

Statistical Frameworks and Contemporary Māori Development

A thesis submitted in partial
fulfillment of the requirements for the
Degree of Masters of Indigenous
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Declaration



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Abstract

Māori have entered a period of development that, more than ever before, requires them to explore complex options and make careful decisions about the way forward. This complexity stems from three particular areas. First, from having essentially two sets of rights, as New Zealanders and as Māori, and being active in the struggle to retain those rights. Second, from trying to define and determine development pathways that are consistent with their traditional Māori values, and which align with their desire to participate in and enjoy a modern New Zealand and a global society. Third, from attempting development within a political and societal environment that is governed by a different and dominant culture.

Māori, historically and contemporarily, have a culture that leads them to very different views of the world and development pathways than pakeha New Zealanders (D. Marsden, 1994, p. 697). Despite concerted effort and mis placed belief the Maori world view has survived and is being adopted by Maori youth. The Māori worldview sometimes collides with the view of the governing pakeha culture of New Zealand, which values rights, assets and behaviours differently.

Despite these differences and the complexities it remains important to measure progress and inform debate about best practice and future options. In this regard, statistical information is crucial, and is generally recognised as one of the currencies of development (World Summit of the Information Society, 2003). Māori increasingly desire to measure and be informed about the feasibility and progress of their development choices in a way that is relevant to their values and culture. Where a Māori view of reality is not present there is a high risk that decisions and actions will reflect a different worldview, will fail to deal with cultural complexities, and ultimately will not deliver the intended development outcomes.

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1 Introduction

1.1 Nature of this Study

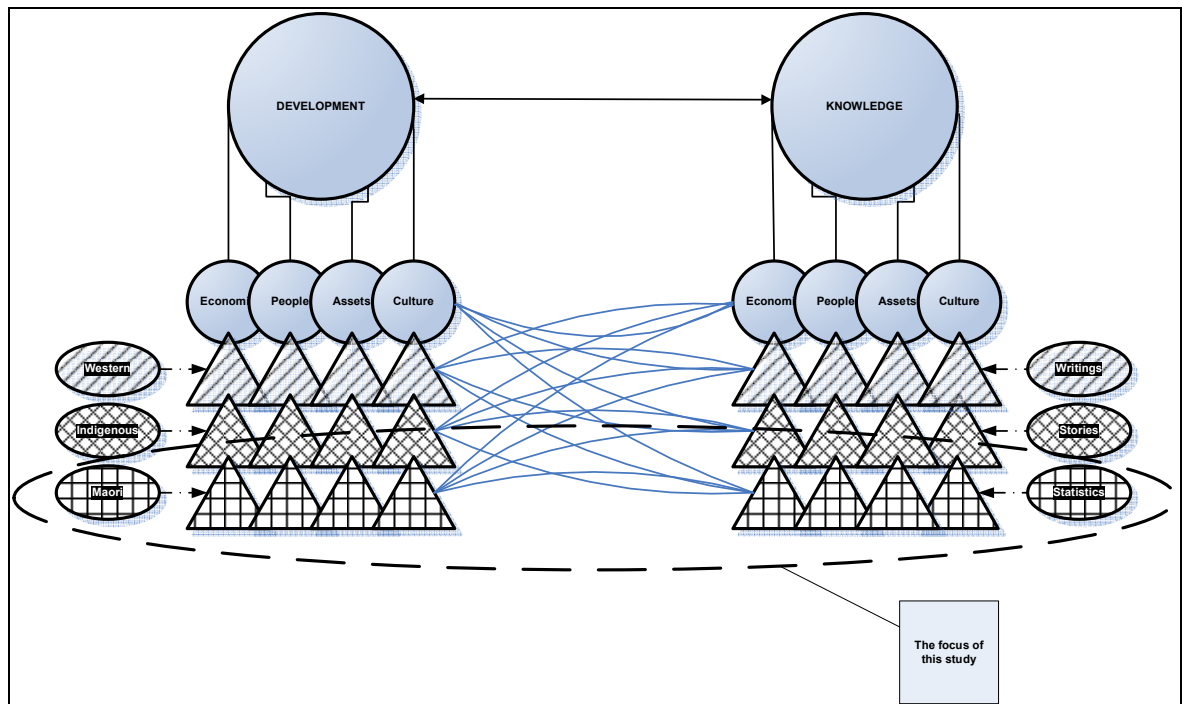
This thesis is significantly located within development theory, and assumes that good information is required in order to progress and measure development. It is from this perspective that the study seeks to explain the following:

- Development- its contemporary nature and its traditional nature;
- Indigenous and Māori development - how it accommodates elements of the dominant pakeha culture, and the challenges and complexities that arise;
- Knowledge systems – how they contribute to providing perspectives of reality from which development goals and processes arise, and influencing the measures that rate and validate development efforts.
- Statistical frameworks – how they determine which statistics will be collected and considered relevant for society, the approaches and methods that will be considered, and how accessible the statistics will be to users.

A feature of the study is a survey of the heads of major Māori development institutions to attain views, supported by their knowledge and experiences, on the use of statistical information to assess the development environment and/or measure development progress.

The diagram below shows the elements of the two conceptual components used (development and knowledge), draws the linkages and associations that exist between them, and locates the focus of this study in relation to those concepts.

Figure 1: Development and Knowledge Connections



1.2 Reasons and Justification for this Study

1.2.1 Reasons

The successful advancement of Māori is desired by Māori, the New Zealand government, and the New Zealand economy. Māori desire the fulfilment of their goals and aspirations, and acknowledgment of their rights under the Treaty and as indigenous peoples, and Government desire Māori to be productive and useful members of a society that contributes to the common good (Te Puni Kokiri, 2000b).

On the whole the success of Māori achievement as New Zealanders is mixed. There is strong evidence that interventions to address disparities between Māori and pakeha New Zealanders have not worked as well for Māori as for other New Zealanders, and have sometimes been based on misleading assumptions about Māori. The New Zealand Prime Minister identified the disparity gap as “...one of the greatest issues facing the country” and “...proposed building the

capacity of Māori and Pacific peoples and their organisations to devise their own programmes”

(Te Puni Kokiri, 2000b, p.1.). The future too looks bleak as Māori, as a section of New Zealand Society, face the effects of entrenched and long term disparity in health, education, income, housing, the labour force, and criminal justice system (Te Puni Kokiri, 2000a, p.1.; 2000c).

Unless Māori have good quality and relevant statistical information about their development they are less likely to progress as a people, and contribute as effectively to the New Zealand society and economy.

1.2.2 Justification

Statistical information is important for developing societies and is generally recognised as one of the currencies of development (World Summit of the Information Society, 2003). Despite this, there is a concern about the limited relevance of much of the official data on Māori issues (Statistics New Zealand, 2002).

1.3 Problem that this Study aims to Address

Despite recognition of the importance of statistics, it is questionable whether existing statistics and statistical frameworks deal with Māori development, and are able to accommodate the Māori worldview and the practicalities of living in a complex cultural and global environment. This is partly because statistics about Māori have generally been collected and produced as a by-product of the information collected for the entire New Zealand population (Statistics New Zealand, 2002). Consequently, the primary questions relating to this hypothesis include:

1. What are the fundamental elements and the complexities of contemporary Māori development and how might they be framed and measured?
2. Do existing statistical frameworks and methods sufficiently deal with the complexities of contemporary Māori development?

3. What are appropriate ways of, dealing with the complexities of Māori development, and providing good statistical frameworks that measure progress?

2 Literature Review

2.1 Introduction

This chapter presents the results of a literature review about the subject of development theory, Māori development, knowledge, and measuring development. Emphasis is placed on explaining the theory, followed by various perspectives from western, indigenous, and Maori worldviews. The literature review then focuses on statistical frameworks for measuring progress and informing future development decisions. Finally the chapter summarises the contribution that the literature review makes to this thesis.

2.2 Development Theory

2.2.1 The Purpose of Development

The Collins English Dictionary describes the term “development” as “...the process of: growing, advancing (to a later stage), improving (value), and following (as a result of something, e.g. an idea, concept or strategy)...” (HarperCollins, 2001, p. 215). The traditional view of societal development is where a community or society move from an underdeveloped state to one that is considered more advantageous or developed (Escobar, 1999; Staudt, 1991). The humanist view of development identifies movement to a more human economy, where the end point is qualitative human enrichment, rather than a way of increasing production or material well-being. The founder of the Economy and Humanism movement, Louis Joseph Lebreton described development as:

“...the series of transitions, for a given population and all the sub-population units which comprise it, from a less human to a more human phase, at the speediest rhythm possible, at the lowest possible cost, taking into account all the bonds of solidarity which exist (or ought to exist) among these populations and sub-populations” (1960, p.1, cited in Goulet, 1995, p.6).

Originally development was considered a topic for the field of economics. However, it has become clear that economics alone is inadequate for explaining the reasons, methods and solutions to complex and multi-faceted development issues, such as mobilisation of human capital. Consequently, the subject of development has transcended the boundaries of several disciplines including social science, human geography or sociology, applied science, plant biology and civil engineering (Goulet, 1995). The New Zealand Institute of Economic Research (2003) acknowledges that while there is an ongoing debate as to what is meant by development, it clearly means more than growth and control over goods and services.

2.2.2 The Nature of Development

In some instances the true purpose(s) of development is deliberately or inadvertently hidden from the subjects of development so as to achieve a particular economic or political agenda (Escobar, 1999; Gibbons, 1999; Kitching, 1982). Bienoff (1985, cited in Fuller & Parker, 2002) sees development initiatives as needing to be clear and transparent and able to clearly state: the purpose of development, the beneficiaries, the method, decision making processes, the disadvantaged, and how the disadvantage will eventuate.

Practitioners and academics warn that while the goals of development may have common threads, they are quite often just very different in their origins, means, and outcomes envisaged. (Boston, Dalziel, & St John, 1999; Cheyne, O'Brien, & Belgrave, 1999; Fuller & Parker, 2002; Goulet, 1995), and that “*all absolutes are not necessarily ethnocentric, and all cultural ideologies are not of equal value*” (Bidney, 1965, p. 697). Goulet (1995 p.41) describes “*Life sustenance, Esteem, and Freedom*” as being fundamental human needs that are relevant to, and sought by, all cultures pursuing development goals.

Desire for greater freedom is a strong universal goal for developing communities, especially indigenous communities that reside within an existing nation state, are involved in seeking the right to have authority and a level of independence to pursue traditional practices, and govern their estates and assets (Bidney, 1965; Blunt & Warren, 1996; M. Durie, 1998). However, Fromme (1941, cited in Goulet, 1995) warns that even amongst developed peoples, most people seek to escape from freedom, in the sense that they desire security and certainty to guard against unforeseen and harmful events. In fact, according to Fromme, (1941, cited in Goulet, 1995) communities require only the level of freedom that allows them to engage in areas in which they have competence or enjoy satisfaction.

2.2.3 Theories and Models of Development

The theory that frames development often controls the discourse that is then used for determining the purpose and method, and articulating the goals for measuring success (Wilmer, 1993).

Development discourse often tends to overlook the cultural and historical context of communities which are the very subject of development. Consequently, it is common for these communities to be confused by this discourse. This is more so for indigenous peoples who exist within and are governed by a separate nation state, where development discourse might seek to be inclusive but in reality might be dominated by the theory or cultural perspective of the governing majority. (M Durie, 2000; Fuller & Parker, 2002; Goulet, 1995; D. Marsden, 1994).

The Economist Keith Griffin concluded from his research that while there is no best path to development, there are four general orientations that guide the choice to particular strategies.

The orientations are:

- development from tradition,
- growth,
- redistribution with growth, and
- basic human needs (Griffin, 1999).

The central premise of “*development from tradition*” is that the goals and means of development must not be borrowed from countries that are already developed, but should be “...*sought from within the latent dynamism of that society’s value system – its traditional beliefs, its meaning system, its local institutions, networks of solidarity, and popular practices.*” (Goulet, 1995, p.88).

The main premise of the “*growth*” approach to development is that social energies must be galvanised around the task of growing the asset base that in turn will create wealth and further capacity for development. Consequently, “*growth*” focuses on maximising economic production, and with a lesser focus on redistributing wealth or assets (Goulet, 1995; Todaro, 1997).

The main purpose for pursuing a “*redistribution with growth*” development approach is to counter poverty and the inequities that result when wealth is accumulated. Proponents of this approach contend that equity, together with growth, must be direct objectives of any development strategy, because it provides a focus for optimising economic growth, as opposed to solely maximising wealth (Boston et al., 1999; Escobar, 1999; Goulet, 1995; Griffin, 1999).

The basic human needs development pathway is a variant on “*redistribution with growth*”. Its main difference is that it quantifies and specifies the amount of equity or redistribution that is required from investments for development and then redirects this redistribution to the poorest

sector of the developing community based on criteria that indicates their level of poverty.

Goulet (1995) notes the preference for two policy features within “*basic human needs*” strategies. The first he describes as “*an emphasis on local and national self-reliance*” and the second as “*a preference for styles of decision-making which induce non-elite populations to participate*” (p. 87).

The Reverend Māori Marsden (cited in M. Henare, 1999 p.35) used the word “tūturu” to describe the concept of “authentic and real” as opposed to “spurious”. The task of determining what is authentic or tūturu was identified as a critical factor that needs to be considered when deciding a development direction or purpose (Terena, 1995; The International Working Group for Indigenous Affairs (IWIGIA), 1994; Warren, Slikkerveer, & Brokensha, 1995; Young, 1995). Goulet (1995) believes that genuine development occurs when the fundamental values, philosophies and worldviews of the developing peoples form the basis for development, and are reflected in their development goals, strategies, and methods. Marsden (cited in M. Henare, 1999, p. 41) argues that each new generation or community should seek out “*those things that are authentic to the culture*”, and are “*...a means of revealing the truth of things in order to know what is to be done to maintain tradition and change reality*”.

Goulet (1995) highlights the complexities in attempting to identify authentic traditions and values. He also points to the dilemmas around deciding: *Who are the authentic carriers of values? How to treat values that promote class structures and divisions? How to deal with “hybrid” values that have formed from attempted reconciliations of the modern and historical environments.* (A. Durie, 1998; M Durie, 2000; Escobar, 1999; Hui Taumata, 2005). Loomis (2000) notes that improvements towards development goals are more evident when indigenous people are given greater control over their own resources, decision making power and ability, and

general management over their own development; and “...*that appropriate governance based on cultural identity and institutions, is important for successful self-determined government*” (p. 10).

Internationally, governments are now recognising the weaknesses in development programmes for indigenous peoples that focus solely or primarily on closing social and economic gaps with the rest of the population, but that lack a cultural incentive to participate (Terena, 1995).

2.2.3.1 Economic Development

Literature on economic development has been dominated by three main theories. These are: (1) linear stages of economic growth; (2) theories related to the notion of international dependence; and (3) neo-classical structural change models (Fuller & Parker, 2002).

Theories pertaining to linear stages of economic growth evolved in the 1960s and were based on the premise that countries must pass through a series of stages to achieve economic development. One of the main requirements was to acquire a sufficient level of domestic and foreign savings to ensure adequate levels of investment, that would in turn fuel economic growth (Fuller & Parker, 2002).

International dependence models gained popularity in the 1970s, following a degree of disenchantment with the linear stages and neo-classical structural change models. International dependence models took greater notice of the institutional, political, and economic environments and disparities that existed between developing countries. These models also considered the results of development that occurred when more developed countries entered into a relationship with those that were underdeveloped (Fuller & Parker, 2002).

Neo-classical structural change models developed in the 1950s, and again regained prominence in the 1980s. These models of economic development are primarily concerned with explaining

why economic development involves a changed industrial structure or environment within a country. Basically, neo classical economists viewed inefficient government intervention, rather than the impact of wealthier countries global economic activity upon the more underdeveloped nations, as being responsible for poor economic growth (Boston et al., 1999; Griffin, 1999; Kitching, 1982). Once again, savings, investment and capital accumulation are seen to be the driving forces of change associated with this model (Fuller & Parker, 2002; Griffin, 1999).

The use of knowledge and technology as a driver of economic development, shifted the emphasis away from creating wealth *per se*, and toward the ability to create wealth, with a heavy focus on developing human capital, and creating environments that attracted and supported the development of this capital (Fuller & Parker, 2002). This more recent shift befits the explanation that economic development is about aspirations, opportunities, factors of influence, and actions and strategies (NZ Institute of Economic Research, 2003).

2.2.3.2 Rights Based Development

The rights-based approach to development is popular with, but not limited to indigenous and tribal communities. Rights based development focuses on achieving a process and outcomes for full, active and meaningful participation of indigenous and tribal communities. Development opportunities need to be aligned to the rights being claimed and implemented according to community cultural values (Fukuda-Parr, 2004; United Nations Economic and Social Council, 2004).

2.2.4 Summary

The task of determining what is authentic or *tūturu* was identified as a critical factor that needs to be considered when deciding a development direction or purpose (Terena, 1995; The International Working Group for Indigenous Affairs (IWIGIA), 1994; Warren et al., 1995;

Young, 1995). Goulet (1995) believes that genuine development occurs when the fundamental values, philosophies and worldviews of the developing peoples form the basis for development and are reflected in the development goals, strategies, and methods.

The theory that frames development often controls the discourse that is then used in determining the purpose and method, and articulating the goals for measuring success. (Wilmer, 1993).

Where this discourse is not understood or accepted by the community being developed, the method, goals and success measures might never be achieved. Often the development discourse for indigenous peoples is laden with values from the developed society or nation state within which the indigenous peoples reside.

There has been a recent shift or expansion of the drivers of economic development models to include aspirations, opportunities, factors of influence, and actions and strategies (NZ Institute of Economic Research, 2003).

Aside from social and economic development models, rights based development is popular with indigenous peoples, who have lost their rights through colonisation. Rights based development focuses on achieving a process and outcomes for full, active and meaningful participation of indigenous and tribal communities.

2.3 Knowledge – and its place in development

2.3.1 The definition of knowledge

The Oxford English Dictionary uses sixteen senses to define the word knowledge. Two particular senses are:

- “true, justified belief”. In this context, “true” is described as being: “in accordance with fact or reality; rightly or strictly so called; genuine: true

love; real or actual". In the same context, "justify" is described as "prove to be right or reasonable; be a good reason for", and

- "knowledge" as "information and skills acquired through experience or education"; "the sum of what is known"; "Philosophy: true, justified belief, as opposed to opinion; awareness or familiarity gained by experience"(HarperCollins, 2001; Simpson, Weiner, & Oxford University Press, 1989).

2.3.2 Knowledge and Development

Education, knowledge, information and communication are at the core of human progress, endeavour and well-being (World Summit of the Information Society, 2003). According to the 1998/99 World Development Report, knowledge, not capital, is the key to sustainable social and economic development. Building on local knowledge, the basic component of any country's knowledge system, is the first step to mobilize such capital (The World Bank, 1998).

The ability for all to access and contribute information, ideas and knowledge is essential to an inclusive and progressive information society. Article 19 of the Universal Declaration of Human Rights, decrees that everyone has the right to freedom of opinion and expression; that this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media regardless of frontiers (United Nations Economic and Social Council, 2000; United Nations Statistics Division, 2003).

2.3.3 Indigenous Knowledge

Literature on indigenous knowledge does not provide a single definition. However, two definitions of indigenous knowledge that capture the meaning for the purpose of this study are:

- the local knowledge that is unique to a given cultural society – contrasts with the international knowledge system which is generated through the global network of universities and research institutes (Warren et al., 1995).
- the unique, traditional, local knowledge existing within and developed around specific conditions of women and men indigenous to a particular geographic area (Robertson-Shaw, 1999; Grenier, 1998, cited in Sillitoe, 2001)

Individuals within indigenous communities are generally required to have an understanding of local knowledge. This understanding provides the information needed to exist in their local community and to function and operate in relation to both spiritual and material aspects of society. It also provides them with information for dealing with the complex relationships between the spiritual and material worlds (Robertson-Shaw, 1999).

