



Asia-Pacific
Economic Cooperation

Advancing Free Trade
for Asia-Pacific **Prosperity**

Case Studies on Advancing Inclusive Economic Growth: Understanding and Valuing Indigenous Economies within APEC

APEC SOM Committee on Economic and Technical Cooperation

April 2021



Case Studies on Advancing Inclusive Economic Growth: Understanding and Valuing Indigenous Economies within APEC

APEC SOM Committee on Economic and Technical Cooperation

April 2021

NOTE:

The terms such as “national”, “nation” used in the text are for purposes of this report and do not imply the “political status” of any APEC member economy.

Prepared by:

Authors: Hillmarè Schulze, Konrad Hurren, Hannah Riley

Business and Economic Research Limited (BERL)

Level 5, 108 The Terrace, Wellington

www.berl.co.nz

+64 4 931 9200

All work is done, and services rendered at the request of, and for the purposes of the client only. Neither BERL nor any of its employees accepts any responsibility on any grounds whatsoever, including negligence, to any other person.

While every effort is made by BERL to ensure that the information, opinions and forecasts provided to the client are accurate and reliable, BERL shall not be liable for any adverse consequences of the client's decisions made in reliance of any report provided by BERL, nor shall BERL be held to have given or implied any warranty as to whether any report provided by BERL will assist in the performance of the client's functions.

Reference No: #6087 February 2021

Produced for:

Asia-Pacific Economic Cooperation

SOM Committee on ECOTECH

This report has benefited from the technical inputs of the members of the APEC SOM Committee on ECOTECH. The views expressed in this paper are those of the authors and do not necessarily represent those of APEC Member Economies.

“Uia mai ki a au, he aha the mea nui o te ao?
Mākū e kī atu, he tangata, te tangata, he tangata”

– Māori Proverb

(If you ask me ‘what is the greatest thing in the world?’

I will say, ‘it is people, it is people, it is people’)

This Whakataukī or Māori proverb speaks to the heart of this study, recognising that measuring Indigenous economies and Indigenous economic advancement is a means to improve the lives and well-being of Indigenous Peoples across the Asia-Pacific region.

Executive summary

The aim of this report is to support statisticians, researchers and policy makers within the APEC region to understand and value Indigenous economies in their respective economies. This report finds that research and analysis of Indigenous economies generates useful data and information that can provide decision-makers and stakeholders with important insights to inform policy decisions. This information can help improve the opportunities and wellbeing of Indigenous Peoples. The report also highlights, and helps to raise awareness of, the contribution that Indigenous economies make to their wider APEC economies. This heightened awareness can increase economic opportunities and encourage inclusive growth.

The first stage of this project involved a case study of how the Māori economy and its contribution to the broader New Zealand economy has been measured. This case study was based on the work Business and Economic Research Limited (BERL) carried out to measure the Māori economy in New Zealand in 2011 and 2015. The key statistics in this case study were based on 2013 data, and were from the 2015 report. This case study was provided to APEC economies, along with a questionnaire which asked questions about their respective Indigenous economies.

Responses to the questionnaire were received from Australia, Canada, Japan, Malaysia, Mexico, Peru and Chinese Taipei. BERL analysed the responses to draw insights and identify opportunities for measuring Indigenous economies. One objective was to build a collective knowledge base about how Indigenous economies can be understood and measured to support APEC members' collective approach to facilitation and advancement of inclusive economic growth. Data and information are required to understand the role of the Indigenous economic system within the wider economy.

Collecting and analysing the necessary data is a journey, and there is no standardised approach as there is no neatly defined scope of economics. Indigenous Peoples have long developed a variety of systems to govern their societies. Their traditional and local economic systems ensured sustainable utilisation of resources, social responsibility and harmonious relationships through cooperation, reciprocity and valoration of their cultural values¹. Any Indigenous economic system is part of an economic and social totality that connects and governs the lives of its peoples. For example, the Māori economy is an integrated part of the New Zealand economy.

For the purposes of this project, the journey in gathering data and information can be grouped into three stages. The aim was to consider Indigenous economies in terms of the importance of people and resources. The first stage was to look at people, individuals as well as households, the government and business - looking at who they are, what they do, defining them as the economic actors. The second stage was to measure the Indigenous economic participation of these actors and the final stage is to measure their economic contribution. The questionnaire responses highlighted that each member is at a different stage of understanding and measuring their Indigenous economy. The responses also identified challenges, opportunities and benefits in measuring Indigenous economies.

The Māori economy case study provides an example of each stage of measuring the Indigenous economy, to serve as a reference. It also highlights the many contributions the Māori economy makes to the New Zealand economy.

¹ Retrieved from <http://pro169.org/res/materials/en/development/IPs%20and%20Local%20Economic%20Development.pdf>

Finally, on terminology, we recognise that the term 'Indigenous' has varied degrees of acceptance and use across the Asia Pacific region.

Contents

1	Introduction and overview of Indigenous economies in the APEC region	1
1.1	Why Indigenous economies are important to APEC	1
1.2	Why understanding the measurement of Indigenous economies is important	1
2	Indigenous economic systems	3
2.1	Economic systems	3
2.2	Understanding Indigenous economic systems	4
3	Understanding the measurement of APEC Indigenous economies.....	6
3.1	Identifying economic actors.....	6
3.2	Measuring participation	6
3.3	Measuring contribution.....	9
3.4	Other key findings	11
3.4.1	Supporting Indigenous economies	11
3.4.2	Benefits arising from measuring Indigenous economies	13
3.4.3	Challenges in measuring Indigenous economies	13
3.5	Implications and opportunities.....	14
4	Case study: Māori economy	16
4.1	New Zealand context	16
4.1.1	Key historic events	16
4.1.2	Foundation of the early Māori economy	17
4.1.3	The Treaty of Waitangi.....	17
4.2	Measuring economic actors	18
4.3	Measuring participation	20
4.4	Measuring contribution.....	21
4.4.1	History of measuring the Māori economy	21
4.4.2	Inherent difficulties in measuring Indigenous economies	21
4.4.3	Defining the Māori economy	22
4.4.4	Methodology	22
4.4.5	Data collection	23
4.4.6	Data analysis	23
4.4.7	Results	23
4.5	Impact of COVID-19 on the Māori economy	26

5 Conclusion	27
Appendix A Questionnaire.....	29

Tables

Table 4.1 The Treaty of Waitangi	17
--	----

Figures

Figure 2.1 Economic system flow model	3
Figure 2.2 Understanding the measurement of Indigenous economies framework.....	5
Figure 3.2 Steps to understanding the measurement of Indigenous economies	15
Figure 4.1 Māori and non-Māori population pyramid, 2013	20
Figure 4.2 Māori value added by sector, 2013 \$ billion	24
Figure 4.3 Māori economy export estimates by industry, 2012	25
Figure 5.1 Understanding the measurement of Indigenous economies framework.....	27
Figure 5.2 Steps to understanding the measurement of Indigenous economies	28

Glossary

Term	Description
Hāpu	Section of a large kinship group and the primary political unit in traditional Māori society, often referred to as sub-tribe or clan
Iwi	Often translated to a tribe, closer to “nation”
Kāwanatanga	Governorship
Māori Land Court	The Māori Land Court is a specialist court of record in New Zealand that hears matters relating to Māori land
Statistics New Zealand	New Zealand's official data agency
Tangata whenua	People of the land
Te Puni Kōkiri	Ministry of Māori Development
Te reo	“The Language” referring to the Māori language
Tino rangatiratanga	Sovereignty, self-determination
Tūrangawaewae	Place where one has rights of residence and belonging through kinship
Wairua	Attitude, quintessence, feel, mood, feeling, nature, essence, atmosphere
Whakapapa	Genealogy
Whānau	Family group

1 Introduction and overview of Indigenous economies in the APEC region

1.1 Why Indigenous economies are important to APEC

APEC – building inclusive economies

One of the goals of APEC is to support inclusive economic growth and prosperity in the Asia-Pacific region. The APEC Putrajaya Vision 2040 mandates APEC's work on inclusion. This vision includes a pillar on Strong, Balanced, Secure, Sustainable and Inclusive Growth “to ensure that the Asia-Pacific region is resilient to shocks, crises, pandemics and other emergencies, we will foster quality growth that brings palpable benefits and greater health and wellbeing to all, including MSMEs (Micro, Small, and Medium Enterprises), women and others with untapped economic potential.” APEC’s work focuses on key inclusive growth drivers to help increase the participation of all members and communities in the region. The growth of Indigenous economies is aligned with APEC achieving its goal of inclusive economic growth and prosperity.

Research and analysis of Indigenous economies can increase domestic, regional and global awareness of the value that these economies bring, and highlight the opportunities within these Indigenous economies. Awareness can increase opportunities and encourage inclusive growth. In other words, these increased opportunities for Indigenous economies and their people will both divide the economic pie better and make it grow better, which will be of global benefit. A key rationale for APEC’s work on inclusion is that opening up opportunities can spur stronger economic performance and improve living standards across the board.

Solving inequality matters because it often is associated with poor long-term social outcomes. Everyone, including the very wealthy, pay the costs of these poor outcomes, and reducing inequality can be beneficial for all. If inequality can be a barrier to participating fully in the economy, then reducing these barriers creates a huge opportunity for economies. Studies from the OECD, International Monetary Fund (IMF), World Bank and others have shown that reducing inequality can contribute to boosting economic growth and reducing poverty, while at the same time improving access to opportunities and increasing wellbeing across a range of indicators.

Growing Indigenous populations

Indigenous communities are a growing part of populations. The World Bank estimates that 70 percent of the world’s 370 million Indigenous Peoples (approximately 260 million people) live in the Asia-Pacific region. It appears that Indigenous populations are growing faster than other domestic populations and are generally younger.²

1.2 Why understanding the measurement of Indigenous economies is important

Research and analysis of Indigenous economies generates data and information that can provide decision-makers and stakeholders with important insights. This includes Indigenous communities and leaders.

