Place-making in the Pacific

Can Geographical Indications Support the Sustainable Development of the Nonu Industry in Samoa?

Place-making in the Pacific: Can Geographical Indications Support the Sustainable Development of the Nonu Industry in Samoa?

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“O le nuu o lo tatou tofi mai le Atua”

“The land of our heritage from God”

Namulau’ulu G. Tavana

Abstract

Geographical Indications (GIs) are place-based names that convey the unique environmental, geographical and cultural origins of agricultural products. A GI is designed to protect products by highlighting exclusive features that differentiate tailored and often more 'localised' produce from those which are homogenous and mass produced. GIs are governed by local actors, thus providing a means of control to ensure that production stays in the local area. Yet they also operate within the interface of global to local spheres, providing a 'glocalised' link between people, product and place. GIs can signal messages to extra-local consumers, providing information on the specifics of product production, as well as reflecting quality and standards for ethical consideration. Therefore, GIs and their market labels, are essentially 'markers of origin'; offering a form of certification which virtually guarantees the origin of the product.

The degree to which GIs can protect local, environmental and cultural resources arguably depends on the structure of the GI legislation. In the Pacific region, GI is in its infancy. In Samoa, the Intellectual Property Act of 2012 is in force and contains the foundations of a US influenced GI. Using a commodity chain approach, I compare these two systems; (1) the current US/WTO system and (2) a European (EU) based GI. Developing a theory of factors that contributes to the more sustainable development of the Nonu Industry in Samoa, I argue that the Samoan Nonu product cannot compete in the Pacific region due to the large-scale production of its main competitor, Tahitian Noni. I therefore recommend that the industry may be more sustainably served by adopting a collaborative 'bottom-up' approach, in the form of a European GI, which promotes the niche qualities of local products, by utilising a rigorous narrative codex/certification system, to reduce inter-island and even international competition.

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1

CHAPTER

Introduction

Introduction

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1.0: Chapter Summary

This Chapter forms the introduction of the thesis, guiding the reader through the motivation behind the research, the dominate forms of GI systems and the Noni and Nonu Industries, in order to assess the application of a GI system for the Samoan Nonu Industry. Attempts are then made to summarise the current protection schemes available to the Samoan Nonu Industry, before proceeding with a description of the methodology employed. This is followed by the thesis aims and objectives. Furthermore, two approaches were taken for data collection and assessment for the thesis; (1) a producer-consumer lens or theme and (2) a commodity chain approach and are described under the 'thesis approach' section. The chapter concludes with an outline of the thesis structure.

1.1: Motivation

1.1.1: The Seed of an Idea

Sitting at my desk, in the middle of a windy seasonal change in Wellington, New Zealand, my interest came to rest on the header page of an Internet news site, on an article that read, "Protection for the Endangered Pasty" (Riley, 2011). Greatly amused by this jocular title and its evocations of the Cornish [pasty](#)* as a favourite childhood staple, I read on. Only to discover that the item revealed a somewhat more serious theme – a battle of trade – between two British food manufacturers; 'Ginsters' a company located in Cornwall, in the

South of England and 'Greggs', a company based in Newcastle, situated in the North. According to the article the dispute arose over both firms claiming to use the word 'Cornish', on their pasty product. This resulted in an appeal being lodged at the European Court of Justice in Brussels by Ginsters of Cornwall, who argued that the right to use the word 'Cornish' should be awarded to the Cornish community, so that the link between the pasty product, its heritage and the place where it had traditionally been produced, should be conferred through a Protected Geographical Indication (PGI) as an intellectual property and a legal 'right' of a local firm to control its production. Ginsters won their award for protected food status – securing much needed employment for the local community – on the condition that their product followed strict specification standards: it must be formed into a distinctive 'D' shape, it must contain a filling in accordance with a traditional recipe, based on a combination of swede, potato and carrot but more importantly, for the pasty to be called, 'Cornish', it must be made in Cornwall (Riley, 2011).

1.1.2: Tahiti Noni or Not?

On the other side of the world, an Internet news site featured a contrasting article, highlighting the plight of [Noni*](#) producers in the French Polynesian territory of Tahiti (Hofman, 2009). Placed at the centre of producer allegations, US based Morinda Holdings Incorporated, a multi-million dollar company, supplying raw materials to the global brand leader Tahitian Noni International (TNI), claimed that the reduced demand for Polynesian Noni was based on an overall decline in global demand and was not a result of high production and labour costs in Tahiti. However, Vatea Quesnot, chief executive for another leading Noni manufacturer and exporter in Tahiti, stated that there was some evidence to suggest that Morinda Inc. was buying cheaper Noni juice from places like Tonga, Fiji and Vanuatu and selling this under the Tahitian Noni brand name (Hofman, 2009). The source stated that under current US trademark laws there were 'no legislative requirements', to

* Refer to Glossary of Terms

give a guarantee of the products origin, implying that the company could be passing off cheaper juice but selling it as Tahitian Noni. Helen Russell of the Pacific Island Noni Association (PINA) stated that although Tahitian Noni International was the first of the Pacific Island Countries (PIC's) to 'tap-into' the international market, tests had revealed that, "all Noni fruit is the same" and that there was no reason to believe that Tahitian Noni has any 'particular features' that make it different to any other Noni juice (Hofman Interview, 2009). French Polynesian producers are currently lobbying the territory's government to introduce a guarantee of origin for Tahitian Noni. The request is being considered by the French Polynesian government (Hofman, 2009).

FIGURE 1.1

FIGURE 1.1 | The Cornish Pasty and Tahitian Noni: Advertising campaigns for the EU-based Cornish pasty (Ginsters, 2013) and the US-based Tahitian Noni products (Sanchez, 2011), demonstrating place-based product promotion through the indication of geographical origins via the naming of their goods.

1.2: Cornwall and Tahiti: Worlds Apart

When it comes to GI protection – as a special form of intellectual property – there is no universal law (Bagal & Vittori, 2011). Countries fall into three separate categories; (1) those that come under the European Union (EU) and are governed by the means of specific GI or [sui generis](#)* law, as briefly described in the example of the Cornish pasty, (2) those that come under the United States of America (US) trademark protection system, as briefly described in the example of Tahitian Noni Juice and (3) those that do not formally recognise or protect GI's, (O'Connor, 2005) as was the situation in the Pacific Island Country (PIC) of Samoa before 1st October 2012.

While the EU and US equally value and protect GI's, they both have divergent approaches and interests. In brief, the definition of a GI under the EU protection system is primarily focused on the use of a place name to establish a 'link' or connection between place, the community who live in that place and the product made in that place. In contrast, a GI under the US protection system is not necessarily concerned with establishing this link. Under this system, products labelled with a place name do not necessarily have to come from a particular place, i.e. a GI for the 'Cornish pasty', under the US system, would not have to come from Cornwall (Goldberg, 2001).