Indigenous knowledge is often seen as the source of decision making for subsistence societies, and appropriate in areas such as agriculture, health, natural resource management and similar activities. This knowledge tends to be embedded in community practices, institutions, relationships and rituals. Other features of indigenous knowledge which distinguishes it broadly from other knowledge are described as:

- local, in that it is rooted in a particular community and situated within broader cultural traditions, and experiences generated by people living in those communities.
- tacit knowledge and, therefore, not easily codifiable.
- transmitted orally, or through imitation and demonstration.
- experiential rather than theoretical knowledge - experience and trial and error, tested in the rigorous laboratory of survival of local communities.
- learned through repetition, which is a defining characteristic of tradition even when new knowledge is added. ·

- constantly changing, being produced as well as reproduced, discovered as well as lost; though it is often perceived by external observers as being somewhat static (The World Bank, 1998).

In colonial times indigenous knowledge was viewed with intrigue, but seen as a handicap to communities wishing to develop and become profitable and virtuous. This view has changed somewhat, especially amongst international agencies, where an understanding has developed amongst development institutions that indigenous knowledge is crucial to successful development.

Institutions are now insisting that indigenous knowledge is incorporated in development strategies, especially in the early problem definition and design phases (Blunt & Warren, 1996; Brush & Stabinsky, 1996; Davis, Ebbe, Hetzner, & World Bank., 1993; The International Working Group for Indigenous Affairs (IWIGIA), 1994; The World Bank, 1998; Wilmer, 1993).

The World Bank (1998) in stressing the importance of exchanging information and integrating indigenous knowledge into the development process, describe six steps that can help achieve this purpose as:

- recognition and identification of indigenous technologies and cultural values
- validation of the significance, relevance, reliability functionality of that knowledge and practice
- recording and documenting, typically exchanged through personal communication from master to apprentice, from parent
- storage in retrievable repositories
- transfer of the knowledge
- disseminating that knowledge to a wider community

2.3.4 Indigenous and Western Knowledge

The anthropologist Frances Morphy (2004, p 29-73, cited in Taylor, 2005, p.4) describes a situation where attempts were made to measure one set of social, cultural and economic systems (Indigenous, small scale), using the tools, methods, and purposes of another (mainstream, national/global). The situation involved a complex interplay between administrative and cultural processes that occurred in the census enumeration process in remote Indigenous Australian communities, where mainstream measures and methods employed in this measurement attempt were not recognised and understood by the target population, and perhaps represented a different view of values. Morphy terms the essence of this cultural and worldview discord as a “*collision of systems*”.

Taylor (2005) borrows the term “collisions” as part of a warning about what might occur from worldview discords. He argues that governments in both New Zealand and Australia are active in avoiding such collisions, because they not only recognise and act on cultural differences in populations, they also actively engage cultural communities in the process of measurement and data quality and data collection. To demonstrate, he points to recent work undertaken in the enumeration of Aboriginal populations, and by Statistics New Zealand, where both national statistical agencies are working to understand the areas of interest and methods for measuring indigenous populations (Australian Bureau of Statistics, 2000; Statistics New Zealand, 1996, 2002, 2005a).

The way that knowledge is conceptualised, and the processes that try to make sense of and understand knowledge, will very likely influence the view that is formed, the issues that are important, and ultimately any decisions that need to be made in relation to those issues (Tuhiwai-Smith, 1999). Marsden (1994, p. 49) asserts that “*All knowledge is culture based, whether it is*

classified as indigenous or not.”, and argues that the most defining factor that differentiates knowledge perspectives is our culture. Tuhiwai-Smith (1999, p. 1-2) explains that “[*The collective memory of imperialism has been perpetuated through the ways in which the knowledge about indigenous peoples was collected, classified and then represented in various ways back to the West, and then, through the eyes of the West, back to those who have been colonized*”.

Hall (1992, p. 276-320, cited in Tuhiwai-Smith, 1999, p.42) identifies language as a factor that might accentuate the difference between indigenous and western knowledge. He makes the point that research that occurs in the western world is “...*an idea or concept, a language for imagining a set of complex stories, ideas, historical events and social relationships.*”; and suggests further that these features serve to code and classify societies and societal values that relate to western styles of knowledge. Similarly, the different contextual settings, that apply to western and indigenous knowledge, are problematic in the sense that when development is defined on national and global scales, indigenous knowledge is often relegated to being “*a convenient abstraction*” that can be slotted into western paradigms, and de-contextualised (Ellen and Harris, 2000, cited in Briggs, 2005).

There is evidence of important differences between knowledge traditions around the world, and understanding these differences is vital before undertaking development (D. Marsden, 1994; Sillitoe, 2001). While common understandings exist between indigenous knowledge and western knowledge, there are strong views that see the two knowledge forms as being separated by very different views of life, such as views of dependency, relationships, spiritual and material world connections, to the extent that they are in fact separated by more than just a cultural and epistemological gulf (Briggs, 2005; Sillitoe, 2001; Tuhiwai-Smith, 1999). It is also argued that the western scientific approach cannot appreciate local practices, as it does not recognize the

spiritual elements of indigenous knowledge (D. Marsden, 1994; Sillitoe, 2001; The World Bank, 1998).

It is claimed that western based knowledge models are seen as being obsessed with measuring and “*scoring*” specific pieces of knowledge to determine the extent of proof, and thus the validity of the knowledge. The western enthusiasm with measurement can sometimes result in the focus becoming more concerned with procedural problems rather than with the substantive concerns that have given rise to these measures (Tuhiwai-Smith, 1999). For example, the process of measuring and maintaining an acceptable Consumer Price Index has, according to some economists, unfairly occupied the attention of the New Zealand Reserve Bank, and required them to take action even though conceding that such a blunt instrument may not promote economic growth.

Māori society, as discovered by English explorer, James Cook, and later visitors to New Zealand, could probably have not functioned so efficiently without sound knowledge and knowledge systems. These systems were crucial to transferring information to explain phenomena, and the dynamics and complexity of the relationships that existed to make the society function. There was strong evidence that while Māori valued knowledge, they did not treat or expose knowledge in the same way as western society. Māori prized knowledge, and often only entrusted it to a few, as seen in examples where elders selected specific members of the whānau to whom they would entrust knowledge about whakapapa or genealogy, or other aspects of tribal activity (Tuhiwai-Smith, 1999).

Similarly, western definitions strive to achieve universal understanding that transcend cultures, but are ultimately decipherable primarily by their own culture. These definitions often fail to capture the dependencies and holistic perspectives of indigenous cultures, and often seem

incapable of articulating the spirituality of concepts and items (Briggs, 2005; D. Marsden, 1994; Mead, 1994; Poovey, 1998; Sillitoe, 2001).

2.3.5 Summary

Knowledge is defined in more than one sense. It is defined as being “*true*”, such as in accordance with fact or reality, right or reasonable; or be a good reason. In another sense it is defined as information and skills acquired through experience or education. The gap between the two definitions alone is enough to cause societies to hold very different views about the value, sanctity, and use of knowledge.

In all communities and groups of people, education, knowledge, information and communication are at the core of human progress, endeavour and well-being (World Summit of the Information Society, 2003). The World Bank(1998) notes that building on local knowledge, the basic component of any country’s knowledge system, is the first step towards mobilising human capital.

In colonial times indigenous knowledge was viewed with intrigue, but seen as a handicap to communities wishing to develop and become profitable and virtuous. This view has changed somewhat with international institutions suggesting that indigenous knowledge is an integral part of the development process for local communities (Brush & Stabinsky, 1996; Davis et al., 1993; The International Working Group for Indigenous Affairs (IWIGIA), 1994; The World Bank, 1998), and many others, requiring that indigenous knowledge is incorporated in development strategies, especially in the early problem definition and design phases (Blunt & Warren, 1996; Brush & Stabinsky, 1996; Wilmer, 1993).

The main features that characterise indigenous knowledge are its local and traditional uniqueness. Indigenous knowledge tends to be embedded in community practices, institutions, relationships and rituals. This uniqueness contrasts with western knowledge, which is derived more from global sources.

The different contextual settings that apply to western and indigenous knowledge are problematic in the sense that when development is defined on national and global scales, indigenous knowledge is often relegated to “*a convenient abstraction*” that can be slotted into western paradigms, and de-contextualised (Ellen and Harris, 2000, cited in Briggs, 2005).

2.4 Components of Māori Development

2.4.1 Introduction

The Reverend Māori Marsden (Marsden, M. cited in Te Ahukaramu Charles Royal, 2003) describes a worldview as follows:

“Cultures pattern perceptions of reality into conceptualisations of what they perceive reality to be; of what is to be regarded as actual, probable, possible or impossible. These conceptualisations form what is termed the 'worldview' of a culture. The worldview is the central systematisation of conceptions of reality to which members of its culture assent and from which stems their value system. The worldview lies at the very heart of the culture, touching, interacting with and strongly influencing every aspect of the culture.”

Patterson (1992) describes the Māori worldview as a knowledge, belief and spiritual system that is the foundation to Māori society, although with differences for each hapū and iwi, while Henare (1999) believes it exists to connect iwi / Māori to their ancestral legacy and continuity of the past; and to weld them together. Mason Durie (2005) identifies relationships as defining Māori knowledge and the Māori worldview. M. Marsden (1998) describes existence, or the approach

with which Māori view life as stemming from an inherent belief that all life forms derive from a common centre. In time, the view of the world encapsulated within the stories, forms the way in which a people see their world (Te Ahukaramu Charles Royal, 2004).

The Māori worldview tends to look at the world from a holistic perspective, in that each facet of life is inter-dependent, and not as separate units unconnected with other parts of life. Māori do not accept a closed system worldview into which nothing can impinge from outside, neither do they accept concepts which distinguish between the sacred, the human and the natural (M Henare, 1998). This holistic perspective can be found in the way that Māori explain being or existence.

Western worldviews are typically described as promoting individuality, independence, and an obsession with categorisation of life forms. (Briggs, 2005; Davis et al., 1993; Fukuda-Parr, 2001; Lalonde & Akhtar, 1994; Poovey, 1998; Sillitoe, 2001).

The significance of the holistic nature of the Māori worldview is apparent in the explanation Māori give about places and objects they possess. Locations, houses, and other possessions are identified as much by their geographic location as by the significant events and the people involved. For example, most marae are named after a prominent tupuna or ancestor. Often the existence or function of these places/objects seems secondary to their relationship with the values and beliefs that comprise the Māori worldview (Best, 2005; M Henare, 2005; M. Marsden, 1998; The Mental Health Foundation of New Zealand, 1998; Tuhiwai-Smith, 2005).

Durie, A (1998) and Henare, M (1999) both refer to the need for values so that Māori can relate their own culture to those things that they encounter in today's world. The following table lists

the values identified by Henare, M (1999) as forming much of the Māori worldview. These values are explained in detail in Appendix 1.

Table 1: Values that form the Māori Worldview

Value	English Translation
Te ao mārama	Wholeness, the cosmos
Mauri	Life essence, vitalism
Tapu	Being and potentiality
Mana	Power, authority and common good
Hau	Spiritual source of obligatory reciprocity in relationships and in economics
Whānaungatanga	Belonging
Whānau	Extended family as the foundation of society
Te ao hurihuri	Change and tradition
Tika	The right way, justice
Kotahitanga	Solidarity
Kaitiakitanga	Guardianship of creation
Wairuatanga	Spirituality

(Henare, 1999, p. 39, cited in Boston et al., 1999)

2.4.2 Contemporary Māori Development

Contemporary Māori development has been characterised in different ways, primarily using social and economic descriptors to explain the fates and fortunes of Māori. A useful, and wide ranging, definition of Maori development that originated from consultation with Māori over the establishment of a framework being developed by Statistics New Zealand, is: *“a process of enablement that seeks to extend people’s scope for improving their own lives. The ultimate end*

of the process is a state of well-being, a state in which Māori have the capabilities and freedoms to live their life as they wish.”

Indeed, many Māori might subscribe to the values of, and identify with, mainstream New Zealand. They may value collective organisation, but may not see traditional iwi structures as the vehicle that is most appropriate to their form of Māori development. An example is Māori who have congregated in the urban centres, and have opted for Māori urban authorities to represent their development and political aspirations. Henare (1999, p.58) views iwi as only one “*means to an end*”, and comments further that “*the number of Māori people involved in Māori urban authorities such as Te Whānau o Waipareira is simply too great for these modern-day iwi to be excluded from Māori development initiatives*”. For whatever reasons, Māori development aspirations, governance preferences, and levels of commitment to a traditional world view are diverse and varied, and likely will be met by just as diverse and varied range of solutions and models for development (Boston et al., 1999; M Durie, 2000; NZ Institute of Economic Research, 2003).

The first Hui Taumata in 1984 launched a forum for discussing and planning for Māori development. The message from that first conference was that Māori had to be empowered to initiate, design and deliver their own solutions (H. P. Horomia, 2005). Recently, the Hui Taumata 2005 saw a need to focus on ways of accelerating Māori economic advancement, and the role of Māori, as New Zealand citizens and part of a global community.

The Hui Taumata 2005 focused on a development direction that might be seen to ignore traditional Māori values, although those proposing the direction were all strong advocates of tino rangatiratanga, whānaungatanga and other Māori values. The Hui saw Māori having a role as exporters, and being successful in business, and as global citizens. It foresaw Māori building on

existing skills around building partnerships, being innovative and exploiting the diversity of people, and being able to be active in more than one culture. The overarching messages from the Hui Taumata 2005 were:

- create a new dedication to long-term planning for future development in a global framework
- shift the focus from improving access to high achievement and quality of outcomes
- seize opportunities for collaboration and new partnerships to drive economic advancement
- increase investment activity in Māori development and business as significant contributors to the New Zealand economy
- emphasise the vital importance of urgently increasing Māori human capital to raise Māori average incomes and to drive economic growth
- create an intensive focus on growing enterprise and entrepreneurial skills - including those that are also life skills - amongst Māori
- capitalise on the exploration of Māori identity, both as a point of difference for New Zealand and an inexhaustible source of innovation and creativity
- reinforce the importance of excellent leadership and governance that will share good practice and work cooperatively (Hui Taumata, 2005).

Messages from the Hui Taumata contain elements that are reflected in the Statistics New Zealand Māori development framework. The elements include:

- expanding opportunities
- enhanced choice
- better access (for example, to Māori knowledge and institutions and to the knowledge and institutions of society generally)
- increasing participation not just in Māori areas but also in the larger economic, social, cultural and political processes

- increasing command over goods and services
- increasing self-determination

(Statistics New Zealand, 2002).

Durie (2000) proposes that Māori development is concerned not only with participation in society, enjoying comparable living standards and closing social and economic gaps, but is about developing Māori as a people, being Māori, and being part of the Māori world. Similarly, Dame Mira Szaszy (1993, cited in Boston et al., 1999) talks of sustainable social and economic development as needing an essence of being Māori based in ancestral values, which she explains as humanism based on ancient values but versed in contemporary idiom. Szaszy (1993, cited in Boston et al., 1999, p.39) goes on to say:

“Our current humanism does not seem to have found its own balance – with rich lurching forward, disposing of their cultural roots and becoming rootless, and the poor, particularly unemployed, becoming poorer without even the sustenance of cultural or spiritual strengths”.

Contemporary Māori development has occurred under the mantle of the New Zealand Government. This has meant that Māori have found themselves with what might be termed an identity struggle (Boston et al., 1999) where like so many other indigenous peoples “...*their allegiance is not just, and sometime not principally to the state, but also, or above all to an entirely different ‘nation’ , one that is often oppressed, maligned, castigated and sometimes threatened with extinction, for no other reason than the mere fact of existing with one or more nation states*” (Niezen, 1995, p. 193).

2.4.2.1 Tino Rangatiratanga and Self determination

The most common goal of indigenous peoples is the desire for self- determination, where they generally determine the goals, method, and action, usually by way of development that reflects their values and traditions. The political element in this common goal is the right to participate freely in constructive discussion with the state, about the preservation and advancement of aspects of their culture and development, for example the right to speak their own language (Mead, 1994; The International Working Group for Indigenous Affairs (IWIGIA), 1994).

Mana was a term used in He Wakaputanga o Nga Rangatira o Nu Tirene, the 1835 Declaration of Independence, to describe all sovereign power and authority (M. Durie, 1998). In that context mana was seen as describing mana motuhake, the autonomous character of authority held by Māori (Waitangi Tribunal, 1985); (Waitangi Tribunal, 1987). Māori leaders at Kohimarama, in 1860, discussed the treaty in terms of how it impacted upon the mana of the people (Orange, 1980, p. 25, cited in M Henare, 1998). In 1984 at the national hui of Māori representatives held at Tūrangawaewae Marae, Ngaruawahia, Māori leaders declared that:

Mana Tangata, Mana Wairua, Mana Whenua supersede the Treaty of Waitangi. Our dignity as people, the dignity of our spirituality, the dignity of our land supersedes the Treaty of Waitangi (Blank, Williams, & Henare, 1985, p. 2)

Tino rangatiratanga (self-determination) continues as a strong theme in Māori development.

The concept was highlighted during the landmark 1984 Māori Economic Summit Conference (Hui Taumata) as a strong development option, rather than just a political issue. Key elements of tino rangatiratanga appear to be:

- ownership and/or management of important assets
- authority or choice over decisions about goals and ways of achieving them
- sense of achievement from ones own efforts

- acceptable level of autonomy to decide, act and achieve without external restraints.

This right to self-determination is embodied in the Charter of the United Nations and the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights. Common Article 1, paragraph 1 of these Covenants provides that:

"All peoples have the rights of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development."

(The International Working Group for Indigenous Affairs (IWIGIA), 1994)

The concept of tino rangatiratanga, embodies and surpasses the right for self determination. Tino rangatiratanga is deeply rooted in sustaining the future, and in the qualities and concepts more likely to “..prepare for the next century and the well-being of their descendants” (M. Durie, 1998, p.4; Te Rūnanga o Ngāi Tahu, 2000; Te Rūnanga o Ngāi Tahu, 2001). Providing for the tino rangatiratanga of future generations is reflected in the Māori tribe Ngāi Tahu’s tribal vision - *“Tino Rangatiratanga – For us and our children after us” (Te Rūnanga o Ngāi Tahu, 2001, 2004).*

Durie (1995, p. 6), presents a contemporary view of tino rangatiratanga when he argues that, despite the different definitions and interpretations, two common facets of tino rangatiratanga are: *“the way in which control and authority are distributed within Māori society”*; and *“the way in which Māori and the Crown share power”*. Loomis (2000) notes that improvements towards development goals were more evident when indigenous people were given greater control over their own resources, decision making power and ability, and general management over their own

development. Loomis concludes that “...that appropriate governance based on cultural identity and institutions, is important for successful self-determined government” (2000 , p. 10).

2.4.2.2 Customary Rights

A significant way in which indigenous peoples exhibit and consummate their identity as a people is through the practices they undertake to gather and prepare food, celebrate and mourn, and in the places, and sites where those events occur. These practices often have connection with the spiritual world, which in many cases explain creation and give meaning to the reason for being (Mead, 1994; Terena, 1995; Warren et al., 1995).

Today there are laws, treaties, and understandings that recognise a Māori ownership and rights to have access to and observe valued practices. In the New Zealand context, customary rights pertaining to Māori, are rights that pre-date Crown sovereignty, were in existence at 1840 and have continued to be exercised from 1840 to the present day (Ministry of Justice, 2004). The Treaty of Waitangi in recognising that Māori have customary rights, also placed an obligation on the Crown to protect those rights (Hodgson, 2003; Mead, 1994). Consequently, customary rights, or the ability to access those rights, are an important element of development, and closely linked to tino rangatiratanga.

2.4.3 Summary

Every culture has a worldview, or conceptualisations of what they perceive reality to be. This worldview is an ordered system where conceptions of reality are upheld and developed into a value system. They are then made real through the further development of ethics, rules, and laws, which in turn are enforced by reward or sanction, endorsed by the group (Te Ahukaramu Charles Royal, 2003).

The worldviews of most indigenous societies are noted for the strong and long standing relationships they have with land, forests, waterways, oceans and the air. These relationships are the best example of the holistic nature, fusion, or inter-dependence of elements that are common features of indigenous worldviews. The holistic nature, strong relationships between the elements, and connection between the real and spiritual worlds are defining factors that differentiate indigenous from western worldviews (Mason Durie, 2005; M Henare, 1998), which are typically described as promoting individuality, independence, and an obsession with categorisation of life forms (Briggs, 2005; Davis et al., 1993; Fukuda-Parr, 2001; Lalonde & Akhtar, 1994; Poovey, 1998; Sillitoe, 2001).

