

## MURIWHENUA MĀNUKA OIL

PGF Application		For: Approval	
<b>Applicant:</b>	Aupouri Ngāti Kahu Te Rarawa (ANT) Trust	<b>Pipedrive ID #</b>	Commercial
<b>Entity Type:</b>	Registered Charitable Trust	<b>PGF Funding Sought:</b>	\$524,400
<b>Region</b>	Northland	<b>Total Project Value:</b>	\$ Commercial Informat
<b>Tier:</b>	1 - Regional	<b>Co-contribution:</b>	\$ Commercial Informat (Comm %)
<b>Sector:</b>	Primary	<b>Funding Structure:</b>	Grant

### We recommend that SROs:

- a) Approve** up to \$524,400 from the PGF fund towards the set-up and initial running costs of the Muriwhenua Mānuka Oil project, on the following condition:
- That no PGF funding is to be used for planting mānuka on Waimanoni Road land
  - Confirmation of the land leases for both the plantation and wild harvest parts of the project
- b) Note** this project has come from an earlier PGF funded project approved by SROs called 'Developing Projects' where the ANT Trust sought \$100,000 to develop and scope the feasibility of three projects in the Far North – Mānuka Oil, Commercial Information and Commercial Info, and from which a Feasibility Study has been produced.
- c) Note** the PDU has agreed to progress the Mānuka Oil project for a funding decision, due to the mānuka plants for requiring planting in the next Commercial Informat, while giving more time for the ANT Trust to complete the development of the Biotech Laboratory and NEETS projects.
- d) Note** the PDU has received copies of the land leases held by the ANT Trust for the proposed plantation and wild harvest sites – including Kohumaru, Pamapurua, and Ohia.
- e) Note** the PDU has received and viewed evidence of three different potential buyers of the mānuka oil, including Commercial Information and Commercial Information, confirming there is a market for the end product.

### Proposal:

The applicant wants to help Māori landowners in the Far North generate income from unused and under-utilised land, through mānuka oil production, allowing landowners to be more self-determining and self-sustaining as they maximise the economic potential of their land.

The project will enable landowners to wild harvest mānuka specifically for mānuka oil, and future-proof this income stream by growing mānuka as a more sustainable, plantation crop. This will result in a viable and

sustainable raw material that is distilled for mānuka to be produced locally. The applicant will work with local landowners and industry experts to complete the first community-owned mānuka oil processing facility based in the Far North. The distillery will operate as a locally-owned, community-based asset, teaching local people the skill of oil distillation.

The ANT Trust is a well-established provider in the Muriwhenua region with a proven track record of working with Maori communities experiencing hardship and deprivation, and getting things done. The Trust has, over time, been moving from solely addressing the social needs of Far North communities to developing self-sustaining business opportunities for these communities.

The applicant has requested the application be progressed at haste because the plantation must be planted by **Commercial Information**. The PDU has verified that the planting season is **Commercial Information**. Some seedlings have been specially nurtured for the project and these are available immediately to plant.

### PROJECT SCHEDULE

#	Project Activity	Responsible:	Date / Period:
1	Clear land and plant PLANTATION	ANT Trust	<b>Commercial Information</b>
2	Refit facilities for distillery & production	ANT Trust	<b>Commercial Information</b>
3	Purchase/manufacture wild-harvest equipment	ANT Trust	<b>Commercial Information</b>
4	Manufacture and install distillery	ANT Trust	<b>Commercial Information</b>
5	Begin wild-harvesting	ANT Trust	<b>Commercial Information</b>
6	Mānuka oil distillery in operation	ANT Trust	<b>Commercial Information</b>

### Assessment against the PGF criteria:

#### Eligibility Criteria

This application is eligible for PGF funding.

#### Productivity Potential

The PDU has put this project forward for approval because of the potential it provides to make a real difference for the people of the Far North. For a relatively modest amount from the PGF the further development of the existing very small current mānuka oil industry in the Far North has the potential to expand to provide much needed employment opportunities and generate income for many families.

The plantation part of the project will take place on under-utilised or unused leased land, bringing that land into productive use, while the wild harvest part of the project will generate income from existing mānuka trees.

This project has the potential to be the catalyst for a new industry, and because the distillery equipment will be able to extract oil from individual land owners' harvested mānuka, it provides genuine 'public good' from the PGF investment, as well as providing employment and increased productivity of land.