For the most part, the US positions GI's as an extension of brand development (Agarwal & Barone, 2005). GI's under the US system are incorporated into 'top-down' intellectual property legislation and existing trademark law. Therefore, they are arguably suited to More Economically Developed Countries ([MEDC's](#))* because of the need for high rates of capital investment and technical expertise (Bramley & Kirsten, 2007). In contrast, the EU approaches GI protection as a means to consolidate and support economic development in marginalised rural areas, using GI's as a community development tool that promotes economic growth from the 'bottom-up' (OECD, 1995). This position is arguably more suited to Less Economically

* Refer to Glossary of Terms

Developed Countries (LEDC's)* because they do not require extensive capital investment or legal knowledge to set up. These divergent approaches can pose both positives and negatives for a developing country like Samoa, as both systems are not just a world apart geographically but also operate separately with their own definitions, focus and structure for each protection system.

1.3: Tahiti and Samoa: The Noni and Nonu Industry

1.3.1: The Tahitian Noni Industry

Commercial production of Noni began in the mid 1990's with the success of Utah based Tahitian Noni International (TNI) and their marketing of Tahitian Noni (TN) as a ready-to-drink health tonic (Grant, 2006). TNI – now renamed Morinda Bioactives (2012) – is a large-scale, multi-level company. They claim total yearly sales in the range of US\$392 million (O'Sullivan, 2001); yet do not publicly publish any of their earnings. Morinda dominates the global Noni market and this presence is arguably felt in the Pacific region. It is the first US company to penetrate the highly standardised EU market, with a best-selling, 'bioactive' fruit drink, made from reconstituted Noni fruit pulp and additional fruit juices (TNI, 2009). They also produce a wide range of high-value skincare and beauty products made from Noni, as well as an equine dietary supplement in dry powder and tablet form (TNI, 2009).

In 1998, Morinda was forced to face a US multi-state settlement over charges that the company had made unsubstantiated health claims by using customer testimonials to 'prove' that Tahitian Noni Juice could cure diabetes, clinical depression and arthritis. These claims were made without the drug being approved by the US Food and Drug administration (FDA, 2009). As a result, it is now illegal for any producer or processor of a Noni product – from any

country – to make claims that Noni can treat or prevent illness, unless the product is scientifically endorsed (FDA, 2009). Although TN is being sold in Europe, the European Commission has made no endorsement of its health claims (E.C., 2000). Companies must still apply to the European Commission for Health and Consumer Protection before their brand of Noni juice can be approved and trading access is generally acquired under the ‘novel’ food category (E.C., 2000). Although the Noni product has managed to retain its popularity and the trust of its customers – under a trademarked brand – the business practice of Morinda Bioactives – has been seen to be questionable.

1.3.2: The Samoan Nonu Industry

In contrast, the Nonu Industry in Samoa, which is the focus of this study, is a small-scale, low-tech industry that has adopted traditional, hand-processed methods and uses locally sourced raw fruit to make their Nonu product (Vui, 2012). There are currently four individual processors who have evolved into a collective group and are officially known as the Nonu Association of Samoa Incorporated or NASI (Vui, 2012). The remaining processor in Samoa is Pure Pacifika, a New Zealand owned company who operate independently and outside of NASI (Periera, 2012).

The success of Tahitian Noni had a ‘knock-on’ effect around the Pacific and led to Samoa’s entry into a booming global market around the late 1990’s (Rogers, 2012). In the early 2000’s, global demand for Samoan Nonu continued to increase, when the country supplied exports at a total of SAT\$495,000 to major markets in Japan, the USA, Australia and New Zealand (Figure 5.1). Exports then continued to rise from a total of 1% to around 30% of Samoa’s Gross Domestic Production (GDP), reaching a peak in 2005, with an estimated value of around \$SAT 8.3 million (Central Bank of Samoa, 2011; Figure 5.1). However, export values have tended to decrease since 2005.

The Nonu Industry has recently struggled to re-establish a sustainable trading position in a highly competitive global market (Rogers, 2012). This is partly due to macro-economic constraints at country level. These factors are now familiar to most PIC industries and primarily include geographic remoteness and isolation (Connell, 2006) (Figure 1.3). Remoteness and distance makes access to global markets a challenge. It also results in high transportation costs. Therefore, prospects for conventional economic growth are limited. (Murray, 2010).

Many PIC industries lack the diversity to broaden their economic base (Tisdell, 2006). Narrow markets and trading of generic goods makes them vulnerable to global pricing and external trade shocks (Connell, 2006). Samoa is no exception to this and its inability to balance imports/exports has contributed to a financial imbalance and trading deficit of SAT\$822 million (CBS, 2011). Donor aid, remittances and the opportunity for locals to migrate to overseas labour programs, have not helped to address this problem (Bertram, 2011). Additionally, on a micro-economic scale, the industry itself has experienced a prolonged lack of public-private partnership, as well as a lack of skilled labour, resources and technical expertise in market intelligence – especially end markets (Rogers, 2012).

To add further complexities to the economic development of the industry, it appears that Samoa is a country juxtaposed between two major trading agreements: (1) American and (2) European. Up until October 2012, Samoa had no formal recognition for IP or GI laws (I.P. Act, 2012). Legislation has only recently been addressed as Samoa became a member of the World Trade Organisation in 2012 (WTO, 2012). As a WTO member, Samoan GI policy has been prepared with technical assistance from the WTO, under guidance from the TRIPs agreement.

FIGURE 1.2

FIGURE 1.2 | Legislation and Policy Summary: A flow chart illustrating the hierarchy of policy structure affecting the Nonu Industry of Samoa, demonstrating top-down and bottom-up forces of the two dominant Intellectual Property protection systems. Source: Author's own

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Thus, Samoa now has its own interpretation of what constitutes a GI (Tuliaululu, 2012). Additionally, the country has also been positioned to export Nonu to EU member states under an African, Caribbean and Pacific-European Union agreement since 2006 (ACP-EU, 2000-2010; Rogers, 2012). Yet, Samoan processors have, “failed to significantly penetrate this market” (Rogers, Tuioti-Mariner, & Tuoro, 2009 pg 17). As such, the current state of affairs – regarding this paradox of global IP/GI protection – is particularly complex.

While the scope of this study will focus more on developmental, rather than strictly legal aspects, it is necessary to provide a policy summary to present background information and create a specific context for the Nonu Industry (illustrated in Figure 1.2). In brief, my diagram shows ‘top-down’ positioning of international trade policy from the World Trade Organisation (WTO) and the European Union (EU) with the World Health Organisation (WHO) and the Food and Agriculture Organisation (FAO) positioned as markers for international and regional market standards and food safety requirements. As market entry requires product specification, this is generally created through a set of industrial standards, or a codex which must present basic consumer information on product content and nutritional value.