The Māori worldview has been described as a knowledge, belief and spiritual system that is the foundation of Māori society, and which operates to connect iwi / Māori to their ancestral legacy and continuity of the past; and to weld them together (M Henare, 2005). The Māori language and other forms of artistic expression such as carving, weaving, waiata, and whakatauki play a crucial role in conveying values and connecting people with their whakapapa, papakainga, and the spiritual world.

Contemporary Māori development has occurred under the mantle of the New Zealand Government. However, Maori consistently call for the right to initiate, design and deliver their own solutions (H. P. Horomia, 2005). Alongside that call has been a Māori resurgence and reassertion that also claims the legitimacy and validity of Māori knowledge, and the Māori worldview (Briggs, 2005; D. Marsden, 1994; Sillitoe, 2001; Tuhiwai-Smith, 1999).

The most common goal of this reassertion for Māori, and other indigenous peoples, is the desire for self-determination. For Māori, this desire is expressed as tino rangatiratanga (M. H. Durie, 1995). Achievement of that goal can be measured by the extent to which Maori are able to

exercise their customary rights, including practices such as speaking their language, access to food gathering areas, and freedom to participate in cultural practices.

2.5 Measuring Development

2.5.1 Statistical Systems, Frameworks, and Methods

Over the last two decades, both in New Zealand and internationally, there has been a major shift from principled and ideological based policy development, to evidence based policy making where policy makers have had to produce research to show that their proposals are justified, and the interventions proposed are appropriate and workable. This shift has increased the demand for statistical information to support policy development and to monitor the effect of policies implemented to meet the social and economic needs of communities (Statistics New Zealand, 1996).

The shift to greater evidence based policy has also meant a greater focus on the adequacy of statistical systems to provide access to quality and relevant data. These systems generally comprise sub-systems designed to collect data, analyse and process results, and disseminate and make accessible reliable statistics (United Nations Statistics Division, 2003). In New Zealand, and globally, most data are collected through national statistical offices, supported by a national statistical system. The New Zealand official statistical system is operated by Statistics New Zealand under the direction of the Government Statistician. An important role for a statistical system, apart from producing key measures of society's progress, is to guarantee confidentiality for the providers of raw data and assurances of integrity and accessibility for users of processed data (Statistics New Zealand, 2005b).

Much of the focus around the adequacy of statistical systems has focused on the method for collecting, analysing, and storing Statistics, and the uses that can be made from using existing data sets better. However, more recently there has been a focus on the coverage and relevancy of the stock of statistics collected and questions asked about the gaps and usefulness of that stock. This focus has been brought about, in part, by indigenous communities' claims that, in general, official statistical systems do not adequately collect statistics that reflect their interests (Australian Bureau of Statistics, 2005; Briggs, 2005; Capones, 2005; Edlin, 2003; Tuhiwai-Smith, 1999, 2005; United Nations Economic and Social Council, 2004).

Statistical frameworks represent an agreed way of thinking about an area of interest and are therefore, valuable in promoting standards, consistency and comparability across data collections and between jurisdictions and sectors (Australian Bureau of Statistics, 2000). Ultimately the framework should try and capture the users worldviews and recast them in a way that renders them measurable (Statistics New Zealand, 2002).

The Australian Bureau of Statistics (2000, p. 8) observes that “*A statistical framework maps the conceptual terrain surrounding the area of interest*”. In other words, frameworks can define the scope of an inquiry, delineate the important concepts associated with a topic, and organise these into a logical structure, “*Ultimately, the content and form a framework takes will be determined by the nature and scope of the topic, the purpose of the framework, and the perspective of those designing it.*” .

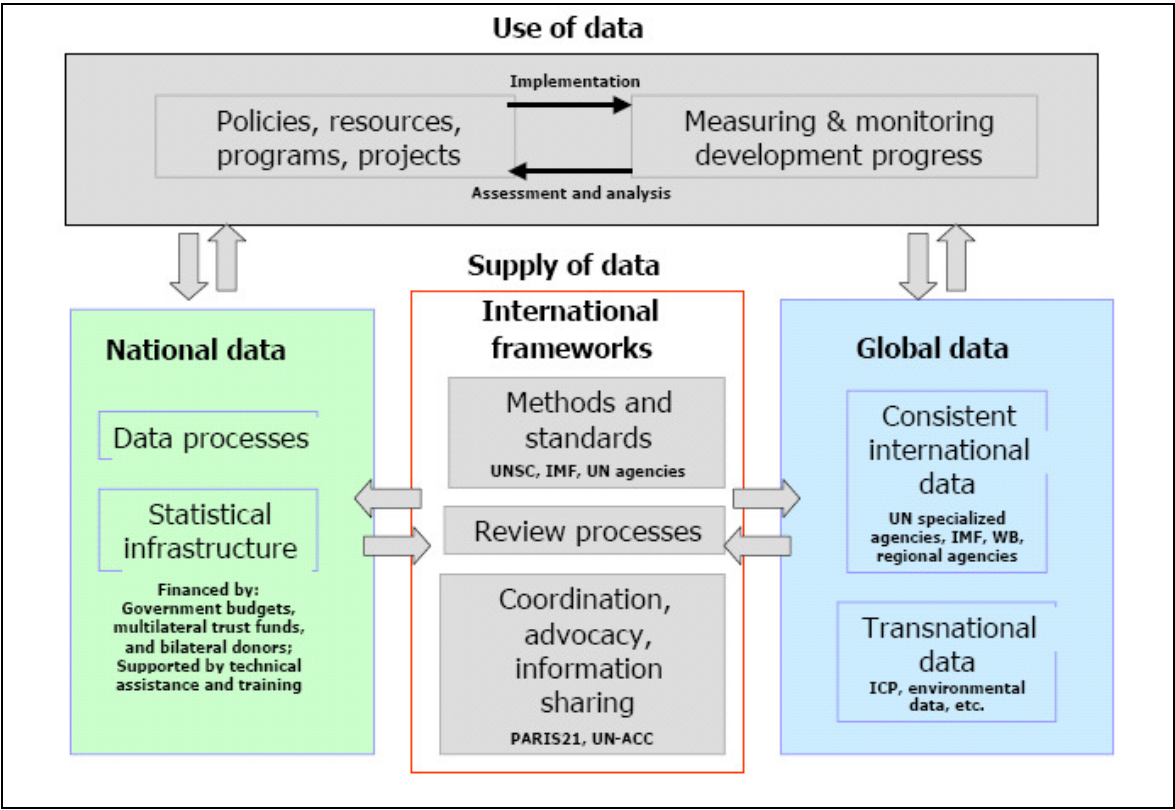
Developing a statistical framework is usually a two stage process. First, the broad goals of the community are identified, as these are almost invariably multidimensional in nature and therefore incapable of being measured. The second phase is devoted to systematically unpacking the different dimensions and organising them according to some theoretical understanding. It is the

goal dimensions that are measured by the indicator system, not the goals themselves.

Sometimes the goal dimensions are broken down into sub-dimensions and sub-dimensions into domains and outcomes. The second phase also includes identifying and selecting appropriate indicators and measures (Statistics New Zealand, 2002).

A generic framework comprising the key elements of a typical official statistical system is shown in the table below.

Figure 2: Generic Framework for a Typical Statistical System



(United Nations Department of Economic and Social Affairs Statistics Division, 2003)

When thinking information framework design, it is important to include features such as: its purpose, the definitions, classifications, methods for collecting and analysing raw data, and publications and methods for disseminating processed data. If this purpose is not recognised, or

the definitions and classification are not relevant to the purpose, then there is a large risk that the information gathered will be distorted or removed from the reality of the culture or population being measured. (M Henare, 2005; Taylor, 2005; Tuhiwai-Smith, 2005).

2.5.2 Statistical Framework - Indigenous Perspective

2.5.2.1 Philosophy and Method

Current practices for framework development vary, but generally provide pre-determined classifications of ethnicity and ancestry (Goldberg, 2005). This pre-determination has been the subject of much concern amongst indigenous populations, and has resulted in the development of internationally approved guiding principles for agencies to use in the construction of a definition of indigeneity. The principles primarily articulate that indigenous peoples include descendants of the original inhabitants of a country who retain cultural difference from that society, and who self-identify as Indigenous (The International Working Group for Indigenous Affairs (IWIGIA), 1994).

Indigenous researchers and international statistical writing stress the importance of employing methods that allow indigenous populations to engage in the design of statistical frameworks, especially decisions around classifications and measures (Economic Commission for Africa, 2004; Kukutai, 2001; Potter, 2005; Taylor, 2005; Tuhiwai-Smith, 1999). However, the claim that indigenous peoples are too often excluded from this process remains a significant concern for indigenous communities and many international bodies (Australian Bureau of Statistics, 2005; Reingold, 2005; Smillie & McGregor, 2005; Taylor, 2005; United Nations Economic and Social Council, 2004; Warren et al., 1995; Wilmer, 1993)

There is a common view, even among conservative writers, that most statistical systems retain an ethnocentric bias; since it is assumed that the western model is universal and is found in the same

way and with the same meaning all over the world (even amongst indigenous people). Some hold to the view that the identity and circumstances of indigenous peoples are ignored or distorted to achieve political ends (Cook, 2005; Kukutai, 2001; Reid & Searle, 2005; Reingold, 2005; Taylor, 2005).

Literature on the ability of generic frameworks to successfully measure indigenous peoples, employed by countries where indigenous peoples inhabit, tends to fall into three categories (Tuhiwai-Smith, 1999). The first category claims that current frameworks ignore, are ignorant of, or have not adequately captured the worldview of indigenous populations. The second claim, rejoices in the progress that is being made and points out areas where further work is required. The third approach, appears to ignore the need to adequately measure indigenous peoples on the basis that the majority, or national measures for “all people” are sufficient (Reid & Searle, 2005; Tuhiwai-Smith, 1999).

Tuhiwai Smith (1999) captures an increasingly popular view, articulated by indigenous and non-indigenous researchers, that the philosophy and design of research, including statistical, frameworks is heavily dominated by a western cultural view (M. Marsden, 1998; Mead, 1994; Sillitoe, 2001; Taylor, 2005; Terena, 1995; United Nations Economic and Social Council, 2004).

2.5.2.2 Kinship

The concept of collectivity: involving waka, iwi, hapū and whānau, along with the institution of marae; is often a difficult concept for Europeans to grasp. European cultures tend now to be organised very much around “*national blocks*” or nation states such as England (the mother land), Germany, or even Europe. Moreover, New Zealand society prefers to view the Māori experience in the context of a “national block” because it equates with their own experience of identity, and is consistent with the belief that New Zealanders are essentially homogenous or

“one people”. Thus a common view is that while practicing a culture that is distinct, Māori have been assimilated as mainstream New Zealanders and ought not to deviate too far from this mainstream.

Collectivity or kinship is a critical component of the indigenous and Māori worldview. Kinship is about unity and association. Māori thrive on identifying connections between individuals and whānau in and between all ethnic groupings. In contrast to western explanations that use the phrase "degrees of separation" between individuals, in communities and globally; Māori almost always refer to degrees of connectedness and commonality through the use of such practices as whānaungatanga and kotahitanga.

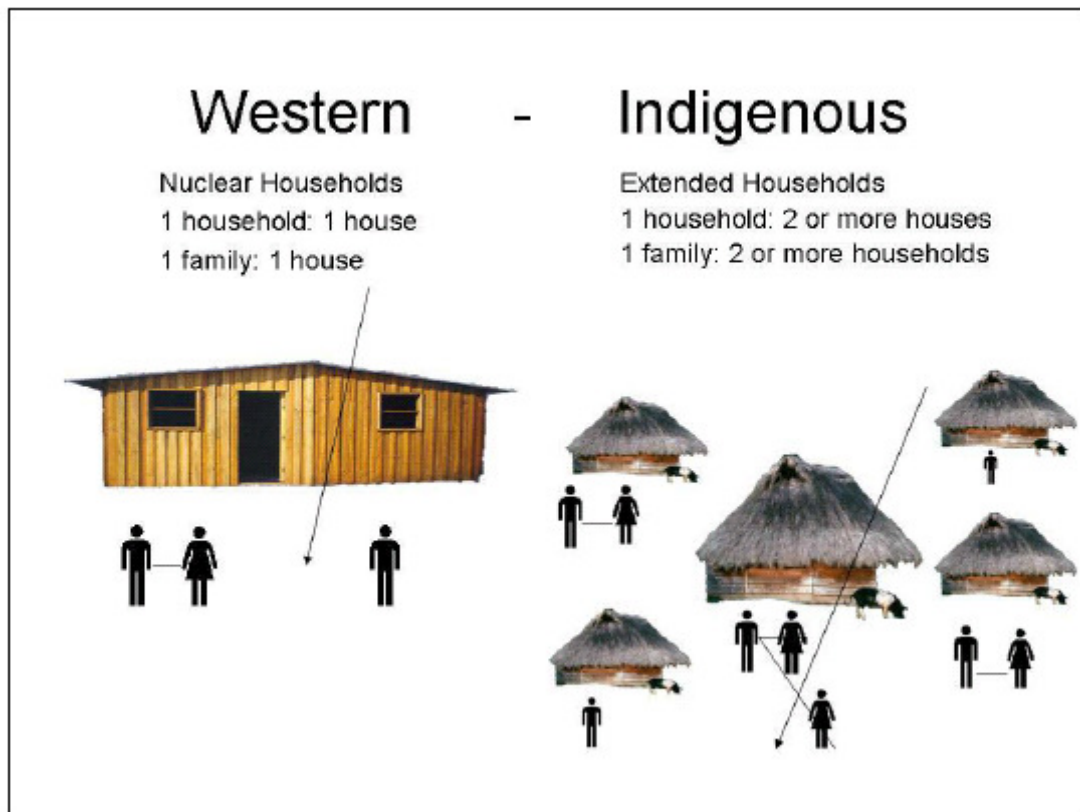
In modern industrial societies the family is one among other social organisations, which conform to the social structure. The forces of the market economy and the state provision of social services (education and health, among others) have attempted to shape “the family” into functional units that fit with the prevailing theory of social and economic fulfilment. However for many societies kinship goes beyond specific types of family and is at the core of indigenous social organisation (Del Popolo & Oyarce, 2005).

In indigenous communities and traditional kinship and family units are the social organisation and the basis of the social structure themselves. These units are usually established as part of a large lineage, and can often be key components for achieving economic and social progress (Del Popolo & Oyarce, 2005; Department of Social Welfare, 1986; M. Henare, 1999; McKinley, 1997). In many instances the fundamental role of indigenous kinship becomes blurred when the assumptions pertaining to the western specific role of the family are used to design classifications (Del Popolo & Oyarce, 2005). While it would still be possible to use basic analytical units, such as people, households and family; these need to be defined in a culturally appropriate way that is

relevant to the culture being measured (Del Popolo & Oyarce, 2005). Once again, failure to define culturally appropriate classifications, goals and objectives, can result in failure to understand the dynamics, failure to measure true progress, and ultimately failure to achieve the intended goals (Del Popolo & Oyarce, 2005; M Durie, 2000; Tuhiwai-Smith, 2005).

While kinship is considered an essential determinant when measuring the wellbeing of indigenous peoples, this is not reflected in the frameworks of many national statistical offices. In an overview of the findings of the 2004 Statistics New Zealand Report of the Review of the Measurement of Ethnicity (June 2004) it was found that: *“Ancestry in the New Zealand climate, while sometimes used as a means of ensuring rights, has not been deemed a useful tool for research and policy analysis. Ancestry is not considered as much of a determinant of social outcomes as allegiance. The review found there was a continued support for ethnicity as a key social variable”* (Potter, 2005, p. 2).

Figure 3: Difference between the concept of Kinship from Western and Indigenous perspectives



(Del Popolo & Oyarce, 2005)

Many studies, attempting to discover the successful components of Maori businesses, initially failed to comprehend the dynamics of the different kinship arrangements. Therefore it was not until later that they found that many successful small businesses operated by Maori trusts and iwi entities, were initiated and supported at a whānau or family level and not so much at the marae or corporate level, as was first claimed (NZ Institute of Economic Research, 2003; O'Sullivan, 2005; Te Puni Kokiri, 2000c).

Qualitative investigation is proposed as a way of better understanding complexity in bicultural or multicultural indigenous kinship, because it can better identify the experiences and patterns from the perspective of the subjects themselves (Del Popolo & Oyarce, 2005). Scrimshaw (1991,

cited in Del Popolo & Oyarce, 2005) suggests the need for a good understanding of such indigenous meanings and experiences is so important as to require explorative ethnographic work to be undertaken to inform the definition and design processes.

There have been a range of approaches suggested as means for improving statistical frameworks for indigenous development (Del Popolo & Oyarce, 2005; Economic Commission for Africa, 2004; Haggith & Colfer, 1999; Kukutai, 2001). Scrimshaw (1991, cited in Del Popolo & Oyarce, 2005) proposes strengthened design for indigenous research and statistical frameworks in at least three aspects:

- to define appropriate units of analysis, that is with meaning for the subjects,
- to clarify the nature of the wrong answer bias and
- to capture the dynamic perspective of the kinship and family in a way that might assist in more accurately determining progress and change overtime illuminate some questions regarding change over time, e.g. redefinition of roles among its members, and vital cycles structure, among others.

In a New Zealand Māori example of kinship there is evidence that the role of the family (whānau), as a resource owner and controller, was missed when conventional roles were attached to this unit for study purposes. Whānau are the hub of the Māori tribal structure and can comprise around 30 or more individuals consisting of children, great-grandchildren, brothers, sisters, and cousins. The whānau usually come under the guidance of one or more kaumātua representing each branch of the whānau, and sometimes led by a rangatira from that hapū. The whānau operates on a day to day basis and provides avenues for its members to have input into decisions, and to benefit from those decisions. Essentially, most decisions that contribute to the hapū and iwi are made at whānau level where the bonds of kinship and association are the strongest. (Department of Social Welfare, 1986).

2.5.2.3 Data Collection

Concerns about methods for collecting data on indigenous communities are consistently voiced in both statistical and indigenous forums (Australian Bureau of Statistics, 2005). The Permanent Forum on Indigenous Issues identified inadequate data collection and disaggregation concerning indigenous peoples as a major challenge for statistical processes and methods. The challenges included:

- Political influences on data collection;
- The imposition of varying definitions, often not recognised by indigenous peoples;
- Standard forms of questions used would not always accurately reflect the situation of indigenous peoples;
- Drifting and mobility in ethnic identity provided inconsistencies when comparing the population longitudinally;
- Inadequate or inaccurate reporting of indigenous identity;
- Lack of vital or service statistics disaggregated by ethnic group, gender and age; and
- The economic situation of indigenous peoples not being represented, because they often belonged to informal or alternative economies (United Nations Economic and Social Council, 2004).

Concerns have been raised that while there is sufficient data collected about Māori to serve the purposes of government, there is a lack of data collected for Māori to serve their needs as a developing people (Statistics New Zealand, 2002; Tuhiwai-Smith, 2005). Statistical data about Māori has been collected by successive governments since the late 1850s, with the Māori and non-Māori populations continuing to be counted separately until 1951 (Smillie & McGregor, 2005).

At a time when policy makers required information about the Māori population in order to address social inequities, Māori have become less inclined to participate in official statistical surveys. The 2001 Census in particular, recognised the low rate of Māori participation, and implemented strategies in an attempt to increase Māori participation, and improve Māori trust in the census processes and outputs. However, subsequent evaluations of the Census 2001 strategies revealed neither an improvement nor decline in Māori participation rates (Smillie & McGregor, 2005).

2.5.3 Summary

The shift to evidence based policy making has brought an increasing demand for statistical information to support policy development. The focus on information has placed statistical systems under closer scrutiny to assess their efficiency and effectiveness at providing the quality and quantity of official statistics needed. In New Zealand the official statistics system has recently been reviewed and a new model is currently being implemented.

