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Pasifika Subsistence Farming in New Zealand: How can the skills and values being harnessed, be optimised by the primary sector to provide sustainable livelihoods?

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1 Executive Summary

A new narrative for New Zealand-based Pasifika farmers is required. The primary industries and government have an opportunity to contribute through shared principles of productivity, inclusivity, and sustainability. Supporting the upliftment of Pacific indigenous farmers in the long run can only contribute to the New Zealand global food story and help reduce social and income inequities.

The aim of this report is to gain an understanding into the New Zealand Pasifika subsistence farming operations, identify the skills and values being developed/maintained in this setting, assess the sustainable livelihood opportunities, and understand the potential values and skills of New Zealand - based Pasifika bring to the Primary Industries.

Key findings:

- There is lack of formal research on Pasifika subsistence farmers in New Zealand to allow baseline assessments.
- When assessed against the livelihood assets of the sustainable livelihood framework (SLF), New Zealand Pasifika subsistence farmers are challenged to access the capital assets (natural – land, physical – buildings, technology, financial – generate income, or investments) required to move from subsistence to surplus and generate income. Pasifika farmers strongest assets are human and social capital.
- Pasifika's key skills include traditional knowledge of horticulture production, intercropping, nutritional management, agronomy, crop rotation, seed/germplasm banks, entrepreneurship, biodiversity, Agroecology, companion planting, hunting, and gathering and animal husbandry.
- Pasifika's key values identified were, kinship, stewardship, and reciprocity.
- Absence of clearly defined policy's that support the economic development of New Zealand Pasifika subsistence farmers.

Recommendations:

- **Data** – undertake further research to map current New Zealand based Pacifica subsistence farming landscape to inform future investment/development.
- **Partnership** – form partnerships between New Zealand Pasifika subsistence farmers and Primary Sector e.g., horticulture and pork industry in exchange for shared livelihood assets to create sustainable livelihoods.
- **Workforce development and mobility** - use the findings from this research to enhance primary sector workforce development plans that include opportunities for the development, attraction, improved participation of Pasifika peoples in their sector.
- **Collaboration** – Bring together NZ Government, Pacific Governments, and FAO to discuss and consider opportunities to extending capacity building in the Pacific to include New Zealand based Pasifika subsistence (indigenous pacific Island peoples) farmers and their communities as long-term investment in agriculture and horticulture developments in the wider Pacific diaspora.
- **Road map** – Develop a road map for Pasifika subsistence farmers aspiring to create livelihood through successful Pasifika Agribusiness opportunities. Government agencies (MPI, MFAT, MBIE, TEC, MPP) to lead.
- **Transformation** – development and delivery of compliance-based training by the regional/local and central Governments to help transform Pasifika subsistence farming businesses from informal to formal. In addition, help shift non-compliant mindsets towards voluntary compliance.

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3 Introduction

The world's smallholder farmers produce around a third of the world's food, according to detailed new research by the Food and Agriculture Organization of the United Nations (FAO) (Lowder, Sanchez, & Bertini, 2021).

Subsistence living through agriculture and horticulture is widespread in the Pacific and provides primary livelihood for its people.

In the mid-1900s the migration of Pasifika to New Zealand gained momentum entering in two waves. The first was in the 1960s in response to the demand for labour in the agricultural and forestry sectors. The second wave of migration met the acute labour shortage in the manufacturing industry in the early 1970s predominately located in Auckland.

However, the oil crisis and economic recession of the 1970s resulted in the loss of many manufacturing jobs and Pacific people became displaced and many overstayed their visa conditions (Ongley, 1991). Fast forward to 2022, Auckland continues to house 66% of the New Zealand's Pasifika population and nationally there is an emergence of Pasifika subsistence farming enterprises as Pasifika seek reinvigoration of their endemic farming skills (StatsNZ, 2018).

Pasifika¹ subsistence farming is not a term often associated with a developed country such as New Zealand, given its modern, high tech Primary Sectors within. Globally, subsistence farmers are often labelled as small scale, low technology, low capitalization, and vulnerable to diverse non-climate stressors (Morton, 2007). However, resilience factors such as family, community, existing patterns of diversification away from agriculture, and possession of indigenous knowledge is irreplaceable (Morton, 2007).

The aim of this research is to understand the current landscape of New Zealand Pasifika subsistence farms and identify the potential value and skills propositions of Pasifika. There is emphasis on understanding the skills and values being nurtured in this environment as well as understanding how that contributes to Pasifika's perceptions of career opportunities within the sector.

The research findings are analysed against the sustainable livelihood's framework (SLF) illustrated by (DFID, 1999). The SLF is a key model adapted by the United nations to assess the outputs of economic development of indigenous communities.

In this research SLF is used to guide the understanding and potential opportunities for New Zealand Pasifika subsistence farmers in creating sustainable livelihoods for the communities they support and ultimately understand how such milestones help move New Zealand towards achieve the 17 United Nations Sustainable Development Goals (UNSDGs, [appendix 1](#)).

In addition, the livelihood assets of the SLF are analysed alongside the Primary Sector to better understand how shared livelihoods assets, can create mutual benefits for both the Primary Sector and NZ Pasifika subsistence farmers in the future.

Finally, the researcher wishes to acknowledge the current Pasifika Horticulture pilot programme, Akongoue² currently engaging multiple subsistence farmer families on a social enterprise in South Auckland, as independent of this research. However, is included as part of the sampled interviewees.

¹ In this report "Pasifika" and "Pacific peoples" refers to both migrants from the Pacific regions and their descendants.

² Akongoue: <https://www.beehive.govt.nz/release/new-programme-launched-attract-pacific-youth-horticulture-careers>.

4 Aims and Objectives

The aim of this research project is to understand:

1. Pasifika subsistence farming in NZ.
2. What are the skills and values being developed/maintained in this setting?
3. The sustainable livelihood opportunities of New Zealand Pasifika subsistence enterprises.
4. What the potential values and skills of New Zealand based Pasifika are to the primary industry?