At present, the codex for the Samoan Nonu product is represented through a regional codex committee, steered by WTO/FAO members, whilst simultaneously being represented by its own industry members from the Pacific (Cullwick, 2013). Positioned between ‘top-down’ and ‘bottom-up’ representation, this study questions whether this juxtaposition is in the best interests of local industry and whether – through the confines of a regionally adopted codex – the Samoan Nonu Industry is being given the opportunity to define its own localised specialisation.

1.4: Isolated Island – Purchasing a Piece of Paradise

Appreciating the choice of Samoa as a research site requires that it is set in a context of deeper discussion. Exploring aspects of Samoa's environment, culture and economy, is essential in order to show how Samoa's geography (Figure 1.3), both physical and human (Figure 1.4) has an impact on Nonu production and promotion. It is these aspects that are translated through the producer-consumer dynamic to the consumer, enabling them to 'purchase a piece a paradise'. These human-environmental relations form the core of the GI concept and impact directly on the primary research.

FIGURE 1.3

1.4.1: The Environment

Samoa is situated in an isolated position, in the middle of the South-West Pacific Ocean (Figure 1.3 - *top right*). It is located between latitudes 13°25'S and 14°05'S and longitudes 171°23'W and 172°48'W, comprises two main islands (Figure 1.3 - *top left*) and over 100 smaller islands – most of which are uninhabited (Ministry of Natural Resources and Environment, 2012). The main island, Upolu, extends about 72 km from east to west and up to 24 km from north to south (MNRE, 2012). The other island, Savaii, is also around 72 km across but is 35 km wide. Total land area is approximately 2820 km², with the two main islands comprising 1115 km² and 1700 km² respectively (MNRE, 2012). Apart from Tonga, Fiji and the Cook Islands, Samoa's nearest trading partners are New Zealand and Australia, which are about 3000 km and 4500 km away from the main islands (Google Earth Pro., 2013), with the nearest European markets being approximately 15000 km away (Google Earth Pro., 2013).

Samoa's physical geography is important for understanding how this relates to Nonu production. Samoa is an oceanic volcanic archipelago and its islands are still volcanically active (Cronin, Bonte-Graptin, & Karoly, 2006) (Figure 1.3 - *bottom left*). Both Savaii and Upolu are surrounded by shallow lagoons, a fringing reef and have coastal plains of 4-5 km wide, which rise to central mountains. Savaii has a central core of volcanic peaks surrounded by a ring of lava-based plateau, then lower hills and coastal plains (Whistler, 1978). Upolu has a chain of volcanic peaks running from one end of the island to the other, with hills and coastal plains on either side (Cronin, Bonte-Graptin, & Karoly, 2006). The island soil is composed almost wholly of volcanic rock, formed from basaltic lava flows (Watters, 1958). The Nonu plant is found in abundance near these coastal areas and grows within volcanic soils that contain high deposits of trace minerals (Nonu Samoa, 2012). It is these trace minerals that make Nonu juice a marketable health product.

1.4.2: The Culture

Culture also has a bearing on the Nonu sector, as Samoa is arguably among the most traditional of all Pacific Island societies and is said to retain many aspects of traditional knowledge that have been 'lost' from other Pacific Island cultures (Encyclopaedia Britannica, 2011) (Figure 1.4). Samoa's ancestors are believed to have moved into the Pacific from the South-East Asian region around 11,000 years ago and recent research on the origins of plant species, in particular the Nonu plant (discussed in Chapter 4) seem to support this assumption (Razafimandimbison, McDowell, & Bremmer, 2010).

FIGURE 1.4

FIGURE 1.4 | Traditional Culture of Samoa: *top left* - two males are dressed in traditional tapa (clothing) and Ula (neck adornment) with the top of their Pe'a or malofie on display (traditional male tattoos that cover the body from the waist to the knees); *top right* – the fire knife is a traditional implement used in ceremonial Siva Afi (dance) (Nonu Samoa, 2012)

Samoaan culture is based on its social institutions and the two most important principles are the Fa'asamoa and the Fa'amatai literally meaning the 'Samoaan way of life' (O'Meara, 1990). Fa'asamoa is based on the 'aiga' or family and this remains the single most significant social and economic unit, along with its associated values of alofa (love), tautau (service) and fa'aaloalo (respect) all aspects essential to Samoaan identity. Both Fa'asamoa and Fa'amatai were

traditionally organised as a 'system of belonging' (Tcherkezoff & Douaire-Marsaudon, 2005) with each person knowing their place in the arrangement of family kinship.

Fa'amatai is organised under a strict hierarchy, with similarities to the 'caste' system in India. The head of the 'aiga' or family is called the 'Matai'. Matai act as representatives, in charge of all family matters and each family member has to abide by the Matai decision. Younger Samoans are expected to accept unquestioning obedience to the Matai (Lawson, 1996). This often means certain family members are 'chosen' to go out into the workforce, earning money to support the rest of the family, while others may be told to stay at home to look after younger siblings or elder relatives. If, however, the Matai fails to take the necessary care of his family or community, or if their personal values become corrupted, he or she could be deemed 'unfit' to hold title. In the case of the family, the Matai title can then be forfeited and reassigned to a more worthy member (O'Meara, 1990). Interestingly, Matai is often translated as '(ma) tai', designating a family 'tie' to a piece of land.

1.4.3: Access to Land

Central to the economic development of the country – and its industry, is access to land, but its availability for commercial enterprise has been the subject of much debate. Traditionally, the Matai title has always been synonymous with family land and land title but this is changing as a result of modernisation and globalisation. Land is being increasingly viewed from a Western perspective, as an asset or commodity (Fairbairn-Dunlop, 1991). In the drive for income, there is an increased trend for portions of family land to be 'allocated to individuals' (Ikenasio-Heather., *Personal Communication*, 2012) and is now at a point where most village land is occupied by these individuals, rather than extended family ownership (Fairbairn-Dunlop, 2008). This has created a modified system of newly cleared land, which may be called

'fanua oa'u lava', "land belonging only to me" (Rogers, Tuioti-Mariner, & Tuoro, 2009 pg 52). Some argue that the increase in individual tenure has assured rural households of a level of subsistence that provides a secure buffer against market decline (Paulson & Rogers, 1997; Rogers, Tuioti-Mariner, & Tuoro, 2009). Others are critical of the shift to private ownership, as it represents the start of a slippery slope towards expropriation (Overton, 1999). Nevertheless, of the total land area in Samoa, about 81% – 565,000 acres – is still estimated to be customary and cannot be bought or sold to those who are not of Samoan descent with around 11% of land freehold and 8% public (Ikenasio-Heather., *Personal Communication*, 2012).