Understanding Indigenous economies can also improve the evaluation of critical issues, such as COVID-19. For example, understanding the Māori economy enables the New Zealand government and Māori to respond swiftly to COVID-19 with a more targeted approach.

Understanding the measurement of Indigenous economies involves turning numbers into information that makes sense and enables sensible evidence-based solutions. The ultimate goal of understanding the measurement of

² <https://www.who.int/healthsystems/topics/financing/healthreport/IHNo33.pdf>

Indigenous economies is to improve the opportunities and wellbeing of Indigenous Peoples. Other benefits include:

- Provides information to empower Indigenous Peoples and enable Indigenous communities to leverage economic opportunities
- Provides insights to policy-makers on the socio-economic differences between Indigenous and non-Indigenous Peoples
- Delivers data that will ensure public policies have greater impact through informed decision-making and targeted investment.

Understanding the measurement of Indigenous economies will also provide clear data on barriers and opportunities for Indigenous economic development within the broader domestic economic contexts. This will enable decision makers to identify appropriate policy levers to address economic inequality for their Indigenous populations.

Measuring Indigenous economies is critical to illustrating the economic contribution these populations make to economies. This can reframe the narrative around Indigenous economic participation in a more positive light and support efforts to address issues of inequality and advance more inclusive models of economic growth.

2 Indigenous economic systems

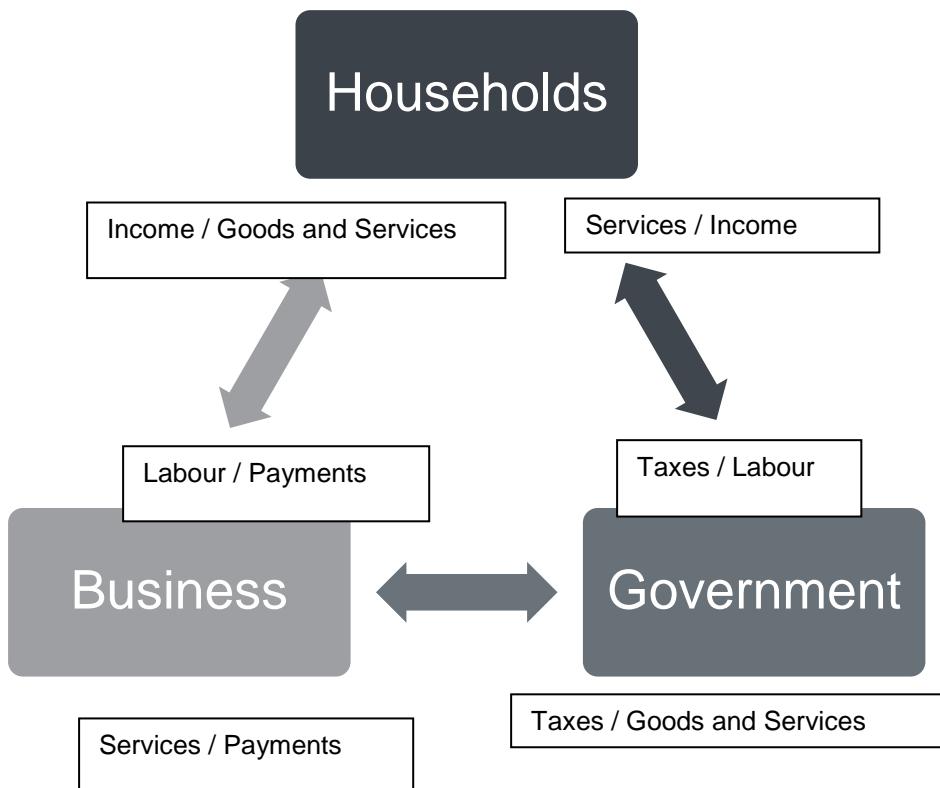
2.1 Economic systems

An economic system is a means by which societies organise and distribute available resources, services, and goods across a geographic region, particularly an economy. Economic systems regulate the factors of production, including land, capital, labour, and physical resources. An economic system includes many institutions, agencies, entities, decision-making processes, and patterns of consumption that comprise the economic structure of a given community. There are various economic systems, such as market systems (free market with limited government intervention), traditional systems (based on goods, services and work with very little division of labour), and also Indigenous systems (traditional and local economic system of Indigenous Peoples). All of these economic systems have their own unique way of dealing with available resources, services, and goods that flow within an economy. In all of these economic systems, there are four (broadly defined) economic actors:

- 1) Households
- 2) Governments
- 3) Businesses and other entities
- 4) Rest of the world.

For the purposes of this report, we will focus on the domestic economic system (households, government and business). Figure 2.1 presents an economic system flow model.

Figure 2.1 Economic system flow model



Households

Households do two fundamental things, which are vital to the economy:

- i) Demand goods and services from business, receive income from business and government, and receive services from government
- ii) Supply labour to business and government, supply payments to business and taxes to government.

Government

Government does two fundamental things, which are vital to the economy:

- iii) Demands taxes from households and business, receives labour from households and receives goods and services from businesses
- iv) Supplies services to business and households, payments to business and income to households.

Businesses and other entities

Businesses do two fundamental things, which are vital to the economy:

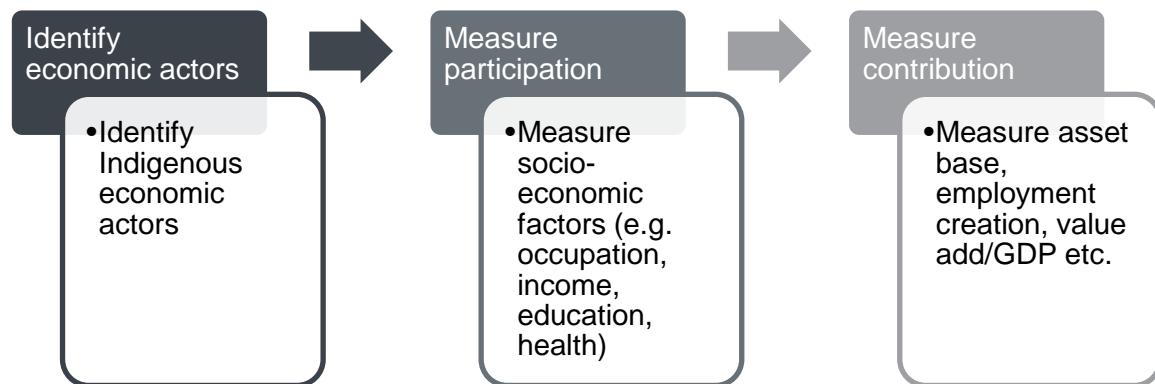
- v) Demand labour from households, receive payments from households and government, and receive services from government
- vi) Supply goods and services to households and government, income to households and taxes to government, and investment in business and other entities.

2.2 Understanding Indigenous economic systems

As mentioned in section 2.1, there are various economic systems within the overall system. Furthermore, any Indigenous economic system is part of an economic and social totality that connects and governs the lives of its peoples. For example, the Māori economy is an integrated part of the New Zealand economy.

Data and information is required to understand the Indigenous economic system within the wider economy. Collecting and analysing this data is a journey and there is no standardised approach. However, for the purposes of this project, this report has grouped the journey of gathering data and information into three stages. These three stages provide a framework for understanding Indigenous economic systems: measuring population, measuring economic participation, and measuring economic contribution. The first stage was to look at people, individuals as well as households, the government and business - looking at who they are, what they do, defining them as the economic actors. The second stage was to measure the Indigenous economic participation of these actors and the final stage is to measure their economic contribution of these actors. These three stages are shown in Figure 2.2. These three stages and the overall framework was developed by drawing upon the Māori economy case study in section 4. Data sovereignty is also an important aspect of collecting data for Indigenous Peoples. This is briefly discussed in section 4.2.

Figure 2.2 Understanding the measurement of Indigenous economies framework



3 Understanding the measurement of APEC Indigenous economies

Indigenous Peoples are not homogenous; they have unique cultures, knowledge bases, values, languages, histories, worldviews, struggles, successes, etc. As such, the Indigenous Peoples and the governments in the co-sponsoring APEC economies will have different experiences. This section details some of the Indigenous economies' insights, as reported in the APEC economies' responses, and concludes with the opportunities for better understanding the measurement of Indigenous economies.

APEC economies had the opportunity to complete a questionnaire about data and information on their Indigenous economy. The questionnaire is provided in Appendix A. Responses to the questionnaire were received from Australia, Canada, Japan, Malaysia, Mexico, Peru, and Chinese Taipei (the respondents). This section uses the *Understanding the Measurement of Indigenous Economies Framework* (Figure 2.2) to summarise the respondents' responses.

3.1 Identifying economic actors

The first stage of understanding the measurement of Indigenous economies is identifying and measuring what constitutes Indigenous economic actors, which could include data on individuals, households and businesses. Definitions of Indigenous individuals, households and businesses is likely to vary between economies. Section 4.2 provides the definitions that the Māori economy case study applied. Data on economic actors provides the foundation for the next two stages of measuring Indigenous economies: measuring participation and measuring contribution. Understanding the size and composition of Indigenous economic actors is crucial for policy and planning purposes.

Most of the respondents include an Indigenous Peoples count in their Census to collect data regarding this component of population. Measuring population is an essential first-step to measuring Indigenous economies and each economy has their own method of identifying and accounting for Indigenous populations.

Government Indigenous population data, such as Census data, (tier one data³) enables service providers (e.g. private consultancy firms, universities, etc.) to conduct research on Indigenous economies. It is also of value to Indigenous communities themselves. Therefore, it is important that the foundation of measuring Indigenous population is sound. This can be difficult as there are issues with undercounting of the Indigenous population.

Each economy's Census questions and data differ. Accordingly, the data analysis and result will differ. For example, Mexico's Census form includes a question about being an "Indigenous speaker". Information regarding the Indigenous population is based on this question. By contrast, Peru has a question about self-identification as well as speaking the Indigenous language. The definitions used for identifying economic actors will have implications for the resulting research.

Building on the findings of this project, APEC economies could share and learn from their respective approaches to Census questions intended to collect information on Indigenous economic actors.