Statistical frameworks are wide reaching. They map the scope of enquiry, define or interpret the conceptual design, and shape the structure into a logical form and in doing so dictate, what and how statistics about a given area of interest will be collected. As frameworks are generally based on a particular theoretical perspective that represents the worldview of its creator (Statistics New Zealand, 2002), it is essential that they relate to the established purpose, and the subjects and users understanding of that purpose. If they fail to capture the users worldviews and recast them in a way that would render them measurable (Statistics New Zealand, 2002), they may become irrelevant to the user and run the risk that the information gathered will be distorted or removed from the reality of the culture or population being measured (M Henare, 2005; Taylor, 2005; Tuhiwai-Smith, 2005).

Generally, statistical frameworks employed by countries with indigenous peoples, have limited success in accurately measuring the circumstances of indigenous peoples, and accurately reflecting their worldviews (Tuhiwai-Smith, 1999). Successful frameworks have reportedly involved indigenous communities in the early development stages where the areas of interest, measurements, and methods are determined (Australian Bureau of Statistics, 2005; Reingold, 2005; Smillie & McGregor, 2005; Taylor, 2005; United Nations Economic and Social Council, 2004; Warren et al., 1995; Wilmer, 1993).

In New Zealand, Māori statistics have been collected as a by-product of the information that is collected for the entire population to serve the purposes of government, and not specifically to meet Māori needs. This has caused many Māori to question the validity of the data, assumptions about their circumstances, and the policies that result from the evidence provided (O'Sullivan, 2005; Statistics New Zealand, 2002; Tuhiwai-Smith, 1999, 2005).

Overall, challenges to understanding and developing relevant statistical measures for indigenous peoples arose because of differences and discord between indigenous and non-Indigenous worldviews. In New Zealand, Māori intellectuals and organisations questioned the relevance of much of the statistical information and claimed current statistical frameworks for measuring Māori was dominated by a pakeha worldview and failed to reflect the Māori reality (Boston et al., 1999; M. Henare, 1999; Statistics New Zealand, 2002; Tuhiwai-Smith, 2005).

2.6 Issues Identified from Literature Review

This section summarises the contribution that current literature makes to this thesis.

In all communities and groups of people, education, knowledge, information and communication are at the core of human progress, endeavour and well-being (World Summit of the Information

Society, 2003). The World Bank(1998) notes that building on local knowledge, the basic component of any country's knowledge system, is the first step to mobilize human capital.

The decisions that communities make about their development theory, goals and models are influenced by the body of knowledge they have accumulated. In this regard, the task of determining what is authentic or tūturu development is reliant upon that developments relevance to the knowledge base of the developing community.

Indigenous communities have too often been the subject of development, and have seen their knowledge and practices downgraded in the face of a dominating country of culture that seeks to manage development on their behalf. In these instances it is difficult to identify whether what is occurring is genuine development, or social and cultural engineering.

Genuine development occurs when the fundamental values, philosophies and worldviews of the developing peoples form the basis for development and are reflected in the development goals, strategies, and methods. The questions: "Development for what" and "Development by whom" need to be asked in all cases where development initiatives are proposed for a community (Goulet, 1995).

In New Zealand Māori intellectuals and organisations question the relevance of much of the statistical information and claimed current statistical frameworks for measuring Māori was dominated by a pakeha worldview and failed to reflect the Māori reality (Boston et al., 1999; M. Henare, 1999; Statistics New Zealand, 2002; Tuhiwai-Smith, 2005).

The reassertion of the validity of the Māori worldview means that Māori want to measure progress toward achieving the goals formed by their worldview, especially those that relate to

self-determination and achievement of tino rangatiratanga. This is already happening in international forums, but is still being ignored or contested by many countries and organisations throughout the world (Sillitoe, 2001; Warren et al., 1995; Wilmer, 1993).

Statistical frameworks map the scope of enquiry, define or interpret the conceptual design, and shape the structure into a logical form. The relevance of statistics produced by a national statistical system is often dependent on the nature and structure of the framework that maps the scope of enquiry. The nature and structure of the framework is important because it is generally based on a particular theoretical perspective that represents the worldview of its creator (Statistics New Zealand, 2002). Successful frameworks have reportedly involved indigenous communities in the early development stages where the areas of interest, measurements, and methods are determined (Australian Bureau of Statistics, 2005; Reingold, 2005; Smillie & McGregor, 2005; Taylor, 2005; United Nations Economic and Social Council, 2004; Warren et al., 1995; Wilmer, 1993).

3 Māori Statistical Framework

This chapter presents a Māori statistical framework that seeks to measure Māori development by focusing on Māori wellbeing and measuring the goals that relate to the dimensions of well-being. The framework, currently being developed by Statistics New Zealand, aims to reflect a Māori worldview and uses definitions of Māori well-being and Māori development that were developed through extensive consultation with statistics experts, academics, iwi, Māori organisations, and interested individuals, groups and government departments (Statistics New Zealand, 2002).

3.1 Conceptual Design

The principles guiding this Māori statistical framework are:

- The framework should recognise the demographic, socio-economic and cultural diversity of Māori and different realities that characterise Māori society.
- Māori cultural institutions and both traditional and modern resources should be included among the units of measurement.
- Māori should be recognised as both consumers/users and producers/providers of goods and services.
- The cultural attributes and socio-economic circumstances of an individual's household should be treated as standard analytical variables.
- Information should be collected and captured at the finest geographic level.
- As far as possible, standard definitions and classifications should be employed to ensure sectoral integration.
- The interconnectedness of Māori development and the development of the nation as a whole should be acknowledged by the establishment of linkages between the Māori statistical framework and the larger population, social and economic databases.

(Statistics New Zealand, 2002)

Statistics New Zealand advises that work on an earlier draft framework eventually floundered because not enough attention was given to conceptual matters, particularly defining Māori development. A second paper, presented in November 2000, argued that any resulting framework should reflect a Māori worldview. Following agreement to the concept papers, a third paper seeking agreement on the definitions of Māori well-being and Māori development from a Māori perspective was submitted to the Statistics New Zealand Māori Forum in March 2001 (Statistics New Zealand, 2002).

At a conceptual level, the framework adopted a capabilities approach which it adapted from the United Nations Development Programme's human development approach to the measurement of progress. This approach was considered as containing sufficient flexibility to recognise diversity among and within cultures, and able to accommodate non-western worldviews. Besides recognising cultural diversity, the capabilities approach was viewed as being consistent with Māori thinking in several other respects, including:

- ability to be adapted to development at the collective and societal levels, recognises multiple realities, and acknowledge the fluidity, complexity and diversity of Māori society;
- inclusion of issues such as freedom, security and the empowerment and participation of people, are key themes, which were overlooked by other approaches;
- inclusion of a rights-based, rather than needs-based, approach without discounting the fact that basic needs have to be satisfied in order for people to choose and realise the kind of life they want to live;
- recognition of the critical role that government plays, and the obligations that the rest of society and the world have in enabling a people's development.

(Statistics New Zealand, 2002, p.5)

On the basis of the review of literature the concept offered by this framework appears to be highly appropriate, with potential to develop a strong tool for measuring indigenous and Māori development.

3.2 Structure

Having determined a conceptual approach, the next step was to define the dimensions, or areas of interest of Māori development to be measured. After considering a number of works and conferences on the matter, the Statistics New Zealand Māori Forum opted for a list based on a paper presented to the 2000 DevNet Conference by Margaret Forster (Forster, 2000, Statistics New Zealand, 2002)

Forster's paper suggested that there are four main goals of Māori development. These are: cultural affirmation, social well-being, economic self-determination, and self-determination.

Later the list was extended to include human capital. The resulting list was:

- Sustainability of Te Ao Māori
- Social capability (since 'capital' is a word that Māori would not use in relation to people and social relations, and capability is more in keeping with the general approach being taken)
- Human resource potential (and not human capital)
- Economic self-determination
- Environmental sustainability
- Empowerment and enablement.

(Forster, 2000, Statistics New Zealand, 2002, p. 6)

The framework then proposed a structure based on areas of interest, goal dimensions of well-being, and measurement dimensions to establish the broad information requirements. Areas of interest correspond to important aspects of the quality of life or well-being. Each of the goal dimensions was identified and differentiated into areas of interest so that for example, Māori language was seen as a component of Te Ao Māori (Statistics New Zealand, 2002).

The broad measurement categories were derived from the goal dimensions within each area of interest, by identifying outcomes for each area of interest and specifying the statistical outputs needed to measure each goal. Because value judgements were involved in selecting these measurements, the project team spent some time closely examining fundamental Māori values such as, manaaki, hau, whānaungatanga and kaitiakitanga (Statistics New Zealand, 2002).

This framework, which is set out in full in Appendix 2, forms the basis of a survey of Māori development practitioners that is presented in the following chapter.

4 Survey

4.1 Introduction

The purpose of the survey was to obtain information about the experiences of Māori development practitioners when they sought to obtain and usefully apply statistics (or information based on statistics) to inform, measure or better understand Māori development issues. For the purposes of the survey, the term “*statistics*” meant either: raw data e.g. tables of numbers; and/or explanations and analysis of statistics.

4.2 Context

Organisations involved in all aspects of tribal development, such as Te Rūnanga o Ngāi Tahu or Tainui use a range of demographic, economic, and environmental statistics to determine the circumstances of their people, state of their assets, and economic and business opportunities. Smaller trusts or entities with more specific mandates, such as land trusts, or health providers, may seek statistics about land use or Māori health outcomes. These, like any organisation, require good access to statistics that are relevant to their business.

The ability to access statistics that are relevant to the user is one of the most important qualities required of a statistical system. The recently published Statement of Principles for Tier 1 Statistics Producers (Statistics New Zealand, 2006), was provided for government departments that produce Tier 1 (key) statistics for the New Zealand Official Statistics system. These principles, contained in Appendix 3, are internationally sourced, and include amongst other things, relevancy and accessibility.

4.2.1 Relevance

The more detailed description of the *Statement of Principles for Tier 1 Statistics Producers*

Principle for Relevance is as follows:

- Official statistics produced by government agencies are relevant to the current and prospective user requirements in government and in the wider community.
- Official statistics are one of the cornerstones of good government and public confidence in good government. Our community needs information about the society we live in, the state of our economy and environment, and our position in the world. International agencies use statistics to measure our social and economic position in relation to other countries and international markets use statistics to monitor financial stability. To meet the test of practical utility, statistics must be relevant and in a form that facilitates easy and correct use.

Key elements of the relevance principle:

- Official statistics meet the needs of government, business and the community, within available resources.
- Official statistics have clear objectives and identify the information needs that they are attempting to address.
- Development and implementation of statistical policy and programmes is based on effective consultation and meets intended primary end users' expectations.
- Statistical work programmes are periodically reviewed to ensure their relevance. Ongoing statistics are regularly assessed to justify their continuation (Statistics New Zealand, 2006).

4.2.2 Accessibility

The more detailed description of the *Statement of Principles for Tier 1 Statistics Producers*

Principle for Accessibility is as follows:

Official statistics should be published, as it is only when they are published that official statistics can benefit a society and its citizens. Publication of data also serves to enhance trust in official statistics. Statistical information is more valuable if it is easily accessed by users, presented in a format that suits users' purposes, and is sufficiently documented for users to understand the data and judge the quality of the fit.

Key elements of the accessibility principle:

Tier 1 statistics producers will ensure equality of access.

- Statistics are presented in a clear and understandable manner and are widely disseminated.
- Release of Tier 1 statistics is by the chief executive of the producing agency according to a calendar of release dates published at least six months in advance.
- The timing of a release is not influenced by the content of the release or set in such a way as to create an advantage to any particular group or individual.
- Because of the potential for financial, political or other gain, strict security is maintained during the preparation and prior to the release of key results.
- As much detail as is reliable and practicable is made available, subject to legal and confidentiality constraints. This includes information about the quality of the data and other relevant metadata.
- In facilitating statistical use of data it is important to keep identifiable information secure and confidential.

- Statistics intended for the broader public are easy to read and do not mislead. Statistical commentary, tables and graphs intended for general use are compiled with a view to their general interest value, impartiality and cost-effectiveness.
- As far as is reasonably possible, the price of statistics products will not be a barrier to access (Statistics New Zealand, 2006).

4.3 Method

4.3.1 Survey Design

The survey questionnaire contained two sections. Section 1 focused on the accessibility of statistics, while Section 2 focused on the relevancy of the statistics. The survey explained:

- Access as: accessing statistics from government agencies, research institutions, and tertiary institutions, and
- Relevance as: relevancy of statistics for measuring and better understanding your organisations Maori development issues.

The contents of both sections are discussed below.

The list of statistics (refer Appendix 4), from which respondents could choose, matched the areas of interest and measurement dimensions used in the draft Māori Statistics Framework designed by Statistics New Zealand that is discussed in detail earlier in this paper. The measurement dimensions specified the actual statistics that a Māori development practitioner might seek to access and make sense of for purposes of measuring progress, or achieving a better understanding. For example, an area of interest such as: Māori Customary Practices and Traditions, included three separate measurement dimensions which the survey respondent was asked to provide a rate in terms of interest, accessibility, and relevance. These dimensions were:

- Māori customary practices and traditions- type, extent of use, where taught, where practiced
- Māori customary practices and traditions- expenditure by users, government, institutions.
- Māori customary practices and traditions- information about teachers

In most instances the areas of interest is made up of the following category of sub-components:

- type, e.g. income, expenditure,
- use, e.g. how utilised,
- expenditure – total costs of purchasing service or product,
- demand, - demand for service product, and
- capability and workforce.

4.3.1.1 Section 1 – Accessing Statistics

The first part of the survey (Section 1) aimed (as articulated in its purpose statement) to: *“better understand how easy or difficult it was for your organisation to access statistics to inform you about Maori development issues”*.

Respondents were asked to:

- first, identify the statistics that they had previously or are currently attempting to locate or obtain to inform their organisation about Maori development issues.
- then indicate the ease or difficulty of locating and obtaining those statistics by ticking one box from the following categories:
 1. Easy to access
 2. Hard to access
 3. Could not access

4. Don't know

4.3.1.2 Section 2 – Relevancy of Statistics

The second part of the survey (Section 2) (as articulated in its purpose statement) aimed to: better understand how relevant statistics are to the Maori development issues related to your organisation.

Respondents were asked to:

- first, tick the statistics that their organisation had used in the past 12 months to better understand Maori development issues
- then, indicate how well these statistics helped explain the Māori development issues that their organisation needs to know about, by ticking one box from the following categories:
 1. Related well
 2. Related partially
 3. Did not relate
 4. Don't know

A hard copy of the survey form is attached as Appendix 4.

4.3.1.3 Sampling and Data Collection

The survey population consisted of Chief Executives, Managers and Research officers identified from a list of Māori organisations (Tuhi Tuhi Communications, 2006) and confirmed as being involved in Māori development, and in collecting and analysing information for their organisations. The sampling process was structured to identify organisations involved in different types and scales of Māori development. The areas were:

- Iwi or tribal organisations
- Pan tribal organisations

- Government based organisations
- Locally / regionally based trusts or service providers.

A sample of 30 potential respondents was drawn from the survey population list. The members forming the sample had met the initial criteria explained earlier, and had:

- confirmed an interest or a practice of obtaining statistics for Māori development purposes,
- were willing to participate in the survey,
- were capable i.e. had internet access and knowledge and experience of working with email and online programmes.

The link to the survey form was emailed to respondents. Upon activating the link in the email, respondents were able to register and start responding to the survey. If required, respondents could pause and return to the survey at any point. This method was chosen after considering the characteristics of the sample frame, particularly their ability to access the internet, time pressures, and the budget and time pressures of the survey manager.

The data collection method can be summarised as follows:

- Respondents listed on the sample frame were contacted by telephone to gauge their initial suitability as a user of statistics for Māori development purposes; and willingness and ability to undertake the survey over the internet.
- Respondents were then emailed the survey in the form of a fully automated online survey.
- Telephone connection was made with respondents to confirm receipt and address any concerns.
- Follow-up reminder emails were sent after 2 weeks and again after 3 weeks (where required).

- Telephone contact was made with respondents who had not submitted surveys following two weeks after the second email.

The returned survey forms were printed and copies retained for security purposes. The data was also retained online where automatic analysis occurred through the programmes data analysis tools. Where the textual response was unclear, respondents were contacted and asked for clarification.

The survey attracted a 60% (18 respondents) response rate from the sample frame of 30 potential respondents. The main reasons for non-response were competing priorities and time pressures. Many potential respondents were keen to complete the survey, but cited lack of staff as an issue that required them to attend to an increasing work load. Two respondents cited problems with accessing the survey as reasons for non-response.

4.3.1.4 Data Analysis

The raw data for this survey consisted of:

- selection of statistics (from area of interest measurement dimensions) that the respondent had attempted, or is currently attempting, to locate or obtain to inform their organisation about Maori development issues,
- rating on the accessibility for each of the above dimensions,
- selection of statistics (from area of interest measurement dimensions) that the respondents organisation had used in the past 12 months to better understand Maori development issues,
- rating on the relevancy of each of the above dimensions.

The data for each dimension were calculated to determine quantity and comparisons between dimensions. The analysis was conducted through a combination of analysis tools incorporated

within the Question Pro survey management programme, and through manual calculation using formula within Microsoft Excel spreadsheets.

4.3.1.4.1 Weighted Score for Relevancy

A peer review of the data raised concerns that the calculations for relevancy may not provide an accurate picture of the overall ease or difficulty related to the statistic or dimension. The question posed was how would you compare a dimension that did not receive a “relating well” score, but was rated, by many, as “relating partially”; to another dimension that was rated by half of the respondents as “relating well”, and the other half as “relating partially”.

To address this concern, a weighted score mechanism was designed. This mechanism accorded weightings to the ratings in the survey as follows: “related well = 100%; “related partially” = 50%; “Did not relate” = -100%. The following example shows how the rating system might work.

Table 2 Comparison of survey rating by respondent and weighted score method

	Survey rating by respondents	Weighted Score
Related Well	28%	28
Related partially	61%	30.5
Did not relate	11%	-11
Total	n/a	47.5

The weighted score for this statistic would be calculated by halving the “Related partially” percentage to 30.5%, adding this to the “Related Well” rating (of 28%) to equal 58%, and subtracting the “did not relate” (11%) to give a total weighted score of 47.5 which is a comparatively high score for relevancy:

4.4 Survey Results

4.4.1 Access

An average of 58% of all 18 respondents sought to locate or obtain statistics to inform their organisation about Maori development issues. Statistics for Iwi Population (94%), and Māori land (92%) were the most popular areas of interest followed by Political Issues (75%), Wellbeing – Health (67%), Housing (67%), and Wahi Taonga and Wahi Tapu (67%). Social Connections (41%) and Maori customary practices and traditions (33%) were the least popular areas of interest.

The following table shows the number of respondents that accessed statistics relating to a particular Areas of Interest relating to Māori development.

Table 3: Respondent Access of Statistics Relating to Areas of Māori Development

Area of Interest (AOI)	Number of respondents who accessed statistics relation to AOI	Proportion of respondents accessing AOI as % of Survey Sample Frame	Frequency that statistics from all dimensions within AOI were accessed
Iwi Population	17	94%	51
Māori Land	17	92%	33
Political Issues	14	75%	27
Wellbeing - Health	12	67%	36
Housing	12	67%	24
Wahi Taonga and Wahi Tapū	12	67%	24
Māori Population	11	61%	33
Māori Business	11	58%	21
Income, Expenditure & Work	9	50%	27

Area of Interest (AOI)	Number of respondents who accessed statistics relation to AOI	Proportion of respondents accessing AOI as % of Survey Sample Frame	Frequency that statistics from all dimensions within AOI were accessed
Learning and Education	9	50%	27
Māori - Treaty Rights	9	50%	18
Māori Language	9	50%	18
Marae	9	47%	17
Social Issues	8	44%	24
Families and Households	8	44%	24
Social Connections	7	41%	22
Māori customary practices & traditions	6	33%	18
TOTAL	178	58%	444

4.4.1.1 Evaluation of Accessibility

The following table shows how respondents rated the accessibility of statistics in particular areas of interest. The areas of interest listed in this table are aggregated from the full list of statistical areas of interest presented in the survey. The full list is contained in Appendix 4 – Section 1.

