

Approaches to Benefit Sharing

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Introduction

The OECD states that Indigenous peoples, as resource owners (in a Māori context, mana whenua) or knowledge holders (mātauranga), do not experience proportionate economic and wider social benefits from resource extraction from land or knowledge that is traditionally occupied, used or owned by them.¹ Several international agreements such as the United Nations Declarations of the Rights of Indigenous Peoples (UNDRIP),² Nagoya Protocol³ and the corresponding Convention on Biological Diversity (CBD)³ exist that protect the Intellectual Property (IP) rights of Indigenous peoples. There is no specific legislation or policies in Aotearoa at present but discussion and potential for change is on the horizon.

This information sheet provides successful examples of different approaches to benefit sharing across a range of industries, from around the world and within Aotearoa. It highlights what works and where challenges and gaps exist in current approaches. Finally, a spectrum of Indigenous sharing approaches is provided, based on the OECD framework of benefit sharing and type of benefit (direct and collective) to Indigenous peoples.

International examples

The key features of benefit sharing need to consider the type of relationship and the nature in which benefits are shared. Although there may be common features, each agreement may be unique. The examples below illustrate some features, types of relationship or the nature of benefit sharing that are useful in considering approaches forward in Aotearoa.

San people

In 1996, the South African Council for Scientific and Industrial Research (CSIR) extracted and patented the bioactive compound in Hoodia responsible for suppressant effects. Over the next five years, various licensing development agreements were entered into between CSIR and other large pharmaceutical companies in an effort to transform this bioactive into a drug targeting appetite suppression.⁴ Initially, there was no benefit sharing with the traditional knowledge (TK) holders. In 2003, following intense public outcry, a Memorandum of Understanding (MOU) was signed between the CSIR and the SASC (South African San Council), in which the San people were recognised as the TK holders.⁵ This was later built upon by the development of the benefit sharing agreement, in which the SASC would receive 8% of all milestone payments from Phytopharm when certain performance targets had

been reached,⁶ as well as 6% of all royalties made by the CSIR once the drug was commercially available.⁵

Cook islands – Koutu Nui

The Cook Islands do not currently have a law governing access and benefit sharing, but the Traditional Knowledge Act 2013 governs how TK is to be protected. Dr. Graham Matheson, a medical researcher with dual citizenship in the Cook Islands, observed traditional plant-based treatments for bone fractures and other medical uses within his community while growing up there.

In 2003, he proposed investigating and commercialising medical remedies based on plant extracts and TK, leading to a benefit sharing agreement with the Koutu Nui (the lawfully recognised indigenous representative body).⁷ This led to the establishment of CIMTECH, a company that includes Koutu Nui as a shareholder.

Dr. Matheson reached a benefit sharing agreement with the Koutu Nui, leading to the incorporation of Cook Islands Medical Research and Development (CIMRAD) with equal shareholding between Matheson and the Koutu Nui.⁸

The agreement with the Cook Islanders comprises both monetary and non-monetary benefits, including annual dividends from CIMTECH, local employment and wider contributions to the local economy.

Variant Bio

Variant Bio is unique to the other case studies described, as this company specifically researches human genetics. It has made two key pledges in relation to benefit sharing and their drug development efforts: the Affordable Medicines Pledge and the Long-Term Benefit Sharing Pledge, which are published on their website (<https://www.variantbio.com/affordable-medicines-pledge-and-long-term-benefit-sharing-pledge>).

Affordable Medicines Pledge:

Variant Bio commits to ensuring that its medicines are affordable and accessible to patients. This includes pricing its drugs responsibly, considering the economic conditions of different countries, and working with governments, non-governmental organisations (NGO), and other partners to ensure affordability.

Long-Term Benefit Sharing Pledge:

Variant Bio pledges to share the benefits of its drug discoveries with the communities and countries where the genetic resources used in its research were originally found. This includes sharing financial benefits, such as royalties, and non-financial benefits, such as capacity building and technology transfer, to support the sustainable development of these communities.