3.2 Measuring participation

Each of the respondents have measured economic participation of their Indigenous People at some level. Measuring participation relates to measuring socio-economic factors of Indigenous Peoples (e.g. occupation, income, education, health). Whereas measuring contribution relates to the Indigenous Peoples creation of goods

³ Tier 1 data is government data. Tier 2 data is from private consultancy firms, universities etc.)

and services, revenue, taxes, employment, assets, value add etc. Measuring participation through information on income, education, health and employment will provide a foundation of data to measure Indigenous Peoples participation in their respective economies. This section highlights some of the research that has been conducted.

Australia

Australia collects data on Indigenous participation through a range of mechanisms, including surveys and administrative data. The most comprehensive source of small area data for Australia's Indigenous population (Aboriginal and Torres Strait Islander people) is the five-yearly Census, conducted by the Australian Bureau of Statistics (ABS). In addition to the critical population and demographic data, the Census includes economic indicators such as housing, education, income and employment.

The ABS also conducts an Aboriginal and Torres Strait Islander Household Survey every three years. The focus of the survey alternates between social indicators (the National Aboriginal and Torres Strait Islander Social Survey (NATSISS), most recent in 2014-15) and health indicators (the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), most recent in 2018-19). These surveys collect information on socioeconomic characteristics such as labour force status, educational attainment and income. Both surveys are designed to provide reliable estimates at the economy level, state/territory level and for non-remote and remote areas.

While there is no agreed way to measure Australia's Indigenous economy, there are a number of data points that can build a picture about the nature and extent of Indigenous economic participation in Australia. This includes:

- Labour supply - Indigenous Australians constitute 2.6 percent of the economy's working age population. This varies significantly across regions, with relatively high numbers and low percentages in metropolitan regions. For example, 50,200 of the working age population in Sydney self-identifies as Indigenous, which is 1.4 percent of the working age population of the region. By contrast, the figures in East Arnhem land are 6,800 and 69 percent, respectively
- Technology and know-how – traditional and customary knowledge can be monetised in different ways through arts and culture, land management, food and medicine, and to enable product differentiation. In terms of patents, there are 321 plant species with known Indigenous uses in Australia; 66 species were mentioned in the title or abstract of a patent in the World Intellectual Property Organisations database, and more than 1,300 patents were returned
- Entrepreneurship - there are no precise numbers on the total number of Indigenous entrepreneurs. Recent analysis of the Census estimates there were approximately 17,900 Indigenous owner-managers in 2016 - an increase of 30 percent since the 2011 Census. The highest intensity of Indigenous owner-managers is in the major cities, with higher proportions in construction, arts and government sectors
- Land – Indigenous tenure arrangements cover 51 percent of Australia's land mass. This includes 39 percent covered by Native Title rights and interests, and 12 percent by statutory land rights. There has been a long period of determining land claims, with the focus now shifting towards how to use land, water and sea resources to leverage community benefits.

Canada

Data from the National Indigenous Economic Development Board (NIEDB) Progress Report shows important gaps between Indigenous and non-Indigenous Peoples in relation to employment rates, median incomes, proportion of income from government transfers, educational attainments and self-employment rates across

Indigenous identity groups. Métis individuals are closest to achieving economic parity with non-Indigenous Canadians.

Indigenous Services Canada (ISC) and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) also regularly measure the socio-economic wellbeing of Indigenous communities and populations. For example, the Community Well-Being (CWB) index⁴ is used to measure socio-economic well-being for individual indigenous communities across Canada. It has 4 components: education, labour force activity, income and housing. The CWB:

- Provides a systematic, reliable summary measure of socio-economic well-being for individual communities in Canada
- Illustrates variations in well-being across First Nations and Inuit communities and how they compare to non-Indigenous communities
- Enables the tracking of well-being over time
- Is compatible with other community-level data to facilitate a wide variety of research on the factors associated with well-being.

Japan

The Hokkaido Prefectural Government conducts the Hokkaido Ainu Living Conditions Survey for the Indigenous Ainu people and their families. The survey covers their living conditions, income status, the percentage of people employed by industry, the percentage of enrolment, the rate of home ownership, etc.

Malaysia

A significant amount of academic research on the Indigenous economy is completed. An example is:

- The Case Study at Lagong Hill Forest Reserve showed that the Aboriginal at Bukit Lagong Forest Reservation's economic activities are 'just enough to live.' Jungle resources had generated economic benefits through their daily economic activities which contributed to their incomes and other activities. Collecting domestic woods, rubber tapping and weaving had been their economic activities that generated incomes. Moreover, since the last few decades, their economic activities had been changing from solely forest resources to their involvement in public and private sectors.⁵

Mexico

The National Institute of Statistics and Geography carries out the National Survey of Income and Households, which reports on household income and spending. It is possible to extract the information referring to the Indigenous population based on the status of "Indigenous speaker".

The National Institute of Indigenous Peoples also has information on the Indigenous population⁶, according to the article 4 fraction XIII of the Law of the National Institute of Indigenous Peoples, this Institution should establish the bases to integrate and operate a "National System of Information and Statistics on Indigenous and

⁴ <https://www.sac-isc.gc.ca/eng/1421245446858/1557321415997>

⁵ Socio-Economy Analysis of Orang Asli Society: Case Study at Lagong Hill Forest Reserve, Selangor (Er Ah Choy, Zalina Che Mat Ariffin, Joy Jacqueline Pereira, 2010)

⁶ Websites with information: <http://www.inpi.gob.mx/localidades2010-qobmx/index.html>; <http://www.inpi.gob.mx/cedulas/index.html>

Afro-Mexican Peoples and Communities”, which contains, among others, a catalog of indigenous peoples and communities with the fundamental elements and characteristics of its political, legal institutions, economic, social and cultural, their lands, territories and resources.

Peru

The Ministry of Development and Social Inclusion has conducted qualitative research regarding Indigenous economies and their relationship to the economic inclusion programs implemented by the Ministry in the Peruvian Amazon. This research is entitled “Economy and productive development in Indigenous communities of the Peruvian Amazon. Implications for policies to overcome poverty”. It analyses Indigenous economic systems (their economic activities, linked to their culture and their relationship with the environment) and how they interact with poverty reduction programs, based on income generation. The Ministry of Development and Social Inclusion has conducted other research that includes Indigenous communities of the Andes, however, they are not limited by ethnicity.⁷

Chinese Taipei

Chinese Taipei undertakes regular sampling surveys to understand family income and expenditure, and financial conditions, as well as in-depth analysis of economic pressure, housing and property ownership, and liabilities. The results serve as a reference for future policy implementations.

3.3 Measuring contribution

Understanding the Indigenous contribution to the overall economy can be achieved by measuring the Indigenous asset base, employment creation, employment income, government revenues, value add/gross domestic product (GDP) etc. This section highlights the research that has been conducted to understand the Indigenous contribution to the overall economy. The research is not only being conducted by the government; but second tier service providers (e.g. PwC) are also conducting research.

Australia

In Australia, PwC has conducted research into the contribution of the business sector to Australia’s economy. This research estimated that the contribution of the Indigenous business sector to Australia’s economy to be between \$2.2 billion and \$6.6 billion⁸.

Other research reports with findings that relate to the Indigenous economy include:

- IP Australia, 2019, Methods for Estimating the Market Value of Indigenous Knowledge⁹
- Linking Indigenous Communities with Regional Development, 2019 - OECD¹⁰
- Igniting the Indigenous Economy, 2016 - KPMG¹¹

⁷ <http://evidencia.midis.gob.pe/wp-content/uploads/2019/01/Informe-Evaluacion-Final-20-1.pdf>

⁸ <https://www.pwc.com.au/Indigenous-consulting/assets/the-contribution-of-the-Indigenous-business-sector-apr18.pdf>

⁹ https://www.ipaustralia.gov.au/sites/default/files/caepr_final_report_on_ik.pdf

¹⁰ <http://www.oecd.org/cfe/linking-Indigenous-communities-with-regional-development-3203c082-en.htm>

¹¹ <https://assets.kpmg/content/dam/kpmg/au/pdf/2016/igniting-Indigenous-economy-australia.pdf>

- Economic benefits of closing the gap in Indigenous employment outcomes, 2014 - Deloitte Access Economics¹²
- Ongoing growth in the number of Indigenous Australians in business, 2018 - Centre for Aboriginal Economic Policy and Research¹³
- Indigenous Business Growth, 2018 - Supply Nation¹⁴
- State of Indigenous Business: driving growth across the Indigenous business sector, 2020 - Supply Nation.¹⁵

Canada

Canada conducted two studies focused on estimating the contribution of Indigenous Peoples to the economies of Manitoba and Atlantic Canada. Both the Manitoba and Atlantic Canada studies were conducted through collaborations between external organisations, which included Indigenous organisations, academia and expert consultants. The two studies estimated the realised Indigenous economic contribution to the province of Manitoba and Atlantic Canada in 2016 from Indigenous businesses, governments, households and infrastructure.

These reports include:

- Indigenous Contributions to the Manitoba Economy, 2016 - Southern Chiefs' Organization (SCO) and Manitoba Keewatinowi Okimakanak (MKO) partnered with Brandon University¹⁶
 - Indigenous contributions to the Manitoba economy: 35,700 jobs, \$1.1 billion in wages, \$2.3 billion in GDP
- \$1.14 Billion Strong – Indigenous Economic Performance Atlantic Canada Economy, 2016 - The Atlantic Policy Congress of First Nations Chiefs Secretariat.¹⁷

In Atlantic Canada, Indigenous communities contribute to \$1,05

4M in GDP through \$2,567M in expenditure and gross production.