5 Methodology

5.1 Literature Review

The approach taken was to complete a literature review of the available documentation/resources on subsistence farming as practiced by indigenous communities worldwide and specifically in New Zealand. This research is then aligned to the sustainable livelihood framework where the capital assets within this framework are analysed and evaluated in relation to the project's objectives.

In addition, Government and New Zealand primary sector workforce strategies were canvassed³.

5.2 Interview Review

Following this, twelve semi-structured and qualitative interviews were conducted with a range of local New Zealand based Pasifika subsistence farmers⁴, entities who contribute or participate in activities related to creating sustainable livelihoods and capacity building of indigenous communities. The interview responses were thematically analysed.

The interview findings provide a real-time snapshot of current subsistence farming in New Zealand.

It is noted that two interviews were translated into Tongan, to facilitate communication with second language speakers.

5.3 Limitations

The qualitative research limitations includes:

- Lack of formal documented research on Pacific subsistence farmers in New Zealand therefore an analysis of a selection of published literature provide examples of global indigenous economies which practice subsistence farming were canvased.
- In the absence of credible data, this paper draws from interviews with a sample of New Zealand Pasifika subsistence farmers (7) and opinions and perspectives from the following:
 - A training provider, delivering bespoke Pacific horticulture production training, NZ.
 - Non-government organisations (NGO) working in the Pacific, focused-on building climate change awareness, beekeeping capabilities, developing food security and climate change resistance plans, Tonga.
 - Previous Fisheries contractor to the FAO, Samoa.
 - Regional Officer Pacific, FAO, Samoa.
 - Humanitarian and economic development faith-based NGO, Suva, Fiji.

³ Fit-for-a-better world strategy and Food-fibre-skills-action-plan

⁴ The term "farmer" in a Pasifika context refers to both livestock farmer and growers.

6 Literature Review

The scope of this review is on the potential value subsistence farming can add to the NZ economy.

6.1 Defining Subsistence Farming

Subsistence farming is a form of farming where crops and/or animals used are to maintain families. Often this type of farming has little to no surplus for sale or protection against loss of income (Munoz-Blanco, 2017).

The literature research shows there are four common types of subsistence farming, being:

1. Pastoral nomads – Focuses on herding domesticated animals rather than planting crops.
2. Shifting cultivation – Farmer moves to new land every few years to farm new land.
3. Slash and burn – Burning of forests, clearing land and planting crops.
4. Intensive subsistence agriculture – Producing large volume food on limited land and resources
5. Plantation farming- Located in developing countries but owned and operated by developed countries.

6.2 Sustainable Livelihoods Framework

The Sustainable livelihoods Framework was developed to measure the outcomes of United Nations sustainable development goals (UNSDG) for poverty alleviation and guide the outcomes of poverty alleviation strategies.

(DFID, 1999)⁵ has adapted and developed a framework (*Figure 1*) which provides skills, assets (both social and material) and approaches which can be used by individuals and communities to develop sustainable livelihoods.

In the absence of a New Zealand centric model, in this research this framework has been used to explore how subsistence farming could assist New Zealand Pasifika subsistence communities thrive.

⁵ DFID is the British government department responsible for promoting development and the reduction of poverty.