PGF Criteria	Assessment Commentary	Rating (0✓ to 5✓)
<b>Link with fund and government outcomes</b>		
Creates permanent jobs	<ul style="list-style-type: none"> <li>The proposal will result in the direct employment of <sup>Comm</sup> people. Further employment is expected through landowners developing their own land and requiring workers.</li> </ul>	✓✓✓✓
Delivers benefit to the community	<ul style="list-style-type: none"> <li>The Trust is already delivering benefits to the community – this project will increase their capacity to do more for the community.</li> </ul>	✓✓✓
Increased utilisation and returns of Maori asset base	<ul style="list-style-type: none"> <li>This project will increase the utilisation of Maori owned and leased land in a sustainable manner.</li> </ul>	✓✓✓✓
Enhanced sustainability of natural assets	<ul style="list-style-type: none"> <li>This project is focused on sustainable natural assets.</li> </ul>	✓✓✓
Mitigation of climate change effects	<ul style="list-style-type: none"> <li>The tree planting will have a positive effect on climate change, partly from mānuka plantations on marginal, erosion-prone land.</li> </ul>	✓✓✓
<b>Additionality</b>		
Adding value by building on what is already there	<ul style="list-style-type: none"> <li>This project will result in a new opportunity for land owners to create value from their land.</li> </ul>	✓✓✓✓
Acts as a catalyst for productivity potential in the region	<ul style="list-style-type: none"> <li>Provides an opportunity for land owners to diversify their land use, particularly those who have been using mānuka for honey, which has dropped significantly in value in Northland recently.</li> </ul>	✓✓✓
<b>Connected to regional stakeholders and frameworks</b>		
Alignment with regional priorities	<ul style="list-style-type: none"> <li>The Tai Tokerau Northland Economic Action Plan includes as a key project, “Explore opportunities for commercially extracting oils from Mānuka”.</li> </ul>	✓✓✓✓
Support from local governance groups (inc. Councils, Iwi/Hapu)	<ul style="list-style-type: none"> <li>Northland Inc, councils and iwi jointly developed the Tai Tokerau Northland Economic Action Plan which includes as a key project, “Explore opportunities for commercially extracting oils from Mānuka”.</li> </ul>	✓✓✓
<b>Governance, risk management and project execution</b>		
Robust project management and governance systems	<ul style="list-style-type: none"> <li>Good experienced governance board, with a project plan and budget in place to ensure the project is well managed. The Trust is a recipient of significant government funding so is used to the accountability that comes with receiving</li> </ul>	✓✓✓

	government funding.	
Risk management approach	<ul style="list-style-type: none"> <li>Risks are identified with mitigations.</li> </ul>	✓✓✓
Future ownership / operational management	<ul style="list-style-type: none"> <li>The Trust in accordance with its charitable status will own the equipment and manage and maintain the distiller on behalf of the local community and will train people in the skill of oil distillation.</li> <li>Whānau will own their land and any wild mānuka assets on that land, and any equipment or machinery they may use for the development of wild mānuka harvesting.</li> <li>The Trust has partnered with an experienced mānuka nursery operator, Kauri Park, who will provide mānuka specific knowledge and management expertise required to successfully facilitate the complexities of engaging Far North Māori landowners in long-term, sustainable mānuka oil production.</li> </ul>	✓✓✓

### Stakeholder Engagement

Engaging with Maori communities and landowners requires a relationship-based approach. A new mānuka oil business cannot achieve long term success without enduring arrangements for access to plantations and people. Those arrangements can only be made when relationships of mutual trust and respect are established between the business and Maori trusts, runanga, individual Maori land owners and whanau. The failure to create enduring economic regional improvement stems partly from a lack of trusted navigators helping landowners choose land conversion options that meet land and owner needs. Communities have been disappointed by industry promises of local employment and community development that did not eventuate, leading to distrust of 'advisors' and 'consultants'.

The PDU and MPI believe the applicant has the ability to be a navigator with Maori landowners.

#### Landowner buy in

The project is likely to be well received by other Maori land owners because:

1. Planting trees aligns with Maori values.
2. The success of the mānuka honey industry has resonated with Maori who will be able to make the connection with the value added possibilities of mānuka oil.
3. The harvesting of the mānuka brush will provide ongoing employment.

### Analysis of the benefits and costs

#### Employment Opportunities

The key benefit of the application is the number of jobs created for the PGF investment being sought. In addition, the project creates an opportunity for further employment and income generation by individual landowners.