These examples indicate what measuring contribution can look like, but there is an opportunity for economies to complete a comprehensive measurement of the contribution of the Indigenous economy within the overall economy. For example, in Canada, Indigenous Services Canada (ISC) is currently conducting a feasibility study to examine how to measure the contribution of the Indigenous Peoples in the Canadian economy as a whole. This study will outline the data currently available to conduct such work, as well as the data gaps that may prevent optimal analyses in this area. Canada notes that the benefits of measuring its Indigenous economy will be to know their contribution to the:

¹² <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/finance/deloitte-au-fas-economic-benefits-closing-gap-10-feb-2014-240914.pdf>

¹³ <https://caepr.cass.anu.edu.au/research/publications/ongoing-growth-number-Indigenous-australians-business>

¹⁴ <https://supplynation.org.au/wp-content/uploads/2018/10/Building-Indigenous-Growth-Report.pdf>

¹⁵ <https://supplynation.org.au/research-paper/state-of-Indigenous-business-driving-growth/>

¹⁶ <http://scoinc.mb.ca/wp-content/uploads/2019/01/Indigenous-Economy-Report.pdf>

¹⁷ https://www.apcfnc.ca/images/uploads/FINAL_WEBSITE_VERSION_1_14_Billion_Strong_June_1_2016.pdf

- Gross Domestic Product
- Jobs creation
- Employment income
- Government revenues.

3.4 Other key findings

3.4.1 Supporting Indigenous economies

The respondees supported Indigenous economies through various research and policies. This is important for igniting the contributions of Indigenous economies. This section provides examples of these policies and research.

Australia

The Australian Government supports Indigenous economic development through policies that address disadvantage and build human capital in Indigenous populations, and to grow the opportunities for wealth creation. This includes policies aimed at stimulating growth in the Indigenous business sector, including:

IPP

The Indigenous Procurement Policy (IPP) was introduced in 2015 to increase the number and value of Australian Government contracts awarded to Indigenous businesses. The primary purpose of the IPP is to stimulate Indigenous entrepreneurship, business and economic development, providing Indigenous Australians with more opportunities to participate in the economy. Since 2015, the IPP has generated over \$3.5 billion in Australian Government contracting opportunities for Indigenous businesses. Many of Australia's State and Territory governments have similar policies in place, as do a number of big businesses in the corporate sector.

Targets in infrastructure

The Australian Government works with State and Territory jurisdictions to include Indigenous supplier and employment targets in major infrastructure projects to generate economic opportunities for Indigenous Australians. These participation targets aim to build demand for Indigenous employees and business, with an ultimate goal of reducing the disparity between Indigenous and non-Indigenous economic outcomes.

Indigenous Business Sector Strategy (IBSS)

The IBSS is the Australian Government's 10 year commitment and key policy for supporting the growth of the Indigenous business sector. The IBSS is helping the sector to respond to this increasing demand by enabling more Aboriginal and Torres Strait Islander Australians build sustainable businesses that will support themselves, their families and their communities.

The Strategy provides support through four key pillars that Indigenous businesses identified as critical to their success and growth of the sector:

1. Better business support
2. Improves access to finance
3. Stronger connections and networks
4. Harnessing the power of knowledge and data.

Canada

Canada has conducted three recent studies focused on the potential contribution to the Canadian economy, if Indigenous socio-economic factors were improved. Although using different methodologies, both the National Indigenous Economic Development Board (2016) and Centre for the Study of Living Standards (2015) studies estimate gains to the Canadian economy in terms of GDP, if the closing of the Indigenous educational gap were to occur. Similarly, although no estimates on the impact to Canadian GDP are provided in the study produced by Spielaier (2014), increases to Indigenous labour force participation when education gaps were to close are examined through a lens of microsimulations.

These reports include:

- Reconciliation: Growing Canada's Economy by \$27.7 Billion, 2016 - The National Indigenous Economic Development Board¹⁸
- Closing the Aboriginal Education Gap in Canada: Assessing Progress and Estimating the Economic Benefits, 2015 - Calver¹⁹
- The relation between education and labour force participation of Aboriginal peoples: A simulation Analysis using the Demosim population projection model, 2014 - Spielaier²⁰.

Chinese Taipei

In recent years, Chinese Taipei has been conducting research on the Indigenous contribution to the Chinese Taipei economy by measuring Indigenous participation in the economy. For instance, analysis of the possibility of facilitating trade, as well as investigating the performance of Indigenous-owned businesses. Chinese Taipei also supports the contribution of its Indigenous population through the following policies:

- Establishing a sustainable environment through utilising the cultures of Chinese Taipei Indigenous Peoples as elements for constructing and deepening key areas of industries, and reinforcing the integration of technologies and resources across industries
- Discovering and cultivating operational and management talents in the Indigenous industries, while implementing “learning through working” strategies and fostering collaborations between the industry and the academia to bridge the talent shortage gap
- Building and promoting brands in the Indigenous industry by storytelling, marketing and product quality optimisation to help brands establish their uniqueness and representativeness
- By investing in Indigenous start-ups and providing assistance in forming business strategies and finding Indigenous business models to deepen and solidify the foundation of the industry
- Opening up distribution channels by connecting the city with the townships where the Indigenous Peoples reside, where the production activities take place in the townships, and products sold in the city
- Implementing statistical analysis on gender to include Indigenous women in the decision process of economic and industrial developments, and to further create a gender-friendly environment.

¹⁸ http://www.naedb-cndea.com/reports/naedb_report_reconciliation_27_7_billion.pdf

¹⁹ <http://www.csls.ca/reports/csln2015-03.pdf>

²⁰ <https://journals.library.ualberta.ca/csp/index.php/csp/article/view/22095/16427>

3.4.2 Benefits arising from measuring Indigenous economies

The following benefits of measuring Indigenous economies were highlighted by the respondents.

Empowering Indigenous Peoples

A respondee stated that, ultimately, the benefit of measuring Indigenous economies is that it can help empower Indigenous Peoples and accelerate the opportunities for Indigenous economic development.

Provides insight to the socio-economic gaps between Indigenous and non-Indigenous Peoples

Some of the respondents emphasised the importance of understanding the socio-economic wellbeing of Indigenous Peoples. Indicators such as the Indigenous labour force (employment, unemployment and labour force participation), Indigenous business spending, Indigenous self-employment, Indigenous household income and expenditure, will help provide further insight into the socioeconomic gaps between Indigenous and non-Indigenous Peoples.

Enable Indigenous communities to leverage economic opportunities

Respondents pointed out that improving knowledge of Indigenous economies creates greater understanding, insight and ability to improve outcomes. This would enable Indigenous Peoples to leverage economic opportunities.

Public policies that have a greater impact

Economies made the point that data can be a powerful tool for enabling informed decisions. Measuring Indigenous economies can enable public policies that have a greater impact and benefit for Indigenous Peoples. It can also accelerate government investment, as it demonstrates that there is value in Indigenous economies. A greater understanding of Indigenous economies can also support governments to design and implement enabling policies for entrepreneurship and small business.

3.4.3 Challenges in measuring Indigenous economies

The following challenges in measuring Indigenous economies were recognised by the respondents.

Data and information gaps

There are data and information gaps that limit the respondents' ability to measure their Indigenous economy. This can be a result of a number of reasons (e.g. the data has not been collected, the data is not frequently collected, the collected data does not provide the necessary information).

No clear dividing line between Indigenous economies and the overall economy

Indigenous economies are not a separate, distinct, or a clearly identifiable segment of the overall economy. Instead, Indigenous economies are a closely connected component of overall economies. The composition of Indigenous economies and their key sectors are likely to be different to the overall economy. Some of the respondees outlined that it is, therefore, difficult to create a clear dividing line between Indigenous economies and the overall economy.

No working definition of Indigenous economies

None of the co-sponsoring economies have a working definition of their Indigenous economy. Some of the respondees discussed the difficulties in arriving at a definition. Difficulties include: no cross-party consensus, more than one Indigenous group with diverse cultures, Indigenous People's lives are integrated throughout society, and the Indigenous economy is integrated throughout many sectors. Nevertheless, the responses show

that it can be possible to proceed with measuring some aspects of the Indigenous economy without having an overarching definition in place.

Lacking a methodology

None of the respondents have a methodology to measure their Indigenous economy. A respondent noted that measuring the Indigenous economy should incorporate methods that apply to both Indigenous and non-Indigenous worldviews. This may be difficult, given measuring economies is centred in the non-Indigenous worldview. Nonetheless, co-design with Indigenous Peoples will likely improve outcomes from the Indigenous perspective.

Cultural diversity

Some of the respondents have many groups of Indigenous Peoples in their economies. These Indigenous groups have different worldviews, and it is, therefore, difficult to conduct research with each Indigenous group.

Failing to consult Indigenous Peoples

One of the respondents highlighted that marginalisation and social exclusion have led to the failure to consult Indigenous Peoples and communities on economic policies that affect them. In some cases, this has meant that the government's social initiatives have had limited impact. Economies identified that consultation, engagement and building trust and relationships are important parts of measuring Indigenous economies.

Low Census response rate from Indigenous Peoples

The survey responses showed that improving the capture and response rates of the Indigenous people surveyed is difficult. This can result in undercounting the Indigenous population.

Measuring economies can impose worldviews

A respondent expressed the view that the concepts used to define both economic and social processes, such as the terms 'development' or 'wellbeing', are often imposed and can be a limited vision of Indigenous Peoples and communities. Another respondent stated that the economic indicators used by governments are not relevant to Indigenous Peoples' perceptions and aspirations.

Qualitative indicators are lacking

Measuring economies often focuses on GDP, monetary income and employment. It is difficult to measure qualitative aspects of Indigenous economies (e.g. environmental stewardship). This fails to provide insight into important characteristics of Indigenous economies.

3.5 Implications and opportunities

The responses highlighted that each of the respondents is at a different stage of understanding and measuring their Indigenous economy. The responses also highlighted the opportunities for understanding the measurement of Indigenous economies within APEC. The most significant opportunity is for the respondents to measure the contribution of the Indigenous economy to its overall economy. This involves measuring the Indigenous asset base, employment creation, employment income, government revenues, value add/GDP, etc. It also involves working with Indigenous Peoples to understand other contributions that should be measured.