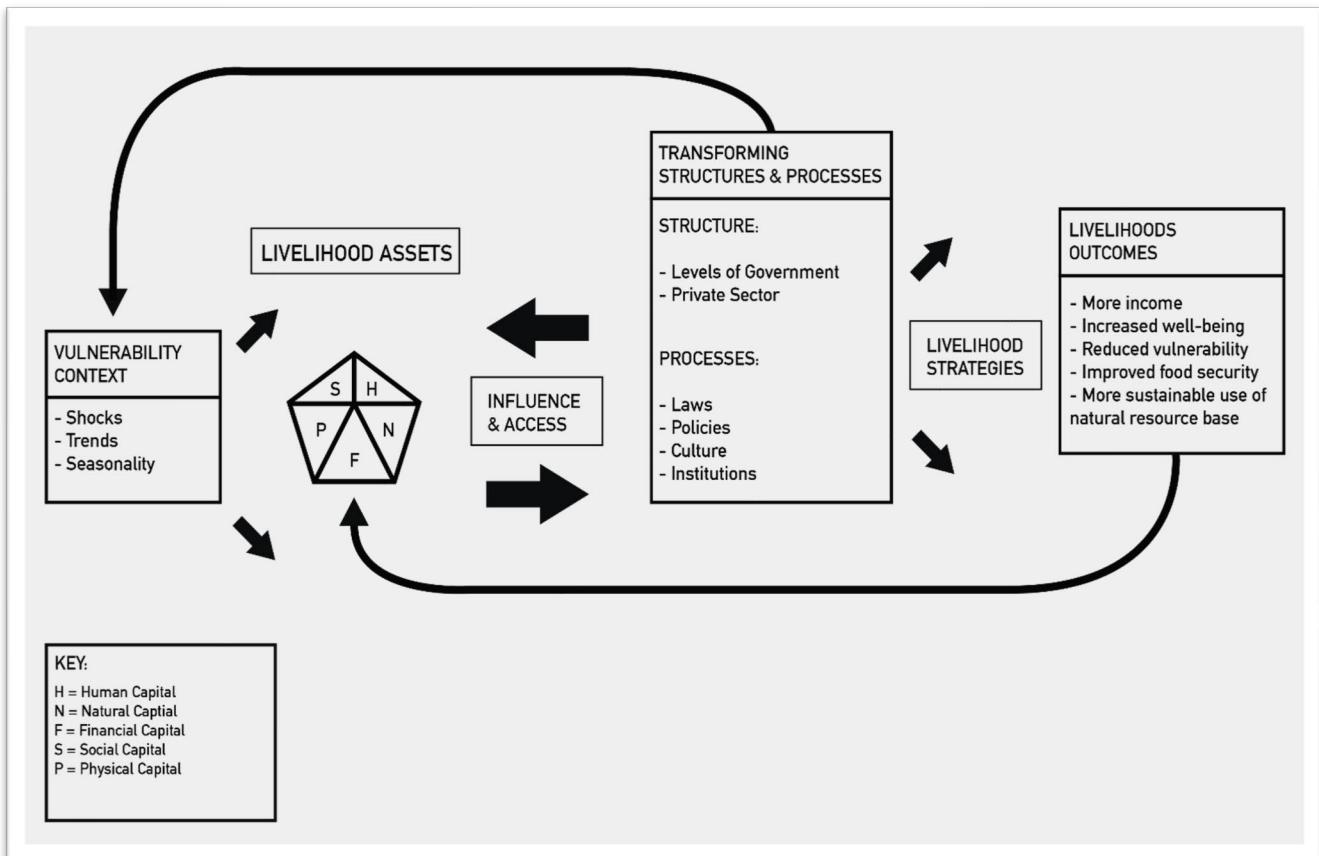


Figure 1. Sustainable Livelihoods Framework (DFID, 1999)

6.3 Breakdown of Livelihoods Assets

Human Capital

Human capital is best defined as representing the people element in the livelihood's assets of the framework. Sustainable livelihoods is a people-centred concept in that it is based on the households or community's analysis of their livelihoods (Munoz-Blanco, 2017).

Research by (Curry & Koczberski, 2013) suggest there is renewed interest in accommodating or hybridising indigenous economic perspectives. This interest revolves around capacity building of people to take ownership of their development, unite in problem solving, heal and rebuild their communities.

For example, in the wider Pasifika context; the Pacific Island Countries and Territories (PICTs) are confronting climate change while facing a decrease in available arable land and increasing rates of urbanisation. Around 80% of all Pacific Islanders still rely on agricultural produce from their own gardens or from small holder farmers to support or to supplement their diets (Georgeou, et al., 2022).

In the New Zealand Pasifika context, this human capital is demonstrated by cultural values centred around family and community. These include skills, capabilities, competencies, and wellbeing which combined provide a basis for achieving sustainable livelihood strategies. However, (Munoz-Blanco, 2017) demonstrates that the efficacy of human capital development can be challenging where there is an absence of development indicators.

To successfully develop human capital in a New Zealand Pasifika subsistence context, approaches need to recognise the importance of the cultural context within which the communities operate. It is important that the transforming structures and processes of the sustainable livelihood framework include both direct and indirect support for the communities.

(DFID, 1999) suggests human capital is a multifaceted concept comprising a range of human attributes, which are difficult to quantify, and it could be concluded that its stock value cannot be determined by existing knowledge and experience but instead a combination of knowledge and one's ability to learn and acquire skills in relation to future needs of the community.

Conclusion: Given the strong barriers confronting new farmers, particularly farmers using ecologically informed practices, developing this workforce requires public investment (Carlise, et al., 2019).

Social Capital

Social capital or social resources is best described as resources individuals rely on in order to achieve sustainable livelihoods i.e., community well-being which can include mental, spiritual, and physical well-being.

Based on (Munoz-Blanco, 2017) guidance, Pacific subsistence farms depict this through their community connections, religious groups, relationship with regulatory bodies, number of trusted relationships, informal safety nets which lead to reduced transition costs. Research by (Vunibola, Steven, & Scobie, 2022) suggest that indigenous peoples develop indigenous economies within Pasifika social-cultural understandings of development.

Munoz-Blanco's research is directly applicable in the Pasifika context. This is shown by networks, connections, relations, and formal group settings such as churches.

However, it is noted that these traditional forms of social protections which operate informally based on reciprocity and solidarity, are slowly being eroded by urbanisation and weakening community ties (Li, 2017).

This is potentially relevant in the NZ context as many young Pasifika are raised in the western world with limited exposure to subsistence farm practices.

Conclusion: There are strong ties within Pasifika subsistence farming communities that create sustainable livelihoods and the wellbeing of the communities they support. However, these are changing through influence of urbanisation.

Natural Capital

As defined by (Munoz-Blanco, 2017) Natural capital refers to the resources such as land, forests, water, and fisheries etc. The idea it creates natural income such as goods which provide livelihoods. Understanding how natural capital is employed, both on its own and in conjunction with other resources, is fundamental in order to support the creation of sustainable livelihoods (Munoz-Blanco, 2017).

Economic development is primarily centred around increasing natural capital, whereas the SLF is human centred and involves a broader understanding of the needs of subsistence farmers which goes beyond using the asset to earn a livelihood. Without this natural capital, substance farmers are unable to access the networks necessary for well-being.

Research suggests, subsistence farmers are at greater risk of being impacted by naturally occurring processes such as adverse weather events, which are a risk when considering the close relationship

between natural resources and the vulnerability context of the SLF ([figure 1](#)). However, as (Lele, 2022) argues focusing solely on economic growth detracts from human wellbeing.

Natural resource focused support to disadvantaged communities will become important in the future. This support might include conservation and environmental sustainability in how the subsistence farmers conserve natural assets such as water. (Carlise, et al., 2019) argues one of the biggest barriers faced by would-be farmers is acquiring or gaining access to land, particularly land with adequate access to water.

The research notes, absent of credible land utilisation data identifying New Zealand Pasifika subsistence farmers.

Conclusion: Natural assets alone will not achieve sustainable livelihoods but rather need to work in conjunction with community wellbeing considerations to reduce susceptibility to vulnerability shocks in subsistence communities.

Physical Capital

Physical capital is defined as basic Infrastructure and/or equipment that enhances productivity, therefore access to such capital is an essential component to create sustainable livelihoods.

Research by (Munoz-Blanco, 2017) suggests, to fully understand the physical assets needed to achieve sustainable livelihoods, access to the following should be considered:

- Roads and transport services
- Safe physical buildings
- Sanitation and water sources
- Affordable energy sources
- Technology

However, subsistence farmers often lack access to basic physical assets and as a result are often labelled as passive adaptors of technology and thus innovate without the modern technology.