Table 4: Accessibility of Māori Development Statistics

	Easy to access	Hard to access	Could not access	Don't Know
Māori Population	55%	45%	0%	0%
Iwi Population	53%	35%	12%	0%
Māori Land	45%	55%	0%	0%
Families and Households	38%	63%	0%	0%
Social Issues	38%	63%	0%	0%
Wahi Taonga and Wahi Tapu	38%	25%	25%	13%
Learning and Education	33%	67%	0%	0%
Māori - Treaty Rights	33%	67%	0%	0%
Marae	29%	59%	12%	0%
Income, Expenditure & Work	22%	78%	0%	0%
Maori Language	17%	83%	0%	0%
Wellbeing - Health	17%	67%	0%	17%
Social Connections	14%	59%	27%	0%
Housing	13%	88%	0%	0%
Māori customary practices and traditions	11%	83%	6%	0%
Māori Business	0%	100%	0%	0%
Political Issues	0%	78%	22%	0%
None of the above	0%	0%	0%	0%
Average	27%	65%	6%	2%

Overall, an average of 65% (12) of the survey respondents found statistics about Māori development were “hard to access” i.e. they could not be easily located using a range of search and enquiry methods. However, an average of 27% (5) of respondents rated statistics about Māori development as “easy to access”, i.e. they could be located using one or more of a range of search methods. On average, 6% (1) of respondents rated statistics about Māori development as “could not access”.

Māori Business statistics stood out because they were rated as “hard to access” by 100% (18) of respondents. Other statistics which earned high ratings for being hard to access included Housing (88%(16)), Māori Language (83%(15)), and Māori Custom and Practice (83%(15)), especially in relation to statistics for: *Maori customary practices and traditions - type, extent of use, where taught, where practiced*.

Statistics relating to Māori population (55%(10)), Iwi population (53%(9)), and Māori land (45%(8)) rated highest, but not significantly, amongst statistics that were “easy to access”.

Respondents provided some written comments about their experiences when accessing Māori development statistics. In response to the following question, the most common responses are listed below. *Please provide comments on the general ease/difficulty of obtaining statistics that inform on the issues of Maori development.*

- Obtaining statistics for Māori development purposes was difficult. They saw these statistics as being a low priority for information providers. Where the statistics were accessible, they were often not updated. Census data was seen as accessible, but quickly became out of date.
- Figures available on Statistics New Zealand’s website as reasonably accessible. Other websites required more work to locate the statistics needed.

- Statistics were seen as not geared towards Iwi development needs. In particular the way these statistics were gathered and presented made it hard to provide information on the dynamics of iwi members into and out of the different cultural settings that they move.
- Official statistics and the agencies that were responsible for collecting them were not easy to locate.
- The language used by government agencies to describe statistics was often too technical and not consistent across agencies.

4.4.2 Relevancy to Māori Development

4.4.2.1 Analysis of Use

An average of 50% of all 18 respondents identified that their organisations had used statistics they accessed over the past 12 months, to better understand Maori development issues. Statistics for Iwi Population (59%(11)), and Māori-Treaty Rights (58%(10)) were the most used; followed by Wellbeing – Health (57%(10)), Social Issues (57%(10)), and Social Connections (56%(10)). Statistics from the AOIs for Families and Households (37%(6)) were identified as the least used by survey respondents.

The following table shows the number of respondents that used statistics relating to a particular Areas of Interest relating to Māori development, that they accessed over the past 12 months.

Table 5: Respondent Use of Statistics Relating to Areas of Māori Development

Area of Interest (AOI)	Number of respondents who used AOI statistics	Proportion of respondents using AOI statistics as % of Survey Sample Frame	Frequency that statistics from all dimensions within AOI were used
Iwi Population	11	59%	32
Māori - Treaty Rights	11	58%	21
Wellbeing - Health	10	57%	31
Social Issues	10	57%	31

Area of Interest (AOI)	Number of respondents who used AOI statistics	Proportion of respondents using AOI statistics as % of Survey Sample Frame	Frequency that statistics from all dimensions within AOI were used
Social Connections	10	56%	30
Housing	10	53%	19
Māori Land	10	53%	19
Political Issues	9	50%	18
Wahi Taonga and Wahi Tapu	9	50%	18
Income, Expenditure & Work	9	50%	27
Māori Population	8	46%	25
Learning and Education	8	46%	25
Māori Business	8	44%	16
Maori customary practices & traditions	8	43%	23
Maori Language	8	42%	15
Marae	8	42%	15
Families and Households	7	37%	20
TOTAL	152	50%	385

4.4.2.2 Evaluation of Relevancy

The following table shows the areas of interest rated by respondents, and scored using the weighted score for relevancy explained previously. The areas of interest listed in this table are aggregated from the full list of statistical areas of interest presented in the survey. The full list is contained in Appendix 4 – Section 2.

Table 6: Relevancy of Māori Development Statistics

Area of Interest	Related well	Related partially	Did not relate	Don't Know	Weighted Score
Māori Population	60%	40%	0%	0%	80%
Social Issues	32%	68%	0%	0%	66%
Housing	21%	79%	0%	0%	58%
Māori - Treaty Rights	14%	86%	0%	0%	57%
Learning and Education	12%	88%	0%	0%	56%
Families and Households	10%	90%	0%	0%	55%
Social Connections	10%	90%	0%	0%	55%
Income, Expenditure & Work	11%	89%	0%	0%	55%
Iwi Population	28%	66%	6%	0%	55%
Māori Business	0%	100%	0%	0%	50%
Maori Language	0%	100%	0%	0%	50%
Political Issues	28%	61%	11%	0%	47%
Marae	33%	53%	13%	0%	45%
Māori Land	53%	26%	21%	0%	45%

Wahi Taonga and Wahi Tapu	6%	83%	11%	0%	34%
Maori customary practices and traditions	13%	70%	17%	0%	31%
Wellbeing - Health	0%	86%	14%	0%	29%
None of the above	0%	0%	0%	0%	0%
Average	19%	75%	6%	0%	51%

Overall an average of 75% (14) of the survey respondents, who had used statistics as a means of better understanding or measuring dimensions of Māori development, rated this data / analysis as only partially relating to their area of Māori development. In comparison, an average of 19% (3) of the respondents rated the data / analysis used as relating well, meaning it served the intended purpose, while a smaller proportion of 6% (1) of respondents in this group rated the statistics / analysis used as having no relationship to the aspect of Māori development they were researching.

Statistics / analysis on Māori population and Māori land were rated as relating well by the highest proportion (over 50% (9)) of respondents. Statistics / analysis on Māori Business, Māori Language, Families and Households, Social Connection were highly rated (90% - 100%) as relating partially to that particular area of Māori development. However, using the above weighted score for relevancy (described in Table 2 above), statistical data for Māori population (80) followed by Social Issues (66) received the highest score for relating to Māori development, while statistics / analysis for Wellbeing – Health (29), Maori customary practices and traditions (31), and Wahi Taonga and Wahi Tapu (34).

Some statistics / analysis were rated as both relating well and not relating to aspects of Māori development. Statistics / analysis for Māori land stood out in this category, with 53% (10) of respondents rated this area as relating well, 26% (5) as relating partially, while conversely 21% (4) rated it as not relating to their aspect of Māori development. The weighted score for Māori

land was 45. Statistics / analysis for marae, political issues, and wahi taonga and wahi tapu were also subject to this phenomenon, although not as acute.

Respondents provided some written comments about their experiences when using Māori development statistics. Responses to the question - *Please provide comment on the general relevancy of statistics to the issues of Maori development*, are listed below:

- Generally statistics are not responsive to issues of Maori Development and if they are, deciphering them to suit our needs can be cumbersome.
- These (population) statistics are very relevant as they allow Maori Legal Services to target future law-related education programmes for Maori and their whānau within the Wellington region.
- Government has a wealth of information that is not always suited to our (Māori development) needs or requirements - we need our own research and research capability as a matter of priority.
- Statistical information is required by funders when making applications. Data needs to be relevant for this purpose, or it is of limited use to us

4.4.3 Summary

4.4.3.1 Access

The majority of Māori development practitioners found Māori development statistics hard to access. They believed this difficulty was due to Māori development statistics being of a lower priority to the main statistical producers, and a lack of understanding about the dynamics of Māori development and iwi development. Some respondents commented on the language used to describe statistics as being a barrier to accessibility.

Where the statistical needs of Māori development practitioners coincided with those of the main statistical users e.g. government, then these statistics were rated as easy to access. This occurred

in the areas of Māori and iwi demographics, and in areas where concerted efforts had been made to establish databases of statistics, such as Māori land ownership. .

Statistics that related to customary cultural practices, political areas of interest, which included indigenous rights, and social connection concerning the dynamics of family, whānau, and urban Māori connections, all featured highly amongst those statistics that could not be accessed by some practitioners.

4.4.3.2 Relevancy

On average, most (75%) Māori development practitioners found Māori development statistics related partially to the Māori development issues of their organisation. They believed statistics were generally unresponsive to their needs.

Only 20% of practitioners rated the statistics they used related well to the purpose of the organisations they served. This 20% average was heavily influenced by the large proportion (60%) of respondents who rated Māori population statistics as ‘relating well’.

Māori demographic statistics were seen as highly relevant to the needs of practitioners, and once again the influence of a national statistical office meeting user needs in these areas appears to have influenced respondent’s ratings. However, this type of statistic stood out as unusual.

Amongst the significant statistical data produced by government the relevance to Māori development needs and the understanding of Māori and iwi dynamics was noted by some respondents as low.

4.5 Constraints of Study

This study was empirical in nature, as it relies on the experiences of Māori development practitioners and judgements they make about the accessibility and relevance of Māori statistics to Māori development. The assessment of these experiences is not intended to provide definitive answers to the questions posed in chapter one, but to gain first hand information from practitioners about accessibility and the relevance of statistics. In this sense the survey goes part way to responding to the problem statement - question 2: *Do existing statistical frameworks and methods sufficiently deal with the complexities of contemporary Māori development?*

Survey coverage was limited to a sample frame of 30. This was a deliberate strategy given the resources and time available. A larger sample frame would have been preferable because it would have provided greater accuracy of results, and possibly greater insight into the issues of concern to statistics and Māori development.

The way in which commentaries were collected could also be a limiting factor to this study.

These were provided in response to specific questions as opposed to interviews that might have clarified terminology, and investigated other relevant issues raised in discussion.

4.6 Conclusion from Survey Results

The purpose of this survey was to obtain information about the experiences of Māori development practitioners when they sought to obtain and usefully apply statistics (or information based on statistics) to inform, measure or better understand Maori development issues.

There are three scenarios that play out from the results of this study, and the experiences of Māori development practitioners who seek to be informed, to measure or to better understand Maori development issues. The scenarios are:

- There are significant concerns with the relevance and accessibility of statistics available, or that should be available.
- There is evidence that some statistical data is highly relevant to Māori development, but this phenomenon is isolated to Māori demographics, and not widespread.
- There is strong evidence that the bulk of statistical data sought by Māori practitioners is accessible, with difficulty, and when applied relates in part to Māori development.

The results of this study, while bringing forward the above scenarios, do not comprehensively explain the reasons for either the results, or the scenarios. These questions will need to be addressed as part of a further study.

5 Conclusion

5.1 Introduction

This thesis:

- seeks to explain two concepts: first Māori development - its contemporary nature, its traditional nature, how it accommodates elements and imperatives of the governing culture, the challenges faced and the complexities that arise, and
- asks what part knowledge plays in influencing development choices, and especially, how does local, or indigenous, knowledge impinge on the development choices of Māori.

In both of these regards, the study attempts to identify and define the complexities that exist when development choices have a traditional, contemporary, and cross cultural basis.

The following sections respond to the problems the study was specifically aiming to address.

5.2 What are the fundamental elements and the complexities of contemporary Māori development and how might they be framed and measured?

Complexities in contemporary Māori development tend to occur when the Maori and pakeha worlds collide and require reassembling. That reassembly requires Maori to determine which pathways will best allow them access to indigenous rights, participation as New Zealanders, and genuine development that acknowledges both traditional and contemporary values.

Māori have found themselves in what might be termed an identity struggle where like so many other indigenous peoples “...*their allegiance is not just, and sometime not principally to the state, but also, or above all to an entirely different ‘nation’ , one that is often oppressed, maligned,*

castigated and sometimes threatened with extinction, for no other reason than the mere fact of existing with one or more nation states” (Niezen, 1995, p. 193). Consequently, contemporary Māori development is complex because it seeks to fit several perspectives into one development framework. These perspectives include:

- traditional values, both spiritual and practical, such as tapu and noa, and tikanga and whānaungatanga;
- western perspectives that have come about through colonisation and globalisation, such as urbanisation, individualism and multi-culturalism;
- New Zealand pakeha perspectives that seek their own identity, place in the global community, and economic and social success, and whose values are a mixture of colonial New Zealand, Māori, British, global, and contemporary New Zealand; and
- the different Māori perspectives that relate to separate tribal, religious, and regional Māori groupings which seek tino rangatiratanga in their own separate and collective right.

Dame Mira Szaszy (1993, cited in Boston et al., 1999) identifies the struggle to reconcile the complexities of Māori development in its traditional and contemporary forms, as she called for sustainable social and economic development to include an essence of being Māori based in ancestral values, and humanism that is based on ancient values but versed in contemporary idiom. Szaszy (1993, cited in Boston et al., 1999, p.39) goes on to say

“Our current humanism does not seem to have found its own balance – with rich lurching forward, disposing of their cultural roots and becoming rootless, and the poor, particularly unemployed, becoming poorer without even the sustenance of cultural or spiritual strengths”.

The periods of contemporary Māori development included Rural Development from 1925-1950, and a move to urbanisation from 1950 onwards. However, throughout all of the periods, by far

the strongest theme was that of Māori rights to maintain traditional practices and development through a process of self-determination or tino rangatiratanga (M. Durie, 1998; M. H. Durie, 1995; Mead, 1994).

The traditional perspective might well presuppose that Māori development will aim to have a societal structure that comprises characteristics that are premised on a long standing relationship with land, forests, waterways, oceans and the air (Mason Durie, 2005); or at least seek a relationship between people and nature, and aim to exert some control over the natural world (M Henare, 1998). The elements of this perspective could be based on the values contained in Appendix 1.

The sub-elements of tino rangatiratanga are probably more recognisable as elements of contemporary Māori development. These include:

- ownership and/or management of important assets
- authority or choice over decisions about goals and ways of achieving them
- sense of achievement from ones own efforts
- acceptable level of autonomy to decide, act and achieve without external restraints.

Tino rangatiratanga also pervaded a range of standard elements of development covered by social and economic development models. Among calls for Māori to aim for improved outcomes in areas such as health, education, income, and social participation and cohesion, came the proviso that such improvements would need to be rooted in traditional values to be authentic and appropriate for Maori (Gibbons, 1999).

In the New Zealand context, customary rights pertaining to Māori, are rights that pre-date Crown sovereignty, were in existence at 1840 and have continued to be exercised from 1840 to the present day (Ministry of Justice, 2004). These include, but are not limited to, the following:

- Self-governance (ownership, control, regulation, management, and allocation),
- Development (cultural and economic benefit),
- Exclusivity (in accordance with tikanga (correct practice),
- Use (in its many forms), and
- Access.

(Rei, 2005).

The contemporary perspective of Māori development will have a range of sub-perspectives.

This diversity can be seen in Durie's (2000) description of contemporary Māori development, where he proposes that Māori development is concerned not only with participation in society, enjoying comparable living standards and closing social and economic gaps, but is about developing Māori as a people, being Māori, and being part of the Māori world. Goulet (1995) speaks of hybrid values that come about when contemporary and traditional forms of development meet and require a vehicle for both to have meaning.

5.3 Do existing statistical frameworks and methods sufficiently deal with the complexities of contemporary Māori development?

Generally, statistical frameworks employed by countries with indigenous peoples have had limited success in accurately measuring the circumstances of indigenous peoples, and in accurately reflecting their worldviews (Tuhiwai-Smith, 1999). At best there are attempts to emphasise and develop models of bi-culturalism or partnership, but little effort to implement strategies for negotiated design, methodologies, and outcomes. At worst, the social, cultural and

economic outcomes, values and measures will have little or no relevance to Māori, and Māori development goals.

Literature shows that generic statistical frameworks employed, by nation states or international organisations, to measure the circumstances of indigenous peoples tend to fall into three categories. The first category claims that current frameworks ignore, are ignorant of, or have not adequately captured the worldview of indigenous populations. The second claim, rejoices in the progress that is being made and identifies areas where further work is required. The third category, appears to be ignoring the need to adequately measure indigenous peoples on the basis that national measures for “all people” are sufficient (Reid & Searle, 2005; Tuhiwai-Smith, 1999).

While there is an attempt to interpret and reconcile the complexities of Māori development, what in fact occurs, as explained by Morphy (2004, p 29-73, cited in Taylor, 2005), is a cultural and world view discord and a “*collision of systems*”. At one level this collision is described in terms of a dominant culture failing to negotiate with a less dominant culture about appropriate values, goals and methods for research. However, a significant body of research claims that the collision is not that indigenous knowledge and scientific knowledge are tenuously connected or separated by a cultural – epistemological gulf; but are based on very different views of dependency, relationships, and assumptions (Sillitoe, 2001).

Claims about the inadequacy of existing statistical frameworks by Māori and iwi organisations, while prolific at times, have engendered some progress toward better accommodating Maori user needs. Of particular interest is the Māori statistical framework being designed by Statistics New Zealand that seeks to measure and reflect Māori development by focusing on Māori wellbeing

and measuring the goals that relate to the dimensions of well-being (Statistics New Zealand, 2002).

5.4 What are appropriate ways of, dealing with the complexities of Māori development, and providing good statistical frameworks that measure progress?

Genuine development occurs when the fundamental values, philosophies and worldviews of the developing peoples form the basis for development and are reflected in the development goals, strategies, and methods (Goulet, 1995). Successful frameworks have reportedly involved indigenous communities in the early development stages where the areas of interest, measurements, and methods are determined (Australian Bureau of Statistics, 2005; Economic Commission for Africa, 2004; Kukutai, 2001; Potter, 2005; Reingold, 2005; Smillie & McGregor, 2005; Taylor, 2005; Tuhiwai-Smith, 1999; United Nations Economic and Social Council, 2004; Warren et al., 1995; Wilmer, 1993).

Statistics New Zealand advises of the need to pay attention to conceptual design and definitions used when developing statistical frameworks. They specifically refer to lessons learned when developing a Māori statistics framework, which initially floundered because these factors were not properly taken into account. Statistics New Zealand addressed this problem by playing close attention to the concepts, philosophies and definitions that formed part of the Māori worldview, and re-oriented the framework to pay closer attention to, and define more accurately, Māori well-being and Māori development from a Māori perspective (Statistics New Zealand, 2002).

Scrimshaw (1991, cited in Del Popolo & Oyarce, 2005) proposes to strengthen design for indigenous research and statistical frameworks in at least three aspects:

- to define appropriate units of analysis, that is with meaning for the subjects,

- to clarify the nature of the wrong answer bias and
- to capture the dynamic perspective of the kinship and family in a way that might assist in more accurately determining progress and change overtime illuminate some questions regarding change over time, e.g. redefinition of roles among its members, and vital cycles structure, among others.

A growing requirement for statistical frameworks is to produce statistics that are relevant to indigenous and Māori development. An example of this is a call for statistics that measure whether indigenous communities have the capability and authority to access generic and specific indigenous rights. Participants at the 2003 Permanent Forum on Indigenous Issues stressed the need for developing a conceptual framework for rights-based indicators to ensure that the data collected would be relevant to indigenous peoples who had identified the maintenance of traditional rights as a key indicator of well being and development progress, especially when existing within another culture's nation state.