1.4.4: The Economy

Samoa has a small, open economy where almost everything is imported (SDS, 2012; NES, 2012). This results in a trade imbalance, with goods received almost 20 times higher than goods exported (CBS, 2011). Without external aid and remittances, Samoa's balance of payments would remain unequal. Like many of the small PIC nations, Samoa has been encouraged – by aid donors and development trustees – to develop a modern economy, to integrate into the global market system (Murray, *Personal Communication.*, 2013). Infrastructure development, including roads, airports, seaports and telecommunications systems have been extensive, with a large investment in services (tourism and commerce), construction, fisheries and agriculture. However, agriculture and related primary sector activities still support the majority of the total population with 75% or approximately 130,000 people relying on some measure of subsistence agriculture (Rogers, Tuioti-Mariner, & Tuoro, 2009; CBS, 2011). The significance of the primary sector is also indicated by the fact that related activities account for approximately 50% of GDP (CBS, 2011; SBS, 2013). Main export commodities during Feb-July 2012 include; coconut oil, fish, beer, copra, Nonu juice, drinking coconuts and taro (CBS, 2011).

Economically, Samoa has performed well in relation to other Pacific Islands, with a growth of approximately 4.2% during 1994-2007 but agricultural sector growth has remained sluggish, contributing just 11% to the structure of the economy (CBS, 2011). Total GDP is also dominated by external aid and remittances from Samoans working overseas. However, aid agencies have been pushing for pressure to globalise – and export – to try to reduce this dependence, so the shift towards neo-liberalism has increased (Murray, *Personal Communication.*, 2010).

1.5: Methodology

The research methodology employed the collection of both primary and secondary data in order to answer the research aim and objectives. Primary data was collected over a nine week period from the 19/05/2012 to 19/07/2012. During the nine week field station in Samoa, on the island of Upolu, in-depth semi-structured interviews were conducted with participants, selected due to their multi-disciplinary roles as key actors within the Samoan Nonu Industry. Figure 1.3 displays the geographic position of Samoa and I have created Figure 3.1 to show the sites of Nonu processing plants visited, in addition to interview locations numbered 1-30. Furthermore, observation of the Nonu juice making process was assessed and structured using a *commodity chain approach*. Secondary data was collected before and after the field research in Samoa whilst located in New Zealand. Peer reviewed literature, in addition to multiple sources, were reviewed through a ‘*producer-consumer*’ lens in order to develop a focused and comprehensive understanding of the GI concept and its application to the Nonu Industry.

1.6: Thesis Aim and Objectives

The term Geographical Indications has been around for many decades and there already exists a considerable body of analysis on international agreements, legal systems and a history of debate on the rationale for GI's

(Yeung & Kerr, 2011). However, there is little peer reviewed literature to assess the potential benefits and challenges of applying a GI (Barham, 2004). There is even less literature on GI topics that relate to Samoa and no literature that relates, in particular, to the application of a GI for the Nonu Industry. Therefore, this study has a significant opportunity to address these gaps in the literature.

The main aim of this research was to assess *the application of a Geographical Indication to support the sustainable development of the Nonu Industry in Samoa*. As the state of GI protection within Samoa is in its infancy, in order to fully address the aim, the pros and cons of using either; (1) a USA-based protection system or (2) the application of an EU-protection system, this lead to the development of two fundamental questions:

- 1) *Can the current US based GI protection scheme promote and support sustainable development of the Nonu Industry?*
- 2) *Would the adoption of an EU based GI provide better support for sustainable development of the Nonu Industry?*

In turn, these two questions will be answered by carrying out the following objectives:

- 1) *Outline* the regulations pertaining to the GI system – both nationally and internationally – to assess how they have been used – if at all – in the Pacific Islands, especially in Samoa
- 2) *Describe* the global/local links in the Nonu export sector, in terms of trade and production
- 3) *Undertake* a detailed commodity chain analysis of the Nonu Industry in Samoa, as a case study
- 4) *Record* local perspectives on the characteristics of GI and identify the communities ‘self-definitions’ or perspectives of GI and how this could be

applied to provide place-based codification and product differentiation for the promotion of the Nonu juice product

- 5) *Assess* the potential benefits and challenges of applying an EU-GI to the Nonu Industry (with or without state support) and highlight areas that require further development.

1.7: Thesis Approach

1.7.1: The Producer-Consumer Dynamic

There are many different approaches and theories that could be taken to address the aim and objectives of this thesis. After much research, I consider that the producer-consumer dynamic be taken as a theme of this study.

FIGURE 1.5

FIGURE 1.5 | The Producer-Consumer Dynamic: A schematic diagram of the producer-consumer dynamic displaying the relationships between (1) conventional products and how they operate in a placeless space as opposed to (2) niche products that maintain a specific quality due to their localised place-based identity, modified from Stræte (2008).

I believe it offers an effective means to explore the dualist relationship between producer and consumer markets, as it assists with understanding the motivations behind the purchase of a commodity and how consumers (and producers) relate to food quality and food system issues as a whole (Coe, Kelly, & Yeung, 2007) (Figure 1.5). This theme is also used to show how there has been a global shift towards consumer preference for products that can show transparency (DeLoitte, 2011) and how the relationship between producer, consumer and product is increasingly based on trust. This idea will be explained in more detail in subsequent chapters.

1.7.2: The Commodity Chain Approach

In addition to the theme of a producer-consumer dynamic, this thesis uses a commodity chain approach. A commodity chain is basically defined as a “network of labour and production processes whose end result is a finished commodity” (Hopkins & Wallerstein, 1986 pg 159). It describes the full range of activities required to bring a product or service from its conception, through to its delivery to consumers.

FIGURE 1.6

FIGURE 1.6 | The Commodity Chain of Samoan Nonu: The process of making Samoan Nonu Juice is divided into three sections based on the principles of the commodity chain structure: (1) input, referencing the biological and environmental aspects of the Nonu fruit, (2) transformation, detailing how the fruit is converted to a juice and; (3) distribution, which is concerned with the packaging, labelling and marketing of the Nonu product Source: Author's own.

The global commodity chain concept was originally developed within an analytical framework of the political economy of development and underdevelopment, where it was used to highlight power relations embedded within the value chain (Gereffi & Korzeniewicz, 1993). However, in this study, the theme of power is not specifically addressed and the commodity chain approach is only used to provide an outline of the various stages of the localised processes and specialisation of the Nonu Industry in Samoa (Figure 1.6).

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1.8: Thesis Outline

CHAPTER 1 | Introduction: Chapter one introduces the thesis by defining three types of GI protection, outlining the current state of affairs in Samoa and highlights the potential benefits of applying a specific Nonu codex to the Samoan Nonu juice product, the thesis aims, objectives, methodology and approaches are then identified

CHAPTER 2 | Literature Review: Chapter two is divided into a four part literature review: (1) background on the Nonu plant, sustainable development and GI's, (2) assessment of literature on legislation of IP/GI on a global regional and local level, (3) theories of culture and how the idea of place-building can be incorporated into the marketing of a place-based, localised product and; (4) place-based narratives, to show how these aspects could be built into a specific codex for the Samoan Nonu juice product.