The Far North has particularly high unemployment rates, partly because of the lack of sustainable employment opportunities. This project offers year round employment in a variety of roles, and given the ANT Trust's

experience in training and employment programmes in the past will ensure it can provide the pastoral care needed for its workers. In this regard, the fact that the proponent is an experienced Trust, versus a start-up or early stage business, is viewed by the PDU as positive.

The beneficiaries of this project will be those employed directly, those who gain better returns from their own land, and if the business begins to generate profits for distribution will mean the Trust can invest in further business opportunities.

Specific employment opportunities include:

- manual labour (foliage harvesting, plantation establishment & management)
- production line (distilling, bottling, packaging, dispatch),
- laboratory (testing, analysis, quality control)
- business management and operations (landowner liaison, harvesting logistics, sales & marketing, export logistics, regulatory management & compliance)
- senior executive team (CEO/COO, CFO).
- there are also a range of collateral business opportunities including cartage, mechanical harvesting equipment, weed/pest control contracting, machinery maintenance, nursery facilities and plantation advisory services.

Manual labour for harvesting may provide employment opportunities in the short term but it appears inevitable that mechanical harvesting will be necessary to reduce production costs and increase harvest efficiency.

#### **Mānuka oil**

- The composition of NZ oils is relatively well described and there is evidence of similar (and sometimes superior) properties compared to Australian tea tree oil. The properties investigated to date include: antimicrobial, anti-viral and anti-fungal action, anti-inflammatory action, pesticide/miticide action, skin and hair conditioning and potential for anti-tumour activity.
- The East Coast of New Zealand varieties of mānuka are considered to produce the best quality mānuka oil.

#### **NZ Mānuka oil industry**

- In NZ, there are several companies distilling and selling mānuka oil. While most are focused on the domestic market, two have larger scale production for exporting and jointly produce around 4-5 tonnes a year. Commercial Info  
Commercial Information [REDACTED]. The closest equivalent product is Australian tea tree oil with an annual production volume of 400-500 tonnes, of which around 80% is exported. This is mainly for household and aromatherapy/clinical use.
- Plant oils produced from foliage have various ecological functions for the plant including deterring microbes and herbivores, inhibiting the growth of other plants, and attracting pollinators. Essential oils are extracted from plant material usually by steam distillation but other processes used include expression or solvent extraction. When extracted, plant oils are known as essential oils. These botanical raw materials are primarily used in the flavour and fragrance industries, as well as the 'aromatherapy' industry.
- The applicant has held discussions with a number of potential buyers of the end product. The PDU has viewed or received copies confirming there is a market for the end product. In order to maximise returns the applicant is also looking at the prospect of selling to local buyers (who already have bottles and labels ready to be filled with oil) and potentially retailing their own brand – initially at local tourism outlets and health shops.

#### **Underutilised Māori Land**

- Twelve percent of Northland's land cover is low-producing grassland and scrub, which includes mānuka (*Leptospermum scoparium*). More than 33,000ha of this under-utilised land is Maori land.

- Mānuka is predominately situated on Maori land brought about because non – Maori land was developed into grass land for agricultural purposes.
- Mānuka oil production was identified in 2001 by the Hokianga and Kaipara communities as one of ten potential crops suitable for profit-making enterprises on Northland properties, requiring low capital investment and a lower labour skill requirement for harvest.
- Approximately two thirds of Maori land in Taitokerau is ungoverned with an average size less than 20 hectares and an average ownership of 7 owners (2014 Maori land court update)

#### How this application can assist with the utilisation of Maori land

**Return per hectare:** The potential returns per hectare are based on yield multiplied by price.

**Price:** \$<sup>Commercial In</sup> per litre based on ANT application.

**Yield:** A tonne of mānuka foliage can produce around 2-5 litres of oil, with an average around 3 litres. Yield depends on the dry matter content of the foliage, the twig-foliage ratio and the time of year. The distillation time can take up to 6 hours for mānuka.

The total potential revenue per hectare is \$<sup>Commercial In</sup> to \$<sup>Commercial In</sup> per hectare with an expected average of \$<sup>Commercial In</sup>.

The net return per hectare would require that costs be deducted. This is hard to determine as these costs would be driven by the total volume obtained by the applicant.

The projected return per hectare is likely to be significantly more than current land use or potential other land use.