(Jannat, Islam, Alamgir, Abdullah, & Ahmed , 2021) propose to improve production efficiency, it is mandatory for subsistence farmers to increase the level of modern implements and that Government and different NGOs need to come forward in this regard for the betterment of this unprivileged society.

Conclusion: There is a need for permanent infrastructure in order to facilitate the provisions of services, basic needs, and production capacities of subsistence farmers in order to achieve sustainable livelihoods.

Financial Capital

Financial capital is the most versatile of the five livelihood assets ([figure 1](#)). It can be converted into different types of capital assets or used to acquire direct livelihood outcomes i.e., purchases. It is noted financial capital cannot purchase wellbeing.

There are two sources of financial capital such as, available stocks (savings) or regular inflows of money (stable earned income).

However, (Munoz-Blanco, 2017) claim that while versatile, this is perhaps the hardest asset for indigenous or underprivileged communities to access. (Ferdousi, 2015) links access to credit and the decision to adopt agricultural innovation for greater productivity have positive results.

Increased access to financial capital for subsistence farmers requires transformative structures/processes ([figure 1](#)) to facilitate achieving sustainable outcomes.

Conclusion: Access to financial capital supports subsistence farmers to adopt diverse livelihood strategies. However, accessing these resources requires careful consideration of the type and level of indirect support needed.

7 Interview Review – *The state of play*

7.1 Pasifika Subsistence Farming in New Zealand

According to those interviewed, the types of subsistence farming businesses operated are social enterprises, livestock farmers (pigs), horticulture growers, or a mixture of all these. Of the farmers interviewed their land ranges between 1 and 12 acres each.

Interviews with the contractor to the FAO, notes that in the Pacific many subsistence farmers operate informally. This appears consistent with the responses of those interviewed when asked about the nature of their food production businesses. Compliance with regulatory systems generally only occurs when exporting to overseas markets when exporters must comply with importing countries regulations⁶.



Figure 2 The late Sione Violeti, Taro Farmer Northland.

"The extent of farming knowledge embedded in our communities is underestimated" Pasifika Farmer

"For long term food security and effective land use with growing populations, subsistence farming needs to become everyday concept for kiwi families" Humanitarian Development Organisation.

7.2 Skills

Traditional Knowledge

Many of those interviewed continuously touched on endemic knowledge learnt while growing up in the Pacific or in technical terms, ethnobotanical capabilities.

According to those interviewed, the skills needed to be maintained and developed “informally” on their farms include:

⁶ I.e., NZ Import Health Standard (IHS) outlining the requirements that must be met for importing risk goods into NZ

- Horticulture production
- Intercropping
- Nutritional management
- Agronomy, crop rotation
- Seed/germplasm banks
- Entrepreneurship
- Biodiversity, agroecology, companion planting
- Hunting and gathering
- Animal husbandry

"As farmers we have always had knowledge of the Universe, we are farmers equipped with the knowledge of our ancestors, that is the science of yesterday. The science of yesterday was not limited by money or time" Pacific Grower

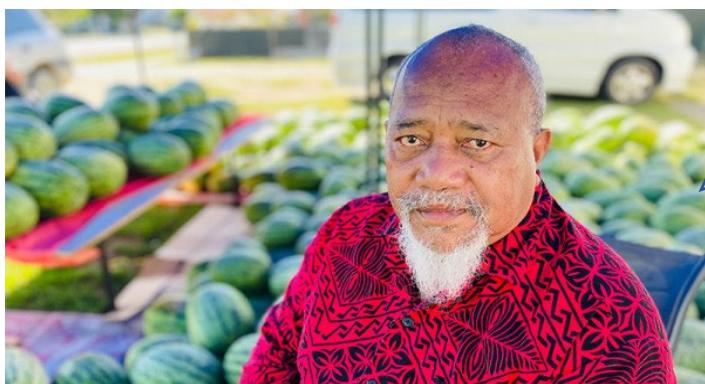
In the Pasifika context historical practices of farming are closely aligned with the objectives of regenerative horticulture/farming, the use of fallowing systems, biodiversity and soil management. These ensure land continues to yield for their families now and for generations to come.

"Knowledge of climatic and environment changes following natural disaster has allowed the local fishers to adapt fishing techniques to locations, because they endemically know which fish species won't be safe to catch" Contractor, FAO.

However, these skills are what many pacific farmers and community leaders of social enterprises are desperately trying to capture and pass onto the next generation. This presents a challenge to the community and the hypothesis of this research, as children within the New Zealand farming community have not grown up in the subsistence farming setting of the Pacific.

"The traditional knowledge of our Pasifika fishers have you can't beat. For example, they know the safe fishes to catch, and whenever the FAO delivers regional training, it's often only to train them on new skills and techniques because they are already experts" Contractor, FAO.

In considering Pasifika farmers traditional knowledge, an interview with FAOs Regional Officer, notes the global challenges with climate change should not affect Pasifika farmers, given their traditional knowledge and methods of farming. These techniques have always been sustainably centred and are knowledge/skills which the Primary sector can draw from when moving towards sustainability.



"The ability to listen to a plant – and respond – can take a long time to develop but once that knowledge is there, you have it forever," Pasifika Grower

Figure 3 Isikeli Maka Pasifika Grower, (Walsh, 2022)

7.3 Career opportunities

When asked to expand on their understandings of primary sector career opportunities, it was clear there is limited knowledge or exposure to the diversity of work available and how their existing skills could complement or become transferable opportunities.

The roles the interviewees were most familiar with were:

- Fruit and vegetables picker
- Packhouse worker
- Pig farmer
- Vine pruner
- Selling fruit at a flea market or roadside

The interviewees advise primary industry or “farming” historically has been a field for those in the family who were not fruitful in the classroom. It is apparent that the awareness of these limited opportunities has come through the Regional Seasonal Employee (RSE) programme available to selected Pacific countries, and in which their family members participate.

Several farmers/growers suggested the lack of Pasifika participation in the sector is not a result of lack of interest but rather the lack of exposure to these opportunities in their region.