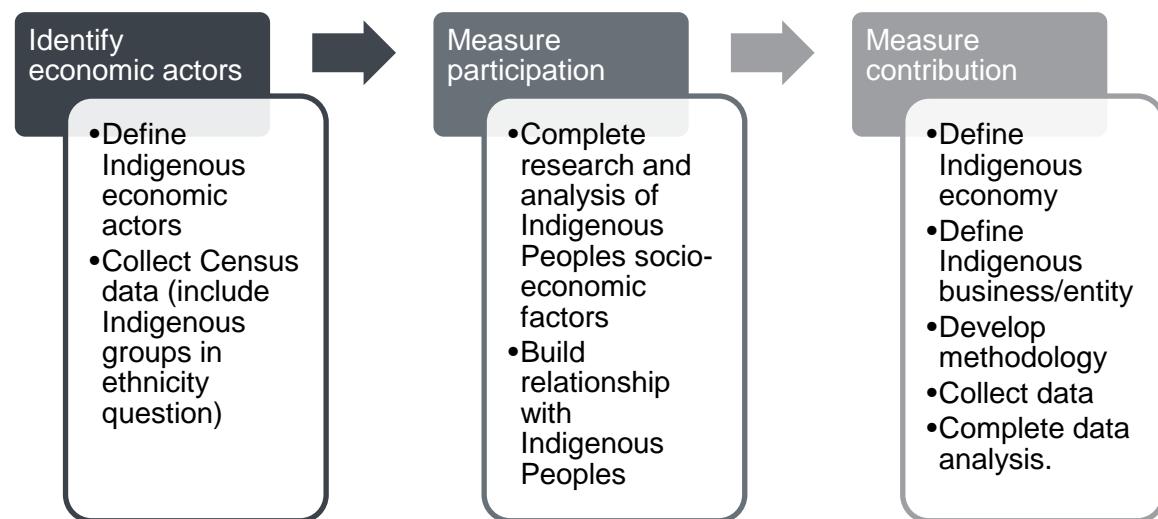
Advancing to the next stage (i.e. stage three) of the 'Understanding the Measurement of Indigenous Economies Framework' may require economies to make changes to how they define their Indigenous population, or their participation. For example, a credible definition of Indigenous Peoples is required to measure economic contribution.

Figure 3.2 illustrates an approach to realising this opportunity by outlining steps to understand Indigenous economies. It highlights that measuring contribution requires:

- Defining Indigenous economy
- Defining Indigenous business/entity
- Developing methodology
- Collecting data
- Completing data analysis.

Section 4 provides a case study of how the Māori economy and contribution has been measured in New Zealand. It explains each of steps to measure Indigenous economic contribution.

Figure 3.1 Steps to understanding the measurement of Indigenous economies



4 Case study: Māori economy

The purpose of this case study is to provide an example of applying each of the stages of the Understanding the Measurement of Indigenous Economies Framework. All dollar figures in this section are in the New Zealand Dollar (NZD).

4.1 New Zealand context

Māori are the *tangata whenua* (people of the land), the Indigenous people of Aotearoa-New Zealand. They sailed across the seas to New Zealand around 1,000 years ago. Today, one in seven New Zealanders identifies as Māori. Their history, language and traditions are central to New Zealand's identity²¹.

The Māori economy is not new, having been established for several centuries. However, the term "Māori economy" has only been mainstreamed in the last few decades in New Zealand. The scope of the Māori economy is diverse and complex, making it hard to define, and it cannot be narrowed to just treaty settlements. The Māori economy is not a separate economy, it is integrated into all parts of the New Zealand economy. For this case study, a specific definition was developed based on previously completed research.

4.1.1 Key historic events

The main characteristic of the early Māori economy was the importance of relationships. Part and parcel of these relationships were reciprocity, flexibility, sustainability and sharing/trade. The early European settlers in New Zealand were in the midst of the industrial revolution, where technology, productivity and machines were of much greater importance than relationships.

As with most Indigenous economies, there have been key historical events that have shaped the Māori population, and its participation in the economy. By examining the historical influences on Māori and the economy, it is possible to identify four key periods which assist in isolating the economic drivers for Māori.

These four key periods begin with the diverse economy prior to the arrival of early European settlers, which continued and expanded with early contact with the settlers. The second period began in the late 1850s with a combination of factors. Māori had entered into the cash economy with the flour milling and shipping industries, and they were significantly impacted when these markets collapsed. At the same time, the settler population was increasing exponentially and there was considerable pressure for land acquisition. In the period that followed, land was acquired by the Crown and settlers through purchase, confiscation, and the Native Land Court.

The third key period for Māori was the steep rise in urban migration in the 1950s and 1960s. Urban living could provide things such as quality housing and full-time employment, in a way that rural living was not able to. The fourth key period started in the 1980s with Māori organisations and iwi groups increasingly seeking and developing Māori-led economic and social solutions. The paradox of this period was that the result of economic reform within the economy meant the experience of individual Māori were, generally, negative. The events and influences affected different hapū and iwi (clans and tribes) in different ways, and for various reasons, including their location or access to resources.

²¹ 100% pure New Zealand retrieved from <https://www.newzealand.com/nz/maori-culture/>

4.1.2 Foundation of the early Māori economy

The foundational element of the early Māori economy was relationships. These relationships were based on people to people, people to the physical world, and people to the spiritual world. It was, therefore, no surprise that Māori were open to developing relationships with early settlers, as it was part of their way of conducting life, building relationships and trade.

4.1.3 The Treaty of Waitangi

The Treaty of Waitangi is New Zealand's founding document. The Treaty of Waitangi was first signed on 6 February 1840 in the Bay of Islands. The Treaty represents an agreement between the British Crown and about 540 Māori chiefs.

New Zealand's constitution is not founded on one document. Instead, it has a number of sources, including the Treaty of Waitangi, crucial pieces of legislation, several legal documents, and common law derived from court decisions, as well as established constitutional practices known as conventions.

The Treaty of Waitangi was written in English and translated into te reo Māori. However, there are major differences between the two versions which has created tensions between the two interpretations. These differences are outlined in Table 4.1. The keywords in article one are 'sovereignty' and '*kāwanatanga*'.

Kāwanatanga means governorship, rather than sovereignty. The keywords in article two are 'possession' and '*tino rangatiratanga*'. *Tino rangatiratanga* refers to the role and power of chief. Article two promised the chiefs authority, rather than possession.

Table 4.1 The Treaty of Waitangi

The Treaty: Differences in meaning		
	English version (The Treaty of Waitangi)	Te reo Māori version (Te Tiriti o Waitangi)
Article one	The Māori chiefs agree to give the Queen of England sovereignty over New Zealand	The chiefs agree to give the Queen of England <i>kāwanatanga</i> over New Zealand
Article two	The Queen promises that Māori will always have possession of their land, forests, and fishing grounds	The chiefs are promised <i>tino rangatiratanga</i> (total chieftainship) over their whenua (land), <i>kāinga</i> (villages), and <i>taonga</i> (treasures)
Article three	The Queen gives the people of New Zealand her royal protection and all the rights and privileges of British subjects	The Queen gives the people of New Zealand her royal protection and all the rights and privileges of British subjects

The status of the Treaty of Waitangi has evolved over time. In recent history, successive governments have recognised the significance of the Treaty of Waitangi, as a result of Māori leaders and people stressing its importance. Consequently, the Crown has used the principles of the Treaty of Waitangi (Participation, Partnership and Protection) to engage with Māori. However, the Crown is yet to achieve complete success in engaging with Māori using Te Tiriti o Waitangi.

Treaty settlements

The signing of The Treaty of Waitangi was followed by 100 years of the British appropriating Māori land and the commerce they conducted on it. This resulted in poverty and the introduction of new, foreign diseases which ravaged the Māori population.

Over the past 25 years, the government and iwi across New Zealand have been working to acknowledge historical grievances. In most cases, there has been a measure of financial redress for Crown wrongdoing and the return of culturally significant sites to iwi; however, the value of redress is only a very small fraction of the value of the lands and other natural resources that were originally taken. These settlements have so far resulted in:

- A total of 73 settlements with the Crown passed into law
- A further 11 settlements that have been agreed but are either awaiting endorsement by Parliament, or have failed to pass the final hurdle of Parliament
- The total value of all finalised settlements is \$2.2 billion. Two of the most significant settlements were finalised in the early part of the settlement process in the 1990s. Ngāi Tahu, in the South Island, and Tainui of Waikato, in the North Island, both agreed settlements with the Crown worth \$170 million.

Each settlement is different, but settlements usually provide three kinds of redress to the claimant group:

- 1) An historical account of the Treaty breaches, and Crown acknowledgement and apology
- 2) Cultural redress (such as changing place names, transferring Crown land to the claimant group, and co-governance of lands, rivers and lakes)
- 3) Commercial and financial redress (cash, property, or a mixture of both).

Treaty settlements have created opportunities for Maori and have strengthened the Māori economy. Māori have used the money and land from these settlements to create businesses, support education and fund scholarships, create jobs, and provide social and cultural services. As such, treaty settlements have supported the growth of the Māori economy. However, treaty settlements are only one of many factors contributing to growing the Māori economy. The many trusts, incorporations, businesses outside the scope of the treaty settlements that are thriving are testament to this.

4.2 Measuring economic actors

Data sovereignty

The Crown and Māori have both recognised the importance of Indigenous data sovereignty. The Crown and Māori are working together to collect data and collaborate on data projects.

Māori individuals

To identify economic actors, the New Zealand Census form asked “Which ethnic group do you belong to? Mark the space or spaces which apply to you”, for which Māori was one option.

In New Zealand, the Māori population has increased from 598,602 in the 2013 Census (on which our case study is based), to 775,836 in the 2018 Census. This is a growth rate of 30 percent, and Māori have increased from 15 percent of the total population to 16.5 percent.

The number of Māori youth is growing particularly rapidly. In New Zealand the young Māori population will grow considerably in both absolute and proportionate terms. The population pyramid at Figure 4.1 highlights that Māori have a younger population than non-Māori. The median age of Māori people in 2013 was 24 years old, while the median age of non-Māori in New Zealand was 38.

Māori households

Māori households are defined as a household with one or more Māori members.