#### **Threats**

- **Landowner supply agreements:** Regardless of the methods used, a plantation requires management activities and harvesting to be undertaken regularly. If the harvest rotation is longer than around a year, plants develop a higher proportion of woody stems which reduces oil yields. Regular maintenance and harvesting requires landowner permission for ongoing access. However, the political and familial intricacies of Maori land ownership can make long term access uncertain. Enduring positive relationships supported by clear contracts or MOU with landowners can reduce the risks of changed access arrangements.
- **Northland Regional Policy Statement:** plantation replacement will require mānuka to be cut down and/or milled, and both activities have potential regulatory constraints. The operative Northland Regional Policy Statement does not currently define mānuka vegetation as “significant” although it may be considered so where it is associated with significant wetlands. The content of a future National Policy Statement and/or National Environmental Standard on indigenous biodiversity may alter the significant status throughout NZ. The operative Northland Regional Water and Soil Plan requires resource consents for vegetation clearance in some circumstances relating to erosion prone land, riparian margins, and ecologically significant sites. Far North District Council controls indigenous vegetation removal in outstanding landscape areas and in other areas in certain circumstances but is relatively permissive provided the vegetation is not ‘remnant forest’, near lakes or in coastal areas. Northland producers should keep a watching brief on regulatory constraints on thinning and replanting mānuka as well as consulting on relevant changes to statutory the Departments.
- **Market constraints:** The Australian Tea Tree Industry Association makes much of potential alternative applications in industry and medicine, it also stresses that currently there is little expansion of existing markets. It may be that protectionism and increasing regulation is constraining efforts to broaden the

market and providing resistance to efforts to extend the Tea Tree Oil platform.

- **European Union REACH regulations:** New Zealand manufacturers exporting to the EU report that REACH documentation is not complex and the registration costs are not high. However, exports to the EU not only have to register the product itself but also the packaging ingredients. Some packaging materials, particularly plastics and polystyrene are now considered restricted materials and are considerably more complex to register, and may soon be rejected altogether. Further, draft EU legislation is expected to be passed requiring packaging to be returned to the manufacturer at the manufacturer's cost. If this occurs, it will significantly increase EU export costs. The Australian Tea Tree Oil industry considers it likely that North America will introduce similar regulatory measures.

**Entry barriers:** many essential oil markets are affected by entry barriers associated with advancing technology and increasing demand for proof of efficacy to back claims of therapeutic benefits and medicinal activity. This is expected to be particularly true for mānuka oil where the principal benefits are based almost entirely on therapeutic and medicinal properties, not aromatic or cosmetic properties.

- **Production system:** The production system must be driven by how much and what sort of oil the market wants. Most attempts to set up essential oil production businesses have been restricted by market and business difficulties, not by the technical requirements of oil production.
- **Competing with Australian Tea Tree Oil:** Tea Tree Oil appears to be marketed mainly as a bulk commodity product. NZ oils on the other hand appear to be supplied directly to a select client base as an ingredient for high value applications. Prioritising this path to market will avoid putting NZ oils in direct competition with Australian Tea Tree Oil.

## Financial Analysis

The past 2 year's financial and performance statements have been provided. The project budget is below. This is a revised budget following input from the PDU. The original budget was for \$<sup>Commercial Informat</sup>, with the full \$<sup>Commercial Informat</sup> sought from the PGF. Following input from the PDU the applicant has revised the project scope and is now requesting \$524,000 of a \$<sup>Commercial Informat</sup> project.

The amount now sought, at <sup>Comm</sup>% of the total project costs is an appropriate level of investment for the PGF given the benefits it should achieve.

Overall the PDU and MPI are supportive of the project, noting the potential risks and are recommending approval of the \$524,000 sought.

<b>PROJECT BUDGET</b>			
		<b>Total</b>	<b>PGF</b> <b>ANT</b>
<b>WILD HARVEST: first 12 months</b>			
Land lease	1	Commercial Information	
Purpose built trimming machines	2		
Admin costs: insurance, legal, accounting etc			
Management	1.5		
Workers (6 months)	6		
Vehicle hire/lease			
Equipment			
Fuel & maintenance			
Distillery unit	1		
	<b>Sub-Total</b>	Commercial Information	
<b>PLANTATION: first 12 months</b>			
Land lease	1	Commercial Information	
Irrigation setup & irrigation fittings	1		
Site preparation - spraying (per hectare)	7		
Purpose built trimming machine	1		
Super mānuka	70,000		
Freight	70,000		
Distillery unit	1		
Admin costs: insurance, legal, accounting etc			
Management	1.5		
Workers	3		
Vehicle hire/lease			
Equipment			
Fuel & maintenance			
	<b>Sub-Total</b>	Commercial Information   Commercial In	
	<b>GRAND TOTAL</b>	Commercial Information	
<b>Funding Arrangements</b>			
A grant of \$524,000.			
<b>Due Diligence and Ownership</b>			
The PDU has not found any risks during the due diligence process.			