For those already in the sector, the lack of promotion within workplaces for Pasifika workers gives little aspiration to enter the sector.

It was noted that many were interested in investigating regional opportunities given the increasing cost of living in a large city, and an appetite to return to subsistence farming lifestyles to support the needs of wider family, meeting cultural commitments and community needs, and fulfilling entrepreneurial dreams of becoming a sustainable enterprise.

“Taro leaves grow well here, and we are experts in this crop, high value markets in Asia exists but New Zealand is not interested” Pacific Grower.

Asked if they saw opportunities for their skills in New Zealand’s current system, overwhelmingly all agreed, with many highlighting their aspirations to be economically viable and be a source of income for their communities and a role model for their children.

“It is our dream that one day we would become an Employer for our Pacific people we just need to know the way forward” Pasifika Farmer.



*“I farm pigs, it’s what I did in the Islands it’s all I wanted to do, it’s all I knew how. I do this for our people. Pigs are important for our cultural celebrations and I can’t supply enough to meet the market demand”
Pasifika Farmer.*

Figure 4: Pasifika Pig Farmer.

7.4 Values

"Tofia is a term Tongans use, it means blessings from God. Land is a source of life gifted from God, therefore how we treat the land must ensure it provides for generations to come and the products of what is produced on this land must ensure it creates sustainable benefits for the family and community it serves" Pasifika Grower.

In assessing the outputs of the interviews, it is clear the traditional and cultural values of pacific peoples in New Zealand provide a solid social foundation for food producing enterprises. This ranges from management of the land through to harvesting crops and the beneficiaries of that product.

Specifically, it is the theological beliefs of the farmers that determine the objectives and outcomes of New Zealand Pasifika subsistence farming practices. According to interviewees, it is these values that guide their farming practices and whom they ultimately aim to serve (customer).

The top values that emerged from the interviews:

Kinship

Profit is regarded as a means to fulfilling broader spiritual, cultural, social, and environmental notions of wellbeing rather than an end in itself.

Ancestors and the sense of belonging involves kinship with what and who has gone before them. The interviewees spoke about what underpins their enterprises, and for many it can simply revolve around family. Community is referenced by many of those interviewed in that every pacific person belongs to a family and every family belongs to a person.

"Many pacific peoples feel displaced, and growing food on land in New Zealand is what connects us to our mother land" Pasifika Grower.



Figure 5: Grandma and Grandchildren on Kumara Farm.

Stewardship

Stewardship – **The act of taking care of or managing something, for example property, an organization, money, or valuable objects**, Oxford Dictionary⁷.

According to the interviewees, the church leader's role as well as the church institute are the stewards of their operations and pivotal in the sustainability of spiritual wellbeing of Pacific subsistence farm operations.

As stewards they pass on theological wisdom and link these to the need for environment for conservation, development of people, sharing and the need to return good.



"I hope Pasifika become a life provider for themselves, family, and community. It means taking action. Lands theological link to Christ, love, and respect parents, it all begins on this land. My dream for this land in this lifetime is to produce young farmers so they know how to feed their families" Pacific Grower and Reverend.

Figure 6: Reverend Ikilifi Pope and the youth from Akongoue.

Reciprocity

"I grow some taro leaves and I don't charge the community who come to harvest my crop, it's all part of our values" Pasifika Grower.

Those interviewed highlighted that all expressions of kindness, support and respect will be reciprocated at a time and in a way that honours the people involved and who they represent, and the need to do good to get good back. Acknowledging the significance of relationships and maintaining a balance across families, individuals, and communities.

"You reap what you sow, the bible says we must work, if we don't work, we shall not eat" Pasifika Grower.

⁷ https://www.oxfordlearnersdictionaries.com/definition/american_english/stewardship

Aspirations are not only situated within a consideration of personal circumstances but are shaped in crucial ways by networks of relations and by the possibilities afforded by material and cultural resources.



Figure 7: Father and son harvesting Kumara on the Social Enterprise communal far.

"I'm teaching my son how to grow kumara, one day he will use this knowledge and experience to become a useful farmer to his family and the country one day" Pasifika Father (fig 7).

7.5 Sustainable Livelihood

Considering the capital assets of the Sustainable Livelihoods Framework (figure1), the interviewees reveal a number of vulnerabilities to their ability to become economically viable and achieve their aspirational sustainable livelihoods.

These include:

- **Natural Capital:** lack of access to land is problematic. Their land is informally borrowed from the local councils, and Maori trusts. Some are on short term leases with only 2/10 interviewed owning their farm.
- **Physical capital:** lack of adequate sanitation and infrastructure onsite, access to registered abattoirs, modern on farm machinery, fencing, adequate animal holding facilities, leading to the continuation of non-registered subsistence farmers.
- **Financial Capital:** Many of those interviewed admit that access to finance for investment or scaling up their enterprises is difficult due to limited savings, the low-income jobs currently held, non-sustainable local and small government grants and lack of dedicated policies to enable enterprise growth.

On a positive note, the results show that success is attainable when the 5 livelihood assets are combined with Pasifika values. Examples are:

- **Human Capital:** with 57 families farming at one social enterprise in South Auckland, it is a great access point into the community for the primary sector aiming to attract young people into a primary sector career. According to those interviewed, parents and elders are the most influential people in young Pasifika lives and career choices. It makes sense that connecting through subsistence farming enterprises removes the barriers of initial engagement with this community.

- **Social Capital:** well, established theological values and cultural systems that focus on the all-inclusive wellbeing of Pacific peoples is well installed within and confirmed consistently across those interviewed (refer Stewardship).

8 Discussion - *Complex considerations.*

8.1 The Reality

Demographics

Stats NZ Census 2018 data suggests Pacific in New Zealand are young: 46 percent are under 20 years old. With this young population, in the coming years the population of Pacific people will grow significantly, and likely to be a greater proportion of the workforce in comparison to the rest of the New Zealand workforce.

