomes of these practices is important for continually evaluating their effectiveness is generating desired results. Figure 3 illustrates the approach that has been taken to developing indigenous sustainability indicators, and the theory behind the formation of a dashboard for Maori enterprise, within the ARGOS programme.