Māori business

Māori in New Zealand own or operate under a number of different structures and entities. Some are common to all New Zealanders, but some are unique to Māori:

- Private companies
 - Māori in business
 - Self-employed Māori
 - Māori employers
 - Māori employees
 - Māori businesses (a Māori business is operationally run in an explicitly Māori way)
 - Self-employed Māori
 - Māori employers
 - Māori employees
 - Iwi Asset Holding companies
- Māori trusts and incorporations
- Charities.

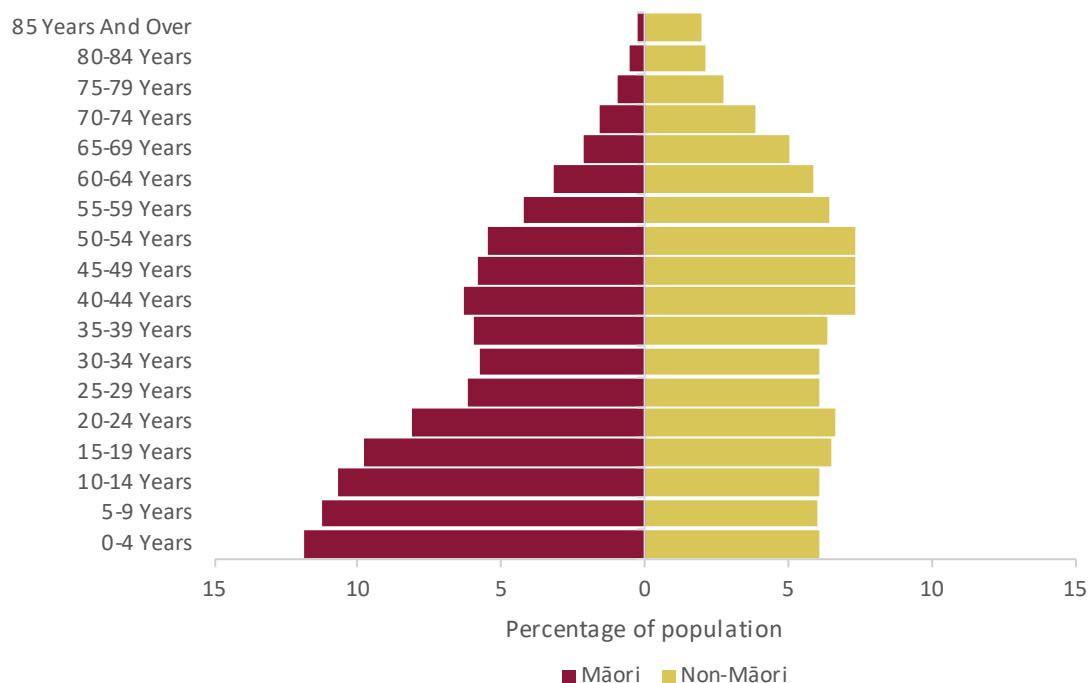
Māori businesses include Māori-owned entities with multiple or collective ownership. A key point of difference is that the beneficial owners in a collectively-owned Māori business are there by inheritance or *whakapapa*. Their ownership interest or shares also denote their *tāngata whenua* (the iwi, or hapū, that holds customary authority over an area) status and the *tūrangawaewae* (place where one has rights of residence and belonging through kinship) of the beneficiary.

Defining a Māori business is complicated as businesses do not record ethnicity as part of business registration. For the purposes of measuring the Māori economy, a Māori business was deemed to be when a business was Māori owned, individually or collectively.

Data collected on Māori businesses are from various resources including the Census of Population, surveys of iwi, Māori trusts and incorporations, Māori business associations, and informal networks.

The New Zealand government has increasingly recognised that it is important to collect specific Māori data. Statistics New Zealand is working to improve their methods to identify and collect data on Māori businesses, iwi, collectives and population, through specific surveys and administrative data. Various government departments are also looking at how policies impact on Māori, and are exploring ways to measure these impacts.

Figure 4.1 Māori and non-Māori population pyramid, 2013



4.3 Measuring participation

There has been a significant amount of Māori research conducted in New Zealand. Some examples include:

- Education outcomes for Māori, 2019 – BERL²²
 - The research tells the story of 100 Māori youth starting their education journey. It identifies streaming of Māori into low expectation classes as one of the key barriers that severely limits their options and future pathways. Of the 100 who begin the journey, almost 20 percent leave school with no qualifications and only 14 percent complete a degree. The report has a call to action for whānau, hapū, iwi, teachers, school leaders, policy makers and The Minister for Education for collective action to remodel this part of the education system.
- Whano - Towards Futures that Work: How Māori Can Lead Aotearoa Forward, 2020 – BERL²³
 - Between the 2013 and 2018 Census, the number of working Māori in Aotearoa increased by 50 percent and in 2018 made up 14 percent of the total working-age population. This growth is predicted to continue.
 - The report provides a shared vision for what that future of work might look like and offers three key ingredients for how to achieve it:
 - An authentic Treaty partnership between Māori and the Crown

²² <https://www.berl.co.nz/our-mahi/100-maori-school-leavers-what-are-their-outcomes-25>

²³ <https://www.berl.co.nz/our-mahi/whano-towards-futures-work-maori>

- A system that delivers and measures skills and competencies, not just qualifications
- Equal access to life-long learning.

4.4 Measuring contribution

4.4.1 History of measuring the Māori economy

Over the past 15 years, significant research, information and effort has gone into establishing the concept and context of the Māori economy within New Zealand. This effort has included understanding the composition and contribution of the Māori economy. Consequently, the Māori economy is a widely used concept and accepted in government and the business sector. Needless to add, the Māori economy is a well-integrated and growing component of the New Zealand economy.

The ‘Asset Base, Income, Expenditure and GDP of the 2010 Māori Economy’ report was published in 2012²⁴. This report estimated the size of the Māori economy and illustrated the relationships between the Māori economy and the wider New Zealand economy. In 2015, this report was updated and expanded to present an overview of the 2013 Māori economy. The Māori Economy Report 2013 used statistical information that was provided from a number of sources, but primarily from the Census in 2013²⁵. This report provided further valuable information and findings about the landscape of the Māori economy. This work has been widely used throughout government and by Māori entities.

Since the Māori Economy Report 2013, there has been a significant step change in the Māori economy. Many more iwi and hapū organisations have been developing strategies and business plans to shape their next 10 to 100 years of growth. Anecdotally, the Māori economy is growing faster than the New Zealand economy. The average annual growth rate across individual post-settlement governance entities, surveyed by TDB Advisory Ltd between 2013 and 2018, ranged between four percent and 15 percent²⁶. Should these rates continue, we will be looking at a significant increase in assets and contribution to the economy by 2030. This suggests that opportunities and benefits arise from measuring the Māori economy.

4.4.2 Inherent difficulties in measuring Indigenous economies

However, there are potential dangers associated with measuring the Māori economy. Difficulties arise as the Māori economy is measured in a non-Māori way. In general, economics takes a narrow, financial approach. In recent years, economics has moved towards a wider framework. However, the economics discipline, as well as related disciplines, such as accounting, have struggled to measure the ‘value’ of an economy. As such, difficulties still prevail in measuring economics through a wider lens and this impacts upon measuring Indigenous economies. These difficulties have several causes. One is that it is difficult to collect the required data. Often the available data represents the ‘productive’ or paid economy. Measuring Indigenous economies through financial assets and GDP lenses can lose the richness of the Indigenous economy. Another cause is that measuring economies often takes a quantitative data analysis approach, and this approach often provides a single numerical value of the economy. The numerical value is often monetary, which again fails to reflect the

²⁴ Document can be retrieved from <https://www.tpk.govt.nz/en/a-matou-mohiotanga/business-and-economics/the-asset-base-income-expenditure-and-gdp-of-the-2>

²⁵ Document can be retrieved from <https://www.tpk.govt.nz/en/a-matou-mohiotanga/business-and-economics/maori-economy-report-2013>

²⁶ Further information is available at <https://www.tdb.co.nz/maori-economy-reports/>

richness of the Indigenous economy. Another difficulty is that value judgments are made by those who are measuring the economy, and their world view is inherent in the research.

These learnings provide insights that may create opportunities for those embarking on this process. It provides the opportunity for designing the research process through an Indigenous lens throughout the entire process by involving the Indigenous community.

4.4.3 Defining the Māori economy

This case study uses a broad definition of the Māori economy to enable the inclusion, as far as possible, of all Māori people, entities and enterprises that self-identify as Māori.

The Māori economy is thus defined as all known assets owned, and wealth generated and income earned by Māori.

Broadly the Māori economy comprises people, assets and businesses:

- Māori people – Māori employed in the labour market, as well as Māori employers
- Māori assets – including assets from iwi, collectives, trusts, incorporations, and businesses
- Māori businesses – including Māori businesses and Māori in business.

4.4.4 Methodology

Economic activity, in terms of dollar value, can be measured from two sides. The first is analogous to a balance sheet and measures the stock of all durable economic goods at a point in time. The second is analogous to a revenue and expenditure statement, it measures the activity from one period to the next, in terms of what was produced and consumed (referred to as the flow). GDP can be used to measure three different dimensions of the flow: production, expenditure and income.

These concepts can be used to measure the Māori economy, and to paint a picture of the Māori economy.

The stock –balance sheet

The stock is a measure of all durable economy goods at a point in time. To measure the stock, all assets of Māori businesses were identified using information from financial statements, networks and government departments. These assets formed the baseline. Land holdings data held by the Māori Land Court, and estimates from the Charities Commission data were added to the baseline. Lastly, the Annual Enterprise Survey from Statistics New Zealand was used to calculate estimates of the otherwise unaccounted-for assets.

The flow – income and expenditure statement

The flow can be calculated using a Social Accounting Matrix (SAM). A SAM summarises the many payments or transactions in an economy. These transactions or payments may involve a person, an industry, a household, an enterprise, the government, a foreign customer or a supplier. The SAM summarises the source and destination of these transactions, i.e. who are making and who are receiving the payments.