Variant Bio commits to donating 4% of its total net revenue at the end of each calendar year to selected organisations which support communities among their Active Partner Populations (the group of individuals connected to a project). These organizations provide services in healthcare, environment, education, and culture. A Benefit Sharing Committee, including representatives from Active Partners and Populations, chooses the organizations annually. This commitment continues until Variant Bio is acquired or completes an initial public offering (IPO).

Upon acquisition or IPO, Variant Bio has committed to the distribution of net proceeds equal to 4% of fully diluted shares of its common stock to selected organizations or a non-profit foundation. This final distribution aims to provide ongoing benefits to Active Partners and their populations. Variant Bio pledged to administer these commitments in good faith, with any questions about interpretation or application resolved by its Board of Directors in consultation with the Benefit-Sharing Committee.

Aotearoa examples

Ngāi Tahu and MEA fragrance

An example of benefit sharing in Aotearoa is Ngāi Tahu, who have official recognition of its deep ‘cultural, spiritual, historic, and traditional association; with its land and resources’.⁹

One biological taonga known as Taramea (*Aciphylla aurea*), is a sub-alpine speargrass species. Ngāi Tahu has obtained legal acknowledgment of its ‘rangatiratanga’ and ‘mana’ concerning the territories where taramea flourishes.⁹

MEA is branded under Taramea Fragrance Ltd. and is part of Kāti Huirapa Rūnaka ki Pūketeraki (Pūketeraki), within the wider iwi of Ngāi Tahu. Pūketeraki Rūnanga launched a business project to gather and refine taramea for making perfume oil, a revival practice of the Ngāi Tahu tradition of perfume making.¹⁰

This venture is based on connection with taramea while exploring avenues for social and economic gain through Pūketeraki’s development of taramea as a global market commodity.¹¹ The oil was packaged and sold to the wider Ngāi Tahu community, both through Ngāi Tahu tourism shops and online. It was founded to help their people enhance their leadership and create long-lasting economic benefits.

Ora Innovation Ltd.

Ora Innovation New Zealand Ltd (OINZL) is an agribusiness developed by three sisters from Ngāti Kahungunu, promoting mātauranga Māori practices to sustainably harvest and scientifically validate the healing properties of the rongoā (medicinal) native plants of Aotearoa.

OINZL began as a modest enterprise industry and has now evolved into a globally commercialised product. This transformation underscores the imperative to uphold cultural, ethical, accountable, and sustainable practices, emphasising OINZL’s commitment as a responsible Māori agribusiness entity.¹⁰

Key lessons

Several key lessons can be summarised from the provided case studies. Paramount is the necessity of regulating access and benefit sharing (ABS) agreements as mandatory before access to TK can be granted. Several cases, such as the Kakadu plum and *Hoodia gordonii* and the San peoples, exemplify how the lack of free, prior, and informed consent and mutually agreed terms can not only hinder commercial opportunities but also impede the ability of TK holders to retain, maintain, control, protect, or develop their knowledge over a particular species.

One lesson is ensuring the visibility of relationships and use of mātauranga or taonga (treasured items) through the use of provenance information. Local Contexts provides mechanisms for recording provenance within digital infrastructures through the Traditional Knowledge and Biocultural Labels. These tools are being used in a range of institutional databases with the aim of supporting Indigenous recognition and maintaining opportunities for communities to participate in future research and commercialisation activities that use their TK or biocultural material.¹²

Many successful examples show the need for direct relationships with Indigenous peoples, through larger tribal/iwi groupings, smaller family/whānau groups or kaitiaki. Direct relationship building means Indigenous peoples are considered from early in the project and affords them the greatest opportunity for involvement and input. Additionally, direct relationships enable the ability to directly negotiate with holders of Indigenous resources which provides the greatest amount of disseminated benefit to Indigenous groups from use of an indigenous resource through negotiated bilateral agreements.

Engaging directly and understanding the needs, rights, and responsibilities of Indigenous peoples leads to further positive outcomes. For example, understanding that there may be multiple interests represented from engagement with mātauranga holders, and therefore there may be a need to

develop mechanisms for the development and enactment of multilateral mechanisms.