References

- Australian Bureau of Statistics. (2000). *Measuring Well-Being*. Canberra: Australian Bureau of Statistics.
- Australian Bureau of Statistics. (2005, 2005, 14 - 15 April 2005). *Measuring Small Populations: Counting Australia's Indigenous Peoples*. Paper presented at the IAOS Satellite Meeting on Measuring Small and Indigenous Populations, Te Papa Wellington Tongarewa, Museum of New Zealand, Wellington, New Zealand.
- Best, E. (2005). *Maori Religion and Mythology - Part 2*. Wellington NZ: Te Papa Press.
- Bidney, D. (1965). The Concept of Value in Modern Anthropology. In A. L. Kroeber (Ed.), *Anthropology Today* (pp. 697). Chicago: University of Chicago Press.
- Blank, A., Williams, H., & Henare, M. (Eds.). (1985). *He Korero mo Waitangi te Runanga o Waitangi 1984*.
- Blunt, P., & Warren, D. M. (1996). *Indigenous organizations and development*. London: Intermediate Technology Publications.
- Boston, J., Dalziel, P., & St John, S. (Eds.). (1999). *Redesigning the Welfare State in New Zealand: problems, policies, prospects*. Auckland NZ: Oxford University Press.
- Briggs, J. (2005). The use of indigenous knowledge in development: problems and challenges. *Progress in Development Studies*, 5(2), 99-114.
- Brush, S. B., & Stabinsky, D. (1996). *Valuing local knowledge: indigenous people and intellectual property rights*. Washington, D.C.: Island Press.
- Capones, E. M. (2005). *The Philippine Indigenous Peoples: Development and Challenges*. Paper presented at the IAOS Satellite Meeting on Measuring Small and Indigenous Populations, Te Papa Wellington Tongarewa, Museum of New Zealand, Wellington, New Zealand.
- Cheyne, C., O'Brien, M., & Belgrave, M. (1999). *Social Policy in Aotearoa New Zealand*. Auckland: Oxford University Press.
- Cook, L. W. (2005, 14 - 15 April 2005). *Political and Methodological Issues in Country Experiences of Measuring Ethnic Communities, Small and Indigenous Populations*. Paper presented at the IAOS Satellite Meeting on Measuring Small and Indigenous Populations, Te Papa Wellington Tongarewa, Museum of New Zealand, Wellington, New Zealand.
- Davis, S. H., Ebbe, K., Hetzner, A., & World Bank. (1993, September 27-28, 1993). *Traditional knowledge and sustainable development*. Paper presented at the World Bank Task Force on the International Year of the World's Indigenous People, Washington, D.C.

- Del Popolo, F., & Oyarce, A. M. (2005, April 2005). *Household, kinship and family: some findings from Panama, Bolivia and Chile for improving census data*. Paper presented at the IAOS Satellite Conference, Te Papa Wellington Tongarewa, Museum of New Zealand, Wellington, New Zealand.
- Department of Social Welfare. (1986). *Puao-te-ata-tu: The Report of the Ministerial Advisory Committee on a Maori Perspective for the Department of Social Welfare*. Wellington.
- Durie, A. (1998). *Me Tipu Ake Te Pono: Māori Research Ethicality and Development*. Paper presented at the Te Oru Rangahau, Māori Research & Development Conference, Palmerston North.
- Durie, M. (1998). *Te Mana Te Kawanatanga: The Politics of Maori Self Determination*. Auckland: Oxford University Press.
- Durie, M. (2000). *Contemporary Māori Development: Issues and Broad Directions*. Unpublished manuscript, University of Waikato.
- Durie, M. (2005). *Nga Tai Matatu - Tides of Maori Endurance*. Melbourne: Oxford University Press.
- Durie, M. H. (1995). Tino Rangatiratanga - Māori Self Determination. *He Pukenga Korero, Koanga, 1*(Spring).
- Economic Commission for Africa. (2004). *Statistical Development in Africa: A Statistical Framework (preliminary version)*. Retrieved 26 March 2005, 2005, from http://www.uneca.org/eca_programmes/policy_analysis/statistics/docs/absa_2004_e07.pdf
- Edlin, B. (2003). Economics: Measuring the Maori Economy. *New Zealand Management*, 12.
- Environment Bay of Plenty. (2006). *Environment Bay of Plenty Proposed Regional Water and Land Plan - Version 8.0*. Retrieved 1 August 2006, 2006, from <http://www.ebop.govt.nz/media/pdf/wl-b.pdf>
- Escobar, A. (1999). The invention of development. *Current History*, 98(631), 382.
- Evans, J. R., & Lindsay, W. M. (2001). *The management and control of quality* (5th ed.). Cincinnati, Ohio: South-Western.
- Fukuda-Parr, S. (2001). *In search of indicators of culture and development: review of progress and proposals for next steps*. Retrieved 4 April 2005, 2005, from http://www.undp.org/hdr/docs/In_search_of_indicators_of_culture_and_development_FukudaParr.pdf
- Fukuda-Parr, S. (2004). Millennium Development Goals: Why They Matter. *Global Governance*, 10(4), 395.

- Fuller, D., & Parker, L. (2002). *Indigenous economic development in Northern Australia : opportunities and constraints*. Rockhampton, Qld.: Central Queensland University Press.
- Gibbons, S., Temara, A., & White, T. (1999, September). *Change Or Be Dammed - Leadership Culture and Change: Implications For The Māori Organisation of The Future*. Paper presented at the Ngai Tatou 2020: Indigenous Governance & Accountability: Whakahaere-a-iwi, Whakamarama-a-iwi.
- Goldberg, H. (2005, April 2005). *Measurement Issues Associated with the Health of the United States American Indian/Alaska Native Population, Centers for Disease Control and Prevention*. Paper presented at the IAOS Satellite Meeting on Measuring Small and Indigenous Populations, Te Papa Wellington Tongarewa, Museum of New Zealand, Wellington, New Zealand.
- Goulet, D. (1995). *Development Ethics: A Guide To Theory and Practice*. London: Zed Books Ltd.
- Green, K. (2003). Te Ao Hurihuri. *ConScience Newsletter - Conservation Science Newsletter* (Number 46).
- Griffin, K. (1999). *Alternative Strategies For Economic Development* (2nd ed.). London: MacMillan Press Ltd.
- Hagghith, M., & Colfer, C. J. P. (1999). Traditional wisdom meets Artificial Intelligence. *Agroforestry-Forum*, 9(3), 24-30.
- Hall, D. (1998). Indigenous Governance & Accountability. In The Mental Health Foundation of New Zealand (Ed.), *Te Ao Pūmau - Standards and Foundations of Maori Society*. Auckland: The Mental Health Foundation of New Zealand.
- HarperCollins, P. (2001). *Collins Paperback English Dictionary*. Glasgow: HarperCollins Publishers.
- Henare, M. (1998). Nga Tikanga Me Nga Ritenga O Te Ao Maori. In The Mental Health Foundation of New Zealand (Ed.), *Te Ao Pūmau - Standards and Foundations of Maori Society*. Auckland: The Mental Health Foundation of New Zealand.
- Henare, M. (1999). Sustainable Social Policy. In J. Boston, Dalziel, P., & St John, S. (Ed.), *Redesigning the Welfare State in New Zealand: problems, policies, prospects* (pp. 35-39). Auckland: Oxford University Press.
- Henare, M. (2005). *Indigenous Businesses and the Economy of Mana or Affection: A Maori Case Study*. Paper presented at the IAOS Satellite Meeting on Measuring Small and Indigenous Populations, Te Papa Wellington Tongarewa, Museum of New Zealand, Wellington, New Zealand.
- Henry, E. (1999, September). *Different Accountabilities For Different Needs*. Paper presented at the Ngai Tatou 2020: Indigenous Governance & Accountability: Whakahaere-a-iwi, Whakamarama-a-iwi.

- Hodgson, H. P. (2003). *Progress on aquaculture law reform*. Retrieved 17 February, 2006, from <http://www.fish.govt.nz/current/press/pr240703.htm>
- Horomia, H., Parekura. (2004, 7/04/2004). *Kaitiakitanga anchors foreshore and seabed bill*. Retrieved 3 August 2006, 2006, from <http://www.beehive.govt.nz/ViewDocument.aspx?DocumentID=19395>
- Horomia, H. P. (2005). *Speech notes prepared for Hui Taumata 2005*. Retrieved 29 May 2006, 2006, from <http://www.beehive.govt.nz/ViewDocument.aspx?DocumentID=22330>
- Hui Taumata, S. C. (2005). *Hui Taumata 2005: Summary Report*. Paper presented at the Hui Taumata 2005, Wellington, and Te Papa.
- Ihi Communications and Consultancy Ltd (Ed.). (1994). *Social Policy Agency - Ropu Here Kaupapa - Bicultural Training*. Wellington: Ihi Communications and Consultancy Ltd.
- King, M. (2004). *The Penguin History of New Zealand*. Auckland: Viking.
- Kitching, G. (Ed.). (1982). *Development and Underdevelopment in Historical Perspective*. London: Methuen.
- Kukutai, T. (2001). *Maori identity and "political arithmetick": the dynamics of reporting ethnicity*. University of Waikato, Hamilton.
- Lalonde, A., & Akhtar, S. (1994). Traditional Knowledge Research for Sustainable Development. *Nature & Resources*, 30(2), 22-28.
- Loomis, T. (2000). *Government's Role in Māori Development: Charting a New Direction. (Working Paper)*. Unpublished manuscript, Waikato University.
- Marsden, D. (1994). Indigenous Management and the Management of Indigenous Knowledge. In S. Wright (Ed.), *Anthropology of Organisations*. London: Routledge.
- Marsden, M. (1998). Maori Illness and Healing - Mental Health: A Case for Reform. In The Mental Health Foundation of New Zealand (Ed.), *Te Ao Pumau: Standards and Foundations of Maori Society*. Auckland: The Mental Health Foundation of New Zealand.
- McKinley, T. (1997). *Cultural Indicators of Development* (No. ISSN: 1020-5381): United Nations Research Institute for Social Development (UNRISD).
- Mead, A. T. P. (1994). *Nga tikanga, nga taonga - cultural and intellectual property: the rights of indigenous peoples*. Auckland N.Z.: Research Unit for Maori Education University of Auckland.
- Ministry of Justice. (2004). *Main Elements of the Foreshore and Seabed Act*. Retrieved 17 February 2006, 2006, from <http://www.justice.govt.nz/foreshore/main3.htm>

- Niezen, R. (1995). *The Origins of Indigenism - Human Rights and the Politics of Identity*. California: University of California Press.
- NZ Institute of Economic Research. (2003). *Maori Economic Development: Te Ohanga Whanaketanga Maori*. Wellington NZ: NZ Institute of Economic Research.
- O'Sullivan, J. G. (2005). *An Investigation into the process of Maori Economic Development*. Lincoln, Christchurch.
- Patterson, J. (1992). *Exploring Maori Values*. Palmerston North: Dunmore Press Ltd.
- Poovey, M. (1998). *A History of Modern Fact - Problems of Knowledge in the Sciences of Wealth and Society*. Chicago: The University of Chicago Press.
- Potter, D. (2005, April 2005). *Measuring Ethnicity in New Zealand - One concept, to measure them all?* Paper presented at the IAOS Satellite Meeting, Te Papa, Wellington, New Zealand.
- Rei, M. (2005). *Speech: Omaka Marae 29 August 2005*. Retrieved 21 February 2006, 2006, from <http://www.wcl.govt.nz/maori/rauemi/teopemana.doc>
- Reid, P., & Searle, P. (2005, 14 - 15 April 2005). *Government Performance in Aotearoa/New Zealand: Two Perspectives*. Paper presented at the IAOS Satellite Conference, Te Papa Wellington Tongarewa, Museum of New Zealand, Wellington, New Zealand.
- Reingold, D. (2005, April 2005). *Measuring Roma Ethnicity and Poverty in Central and Eastern Europe*. Paper presented at the IAOS satellite Meeting On Measuring Small and Indigenous Populations, Te Papa Tongarewa, Museum of New Zealand, Wellington, New Zealand.
- Robertson-Shaw, M. (1999, September 1999). *Foreword - Ngai Tatou 2020: Indigenous Governance & Accountability*: Paper presented at the Ngai Tatou 2020: Indigenous Governance & Accountability: Whakahaere-a-iwi, Whakamarama-a-iwi.
- Royal, T. A. C. (1997, 14-16 March 1997). *Te Ao Mārama An Historical Paradigm?* Paper presented at the History Hui convened by Te Pouhere Kōrero Te Wānanga-o-Raukawa, Otaki.
- Royal, T. A. C. (2004). *An Organic Arising: an Interpretation of Tikanga Based upon Maori Creation Traditions*. Paper presented at the Tikanga Rangahau Maturanga Tuko Iho - Traditional Knowledge and Research Ethics, New Zealand.
- Royal, T. A. C. (Ed.). (2003). *The Woven Universe: Selected Writings of Rev. Maori Marsden*. Auckland: The Estate of Rev. Maori Marsden.
- Sillitoe, P. (2001). Globalizing Indigenous Knowledge. In P. Sillitoe, Bicker, A., and Pottier, J (Ed.), *Participating in Development - Approaches to Indigenous Knowledge* (pp. 109-133). London: Routledge.

- Simpson, J., Weiner, E. S. C., & Oxford University Press. (1989). *The Oxford English Dictionary*. New York: Oxford University Press.
- Smillie, F., & McGregor, D. (2005, 14 - 15 April 2005). *Measuring Small Populations: Measuring Māori in the New Zealand Census*. Paper presented at the IAOS Satellite Conference, Te Papa Wellington Tongarewa, Museum of New Zealand, Wellington, New Zealand.
- Statistics New Zealand. (1996). *Proceedings of the Maori Users of Statistics Conference, 20-21 November 1996, Hamilton, New Zealand*. [Wellington, N.Z.]: Statistics New Zealand.
- Statistics New Zealand. (2002). *Towards a Maori statistics framework: a discussion document*. Retrieved 9 June, 2005, from <http://www.stats.govt.nz/developments/maori-stats-framework.htm?>
- Statistics New Zealand. (2005a). *Maori Population: Looking Out to 2021*. Retrieved 5 June 2006, 2006, from <http://www.huitaumata.maori.nz/pdf/population.pdf>
- Statistics New Zealand. (2005b). *Statistics New Zealand - Statement of Intent 2005*. Wellington: Statistics New Zealand.
- Statistics New Zealand. (2006). *Statement of Principles for Tier 1 Statistics Producers*. Retrieved 21 November 2006, 2006, from www.statisphere.govt.nz
- Staudt, K. (1991). *Managing development: State, society, and international contexts*. California: Sage Publications Ltd.
- Taylor, J. (2005, 14 - 15 April 2005). *When Systems Collide: On the Enumeration of Indigenous Australian Populations*. Paper presented at the IAOS Satellite Conference, Te Papa Wellington Tongarewa, Museum of New Zealand, Wellington, New Zealand.
- Te Puni Kokiri. (2000a). *Maori in the New Zealand Economy*. Wellington: New Zealand Government.
- Te Puni Kokiri. (2000b, July). PM: Budget reflects desire to close gaps. *Te Puni Kokiri-Ministry of Maori Development Newsletter*, 1.
- Te Puni Kokiri. (2000c). *Progress towards closing social and economic gaps between Maori and non-Maori*. Wellington: New Zealand Government.
- Te Rūnanga o Ngāi Tahu. (2000). *Vision Kai Tahu 2025*. Christchurch: Te Runanga o Ngāi Tahu.
- Te Rūnanga o Ngāi Tahu. (2001). *Ngai Tahu 2025*. Christchurch: Te Runanga o Ngāi Tahu.
- Te Rūnanga o Ngāi Tahu. (2004). *Te Rūnanga o Ngāi Tahu, Annual Report 2004*. Christchurch: Te Rūnanga o Ngāi Tahu.

- Terena, J. (1995). Traditional Knowledge and Cultural Survival. In S. H. Davis & K. Ebbe (Eds.), *Traditional Knowledge and Sustainable Development* (pp. 7-8). Washington D.C: The International Bank.
- The International Working Group for Indigenous Affairs (IWIGIA). (1994). *The Indigenous World - 1993-1994 - Working Group Report*. Copenhagen.
- The Mental Health Foundation of New Zealand (Ed.). (1998). *Te Ao Pumau: Standards and Foundations of Maori Society*. Auckland: The Mental Health Foundation of New Zealand.
- The World Bank. (1998). *Indigenous knowledge for development - A Framework for Action*.
- Todaro, M. P. (1997). *Economic Development* (6th ed.). New York: Addison-Wesley Publishing Company.
- Tuhi Tuhi Communications. (2006). *TAKOA: te aka kumara o Aotearoa: a directory of Maori organisations and resource people*. Auckland (NZ): Tuhi Tuhi Communications.
- Tuhiwai-Smith, L. (1999). *Decolonizing Methodologies - Research and Indigenous Peoples*. London: Zed Books Ltd.
- Tuhiwai-Smith, L. (2005, 14-15 April). *Telling Stories with Numbers: Whose Stories? Who is the Storyteller? Who Listens? Who Acts?* Paper presented at the IAOS Satellite Meeting on Measuring Small and Indigenous Populations, Te Papa Wellington Tongarewa, Museum of New Zealand, Wellington, New Zealand.
- Turoa, H., & Turoa, P. (1986). *Te Marae - A Guide to Customs and Protocols*. Auckland: Reed Methuen Publishers.
- United Nations Department of Economic and Social Affairs Statistics Division. (2003). *Handbook of Statistical Organization, The Operation and Organization of a Statistical Agency* (3rd Edition ed. Vol. Series F No. 88). New York: United Nations.
- United Nations Economic and Social Council. (2000). *Development and International Cooperation in the 21st century*. New York: United Nations.
- United Nations Economic and Social Council. (2004, 10 - 21 May 2004). *Report of the Workshop on Data Collection and Disaggregation for Indigenous Peoples*. Paper presented at the Permanent Forum on Indigenous Issues, New York.
- United Nations Statistics Division. (2003). *Social Statistics in the World Bank* (No. ESA/STAT/AC.88/37). New York: United Nations.
- Waitangi Tribunal. (1985). *Finding of the Waitangi Tribunal on the Manukau Claim (Wai 8)*. Wellington: Department of Justice.

- Waitangi Tribunal. (1987). *The Report of the Waitangi Tribunal on the Orakei Claim (Wai 9)*. Wellington: Government Printer.
- Warren, D. M., Slikkerveer, L. J., & Brokensha, D. (1995). *The Cultural dimension of development: indigenous knowledge systems*. London: Intermediate Technology.
- Whitehead, J., & Annesley, B. (2005). *The Context for Maori Economic Development-A background paper for the Hui Taumata 2005*. Wellington: The Treasury (New Zealand).
- Wilmer, F. (1993). *The Indigenous Voice in World Politics*. California USA: Sage.
- Winiata, P. W. (2000). Whakatutanga Rua Mano: Capacity Building in Practice. In U. o. Waikato (Ed.), *Nation Building and Maori Development in the 21st Century Conference* (pp. 131-143). Hamilton: University of Waikato.
- World Summit of the Information Society. (2003, 12 December 2003). *Declaration of Principles - Building the Information Society: a global challenge in the new Millennium*. Paper presented at the World Summit of the Information Society, Geneva.
- Young, E. A. (1995). *Third world in the first: development and indigenous peoples*. London ; New York: Routledge.

Appendix 1: Explanation of Values that form the Māori Worldview

Te Ao Mārama

Te Ao Mārama is described as the world of light and life (Best, 2005). This description stems from the Māori perception that the world is at least a two-world system in which the material world (Te Ao Mārama) gains from the spiritual world, and the higher spiritual world interacts with the physical nature of Te Ao Mārama (Te Ahukaramū Charles Royal, 1997).

Royal (1997) proposes that Māori, in Polynesia and then in Aotearoa, developed a value system or philosophy of life founded in the concept of Te Ao Mārama, and that this philosophy guided their lives prior to coming into contact with Europeans.

Mauri

Mauri is described as the life principle. It is seen as involving the strength and spiritual powers of the ancestors. The mauri is often described as being the very essence of being alive, and is sometimes referred to as the “*life force*”. When the mauri is removed, damaged or polluted, then the life force suffers (Best, 2005), as seen in the following example:

“The mauri of the marae is enhanced if its kawa is practised regularly and correctly. In some instances people have been known to spiritually place the mauri of their marae within an object for safekeeping. When, as has happened, the mauri is removed from the marae, either deliberately or inadvertently, that marae suffers; the tangata whenua have difficulty working together, things go wrong, and often there is a general lack of commitment and cooperation. When the mauri is replaced, the marae is again able to function to its full capacity and with the mana that it previously had.” (Turoa & Turoa, 1986, p. 125)

Both animate and inanimate objects are said to have a mauri or life force. Besides referring to “*te mauri o te tangata*” (the mauri of the person), reference is also made to “*te mauri o te whare*” (the mauri of the house), and “*te mauri o te whenua*” (the mauri of the land) (M Henare, 1998).