93% of Pacific peoples live in urban centres with 66% in Auckland alone (Professionals, The New Zealand Pacific Economy, 2018) as a result of the two Pacific migrations.

In addition, a survey of 8500 secondary students in 2012 found major links between ethnic inequities and young people living in poverty. Almost half of young people living in poverty identify as Pacific peoples (Fleming, 2016).

Currently only 3,800 (7%) Pacific peoples are recorded as employed in the primary sector (MBIE, 2022). The report also highlights the underutilisation rate of Pasifika 13.7% which roughly 27,100 people.

The research acknowledges that the lack of access to natural, physical, and financial assets will over time add to the vulnerabilities of this community and disrupt its ability to transfer traditional skills/knowledge and influence the growing Pasifika youth into food production opportunities.

Sustainable Livelihood Outcomes

The results of the interviews conducted plus the research, highlight that there is a lack of access to natural capital such as land and water. This becomes a major limitation to creating surplus and thereby generating income. Lack of access to financial or economical assets prevents Pacific farmers in New Zealand from investing in technology, accessing land or technical expertise to support the development of their enterprises.

Similarly, Pasifika farming enterprises often use simple farming systems i.e., physical assets such as a hoe, spade, and manual labour rather than the Agritech currently used in complex modern farming systems.

It is important to note, that all interviewees spoke about their aspirations to buy more land to create the opportunities for their community, become employers, explore value-add opportunities of traditional crops they are able to grow in New Zealand and ultimately reduce the negative health impacts of not accessing healthy foods.

They also spoke about the desire to provide a platform for Young Pasifika to move into successful primary industry roles and see the land as means of providing for the family.

As the population increases and land becomes harder to acquire, access to natural, physical, and financial assets will make it even more difficult for these farmers to realise their aspirations to create economically viable enterprises.

"Not only do we (FAO) capacitate farmers, but we also have to provide inputs (livestock or seeds), and this could be something government leads? Because subsistence farmers will require enablers, they can't do it alone" Regional Officer, FAO.

Value of traditional farming systems

"The Pacific peoples bring diverse knowledge systems, expertise with new crops and an innovative mindset" Humanitarian Development Organisation.

The primary sector is working toward refining sustainable farm practices. At present the traditional knowledge and skills of Pasifika subsistence farming practised for generations, is underutilised.

Globally, many peasants and indigenous communities practice agroecology with no formal training (Carlise, et al., 2019). These skills are acquired informally through the knowledge passed down from their forebears.

The research findings demonstrate that little attention has been dedicated to understanding the value of traditional Pasifika farming practices. These regenerative practices could contribute to NZs environmental sustainability plans and/or transfer into viable careers in the sector.

While Pasifika farming is undervalued, (Ross, 2017) recommends that any work to improve the livelihoods of the Pacific peoples must be governed by an understanding and incorporation of the Pacific world view to ensure economic growth.

However as (Bazzi, Gaduh, Rothenberg, & Wong, 2016) note transferability of these skills can be difficult to measure.

(Shanahan, Saengcharnchai, Atkinson, & Ganz, 2021) recommend that formal educational institutions provide internships to give students real-world experience and award academic credit for their practical achievements.

Disconnect to the Primary Sector

It is noted that while these communities have strong social ties within, those interviewed commented that there are limited opportunities to connect and upskill into modern systems.

Connection with local farmers, growers, or successful local Maori Agribusiness are likely to enhance traditional farm practices.

The research indicates this limitation is due to the lack of visibility of Pasifika in the sector and access to the diverse opportunities within.

8.2 The Challenges

Addressing Perceptions

Past reports and recent interviews indicate that Pacific peoples often have limited perceptions of opportunities for them in the primary sector. Often limited to meat processing and RSE type roles. While these roles are critical to these sectors, they offer limited career opportunities for young urban Pasifika youth. (Professionals, Evaluation of the New Zealand seasonal worker scheme for East Coast/Hawkes Bay trial, 2015).

The current education system doesn't recognise the knowledge/skills of subsistence farming gained through practical experience. No formal learning credits are available for these skills.

This can lead to the continued perception that the skills developed are not valuable and therefore support the argument from interviewed Pacific Farmer as “At the end of the day, its low-level roles and are low paid”.

Post covid, primary industry workforce plans do not adequately recognise the value that Pasifika communities offer. Nor do these, include plans to develop the current Pasifika workforce. The exception being, the Dairy Industry which has recently identified Pacific peoples as important cohorts in the future of their sector.

Much of the literature reviewed, highlight many barriers to success for subsistence farmers often focusing on short-term results rather than the need for long-term investment.

It is further noted, that in many reports the emphasis is on the challenges faced, rather than the holistic long-term benefits of investing in subsistence farming communities.



Figure 8: Pasifika workers harvesting vegetables⁸.

Lack of credible data

The challenge to monitor progress of subsistence farmers achieving sustainable livelihoods, there are no consistent measurable outcomes.

In order to monitor progress towards achieving sustainable livelihoods, a baseline data set will need to be identified.

It is noted that in New Zealand, unlike the mainstream farming sector obtaining productive date is challenging as a lot of information is by word of mouth. This lack of data makes it difficult to ascertain the level of investment and support subsistence farmers need.

Achieving Sustainable livelihoods

While New Zealand homes the largest population of Pacific indigenous peoples in the world, many continue to live in disadvantaged settings (Professionals, The New Zealand Pacific Economy, 2018).

In order to achieve sustainable outcomes, New Zealand Pasifika subsistence farmers need to find ways to access natural, physical, and financial capital in order to generate income.

⁸. <https://toolkit.nzstory.govt.nz/pages/assets?tags=Harvesting>

“Access to land is a really important issue in NZ, if there is an opportunity for Pasifika in NZ to access land there are various models that FAO use globally that could help manage this asset” Regional Officer, FAO

The FAO facilitates the delivery of global in-country training to subsistence farmer in underdeveloped countries. However, the FAO doesn't appear to recognise the needs of subsistence farmers in developed countries, leaving it to government agencies instead.