Indigenous peoples worldwide share the approach of guardianship and sustainability (kaitiakitanga) over their TK. This is often at odds with a traditional western scientific approach to the use of IP. For example, Indigenous approaches to IP tend to be shared, whereas western IP approaches focus on exclusivity and benefit extraction. Indigenous peoples collectively take responsibility for TK, and see kaitiakitanga as a shared responsibility, as opposed to individual ownership over IP. It is these relational challenges that must be understood when engaging and developing benefit sharing agreements.

Indigenous benefit sharing matrix

We can place the described examples in a matrix of Indigenous partnership and benefit sharing, shown in **Figure 1**. This diagram shows what resource the benefit sharing example utilises – be it Digital Sequence Information (DSI), Genetic Resource(s) or more general TK.

The matrix contains a spectrum of benefit sharing models, based on the OECD models. The matrix draws a distinction between examples where benefit sharing has been Court directed (San peoples), Government mandated (Brazilian government), an industry led partnership, or an Indigenous led initiative. This spectrum also illustrates how the benefit sharing is dispersed to Indigenous peoples and communities, as these benefits can be in the form of direct and indirect financial benefits and wider social benefits, such as upskilling and training, as well as other education and community benefits. The distribution model of benefits can also be via different methods. The Brazilian government provides an example of how this can be achieved through legislatively mandating the distribution of benefits both directly to the Indigenous holders of a resource and via a contestable general fund.

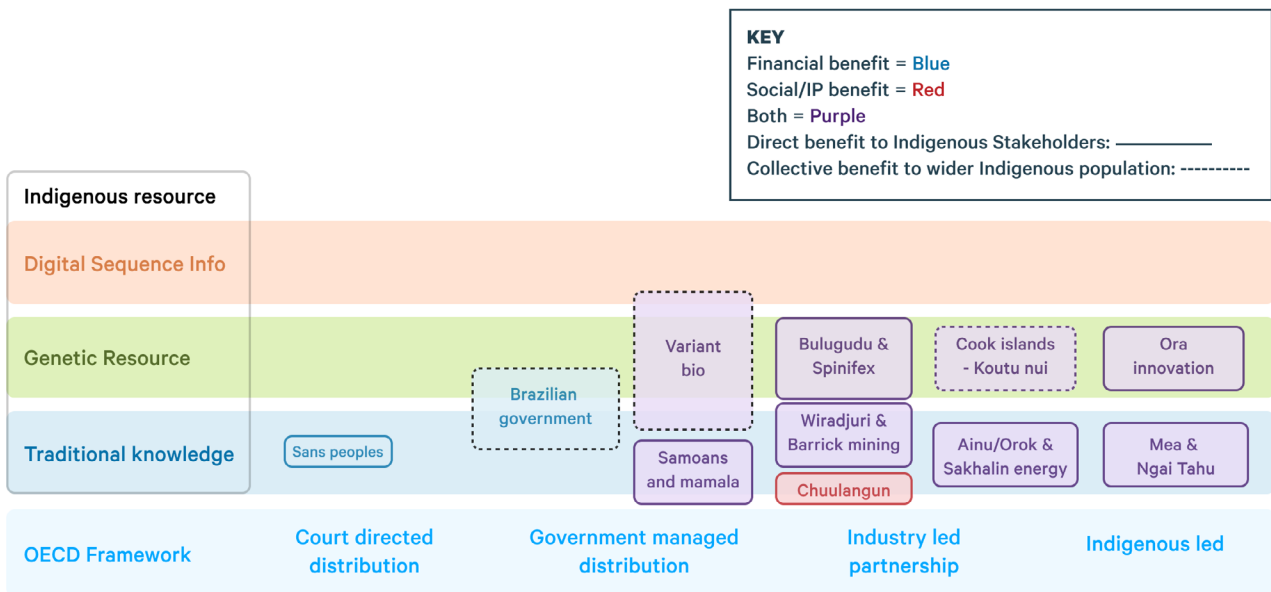


Figure 1: Indigenous benefit sharing matrix

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