Mana

Mana is often described as an attribute similar to social standing, and is often linked to the rangatira and ariki. If a person was said to have worthwhile characteristics, such as an orator or warrior, and had reasonable whakapapa to match, that person could be attributed rangatira status and might be said to have social standing or mana (Winiata, 2000). However, mana cannot be generated or possessed for oneself. Instead, it needs to be generated by others and is bestowed upon both individuals and groups. This is similar to the attribute of leadership. The following proverb or whakatauki describes this aspect of mana, and provides insight into how it is perceived within Māoridom.

Ko to mana i ahau no oku tupuna no tuawhakarere. My strength comes from my ancestors from long ago.

(Karetu, 1987, cited in The Mental Health Foundation of New Zealand, 1998, p.21)

In the Māori world, virtually every activity, ceremonial or otherwise, has a link with the maintenance of and enhancement of mana. It is central to the integrity of the person and the group. Mana is linked to the powers associated with generating new life sources, ideas, and goodness. Hence mana wahine is interpreted as an expression of the generative and nurturing power of Papa-tū-ā-Nuku the earth mother, and mana tāne as the power of the source of life Te Waiora a Tāne.

Persons with prowess and skills in particular areas of every day life, such as fishing, weaving, and speaking are said to be people with mana. However, while a man or woman may be recognised as a competent spokesperson, such recognition does not confer mana as an individual property. In this respect individuals are seen as agents of their people; their value being measured by the way in which their efforts promote the mana of their people (M Henare, 1998).

Mana Māori is associated with Māori wellbeing and is seen to engender the need for iwi, hapū, and whānau, integrity, and honour. Winiata (2000, p140) describes mana in terms of the performance of hapū and iwi as described by others that view them – “*mana-a-Hapū*” or “*mana-a-iwi*”. Such measures might include how these groupings behave in terms of their responsibilities as hosts, and kaitiaki (guardians) of their lands. Good performance or behaviour in these areas might be seen as “*mana enhancing*” and might also be a reflection of the wealth and wellbeing of the hapū or iwi.

Tapu and Noa

Tapu is about setting apart of things, places, and persons, and includes their dedication to Atua (spiritual powers), and so making them, in many instances, sacred (M. Marsden, 1998). Tapu expresses that once a person, or thing, exists then because of its existence it has a real potentiality for mana. Some things are intrinsically tapu, such as the burial ground that has the tapu of humans. However, tapu can be extended to things that are not intrinsically tapu, such as food gathering areas, and certain practices, this form of tapu engenders ideas of restriction or forbidden (M Henare, 1998).

Noa is described as normality and freedom from tapu. The positive aspects of noa are best observed in purification rites (whakanoa), ceremonies to neutralise extensions of tapu. When whakanoa has been applied to a tapu object, it is no longer restricted, but available for normal use

with connotations of safety and freedom. For example, after grieving at the gravesite, mourners wash their hands to cleanse the tapu, to whakanoa, allowing them to engage in activities such as handling food. Women are especially powerful in making things and activities noa. (M Henare, 1998).

Hau

The everyday meaning of the term *hau* is “wind” or “air”. However, it also used to describe the “breath” and “spirit” of a person, animal, or object (Best, 2005). Best (2005, p. 51) further explains that while this may seem confusing to Europeans, in fact there is a “...world-wide connection between terms denoting wind, air, breath and spirit”.

Hauora (broadly meaning health) refers to the physical sense of wellbeing and vitality, and denotes the breathing of the spirit from the atua (God) at the moment of creation and also at birth. Henare (1998, p. 26) reminds us that “Hauora” and health are not synonymous from a Māori view. The healthy physique is seen only as a contributing factor to health, with contributions from the taha wairua (spiritual dimension), the taha hinengaro (psychic dimension) and the taha whānau (family dimension), all equally important.”

The hau of a man or woman could be described as a quality of a combination of their personality and aura. The term was formerly used in reference to warriors being fighting fit (M Henare, 1998), and was known to be used to describe such things as the “hau of a speech”. This connection, between a person and their deeds, relates to the belief that a person can leave behind a portion of their hau, which it is then possible for others to collect or gather up (Best, 2005).

While a person is said to possess, or generate, hau or be described in terms of their hauora, there is a belief that the concept (of hau) is a quality bestowed collectively, but with individual benefits.

In other words it is linked to a person's whānaungatanga and Tūrangawaewae, and the benefits rendered from hau are spread to these entities. An example may be the deeds of a warrior are often attributed to their family or the location they inhabit (M Henare, 1998)

Whānaungatanga

The Māori experience is a collective experience. That experience is well understood by most Māori and many researchers. It can be explained in a structural sense by considering that Māori comprise four main Māori socio-political units and organisational levels, namely whānau, hapū, iwi, and waka (Department of Social Welfare, 1986). Contemporary Māori life and existence is founded on the closely bound entities of whānau, hapū, iwi, and waka. This is the primary form of Māori identity (Department of Social Welfare, 1986; Evans & Lindsay, 2001; The Mental Health Foundation of New Zealand, 1998).

Te ao hurihuri

Te Ao Hurihuri means (among other things) the world moves on, and is used to describe the changes that occur in society, or the making of progress (Green, 2003), the turning world which is dynamic and ever-changing, even though it is bound together by ancient traditions (Robertson-Shaw, 1999).

Tika

Tika is very important in the Māori world. It means “the right way of doing things” as opposed to hē, which means “the wrong way”. Being tika involves keeping to a prescribed path, especially if that path has been set down by Atua (spiritual powers, including Christian God), tipuna (ancestors), group consensus, or customary practices. These practices are known as tikanga (the correct practice/way). Tika also means justice, in the sense of observing the laws and living within them (Ihi Communications and Consultancy Ltd, 1994).

In a European sense tikanga might be described as principles that govern appropriate conduct and dictate correct behaviour. They might also be associated with, customs, plans, rules, and methods. In the Māori world, rights of the group and individuals are controlled by tikanga, and determined by the group as being correct. For example, in some iwi, the speaking rights on a marae belong to the eldest within a whānau (M Henare, 1998).

Tikanga is actively maintained by Māori, especially on the Marae, but also in the way that they go about understanding, analysing and making decisions. Tikanga Māori is observed not only by whānau, hapū, and iwi, but also by the Māori institutions, and by Māori businesses. Forms of tikanga Māori are also observed by mainstream government when it conducts both formal and informal proceedings (Department of Social Welfare, 1986; M Durie, 2000; Edlin, 2003; Gibbons, 1999; Whitehead & Annesley, 2005).

In a contemporary sense, tikanga Māori is described as providing “a particular set of norms and values that organise and structure the relationships and behaviours of Māori people and their organisations in particularly contexts” (Whitehead & Annesley, 2005, p.7).

Kotahitanga

Kotahitanga is about the value of solidarity and unity, and refers to a cultural need to work toward a common interest, and as an ethic and practice in which tribes with different interests, coalesce to protect or advance particular economic and political interests.(M Henare, 1998; Henry, 1999).

Henry (1999, p. 80) describes the ethic of kotahitanga as one that requires Māori to:

- assume solidarity, until enmity becomes the only course of action. Co-operate to compete, and
- lead from behind and in front of others.

Following the confiscation of land in the 1860s, the Kotahitanga movement was established as an alternative forum to the New Zealand parliament. The movement brought several tribes together in an attempt to regain confiscated land. Why the movement's success is a matter of debate, it is acknowledged as providing a national voice for Māori, and inspiring or influencing future forums for Māori representation, such as Ratana and the Young Māori Party (King, 2004).

Apart from iwi, prominent Māori forums that have come about in an attempt to unite Māori around a common Māori interest or view point include:

- Urban Māori Authorities: Urban Manukau Authority (UMA) and Te Whānau o Waipareira
- Ratana: A movement, a following; essentially pan-tribal and national in overview.
- Federation of Māori Authorities: A society of authorities specifically established to manage large Māori land interests.
- Māori Women's Welfare League: Pan-Tribal and National in overview, membership is essentially Māori women.
- New Zealand Māori Council: Pan-Tribal and national in overview representing Māori legal political interests.
- Māori Congress: A loose collection of the tribes at both iwi and hapū level. (Hall, 1998)

Kaitiakitanga

This relationship that Māori have with their culture and traditions, their ancestral lands, waters, sites, waahi tapu and other taonga is a matter of importance to them, and is being recognised as of national importance to New Zealand. The relationship is guided by kaitiakitanga which itself is a duty or ethic of guardianship and, in relation to a resource, includes the ethic of stewardship

based on the nature of the resource itself (Environment Bay of Plenty, 2006; H. Horomia, Parekura, 2004; Te Rūnanga o Ngāi Tahu, 2001).

Kaitiakitanga of natural and physical resources is not confined to the mere protection of those resources from damage, destruction, modification and development. Iwi and hapū believe that within their rohe they are empowered with the responsibility of ensuring that the spiritual and cultural aspects are also maintained for the future (Environment Bay of Plenty, 2006).

Kaitiakitanga extends to protecting or enhancing the future. Te Rūnanga O Ngāi Tahu describe the role of Ngāi Tahu whānui, in terms of kaitiakitanga, as being to protect and enhance their spiritual, cultural, educational and economic aspirations (Te Rūnanga o Ngai Tahu, 2000).

Broadly speaking kaitiakitanga involves a wide set of practices based on a world and regional environmental view. The Māori word tiaki includes the ideas and principles of:

- Guardianship.
- Care.
- Wise management.
- Well being indicators, where resources themselves indicate the state of their own mauri.
- Maintenance of spiritual and cultural aspects of the natural and physical resources.
- Protection, enhancement, and restoration of mauri.
- Appropriate development of resources where necessary (Environment Bay of Plenty, 2006, p. 13).

Kaitiakitanga is described in the following pepeha:

Whatungarongaro te tangata, toitu te whenua.

Koia nei te pepeha e whakahuatia ake ai nga tikanga a te Māori ki ona whenua.

Mai i nehe ra noa, ko te mea nui ki a ia ko te tiaki pumau i te whenua, e kore ranei e tukinotia, tae noa ki te wa e heke iho ai ki ona uri, ki nga whakatipuranga e whai ake ana a muri iho i a ia. Ko nga whakarite o te kaitiakitanga, he taonga tukuiho.

Kua korerotia te korero, kua wanangatia te wananga. Heoi ano, ko te mahi I naiane he whakararangi i aua korero, e marama ai ki a tatau katoa.

He mahi uaua tonu, engari ko a koutou pononga ki te kaunihera enei e ngana nei ki te whakatutuki i te kaupapa.

Ko te tumanako, kai kona koutou e te iwi hai whakatikatika mai, e tau ai te puehu, e whakaae ai tatau katoa. Tihe mauri ora.

The main point of the above pepeha is: Mankind perishes, the land remains eternal. This epitomises Māori beliefs on kaitiakitanga or guardianship of the land and its resources.

(Environment Bay of Plenty, 2006, p. 13).

The role and responsibilities of kaitiaki are wide and varied, and have connection with Māori lore relevant to particular Māori groups and their resources. It is the sole prerogative of each whānau, hapū and iwi to determine their role and responsibilities as kaitiaki, and their interpretation of the concept of mauri. These roles, responsibilities, and interpretations need to be determined by the group according to their values and the circumstances of each case, and cannot be defined by any other persons (M. Durie, 1998; Edlin, 2003; M Henare, 1998; Te Rūnanga o Ngāi Tahu, 2001).

Kaitiakitanga has a variety of applications including, but not limited to:

- The protection and maintenance of waahi tapu and other areas of special significance.
- The placing of rāhui to allow replenishment of traditional kaimoana, mahinga mataitai, or for use at times of disasters, drowning and pollution of food sources.

- Directing development to ways that do not negatively compromise the mauri of the resource.
- Observing tikanga associated with traditional activities such as prayer, ceremony and ritual.
- Active opposition to developments with actual or potential adverse effects on resources, taonga, mauri and Māori cultural relationships.
- Monitoring resource indicators, where resources indicate the state of the mauri.
- Physical restoration and enhancement of resources to rejuvenate and improve the mauri of the resource.
- Lodging claims against Crown actions that have adversely affected the mana of Māori
- Celebrating places by teaching future generations about the special Māori values associated with them.
- Enhancing the natural world by teaching future generations about the special (Māori) values associated with them (Environment Bay of Plenty, 2006, p. 14).

Wairuatanga

Wairuatanga or spirituality, spiritual nature, or welfare is about the spirit or soul of man or objects. In ordinary speech it means “*shadow*” (Best, 2005). Māori often refer to people, events or phenomena as having, or lacking, wairua. This reflects the view that there is a greater need for a more human and spiritual approach as opposed to a purely clinical perspective. When development or social reform is proposed or instituted Māori often seek out the spiritual or temporal meaning and sense, and will judge the reforms success by the level, or sense of wairua. Thus wairuatanga forms a central and significant aspect of Māori aspirations for social reform (M Henare, 1998).

Appendix 2: Draft Māori Statistics Framework

Area of Interest: Māori Language	
Goal Dimensions	Measurement Dimension
Te Ao Māori	Use of the Māori language
	Spoken proficiency
	Availability of Māori language: <ul style="list-style-type: none"> • speakers • services (e.g. television/radio hours) • products (e.g. literature, music, shows).
Human Resource Potential	Acquisition of Māori language proficiency
	Recognition of proficiency
Empowerment and Enablement	Opportunities to acquire/enhance proficiency (provision of formal and non-formal learning, includes mentoring)
	Access to opportunities to acquire/enhance proficiency
	Government spending on the provision of: <ul style="list-style-type: none"> • learning opportunities and resources • services (e.g. television and radio).
	Spending by Māori organisations on the provision of: <ul style="list-style-type: none"> • learning opportunities and resources • services (e.g. television and radio).
Economic Self-determination	Purchase of, and expenditure on Māori language related: <ul style="list-style-type: none"> • products • services • learning opportunities.

Area of Interest: Māori Knowledge	
Goal Dimensions	Measurement Dimension
Te Ao Māori	Availability of expertise in specific areas of Māori knowledge, skills and competencies
	Production and availability of material relating to specific areas of Māori knowledge, skills and competencies including: <ul style="list-style-type: none"> documents sound-recordings maps and images.
Human Resource Potential	Acquisition of Māori knowledge, skills and competencies including: <ul style="list-style-type: none"> self-directed learning mentoring and coaching.
	Recognition of competency (includes formal qualifications and/or hapū or iwi recognition)
Economic Self-determination	Spending by Māori learners on learning-related activities
Social Capability	Reciprocal contributions (in lieu of money) by learners including: <ul style="list-style-type: none"> labour food care.
	Barriers to accessing Māori knowledge, skills and competencies

Area of Interest: Māori Knowledge (continued)	
Goal Dimensions	Measurement Dimension
Empowerment and Enablement	Opportunities to acquire expertise in specific areas of Māori knowledge, skills and competencies including: <ul style="list-style-type: none"> one-on-one mentoring and coaching (the Māori method of transmitting and acquiring knowledge) non-formal and formal courses provided by Māori and public education providers.
	Spending by Māori organisations on preserving, protecting and transmitting Māori knowledge, skills and competencies
	Government expenditure on purchasing and provision of: <ul style="list-style-type: none"> Māori advice to assist in decision-making learning opportunities protecting and preserving Māori knowledge.

Area of Interest: Marae	
Goal Dimensions	Measurement Dimension
Te Ao Māori	Types of marae: <ul style="list-style-type: none"> • ancestral • other.
	Performance of rituals – paepae numbers, kai-karanga numbers, kai-waiata numbers
Empowerment and Enablement	Ownership of land and buildings: <ul style="list-style-type: none"> • whanau • hapū • iwi • Māori organisation • Local body.
	Marae management and operations: <ul style="list-style-type: none"> • hui held and their type • resources (human, physical, financial) • status of the land.
Social Capability	Use of marae by households: <ul style="list-style-type: none"> • frequency • purpose.
	Contributions by individuals or households of time, labour, money to building, maintenance and operation of marae
	Role of individuals in respect of the marae

Area of Interest: Wāhi Taonga	
Goal Dimension	Measurement Dimensions
Environmental Sustainability	Identification and recognition of sites by type including: <ul style="list-style-type: none"> • sites recognised by hapū and iwi but not by authorities • sites formally recognised by authorities (e.g. local bodies, government agencies).
	Quality of the resource obtained based on user observation of the resource site
	Depletion of natural resource stock (such as paua)
	Damage to and destruction of sites as result of local body management or operational procedures, and consents for development
Empowerment and Enablement	Arrangements for hapū or iwi control over, or representation in, management, operation, protection and preservation of wāhi taonga
	Arrangements for representation in environmental management decision-making
	Number of hapū or iwi with environmental management plan, including those that have and have not been incorporated in local district plan
	Government and local body spending on protection and preservation of wāhi taonga
Te Ao Māori	Availability of expertise and materials on cultural and historical significance of wāhi taonga including: <ul style="list-style-type: none"> • experts • documents • sound recordings • maps and images.
	Customary use of wāhi taonga by Māori individuals, households and organisations, including permits issued

Area of Interest: Wāhi Taonga (continued)	
Goal Dimension	Measurement Dimensions
Social Capability	Relationships and working arrangements with mainstream environmental groups
	Contributions toward protection and preservation of wāhi taonga by Māori individuals and households including: <ul style="list-style-type: none"> • time • labour • money.
	Access to wāhi taonga by individuals and households

Area of Interest: Wāhi Tapu	
Goal Dimensions	Measurement Dimensions
<i>Much of the information requirement for wāhi taonga will be repeated in this area</i>	

Area of Interest: Māori Land	
Goal Dimension	Measurement Dimensions
Te Ao Māori	Land held in Māori ownership by geographic location
Economic Self-determination	Purposes for which is used – productive or otherwise
	Value of Māori lands
	Arrangements for retention and utilisation of Māori land-trusts, and incorporations
Empowerment and Enablement	Claims before courts, tribunals, involving land. Include a basis of the claim – e.g. raupatu, Public Works Act
	Cases heard by Māori Land Court by type – succession and outcome

Area of Interest: Population	
Goal Dimension	Measurement Dimension
Social Capability	Māori and iwi population size and growth
	Geographic distribution of the Māori and iwi population
	Proportion of iwi living inside and outside iwi territory
	Proportion of Māori in population
	Population structure – e.g. age, gender and location

Area of Interest: Families and Households	
Goal Dimensions	Measurement Dimensions
Social Capability	Size and composition of Māori households
	Family size and type (including extended families)
	Characteristics of families/households: <ul style="list-style-type: none"> • with children in Māori-medium education • with children attending university or post-school training • with Māori language speakers • with members who contribute to care and support of whanau • that contribute to whanau, hapū, iwi affairs • with members who are self-employed • with members who have been hospitalised.

Area of Interest: Social Connections and Attachments	
Goal Dimensions	Measurement Dimensions
Te Ao Māori	Knowledge of iwi
	Knowledge of kinship ties and connections to others (within whanau, hapū, iwi and across iwi)
	Numbers registered on iwi register (recognition)
Social Capability	Maintenance of relationship with kin living in community in which one/both parent(s) brought up
	Participation in organised community-based activities
	Culture-related leisure activities
	Contribution to and receipt of support from whanau including: <ul style="list-style-type: none"> • material support (e.g. money food, and labour) • advice/counselling • direct care • crisis support and management.
	Contribution to maintenance and operation of hapū, iwi and/or Māori organisations including: <ul style="list-style-type: none"> • time • labour • money • other forms of donation.
Empowerment and Enablement	Formal and informal arrangements for care and maintenance of whanau such as: <ul style="list-style-type: none"> • whanau hui • legal arrangements like whanau trusts.