Furthermore, little research has been undertaken into the ways how New Zealand based Pasifika subsistence farmers might access international services and support like that offered by the FAO to enhance productivity and more sustainable livelihoods.

It is recommended that further research into how New Zealand Pasifika subsistence farming communities may be supported or developed is required.

8.3 The Opportunities

A global food story

(Iambe, 2013) reports that:

- 850 people globally will go to bed globally;
- By 2050, there will be 9 billion mouths to feed; and
- Currently there is 40% global food waste.

Supported subsistence farming has the potential to alleviate these issues.

New Zealand's Pasifika subsistence farmers and the communities they support can play an important role in New Zealand's global food story and help meet the United Nations Sustainable Development Goals (SDGs) of which the Sustainable livelihoods framework provides a roadmap for progress.

The opportunity to Invest in building the capability and capacity of New Zealand Pasifika subsistence farmers and their communities could move us towards achieving some key UNSDGs as outlined in *table 1* below.

Table 1: SDGs for Pasifika Farmers/Growers in New Zealand adapted from <https://sdgs.un.org/goals>

| | | | |
|---|--|---|---|
|  | Providing livelihoods/income mechanisms |  | Produce food and access to healthy food items |
|  | Access to healthy foods, physical activity for improved health outcomes |  | Provides an opportunity for diverse genders and underutilised populations to produce food and income |
|  | Prosperous economies, provide inclusivity, full and productive employment, attractive work opportunities |  | Increases community and sustainability and resilience against vulnerable shocks (environmental/financial) |
|  | Significantly less food waste compared to large scale production systems |  | Reduced carbon food print on imported foods and build capability of community in climate change mitigation techniques |

Primary Sector Pacifica Capability Development Plan

"A big overhaul of the school curriculum will be required to re-brand horticulture/agriculture, its similar to what we are now doing in the Regions" Regional officer, FAO

New Zealand Pasifika subsistence farming enterprises should be seen as an activation tool for entry for the sector. It is a socially safe environment enriched with culture which priorities community wellbeing.

Developing skilled Pacific peoples, creates the potential for a mutually advantageous relationship between primary industries and Pasifika indigenous farming practices.

In analysing the aspirations of most of the subsistence farmers interviewed, it is clear there is a disconnect between the aspirations of the subsistence farmers and their understanding of the regulatory framework for food production, environmental management, and growing/farming for a market i.e., one of the pig farmers wants to breed their own pigs but cannot because they are neither registered and now able to meet the regulatory requirements to do so.

Research of commercialised chilli farms in Indonesia (Mariyono, 2019) demonstrates that stepping up from subsistence to commercial intensive farming improves welfare. The combination of farmers acquiring new knowledge, accessing available funds and technology, increased market access, play a significant role in improving livelihoods, investment in end-to-end capability programmes took them from subsistence to surplus.

Acknowledging that most New Zealand based Pasifika farmers and their communities are the indigenous peoples of their respective Pacific countries. This could give the Crown and UN development agencies such as FAO alternate investment opportunities which could enhance the ongoing regional support and strengthen bilateral ties with New Zealand's Pacific partners

Call to action

There is a need to shift the political focus from building Pasifika peoples to building Pasifika economies.

To facilitate this change, the transformative structures of the SLF needs to be updated to reflect a more holistic global and cultural view. To date the current focus on culture alone, doesn't value and accommodate subsistence farming.

Building skilled human capital requires this shift in political focus.

"We need useful policies, ones that help Pacifica move away from ending up in state dependency"
Pasifika Farmer.

Primary Industries workforce plans recognise the value of inclusivity and diversity, qualities present in subsistence communities. To move forward, both industry and Pasifika subsistence farmers and their communities must consider the long-term value of this partnership.

As the interviews have alluded to, Pasifika have a negative perception of the sector which is a result of their experience of being outside mainstream farming. Industry needs to consider how to enable and uplift existing Pacifica worker in conjunction with bespoke approaches to attract, empower and inspire Pacific peoples.

The fast growing numbers of Pasifika youth, provide opportunities for industry to recognise the value that these could provide to grow their businesses.

In fact, one of the farmers interviewed, said that they, "Just want to know how to get out of Auckland and start afresh" demonstrating the desire for many Pasifika to seek alternate opportunities.

(Weber, 2017) argues, the removal of obstacles to the mobility of people has been seen as an important step to economic and social development.

Collaboration and Partnership

Pasifika values such as commitment to reciprocity, stewardship, and kinship together with traditional farming methods offer valuable additions to New Zealand farming practices.

Primary sector and New Zealand Pasifika subsistence farming communities have many mutual values, more specifically in considering the livelihood assets, it makes sense for the Primary sector to see partnership with the New Zealand Pacifica subsistence farmers as a means of enhancing their sectors (figure 9).