CHAPTER 3 | Methodology: Grounded methodology is outlined in Chapter 3 as a complimentary approach to 'bottom-up', grassroots development of the EU-GI concept and explains how primary and secondary data were collected and assessed.

CHAPTER 4 | Case Study Results: Chapter four gives a detailed overview of the Nonu Industry of Samoa through a commodity chain approach the input, and transformation processes employed by Nonu Samoa and the distributive stage of the commodity chain for each of the current NASI processors.

CHAPTER 5 | Discussion: Chapter five discusses the local and global elements of GI's - the evolution, structure and dynamics of the Nonu Industry - the use of GI's and their practicalities for sustainable resource management, in an attempt to consolidate a codex that contains a working definition of an industry standard, whilst incorporating community 'self-definitions' of GI and concludes through a discussion of Nonu as a niche commodity.

CHAPTER 6 | Conclusion: Chapter six concludes with an overview of the benefits and challenges of applying this to the industry, and attempts to answer the aim and key questions of the thesis through a combination of the main objectives by highlighting areas for further research.

2

CHAPTER 2

Literature Review

Literature Review

2.0: Chapter Summary

This chapter provides a comprehensive review on the available literature relevant to the thesis. A theoretical background on the Noni-Nonu Plant, the concepts of sustainable development and Geographic Indications are provided, followed by a description of the policies and approaches of the USA, EU and Pacific on GI protection with a review on the GI legislation in Samoa. The chapter then proceeds to document the place-making of products through identification of both human and physical elements of an environment that when combined, culminate in the production of a niche product. The chapter concludes on how these qualities can be protected and promoted through the use of a GI codex.

2.1: Theoretical Background

2.1.1: The Noni-Nonu Plant

Noni or Nonu as it is locally known in Samoa, is technically classified by its Latin name, *Morinda citrifolia* Linnæus. It belongs to the family Rubiaceae, more commonly known as the coffee family, which comprises around 650 genera and 13,000 species (Mabberly, 1987). The *Morinda* species has around 80 varieties of trees, shrubs and vine but apart from *M. citrifolia*, none are of any commercial value (Davis & Bridson, 2007). Nonu has been called many different names from the 'Indian Mulberry' (English) to the 'cheese fruit' plant in Australia, named thus because of its pungent butyric acid smell (Morton,

1992). Worldwide, the plant is commonly known as 'Noni' but to the people of Samoa it has always been known by the vernacular name of 'Nonu'. Samoans working in the industry, make a conscious effort to use the word 'Nonu' for their product (Vui, 2012; Yoshida, 2012; Blakelock-Toma, 2012), as most understand the concept of GI and the advantages of applying this for differentiation. As a result, they use the words 'Samoan Nonu' intentionally, as a socially constructed place-based name, to support marketing narratives. In order to endorse this, the vernacular term 'Nonu' will be used for referencing the Samoan fruit and 'Noni' for referencing fruit grown elsewhere.

2.1.1.1: Characteristics of the Noni-Nonu Plant and Fruit

The Noni-Nonu plant is commonly classified as a small woody tree, having a straight trunk and evergreen leaves. It is prolific and extremely hardy (Whistler, 1992; Morton, 1992; Ross, 2001; Wang, et al., 2002). Nonu leaves are classified as pale green and elliptical when young, changing to a darker green with a more ovoid shape when mature (Morton, 1992). At both stages the leaves retain a glossy wax-like surface, like those of the citrus plant, hence the name '*citrifolia*' (Rogers, Tuioti-Mariner, & Tuoro, 2009). The fruit is formed from a pale green syncarp, which contains multiple segments (like a blackberry) and at this early stage, it grows and divides. When young, the Nonu fruit is small, round, hard and bright green in colour with its surface covered by polygonal shapes, much like the surface of a pineapple (Dixon, McMillen, & Etkin, 1999). As the fruit matures it becomes more elongated and 'grenade-like' progressively changing colour from bright green, to pale green, to yellow (McClatchey, 2003). In its final stage the fruit is very fleshy and almost translucent. It also has a rotten smell and is considered to be overripe by most of the processors in Samoa (Vui, 2012).

2.1.1.2: Classification and Distribution of Noni-Nonu

M. citrifolia var *citrifolia* is currently the most common variety in use for mainstream Noni-Nonu juice production. However, documentation reveals that Noni-Nonu classification has been the subject of debate for a number of years. Some researchers claim that Noni plant varieties have the same DNA with a variable appearance (McClatchy, 2003; Nelson & Elevitch, 2006; Waki et al, 2008). Others suggest the plant may contain infra-specific subdivisions – and differing DNA – within the species (Puff *et al.*, 2007). As yet, no particular consensus has been reached on that debate but current taxonomic classifications categorise Morinda into three distinct varieties: (1) *M. citrifolia* var. *potteri*, (2) *M. citrifolia* var. *bracteata*, and; (3) *M. citrifolia* var. *citrifolia* L. (Figure 2.1).

Comment [s5]: Check the figure – the title and image seem to be over the top of some text.

FIGURE 2.1

FIGURE 2.1 | Varieties of Morinda Citrifolia: top left – *M. citrifolia* var. *potteri*, easily identified by its variegated green and white leaves and small fruit; top right - *M. citrifolia* var. *bracteata*, identified by the presence of bracts or small triangular protuberances along the stem surrounding the fruit; bottom left – *M. citrifolia* var. *citrifolia* L. identified by its broad ovoid leaf shape (McClatchy, 2003).

M. citrifolia var. *citrifolia* is also deemed by locals, to be the most common variety in Samoa (Vui, 2012). As such, it will be the only variety that will be considered for the purpose of this study.

As well as debate surrounding the plant variety, it is once believed that the Noni-Nonu plant originated in South-East Asia (Morton, 1992; McClatchey 2001; Nelson and Elevitch, 2006). As Nonu is so prolific, it is thought that its wide dispersal round the Pacific Islands may have been due to seeds drifting in ocean currents or to the plants ability to self-pollinate. It is also thought that

FIGURE 2.2

FIGURE 2.2 | Geographic Distribution of *Morinda Citrifolia*: The present day growth locations of; (1) *M. citrifolia* var. *citrifolia* (blue), (2) *M. citrifolia* var. *bracteata* (dashed black line) and; (3) *M. citrifolia* var. *potteri* (grey line) are displayed and the regions of Micronesia – potential origin of the fruit – and Samoa are illustrated with black lines. Modified from Razafimandimbison *et al.* (2010)

it could have been brought to the Pacific by the South-East Asian ancestors of the Micronesian and Polynesian people (Whistler 1985; Abbott 1992; Morton 1992). Previous studies by Johnansson (1994), McClatchey, (2003) and Nelson and Elevitch, (2006) have claimed that the plant may have evolved in Australia, Borneo or Indonesia, with analysis pinpointing its evolution to the island of New Caledonia. However, the most recent research (Razafimandimbison *et al.*, 2010) claims that the plant may have originated in Micronesia (Figure 2.2). Therefore, it is possible that Nonu plants around the world – including those found in each of the Pacific Islands and Samoa – are all variations of *Morinda citrifolia* var. *citrifolia*, and all have their own unique

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set of biological characteristics due to ocean dispersal, self-pollination and other factors (Whistler, 2005). The local variety of Samoan Nonu is explored in detail in Chapter four of the Nonu case study.