A matrix is another word for a table of numbers. In general, each column of the table represents payments by a person; and each row of the table represents payments received by that person. For example, take the case of a household paying income tax. This transaction will be represented by an appropriate figure in the intersection of the ‘household’ column and the ‘government’ row of the matrix. There are other entries in the matrix. For example, there are some figures representing transfers within sectors and other notional transactions.

In a more formal sense, a SAM comprises a combination of an inter-industry transactions (or input-output) table and the accounting flows of income and outlays for particular institutional sectors of an economy.

A SAM provides a useful framework to measure the Māori economy as it allows us to separate the data between Māori and non-Māori. It also can combine inter-industry transactions with other data sources to provide insights into people, planet and profit.

Gross Domestic Product (GDP) – the production, income, and expenditure measures

GDP is defined as the total market value of all final goods and services produced in an economy in a given time period.

GDP can be calculated from three different dimensions – based on what is produced, the amount of spending, and the income being generated:

- 1) The production account through the value added of individual industries or enterprises.
- 2) The expenditure on final demand – by households on consumption goods and services; by firms investing in buildings, equipment and other capital items; by government on goods and services; by foreign customers on domestically produced goods and services; minus the amount spent on items imported.
- 3) The income of sectors.

The SAM can be used to depict and estimate these three different dimensions for Māori and for the domestic New Zealand economy. Each of these dimensions provides a glimpse of the varying participation of Māori in both the Māori economy and the domestic economy.

However, it is important to note that while economic performance is critical to efforts in lifting outcomes for Māori and for all New Zealanders, other measures of outcomes should not be overlooked. Assets available to be used and broader indicators of wellbeing that do not have a dollar value should be considered (e.g. flora). Broader indicators may include other economic factors, such as rates of household income and consumption, employment and home ownership. As well as indicators across other dimensions, such as health, education, cultural strength, environmental standards, te reo, and *wairua* (spirit). However, for the purposes of this case study, GDP has largely been used to measure the economy.

4.4.5 Data collection

Data collection can be difficult as often the data is not publicly available. Researchers should be well connected in the Indigenous economy to support their ability to access data. Building strong relationships is important for conducting this research.

4.4.6 Data analysis

Once the data is collected, complex data analysis is required. It is, therefore, important to build capability and capacity. As mentioned above, this provides a direct opportunity to build inclusive economies by providing procurement options to Indigenous communities.

4.4.7 Results

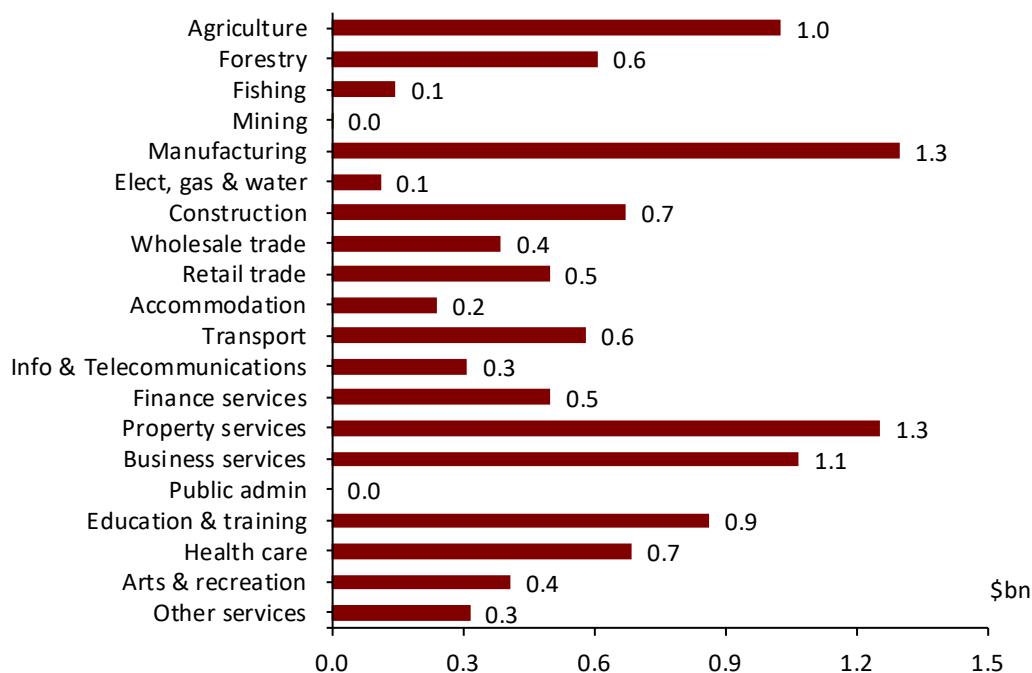
The Māori economy is a significant and increasingly important contributor to the New Zealand economy. The following is a summary of the economic contribution of the Māori economy.

Māori enterprises participate in all sectors of the economy

The 2015 BERL report illustrated that, in 2013, Māori enterprises produced approximately 5.6 percent of the total value added of all New Zealand enterprises²⁷. This was equivalent to about \$11 billion in value added, compared to total New Zealand production GDP of \$195 billion.²⁸

As at 2013, Māori enterprises contributed to value added across most sectors of the economy. Notably, the GDP contribution remained dominated by the \$1.7 billion arising from the land and natural resource-based primary sector.²⁹ This was followed closely by the manufacturing, equipment hire and property services, and business services sectors. These sectors contributed, respectively, \$1.3 billion, \$1.3 billion, and \$1.1 billion.

Figure 4.2 Māori value added by sector, 2013 \$ billion



Māori exporters

Determining the size and value of Māori exports is not a straightforward calculation. It has been estimated that the Māori economy exports are about \$3.4 billion, or 5.6 percent of New Zealand's total exports, with meat and dairy exports totalling \$1.3 billion, as shown in Figure 4.3. These estimates are based on an extension of the work that was completed on calculating the Māori economy. It is reiterated that the definition of the Māori economy and Māori enterprises remains a point of conjecture.

Meat and dairy product export figures are substantially larger than the rest of the export products. These figures include the export share from Māori interest in the Sealord and Moana, as well as Fonterra, corporations. The Māori economy is well-integrated into the current export markets through its supply and shareholding in these corporations.

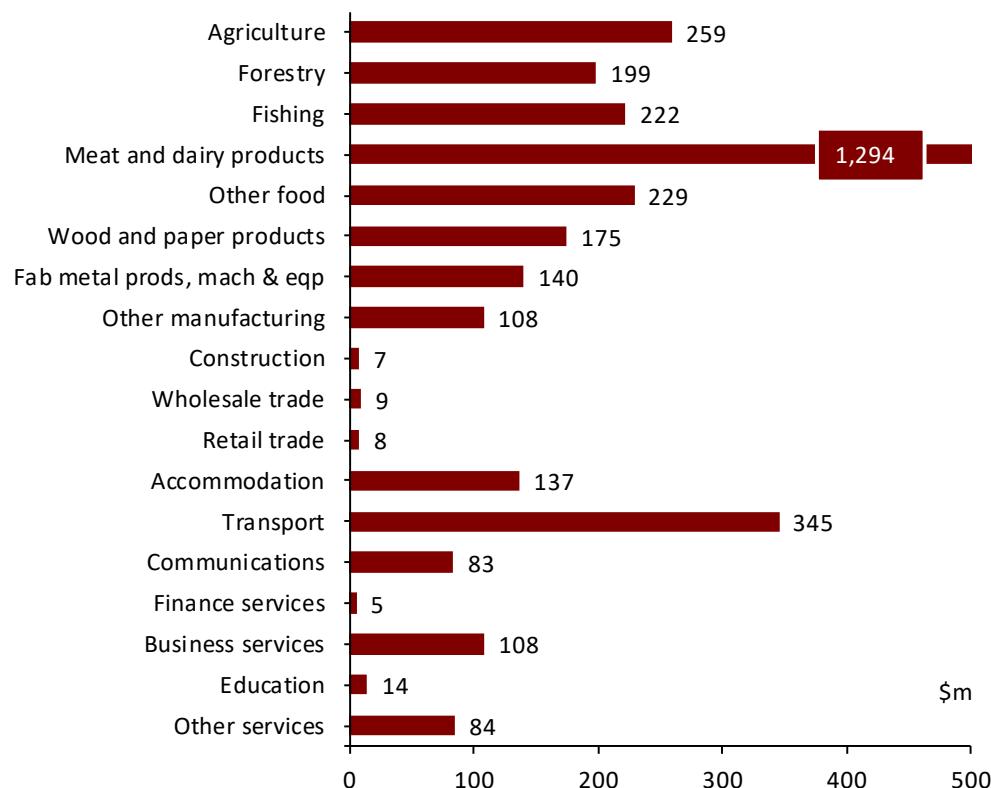
²⁷ BERL, 2015. Maori economy report 2013, Wellington: Te Puni Kokiri retrieved from <https://www.tpk.govt.nz/en/a-matou-mohiotanga/business-and-economics/maori-economy-report-2013>

²⁸ This measure excludes approximately \$17 billion of elements of GDP that are not produced by enterprises of businesses. In particular, this includes indirect taxes imposed on final goods and services.

²⁹ Primary sector includes agriculture, forestry, fishing and mining

With the growth and diversification of the Māori asset base, Māori enterprises are set to play an increasingly important role in New Zealand's exports and trade, and contribute to value-add across most sectors of the economy.

Figure 4.3 Māori economy export estimates by industry, 2012



Māori Small and Medium Enterprises (SMEs)

Māori in business is dominated by SMEs and they form a small but growing proportion of total SMEs in New Zealand. According to Census 2013 there were:

- 14,900 Māori SMEs with no employees
- 6,800 Māori SMEs with employees.

Māori SMEs represent 4.7 percent of the total number of SMEs in New Zealand. Māori SMEs are also represented in all the industries and across the whole of New Zealand. However, the majority of SMEs are in agriculture, forestry, fishing and the construction sectors.