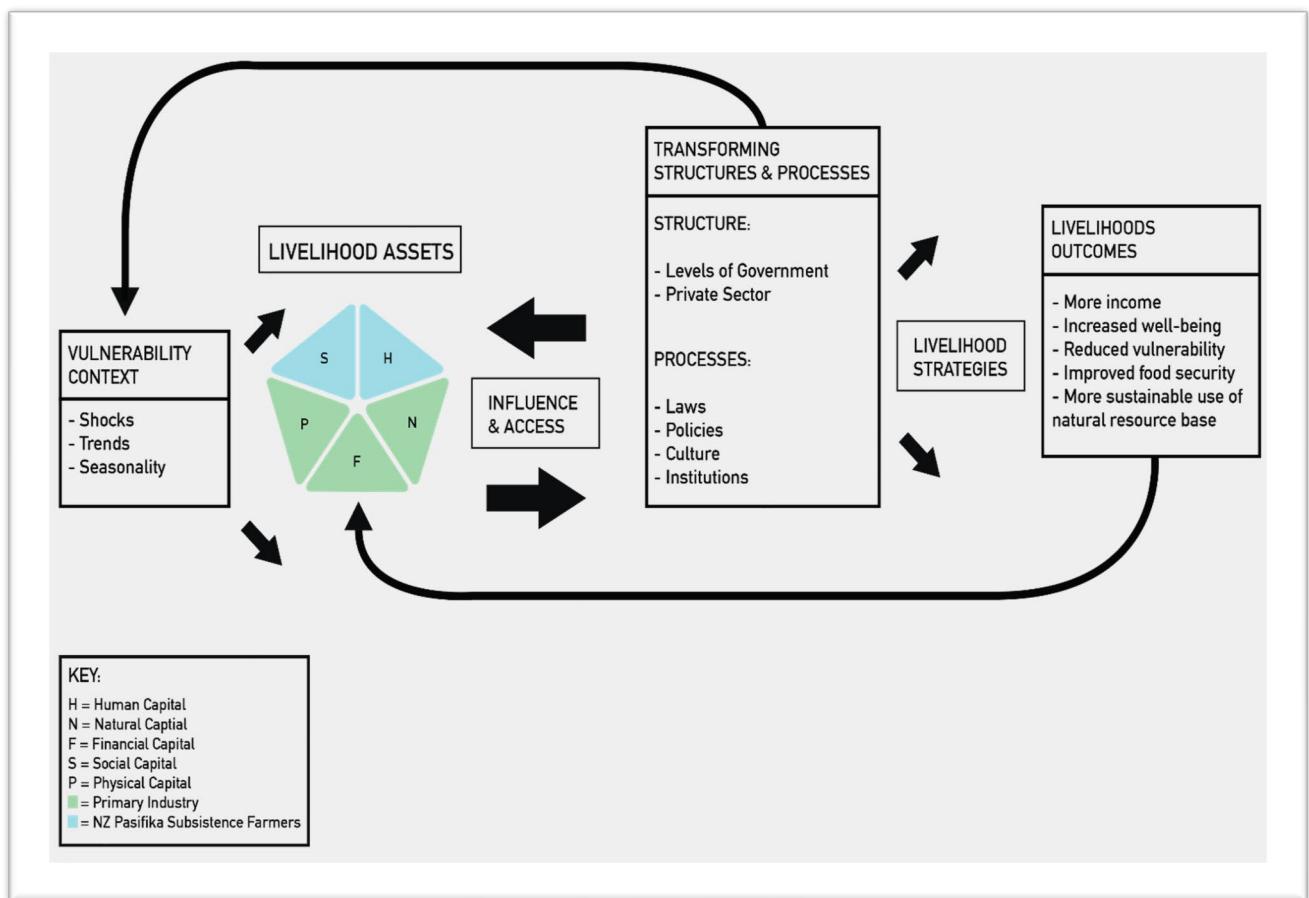


Figure 9. Adapted from (DFID, 1999) Proposed Sustainable Livelihood Framework with Primary Sector and Pasifika where livelihood assets are shared.

The SLF (figure 9) has been adapted to reflect how the Primary sector and Pasifika subsistence farming could form mutually advantageous partnerships through shared livelihood assets. The blue reflects the Pasifika livelihood assets of human and social capital. Together with the primary industry's input

of natural, financial, and physical capital these are able to provide a practical roadmap for Pasifika and New Zealand farming.

9 Conclusion

While, the sample size is small, it does however provide insight into Pacifica subsistence farming capabilities in New Zealand. It is noted that further research is needed.

Pasifika is a fast growing and young population with the potential to become a key workforce for the primary sector in the future. However, the current limited perception of their role in the sector requires rethinking to make the industry attractive to young workers. Further consideration into how the skills such as traditional knowledge and values of Pasifika subsistence farmers may be utilised by the primary sector should provide a deeper understanding of these skill sets.

The Pasifika subsistence farming community has many challenges. While accessing natural, physical, and financial capital remains problematic, Pasifika for their part must forge partnerships with landowners and employers and see this as the means to achieve sustainable livelihoods.

Catalysing change will require an enabling environment, which demands a more inclusive legislative framework to enable development, resource, and governance mechanisms to break down the barriers to land, capital, and markets.

These access challenges require legislative, departmental, and planning authorities to develop cohesive national, local, public, and private initiatives.

Lastly, we need to work collaboratively to develop a broad, multi-sectoral framework that benefits all in order to create sustainable livelihoods.

10 Recommendations – *Where to from here?*

- **Data** – undertake further research to map current New Zealand based Pacifica subsistence farming landscape in order to inform future investment/development.
- **Partnership** – form partnerships between New Zealand Pasifika subsistence farmers and Primary Sector e.g., horticulture and pork industry in exchange for shared livelihood assets to create sustainable livelihoods.
- **Workforce development and mobility** - use the findings from this research to enhance primary sector workforce development plans that include opportunities for the development, attraction, improved participation of Pasifika peoples in their sector.
- **Collaboration** – Bring together NZ Government, Pacific Governments, and FAO to discuss and consider opportunities to extending capacity building in the Pacific to include New Zealand based Pasifika subsistence (indigenous pacific Island peoples) farmers and their communities as long-term investment in agriculture and horticulture developments in the wider Pacific diaspora.
- **Road map** – Develop a road map for Pasifika subsistence farmers aspiring to create livelihood through successful Pasifika Agribusiness opportunities. Government agencies (MPI, MFAT, MBIE, TEC, MPP) to lead.
- **Transformation** – development and delivery of compliance-based training by the regional/local and central Governments to help transform Pasifika subsistence farming businesses from informal to formal. In addition, help shift non-compliant mindsets towards voluntary compliance.

11 References

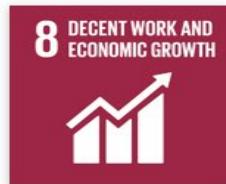
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12 Appendix 1: United Nations Sustainable Development Goals⁹



SUSTAINABLE DEVELOPMENT GOALS



⁹ <https://www.pacific.undp.org/content/pacific/en/home/sustainable-development-goals.html> and <https://sdgs.un.org/goals>