2.1.1.3: Traditional and Modern uses of the Noni-Nonu

Nonu has a 2,000 year history of use in the Pacific Islands and as such, this research argues that it has one of the most enduring links to its 'place' of origin. The body of literature on its traditional use is scant – and exists mainly in oratory form – but it is said that its roots can be infused to make a strong 'tea' for stomach upsets, that its leaves can be topically applied as a 'poultice', to treat skin abrasions and even its flowers can be used as a treatment, 'when placed on the eyes', to alleviate conjunctivitis and sties (Dittmar, 1993). Though most Pacific Islanders use many of these remedies curatively, the point to note is that the drinking of Nonu juice has traditionally been considered a preventative measure and has been regarded as a source of maintaining general health and well-being, in the absence of expensive modern medicine (Dixon, McMillen, & Etkin, 1999). Up until the recent controversy over claims made by Tahitian Noni International, Nonu consumption was considered safe, because of its long-standing use in the Pacific. However, as a result of this controversy, Nonu juice is now scrutinised wherever it is sold (FDA, 2009).

Contemporary application of the Nonu plant grew out of the mid-1990s, when global consumers were provided with a more modern and convenient way to take the fruit (Elkins, 1997; Solomon, 1999). In 1996, Hawaiian Herbert Moniz of Herb's Herbs began a new method of production, when he first dried, crushed and milled the fruit to a powder. The powder was then inserted into an easy-to-take, convenient capsule that still retained all of its medicinal properties (Digg, 2008). Naturally, this sparked widespread interest and in 1997 Tahitian Noni International (TNI), started manufacturing the fruit, in the form of a ready-to-drink health juice tonic (TNI, 2009). As a result of

commercial marketing campaigns, tailored towards Western markets, TNI became one of America's fastest growing private companies and is still the world's brand leader of Nonu juice, clocking-up an impressive US\$33 Million in its first year of sales (TNI, 2009).

Recent shifts towards a revival of 'old-fashioned' remedies or traditional foods have been reflected in consumer demand for more 'natural' products that are perceived to contain medicinal properties and health benefits (Dimara & Skuras, 2005). Today, Nonu juice is marketed as a type of alternative medicine (Dixon, McMillen, & Etkin, 1999; McClatchey, 2003). It is used in the treatment of: arthritis, diabetes, high blood pressure, muscle pain, headaches and poor digestion and was once claimed to contain Xeroxine, a substance which was said to cure cancer (Heinicke, 1985; Wang & Su, 2001). Understandably, this claim has now been refuted but the juice has been evidenced to contain eight major minerals. These include: Vitamin C, Vitamin A, potassium and carotene, sulphur, calcium, phosphorus and selenium (Morton, 1992), with further analysis of 23 phytochemicals and three main sets of micronutrients (Duke, 1992; Morton, 1992; Dittmar, 1993; Dixon, McMillen, & Etkin, 1999; Wang & Su, 2001).

Despite its initial popularity and much public interest in its health claims, Nonu producers and academics have so far failed to provide any scientific evidence to support the link between the products use and its health benefits (Anthony, 2012). As a result, Nonu is now struggling to compete with other health products in a tough global market. Nonu juice is not appealing to drink – even when it is mixed with sweeteners – as it has quite a bitter taste and unpleasant smell (Degener, 1973). Samoan processors have feared for some time that as a health product, “*Nonu is just not sexy*” and that much is needed to apply comparative advantage in a market that contains more popular health supplements, such as Acai and Goji berry (Vui, *Personal Communication.*, 2012).

2.1.2: Sustainable Development

2.1.2.1: Sustainable Development in the Context of Global Resource Management

Worldwide changes to farmlands, forests and waterways – especially in rural areas – have arguably been driven by the need to provide food, water and shelter for seven billion people (Foley, 2011). This has resulted in an intensification of agricultural production and led to the expansion of croplands, plantations and pastures. Such changes – in agricultural practice – have resulted in the wide spread adoption of large-scale industry and its benefits – of economies of scale – have generally resulted in the production of cheaper food (The Open University, 2011). Clearly, most agricultural processes rely on the use of the environment for a natural resource base. But, these resources are delicate and finite and it has been argued for some time, that large-scale industrial processing is currently unsustainable (Shiva, 2000). A few decades ago, concern over globalisation and environmental instability, was mostly limited to advocacy groups and experts (UNEP, 2007). Today it is almost universal, generated – in part – by the publication of the Brundtland Report (1987), in which the idea of sustainable environmental development was defined as an aim to, ‘meet the needs of the present generation without compromising the needs of future generations to meet their own needs’ (World Commission Report on Environment and Development, 1987).

Argued by some as being ‘too narrowly defined’ (Marshall & Toffel, 2004), the Brundtland definition cannot readily encompass the complexity of sustainable environmental development and where this ‘sits’ on the intersection between development and environment. According to Stiglitz, sound environmental policy is essential if development is to be sustainable. He argues that there is a “well-founded worry that badly designed international trade agreements may compromise (developing) countries ability to protect the environment” (Stiglitz, 2006 pg 130).

“Fairness is not in the lexicon of trade negotiations”, he states, adding that the job of western trade negotiators has always been to, “get a better trade deal for their country’s industries”, by gaining increased market access and stronger intellectual property rights, without giving up agricultural subsidy or non-tariff trade barriers (Stiglitz, 2006 pg 131). In essence, they are not thinking about the global environment. Shown here, in the historical context of global trade, is the manner of how sustainable development has arguably been jeopardised by corporate interests, as they have tried to shape globalisation in ways that compromise more than fairness and basic values (Korten, 2001).

2.1.2.2: Sustainable Development in the Context of Global Trade Policy

With 80% of the world’s population living in developing countries, marked by high poverty, unemployment, low incomes and a lack of basic education, globalisation can present unprecedented risk and opportunity (Desai & Potter, 2002). This has been shown in the history of economic development, where one of the main tenets of neo-classical economic theory has been that developing countries will benefit from opening their doors to trade liberalisation. However, history shows that greater openness has generally meant less protection and more risk (Potter, Binns, Elliott, & Smith, 2008). In 1994, 23 developing countries signed up to the General Agreement on Tariffs and Trade (GATT) with the WTO on the promise of better access for exports. According to the international agreement, from what is arguably a ‘top-down’ approach, all import quotas and tariffs were to be abolished and quantitative restrictions (quotas) negotiated on the principle of reciprocity; proposed as an equal amount of goods that could be imported or exported between countries. This was the first time that developing countries had agreed to reduce subsidies and bind tariffs. A crucial feature was the agreement to include agriculture (Daly, 1994).