## Risk Assessment

The key risks to the PDU and proposed mitigations of this investment are as follows:

Type of risk	Risk description	Mitigations	Risk Rating L/M/H
<b>Timing</b>	If the seedlings are not planted by <small>Commercial Information</small> , it will be a further 9 months before they can be planted.	<ul style="list-style-type: none"> <li>Ensure there is an adequate supply of seedlings and enough workers to plant them.</li> </ul>	Medium
<b>Site</b>	If the site is not suitable for mānuka then there is a high likelihood that there could be a large number of plant losses.	<ul style="list-style-type: none"> <li>Site inspection by trusted contractor (<small>Commercial Information</small>) experienced in mānuka plantations. Possible support from Te Uru Rakau (MPI).</li> <li>Prepare planting plan</li> <li>Identify suitable mānuka seedlings for the site.</li> </ul>	Medium
<b>Planting</b>	If the planting process for the seedlings including pre planting, pest control, planting and post planting is not undertaken to the proper care then this may result in a high mortality rate.	<ul style="list-style-type: none"> <li>Planting project to be overseen by reputable contractor (<small>Commercial Information</small>).</li> <li>Pre-plant, pest-control and post-planting measures to be undertaken by applicant.</li> </ul>	Medium
<b>Seedlings</b>	The quality of the mānuka oil and the mortality rate of the planted mānuka seedlings is determined by the mānuka seedling selected.	<ul style="list-style-type: none"> <li>Ensure that the seedlings selected for planting are based upon potential oil quality and the ability to survive. MPI to participate in selecting seedling types and to view seedlings prior to planting. Applicant to contract a reputable nursery.</li> </ul>	Medium
<b>Biosecurity</b>	Myrtle rust is a biosecurity risk that has the potential to impact monocultural plantations.	<ul style="list-style-type: none"> <li>Applicant to apply industry best practice procedures.</li> </ul>	Low

### Consultation undertaken or implications:

#### MPI – 26 August 2019

The Applicant's original PGF application for the planting of mānuka and construction of the distillery was triaged on 7 August 2019.

**Recommendation:** Triage Group supports this application subject to queries being answered and explained.

1. Co-funding approved
2. Evidence of stakeholder engagement
3. Breakdown of funding
4. Outcome of PDU feasibility study

The application was supported subject to items 1 to 4 above being answered and explained. These have since been addressed in the subsequent application.

#### MFAT - 26 August 2019

- This would be a subsidy under the Agreement on Subsidies and Countervailing Measures if provided as a grant. Sales seem destined primarily for local market, so minimal chance of being a prohibited export subsidy.
- Agreement on Agriculture: Given the scale of the funding, and its strong social benefits in a structurally disadvantaged region, this is a very low risk of being seen as production-distorting support. It could be considered Green Box spending under regional assistance programmes.
- Overall, MFAT has no material concerns about this project, but we would recommend any communications focus on the employment and social benefits, rather than the new distillery.

#### DOC – 26 August 2019

Previously DoC indicated that it was unable to offer a position on this application as the department was aware of complexities between the applicant and the landowners Ngai Takato. Until these issues had been resolved it was difficult for the department to provide any meaningful feedback on the application.

Since then DoC has been advised that The PDU has confirmed with the applicant that the ANT Trust owned land in Waimanoni Road was likely to be the land referred to by DoC. In its current application the Trust has not included this land (instead using leased land) and the PDU has agreed it will include a specific condition preventing PGF funding from being used to plant mānuka at Waimanoni Road.

#### TPK – 26 August 2019

Te Puni Kokiri advocates for the following aspects of this proposal:

- The need for increased job opportunities in the Far North;
- The ability for Māori landowners to derive revenue from their land resources;
- Māori-led / community-led enterprises in Māori communities.

The proposal delivers against these goals.

TPK shared concern about an earlier proposal which solutioned over land which is the subject of dispute, therefore is happy with PDU's mitigation requiring Waimanoni land to be outscoped.

TPK discussed apparent weaknesses (on the face of the application) with PDU and, on the basis these have been addressed in PDU's evaluation, support this proposal.

<b>Supporting proposal:</b>	Yes
<b>Appendices:</b>	Yes – application has been provided
<b>Author of paper:</b>	PS, Investment Director, PDU; SO, Senior Advisor, MPI