Area of Interest: Modern Knowledge, Skills and Competencies	
Goal Dimensions	Measurement Dimensions
Human Resource Potential	Distribution of knowledge, skills and competencies within Māori/iwi population
	Knowledge, skills and competencies used in paid or unpaid work for: <ul style="list-style-type: none"> • formal employer • hapū, iwi and other Māori organisations.
	Acquisition of knowledge, skills and competencies through formal structured or non-formal education and training courses
	Knowledge, skills and competencies demanded by Māori and general market
Economic Self-determination	Personal/household spending on acquiring knowledge, skills and competencies
	Use of knowledge, skills and competencies in paid and unpaid work or leisure activities
Empowerment and Enablement	Opportunities to acquire generalised knowledge, skills and competencies through provision by Māori and public providers of structured formal and non-formal education and training courses
	Māori providers of formal structured and non-formal education and training including: <ul style="list-style-type: none"> • types of courses • resources (labour, physical, financial) • students and their attainments.
	Spending by Māori organisations on the provision of structured formal and non-formal training programmes
	Government spending on the purchase and provision of Māori-provided formal and non-formal structured training

Area of Interest: Health	
Goal Dimensions	Measurement Dimensions
Human Resource Potential	Expectation of life
	Infant mortality
	Hospitalisation rate
	Incidence and prevalence of diseases
Social Capability	Arrangements for care of elderly, sick, disabled whanau members
	Use of primary health services including Māori health services
	Accessibility of primary health services
Empowerment and Enablement	Māori providers of health services and programmes including: <ul style="list-style-type: none"> resources (human, physical, financial) users type of service, programme.
	Provision by health institutions for cultural needs of patients and whanau
	Spending by Māori organisations on provision of Māori health services and programmes
	Government expenditure on the purchase and provision of Māori health services and programmes

Area of Interest: Housing	
Goal Dimensions	Measurement Dimensions
Economic Self-determination	Home ownership
	Quality of Māori housing stock
	Barriers to acquisition/improvement in housing including: <ul style="list-style-type: none"> finance location local body zoning status of land.
	Opportunities to purchase/rent a home through iwi-operated schemes such as papakainga housing
	Housing-type preference
Empowerment and Enablement	Māori organisation's (e.g. marae and iwi authorities), spending on housing provision and services
	Government expenditure on housing assistance and on the purchase and provision of housing

Area of Interest: Income and Expenditure	
Goal Dimensions	Measurement Dimension
Economic Self-determination	Level and source of personal and household income
	Household spending patterns
	Net worth, assets and debts of Māori households

Area of Interest: Work	
Goal Dimension	Measurement Dimensions
Economic Self-determination	Labour force participation
	Employment and unemployment rate
	Hours of work
	Industry structure including Māori service provision including: <ul style="list-style-type: none"> • kōhanga reo • Māori provider health services • Māori provider training services.
	Occupation structure including Māori occupations including: <ul style="list-style-type: none"> • kaitiaki • kaitakawaenga • kaiako.
	Job preferences
	Unpaid work by type and hours
Human Resource Potential	Labour demand in locality

Area of Interest: Social Problems	
Goal Dimension	Measurement Dimensions
Human Resource Potential	Level of Māori juvenile and adult offending
	Level of truancy, suspensions, expulsions
	Children in care
	Use of women's refuges
Empowerment and Enablement	Māori-provided social services including: <ul style="list-style-type: none"> • types of service • resources (human, physical, financial) • clients.
	Māori spending on provision of social services and social service programmes
	Government spending on purchasing and provision of Māori-provided health services
Social Capability	Māori voluntary community-based organisations including: <ul style="list-style-type: none"> • type • resources (human, physical, financial) • membership.
	Contributions to and receipt of support or assistance from Māori community-based organisations

Area of Interest: Māori Business Development	
Goal Dimension	Measurement Dimension
Economic Self-determination	Number, distribution, structure and characteristics of Māori businesses
	Net worth, assets and debts
	Productivity
	Profitability

Area of Interest: Participation in Political Decision-Making Processes	
Goal Dimension	Measurement Dimension
Empowerment and Enablement	Participation in local and national elections
	Arrangements for participation in decision-making by iwi/hapū members
	Participation in iwi, hapū, Māori organisation elections, appointments and other decision-making processes
	Representation in national and local decision-making organisations/bodies
	Partnerships with government agencies
	Funding/sponsorship of Māori institutions, individuals, events, activities
	Central and local government consultations

Area of Interest: Rights	
Goal Dimension	Measurement Dimension
Empowerment and Enablement	Claims/objections before local bodies, courts and tribunals
	Successful claims, objections before local bodies, courts, and tribunals
	Public agencies with responsiveness plans, procedures, and Māori language capability
Social Capability	Access to justice: legal aid applications submitted/granted, applications to court
Te Ao Māori	Use of Māori institutions: number of rahui imposed and muru and tatau pounamu exercised, taiapure established
	Customary rights: authorisations by kaitiaki for customary fishing

(Statistics New Zealand, 2002)

Appendix 3: Summary of Statement of Principles for Tier 1 Statistics Producers

PRINCIPLE	DESCRIPTION
Principle 1: Relevance	Official statistics produced by government agencies are relevant to the current and prospective user requirements in government and in the wider community.
Principle 2: Integrity	Official statistics gain public trust through being produced and released using objective and transparent methods.
Principle 3: Quality	Official statistics are produced using sound statistical methodology and relevant and reliable data sources, and are appropriate for the purpose.
Principle 4: Coherence	The value of statistical data is maximised through the use of common frameworks, standards and classifications.
Principle 5: Accessibility	Access to official statistics is equal and open.
Principle 6: Efficiency	Official statistics agencies strive to be efficient and provide value for money in both costs and prices.

PRINCIPLE	DESCRIPTION
Principle 7: Protecting respondents' information	Respondents' rights to privacy and confidentiality are respected and their information is stored securely.
Principle 8: Minimising Respondent Load	The costs of compliance are kept to an acceptable level and data is collected only when the expected benefits of a statistical survey exceed the cost to providers.
Principle 9: Maximising existing data sources	Maximise the use and value of existing data by integrating or aligning available statistics and administrative sources.
Principle 10: International participation	Official statistics agencies make use of and contribute to international statistical developments.

(Statistics New Zealand, 2006)

Appendix 4: Survey of Māori Development Practitioners – Survey Form

The purpose of this survey is to obtain information about the experiences of your organisation when seeking to obtain and usefully apply statistics (or information based on statistics) to inform, measure or better understand Māori development issues.

The survey focuses on two areas:

- Accessing statistics from government agencies, research institutions, and tertiary institutions, and
- Relevancy of statistics for measuring and better understanding your organisations Māori development issues.

The types of statistics, listed in the survey, have been identified from the draft Māori Development framework developed by Statistics New Zealand, with support and advice from the Statistics NZ Māori Advisory Committee.

Meaning of Key Terms

For the purposes of this survey:

- **Statistics** means: either: raw data e.g. tables of numbers; OR explanations and analysis that partly or wholly uses statistics;
- **Accessing statistics** is about: the ease or difficulty of locating and obtaining statistics for the purposes of Māori Development
- **Relevancy of statistics** is about: how well the statistics you obtained related to the issues of Māori development that your organisation needs to be informed about and understand.

The questionnaire should take no more than 10 minutes to complete, and your survey responses will be coded and remain confidential. Call or email me (Mark Feary), if you have questions about any matters concerning the survey, or wider research: email: msf@paradise.net.nz / mobile: 021998180.

Please start with the survey now by clicking on the **Continue** button below.

Please complete these details for further reference. Your response will be coded and kept strictly confidential

Your Name *

Position in the organisation *

Address (where your organisation is located)

Address (for mail purposes and if different from above address)

Your Telephone

Your email address

SECTION 1 - ACCESSING STATISTICS - This section aims to better understand how easy or difficult it was for your organisation to **access** statistics to inform you about Māori development issues.

Please tick the statistics that you have or are currently attempting to locate or obtain to inform your organisation about Māori development issues

- ☐ **Maori customary practices and traditions** - type, extent of use, where taught, where practiced
- ☐ **Maori customary practices and traditions** - expenditure by users, government, institutions.
- ☐ **Maori customary practices and traditions** - information about teachers
- ☐ **Maori Language** - extent of use, where used, profile and ability of speakers
- ☐ **Maori Language** - where taught, ability of teachers, expenditure by government/learners
- ☐ **Marae** - type, location, condition
- ☐ **Marae** - ownership, usage, asset value
- ☐ **Wahi Taonga and Wahi Tapu (sacred and culturally significant sites)** - number and type
- ☐ **Wahi Taonga and Wahi Tapu (sacred and culturally significant sites)** - contribution to, and type of

use by whānau



Maori Land - type, quantity, & value



Maori Land - purpose, owners, & court claims



Maori Population - population, size, and growth



Maori Population - geographic distribution, % of NZ population



Maori Population - age, gender, location etc



Iwi Population - affiliation,, size, and growth



Iwi Population - age, gender, location etc



Iwi Population - geographic distribution, location within rohe



Families and households - size and composition



Families and households - age, gender, employment status, educational attainment



Families and households - iwi affiliation, gender, employment status, educational attainment




Social connections - registered with iwi, types of caring for elderly




Social connections - participation in kinship, cultural, and local community activities, participation in community activities




Social connections - types of caring for elderly


 **Learning and education** - age, gender & location of learners, numbers attending wananga, numbers graduating, iwi affiliations


 **Learning and education** - numbers entering type of qualifications and courses


 **Learning and education** - expenditure on education by learners, and government

 **Wellbeing (health)** - life expectation, illnesses and disabilities

 **Wellbeing (health)** - use of health services, expenditure on services


 **Wellbeing (health)** - health spending by government, and patient

 **Housing** - home ownership, preference for type of home, home quality

 **Housing** - barriers to purchase, and renting, expenditure by government, and owner / tenant

 **Income, expenditure and work** - level and source of income

 **Income, expenditure and work** - labour force participation, job preferences

 **Income, expenditure and work** - skills, experience, years in workforce, hours of work

 **Social issues** - level, type & cause of criminal offending

 **Social issues** - children in care, levels of child abuse

 **Social issues** - types of services and numbers requesting assistance

 **Maori Businesses** - number, type, industry, employer status, ownership characteristics

- ☐ **Maori Businesses** - profitability, productivity, growth, net worth
- ☐ **Political issues** - proportion on Māori electoral roles, numbers in political positions
- ☐ **Political issues** - levels of participation in whānau, hapu, & iwi decision making
- ☐ **Maori / treaty rights** - number and type of claims, types of outcomes, expenditure on claims
- ☐ **Maori / treaty rights** - impact on communities due to unsolved claims, foregone revenue
- ☐ **None of the above**

PLEASE INDICATE THE EASE OR DIFFICULTY OF LOCATING AND OBTAINING
THE STATISTICS YOU SELECTED FOR THE PURPOSES OF MAORI DEVELOPMENT

(Note: Only the Areas selected in above section appeared for the respondent to rate)

	Easy to access	Hard to access	Could not access	Don't Know
Maori customary practices and traditions - type, extent of use, where taught, where practiced.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maori customary practices and traditions - expenditure by users, government, institutions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maori customary practices and traditions - information about teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maori Language - extent of use, where used, profile and ability of speakers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maori Language - where taught, ability of teachers, expenditure by government / learners.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Marae - type, location, condition.



Marae - ownership, usage, asset value.



Wahi Taonga and Wahi Tapu (sacred and culturally significant sites) - number and type.



Wahi Taonga and Wahi Tapu (sacred and culturally significant sites) - contribution to, and type of use by whānau.



Maori Land - type, quantity, & value.



Maori Land - purpose owners, & court claims.



Maori Population - population, size, and growth.



Maori Population - geographic distribution, % of NZ population.



Maori Population - age, gender, location etc.



Iwi Population - affiliation, size, and growth.



Iwi Population - age, gender, location etc.



Iwi Population - geographic distribution, location within rohe.



Families and households - size and composition.



Families and households - age, gender, employment status, educational attainment.



Families and households - iwi affiliation, gender, employment status, educational attainment.



Social connections - registered with iwi, types of caring for elderly.



Social connections - participation in kinship, cultural and local community activities, participation in community activities.



Social connections - types of caring for elderly.



Learning and education - age, gender & location of learners, numbers attending wananga, numbers graduating, iwi affiliations.



Learning and education - numbers entering type of qualifications and courses.



Learning and education - expenditure on education by learners, and government.



Wellbeing (health) - life expectation, illnesses and disabilities.



Wellbeing (health) - use of health services, expenditure on services.



Wellbeing (health) - health spending by government, and patient.



Housing - home ownership, preference for type of home, home quality.



Housing - barriers to purchase, and renting, expenditure by government, and owner/tenant.



Income, expenditure and work - level and source of income.



Income, expenditure and work - labour force participation, job preferences.



Income, expenditure and work - skills, experience, years in workforce, hours of work.



Social issues - level, type & cause of criminal offending.



Social issues - children in care, levels of child abuse.



Social issues - types of services and numbers requesting assistance



Maori Businesses - number, type, industry, employer status, ownership characteristics.

Maori Businesses - profitability, productivity, growth, net worth.

Political issues - proportion on Māori electoral roles, numbers in political positions.

Political issues - levels of participation in whānau, hapu, & iwi decision making.

Maori / treaty rights - number and type of claims, types of outcomes, expenditure on claims.

Maori / treaty rights - impact on communities due to unsolved claims, foregone revenue.

None of the above.

Please provide comments on the general ease/difficulty of obtaining statistics that inform on the issues of Maori development

[illegible]

SECTION 2 - RELEVANCY OF STATISTICS

This section aims to better understand how relevant statistics are to the Maori development issues related to your organisation

Please tick the statistics that your organisation has used in the past 12 months to better understand Maori development issues?



Maori customary practices and traditions - type, extent of use, where taught, where practiced



Maori customary practices and traditions - expenditure by users, government, institutions.



Maori customary practices and traditions - information about teachers



Maori Language - extent of use, where used, profile and ability of speakers



Maori Language - where taught, ability of teachers, expenditure by government/learners



Marae - type ,location, condition



Marae - ownership, usage, asset value



Wahi Taonga and Wahi Tapu (sacred and culturally significant sites) - number and type



Wahi Taonga and Wahi Tapu (sacred and culturally significant sites) - contribution to, and type of use by whānau



Maori Land - type, quantity, & value



Maori Land - purpose, owners,& court claims



Maori Population - population, size, and growth



Maori Population - geographic distribution, % of NZ population



Maori Population - age, gender, location etc



Iwi Population - affiliation,, size, and growth



Iwi Population - age, gender, location etc



Iwi Population - geographic distribution, location within rohe



Families and households - size and composition



Families and households - age, gender, employment status, educational attainment



Families and households - iwi affiliation, gender, employment status, educational attainment



Social connections - registered with iwi, types of caring for elderly



Social connections - participation in kinship, cultural, and local community activities, participation in community activities





Social connections - types of caring for elderly



Learning and education - age, gender & location of learners, numbers attending wananga, numbers graduating, iwi affiliations



Learning and education - numbers entering type of qualifications and courses

-  **Learning and education** - expenditure on education by learners, and government
-  **Wellbeing (health)** - life expectation, illnesses and disabilities
-  **Wellbeing (health)** - use of health services, expenditure on services
-  **Wellbeing (health)** - health spending by government, and patient
-  **Housing** - home ownership, preference for type of home, home quality
-  **Housing** - barriers to purchase, and renting, expenditure by government, and owner/tenant
-  **Income, expenditure and work** - level and source of income
-  **Income, expenditure and work** - labour force participation, job preferences
-  **Income, expenditure and work** - skills, experience, years in workforce, hours of work
-  **Social issues** - level, type & cause of criminal offending
-  **Social issues** - children in care, levels of child abuse
-  **Social issues** - types of services and numbers requesting assistance
-  **Maori Businesses** - number, type, industry, employer status, ownership characteristics
-  **Maori Businesses** - profitability, productivity, growth, net worth
-  **Political issues** - proportion on Māori electoral roles, numbers in political positions



Political issues - levels of participation in whānau, hapu, & iwi decision making



Maori / treaty rights - number and type of claims, types of outcomes, expenditure on claims



Maori / treaty rights - impact on communities due to unsolved claims, foregone revenue



None of the above

PLEASE INDICATE HOW WELL THE STATISTICS YOU HAVE USED IN THE PAST
12 MONTHS, HELP EXPLAIN THE MAORI DEVELOPMENT ISSUES THAT YOUR
ORGANISATION NEEDS TO KNOW ABOUT

(Note: Only the Areas selected in above section appeared for the respondent to rate)

	Related well	Related partially	Did not relate	Don't Know
Maori customary practices and traditions - type, extent of use, where taught, where practiced. _				
Maori customary practices and traditions - expenditure by users, government, institutions. _				
Maori customary practices and traditions - information about teachers. _				
Maori Language - extent of use, where used, profile and ability of speakers. _				
Maori Language - where taught, ability of teachers, expenditure by government/learners. _				
Marae - type, location, condition. _				

Marae - ownership, usage, asset value.



Wahi Taonga and Wahi Tapu (sacred and culturally significant sites) - number and type.



Wahi Taonga and Wahi Tapu (sacred and culturally significant sites) - contribution to, and type of use by whānau.



Maori Land - type, quantity, & value.



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Maori Population - age, gender, location etc.



Iwi Population - affiliation, size, and growth.



Iwi Population - age, gender, location etc.



Iwi Population - geographic distribution, location within rohe.



Families and households - size and composition.



Families and households - age, gender, employment status, educational attainment.



Families and households - iwi affiliation, gender, employment status, educational attainment.



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Social connections - types of caring for elderly.



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Wellbeing (health) - health spending by government, and patient.



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Political issues - proportion on Māori electoral roles, numbers in political positions.

Political issues - levels of participation in whānau, hapu, & iwi decision making.

Maori / treaty rights - number and type of claims, types of outcomes, expenditure on claims.

Maori / treaty rights - impact on communities due to unsolved claims, foregone revenue.

None of the above.



Please provide comment on the general relevancy of statistics to the issues of Maori development

Please contact msf@paradise.net.nz if you have any questions regarding this survey

Glossary

ahi ka	burning fire; continuous occupation; rights to land by occupation
ahi ka roa	long-burning fires; rights to land by occupation
ao Mārama	world of light, material world
ariki	high chief
atua	god, deity, spirit, supernatural being
hapū	tribe, descent group, wider kin group than whānau
hau	spirit, vitality of human life, vital essence of land
hui	meeting, gathering, assembly
iwi	tribe, collection of hapū, people
kai	food, to eat
kainga	home, village, settlement, possibly also country around settlement

kaitiaki	guardian, trustee, protector, steward, controller; spirit guardians
kaitiakitanga	ethic of guardianship, protection
karakia	incantation, chant, prayer, ritual
korero	discussion, speech, to speak
kotahitanga	unity
mahinga mataitai	traditional fishing grounds
mana	authority, control, influence, prestige, power, reputation
mana whenua	customary rights and authority over land and other taonga within the rohe
manaaki	hospitality, generosity, compassion, respect, kindness
manaakitanga	ethic of hospitality, generosity, care-giving
manuhiri	guests, visitors
marae	enclosed space in front of house, courtyard, community

	meeting place
mataitai	seafood, fishing area
mauri	life force, life principle
noa	ordinary, free from tapu or restrictions, safe, touchable
Pakeha	European, non-Maori
rahui	restriction on access or prohibition on use of land or resources; reserve, preserve
rangatira	chief
rangatiratanga	chieftainship, leadership, self determination, self-management; qualities of leadership and chieftainship
rohe	boundary, territory, district, area, region
tangata whenua	people of the land, people of a given place
taonga	treasured possession, property
tapu	religious or spiritual restriction, sacred, consecrated, prohibited

Te ao Māori	the Māori world or worldview
tika	correct, proper, fair, just, according to traditional ways
tikanga	custom, habit, rule, plan, method, rights, law
tino rangatiratanga	full (chiefly) authority
tohunga	specialist, expert
tupuna, tipuna	ancestor, ancestors
tūturu	real, genuine
urupa	burial site, cemetery
wahi tapu	sacred place, repository of sacred objects
wai	water
waiora	Health, well being
wairua	spirit, spiritual aspects
waka	canoe

whakapapa	ancestry, lineage, family connections, genealogy; to layer
whānau	family, extended family
whānaunga	relative, blood relationship
whānaungatanga	ethic of connectedness by blood; relationships, kinship
whare	house, building
whenua	land, ground, placenta, afterbirth