Open policy on agriculture led to intense competition and allowed major players to invade developing markets, impacting on millions of small farmers (Krugman, 2006). No country, especially developed, was prepared to expose their farmers to the rigours of free-trade. So access to markets for developing countries was effectively 'blocked' by a series of loopholes. Quotas were replaced by something called 'equivalent tariffs' which each country was left to define and could be reduced over a period of time (Easterly, 2006). Developed countries exploited these tariffs by setting them at a ridiculously high rate – in some cases up to 100% higher than the cost of domestic tariffs – in order to protect their own agricultural industries and produce (Collier, 2007). This became known as 'dirty tariffication', with further attempts to avoid reciprocal trade policy involving tariff escalation and government intervention (Collier, 2007).

Developed countries were able to exploit developing markets by using tariff escalation, thus placing high tariffs on the importation of processed goods. Because of the cost, it actually became cheaper for developing countries to send raw materials as an export, thereby discouraging the creation of adding value (Thirlwall & Pacheco-Lopez, 2008). Additionally, developed countries were provided with state subsidies to provide protection for their own agricultural products. By receiving this additional payment, producers were able to undercut the competition by selling their product at the cheapest price. Despite being able to produce cheap goods themselves, developing countries could not compete, as their governments could not afford to subsidise agricultural produce (Ntegyereize, 2011). These issues have been hotly debated – especially as a result of the Doha-Uruguay round – where international public protests in 1999 and again at the 2002 Earth Summit in Johannesburg, marked major public dissent over capitalist trade. At present, the WTO is still negotiating to reduce trade subsidy.

In contrast, the Organisation for Economic Cooperation and Development (OECD) had produced a policy report for the Rural Development Strategy'

(OECD, 1995). Primarily viewed as a way to reduce spending on the Common Agricultural Policy (CAP) – by cutting back agricultural subsidy – but additionally used to consolidate the economic transformation of boundaries under a single market system for Europe, the report showed a need to create and develop regional unity by highlighting the role of niche markets and the type of benefits they could bring to the development of rural areas (Garzon, 2007). The report focused on those areas considered to be ‘marginalised’ and offered appropriate strategies to suit smaller-scale agricultural production. These strategies included the creation of certification systems as part of a new ‘food quality’ regime, that was fashioned to illustrate the distinct characteristics of local foodstuffs. Thus, the idea of designing a policy that reinforced the ‘link’ between localised place and product was adopted, with the concept of a geographical location as key to supporting the sustainable development of regionalised agricultural products, from what has already been argued as a ‘bottom-up’ approach (OECD, 1980).

2.1.2.3: Sustainable Development in Relation to the Nonu Industry

Although determined as a narrowly defined example of sustainability, the Brundtland Report (1987) has at least been revered for its contribution to providing a universal standard for the concept (Sachs, 2009). In many respects it is also to be commended for underlining the tension between industrialised modernist culture and the finite nature of the environment and its ecosystems; not in the way that Meadows (1986, 2004), infers as a ‘limit’ to population growth, but rather as an appeal for the earth’s carrying capacity to be respected and not extracted solely for the purpose of the maximisation of profits and capitalistic gain (Brundtland, 1987). Unlike Hardin’s (1968) economic theory of the ‘tragedy’ of resource management – and its definition of resource depletion through un-enclosed, un-regulated self-interest – the report considers how the environment and development discourse must

consider the application of environmental policy under the concept of ‘basic needs’ and how invariably, ‘poverty’ reduces people’s capacity to use resources in a sustainable manner (Brundtland Report, 1987; World Commission Report on Environment and Development, 1987). Understandably, the management and potential sustainability of the environment must be viewed as that which is affected by human activity. It is, in effect, the interplay between human use and human reliance on the earth’s systems – to provide vital services – that are essential for our survival (Foley, 2011) (Figure 2.3).

FIGURE 2.3

FIGURE 2.3 | Sustainable Development Matrix: A model (designed by the Sustainable Land Development Initiative) that integrates the principles of the Brundtland Report (1987) illustrating the interconnectedness of ‘people, planet and profit’ stressing the importance of the sustainable management of each of these three core elements (Mock & Tony 2011).

Consequently, we can see how management of the environment and the cultural and social practices of people are inherently interrelated, and how the current ‘rights-based’ paradigm of the development dialogue asserts that indigenous people have a right to maintain traditional practices and

knowledge of the natural environment, so that its biological diversity can be reproduced and protected (UNDP, 1948).

There are many assumptions that GI's tend to value land and its particular environmental characteristics, especially in relation to agriculture (Barham, 2004). Therefore, it is argued that those involved with its use as a natural resource base – local producers in general and those in Samoa – have a vested interest to protect its unique aspects. Hence, we may assume that the incorporation of a Nonu GI in Samoa would induce better levels of environmental stewardship and human management of the resource, as these environmental and ecological factors are recognised as integral components of many GI products.

2.1.3: Geographical Indications

2.1.3.1: What are Geographical Indications?

Most of us will already be aware of many products that represent a GI, yet may not be aware of what they are. In its simplest form, a GI is the name of a place – this may be a small village, town or even a country, that is used to identify and commercialise natural agricultural products and foodstuffs that originate from that area (oriGIn, 2011). Once established, the GI protects a product from being counterfeited by producers who operate outside a designated geographical location. Popular GI's range from Champagne to Scotch Whisky and from Florida Oranges to Basmati Rice, as well as the less well-known example of the humble Cornish pasty. However, there are one or two examples, like Feta cheese (Greece) which do not use the name of a place as a GI but these examples are an exception to the rule.

2.1.3.2: Why are Geographical Indications Popular?

With an estimated total of 10,000 registered GI's in the EU, USA and other countries – and 10% of this total from developing countries – the GI phenomenon has stimulated increased interest amongst producers, policy makers and academia, as they are perceived to offer a wide range of development opportunities that go far beyond the enhancement of economic growth (Giovannucci, Barham, & Pirog, 2009).

Viewed from the producer-consumer dynamic, GI's can signal important characteristics that determine the quality of a product, or its production process. So, unlike the US trademarked example of Tahitian Noni, a certified GI can provide the consumer with a certain amount of information and offer a guarantee of product origin (oriGIn, 2011). This supports recent trends, showing that consumers clearly have an interest in seeking diversity in products and are willing to pay a premium price for goods that reflect the 'exotic' (Murray, 2000).