Māori economy GDP arose from an asset base totalling \$42.6 billion

- Māori asset base represents 6.1 percent of the total New Zealand asset base
- The Māori economy asset base has increased by \$5.7 billion between 2013 and 2010 (or 15.4 percent in nominal terms), from \$36.9 billion in 2010 to \$42.6 billion in 2013
- After adjusting for changes in prices, real growth from 2010 was estimated at 7.2 percent
- The 2013 Māori asset base estimate comprised:

- \$12.5 billion in Māori trusts, incorporations, and other entities
- \$23.4 billion in assets of Māori employers
- \$6.6 billion in assets of self-employed Māori.

The net savings position of Māori households has improved

- Net savings of Māori households were negative in 2013:
 - That is, total expenditure of Māori households was more than their total income
 - The shortfall for 2013 was estimated to total \$4.0 billion

However, this was a marked improvement from an estimated \$5.5 billion shortfall in 2010, as lower interest rates eased housing costs.

4.5 Impact of COVID-19 on the Māori economy

The COVID-19 pandemic will have a profound effect on the Māori economy, as well as the wider New Zealand economy. Although the economy has started to recover, growth rates will remain subdued and unemployment is likely to continue rising. Rising unemployment will result in a decrease in household income and consumer spending. This will have a significant impact upon wellbeing and the community. The ongoing effects on jobs, income and wellbeing may persist for years to come.

A significant portion of Māori businesses are in the agricultural sector. These businesses are less likely to feel the impact of COVID-19. However, based on data from previous economic shocks in general, the Māori economy will likely suffer more than the wider economy. Furthermore, in these past economic shocks, the Māori economy has had substantially longer recovery periods than the wider economy.

It is very difficult to overstate the importance of the COVID-19 outbreak in shaping the short-term and long-term behaviour of individuals, families, whānau, iwi, businesses, and governments. In recessions of the past, the unskilled and least paid were most vulnerable to job loss and community dislocation. Further, without doubt, Māori have been disproportionately represented in such groups.

Also, the Māori economy is heavily involved in international tourism, which has taken a massive hit because of travel restrictions. The immediate consequences on the Māori economy will centre on the negative impact on several tourism operators across New Zealand.

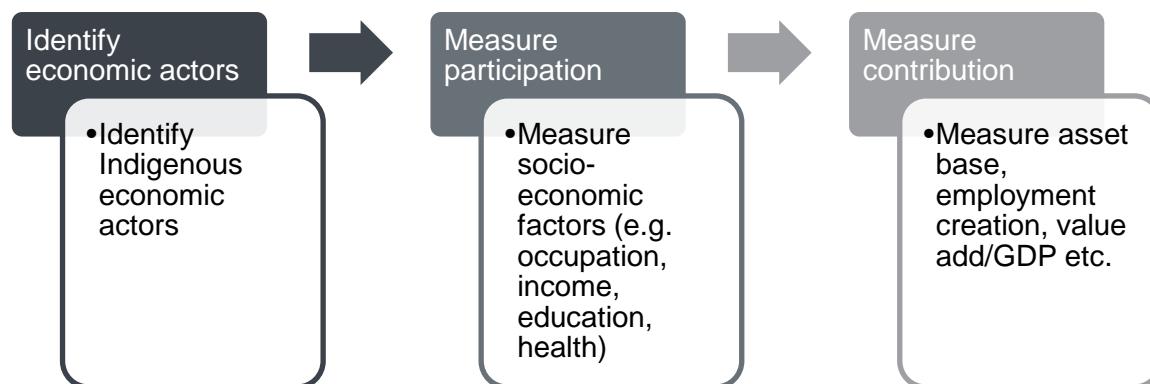
In response to the economic shock, the New Zealand government has implemented various support packages, including a wage subsidy that has also been taken up by Māori businesses. The government has also provided additional targeted support for the Māori economy, including trades training.

5 Conclusion

The aim of this report has been to assist statisticians, researchers and policy makers to understand the measurement of Indigenous economies in their respective economies. The case studies highlighted the importance and value of understanding the measurement of Indigenous economies, and emphasised the contribution that Indigenous Peoples, and what could be understood as Indigenous economies, make to overall economies. This heightened awareness will increase opportunities and encourage inclusive growth. This research found that research and analysis of Indigenous economies generates data and information that can provide decision-makers and stakeholders with important insights, such as the size and composition of Indigenous economies. It can also provide insights into growth of entrepreneurship, education and employment outcomes as some specific examples. These understandings can help improve the opportunities and wellbeing of Indigenous Peoples.

Data and information are required to understand the Indigenous economic system within the wider economy. Collecting and analysing this data is a journey and there is no standardised approach. However, for the purposes of this project the journey can be grouped into three stages. These three stages - Identifying Indigenous economic actors; measuring socioeconomic factors; measuring economic contribution, provide a framework (as shown in Figure 5.1) for understanding Indigenous economic systems. These three stages and the overall framework was developed by drawing upon the Māori economy case study in section 4.

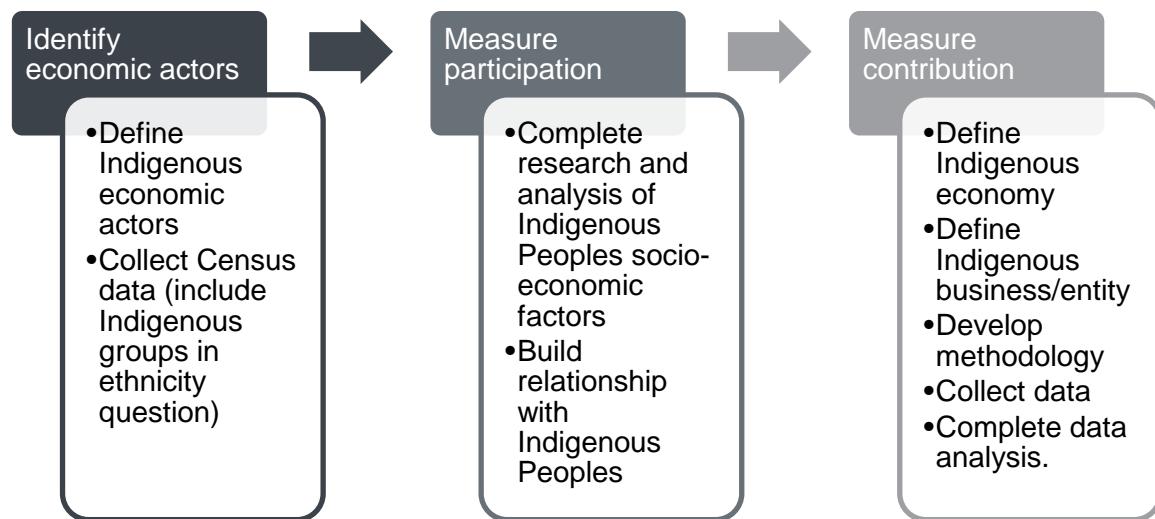
Figure 5.1 Understanding the measurement of Indigenous economies framework



Analysis of the respondents' responses demonstrates that there are opportunities to understand and measure Indigenous economies better. Figure 5.2 provides an approach to realising this opportunity by outlining possible steps involved at each stage to understand Indigenous economies.

The Māori economy case study provided an example of applying each step of the framework. It also expressed the contribution of the Māori economy to the New Zealand economy.

Figure 5.2 Steps to understanding the measurement of Indigenous economies



Appendix A Questionnaire

GENERAL QUESTIONS:

1. Does your economy have a working definition of your Indigenous economy/economies?

Yes No

a. If YES, has your economy attempted to measure the economic contribution of your Indigenous economy/economies? What aspects or components of the Indigenous economy are measured?

2. Has your economy conducted any research into your Indigenous economy/economies?

Yes No

a. If YES, are you able to provide a summary of this research:

3. What are the key challenges for your economy in being able to measure your Indigenous economy/economies?

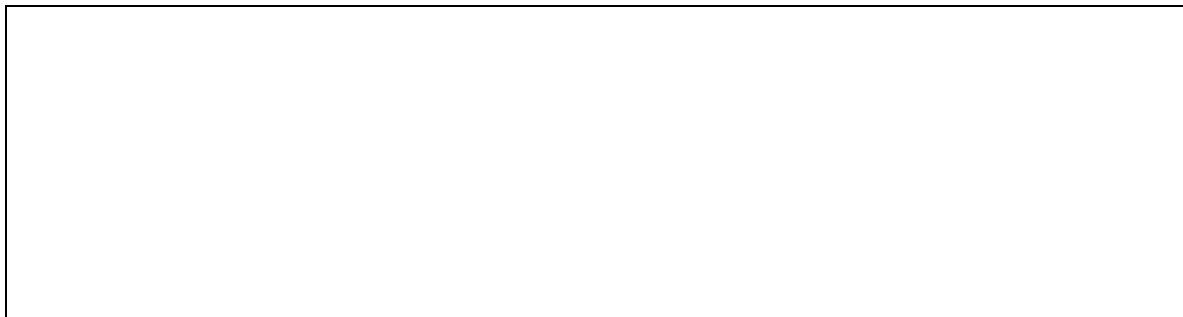


4. To your economy, what are the benefits of measuring your Indigenous economy/economies?



SPECIFIC QUESTIONS:

1. What key historic, constitutional or legal developments have influenced your Indigenous economy/economies?



2. Does your economy maintain official statistics on your Indigenous economy/economies?

Yes No

- a. If YES, we welcome any noteworthy statistics or weblinks to official statistics/data:

--

3. Does your economy have a population count (census) showing the ethnicity and the source of income of the respondent?

Yes No

- a. If YES, could you provide this data and data sources for the total population and each ethnicity:

--

4. Does your economy gather information on total assets and estimated capital value of Indigenous enterprises?

Yes No

- a. If YES, is there any way your economy measures or breaks down Indigenous economic data by sector, income, gender, age and other sub-categories:

5. Besides asset and capital value, does your economy gather other information on Indigenous enterprises?

Yes No

- a. If YES, what kind of information is gathered:

6. Does your economy measure the goods and/or services trade performance of Indigenous enterprises?

Yes No

- a. If YES, is there any data or information on Indigenous trade you can share:

7. How has COVID-19 impacted your Indigenous economy/economies relative to the impact on the non-Indigenous economy?