This aspect is also combined with the idea that consumers are becoming more conscious of supporting and sustaining localised food production in developing countries, or as Harvey (1996) terms, the act of expressing a certain "loyalty to place across space" (Harvey, 1996 pg 303). Thus, a GI can play a vital role in consumer marketing which may result in a greater share of global trade for producers. This popularity presents considerable opportunities for developing countries as more GI's are likely to emerge.

2.2: Policies and Approaches of the USA, EU and Pacific on GI Protection

2.2.1: United States of America and the European Union

Apart from very general coverage in the GATT Agreements of 1947 and 1992, only a few international trade agreements have offered any protection for GI's (Josling, 2006). Both the EU and US protection systems are based on three previous international treaties; (1) Paris Convention for the Protection of Industrial Property (1883), (2) Lisbon Agreement for Appellations of Origin (1958) and (3) Madrid Agreement for the Repression of False and Deceptive Indications of Sources on Goods (1891). Historically, these agreements combined to form the basis for the TRIPs Agreement and protection under the European system (Bagal & Vittori, 2011).

Whilst many GI's are marketed globally, the largest markets are the European Union and the United States. However, there are a number of conceptual differences between these two, which result in an international protection system that has no universally accepted definition of a GI (Josling, 2006). The history of GI in the US shows a product orientated application, with GI's being an extension of a patent and trademark system, primarily used as marketing tools with which to recognise and reward producers and quality production (Dutfield & Suthersanen, 2005). Many of the most popular GI's in the US are wide-reaching and serve only as a market identity for what is often a large-scale level of production. Thus, GI's are defined under the US system in Article 22, paragraph 1 of the Trade Related Aspects of Intellectual Property (TRIPs) as:

“ indications which identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographic origin”.

In contrast, the EU views a GI as a sign of quality and a way of preserving traditional agricultural regions – and the natural resource base – by fostering a ‘quality rather than quantity’ trade orientation (DEFRA, 2003). Thus, a GI under the EU protection system has a much more specific definition than what the US system describes as ‘essentially attributable’ and is defined by Council Regulation (EC) No 510/2006 (2006) as a Protected Designation of Origin (PDO) – a place name that is used to describe an agricultural product or a foodstuff – that:

*“(a) originates in that specific area (b) where the product possesses a specific quality, reputation or other characteristics attributable to that geographical origin [and] (c) **“whose production and/or processing and/or preparation of the product takes place in the defined geographical area.”***

A PDO needs all of the above requirements for registration, whereas only one of these stages is required for a Protected Geographical Indication (PGI). Additionally, the EU protection system also designates that a GI must be managed by a group and a control body and incorporates a scheme of management (DEFRA, 2003).

As a general rule, the US incorporates GI’s as a section of its existing intellectual property legislation or Trademark Law. The US Patent and Trademark Office (USPTO) views GI’s as a subsection, observing that they serve the same function as trademarks, because like trademarks, they; “identify a source, guarantee quality and are a valuable business interest” (USPTO, 2011). Thus, patents, trademarks, certification marks, collective marks and GI’s can belong to any legal entity – government, business, organisation or individual – but by their nature are deemed a ‘private right’. Hence, without any need to link to a group, place or quality standard, (like an EU-GI) they are subject to being controlled, bought or sold just like any private asset, as the owner defines its own rules and this may or may not include quality parameters.

In contrast, the EU uses a highly-developed, stand-alone system of legislation and regulation specifically for GI's, that operates alongside a trademark system (EC, 2006). The EU-GI can only be registered by the producers of a product – of which both are physically related to their geographic origin – or the government of the country in which registration takes place. In essence, this system is known as a *sui generis** because its use is collective. Unlike a US-GI, it cannot be bought, sold or transferred as the name belongs to the land itself. Thus, the GI acts as a 'public good' where everyone involved is covered by a 'collective right' to establish, manage and pursue their own GI as long as they are registered and can provide adequate regulations and standards that prove an authentic link between the product and its locality (EC, 2006). Therefore, it is argued that this 'bottom-up' approach would serve developing countries like Samoa, as a more appropriate system for product protection.

In short, according to the World Intellectual Property Organisation (WIPO) a GI or 'appellation of origin' means a geographical name, "...which serves to designate a product originating therein, the characteristic qualities of which are due exclusively or essentially to the geographical environment..." (WIPO, 2011) whereas an "indication of source" simply means any expression or sign used to indicate that a product or service originates in a country, a region or specific place. Therefore, most source indications do not constitute a GI (WIPO, 2011).

2.2.2: Geographical Indications and Intellectual Property in the Pacific

Despite some efforts by ACP-EU member states, to generate support for GI implementation, the concept is still in its preliminary stages (Coulet & Blakenay, *Personal Comms.*, 2012). In the countries and territories of the South Pacific, intellectual property is in its infancy. Most of the region incorporates some aspects of IP in the form of copyright laws. Fiji, Kiribati and Samoa have used copyright laws for the last few decades – with the exception of Papua

New Guinea – who passed an act in 2000 and the island of Tuvalu having limited legislation (Forsythe, 2009). There are very few reported cases of IPR's in the region, largely because disputes are generally a feature of developed economies and many of the countries in the region are relatively undeveloped. If a dispute occurs, it is more likely to default to common law, introduced to the region in the 1950's from Britain, via Australia, New Zealand or the USA (Forsythe, 2009).

2.2.3: The Samoan Intellectual Property Act, 2011

Up until 2012, Samoa had no Intellectual Property Act or GI legislation. However, as a condition of membership and acceptance into the WTO in 2014, the government has now produced and ratified its own IP act (Tuliaululu, 2012). The new Samoan Intellectual Property Act 2011 came into force on the 1st October 2012. The act introduces new provisions on: innovation patents, designs, trademarks and collective marks, but is basically akin to USA/WTO IP legislation (Sun, 2012) as it does not make provision for establishing the link between product and place through the collective 'public good' element of the EU-GI. (Appendix B)

2.3: Place-making of Products through GI Protection and Codification

2.3.1: GI and the Local Samoan Community

Traditional and locally-made products have the potential to create market value for small developing countries if they are used in combination with aspects of place-based GI's, as they can be used as a marketing strategy for agricultural produce (Bagal & Vittori, 2011). However, as already mentioned, small developing countries have not adapted well to the supposed 'openness' of liberalised trade nor to the requirements of neoliberalisation and this has attracted a body of literature that acknowledges the progressively negative effects of the ideology, especially in the region of the Pacific (Wartho &

Overton, 1999; Overton, 1999; Firth, 2000; Murray, 2000, 2001; Connell, 2006; Firth, 2009). Firth notes that, “in a world rapidly headed for the so called level playing field”, “the whole logic of globalisation is to standardise rules” so that for any country, “whatever its circumstances” comparative advantage is “everything”, “and if a country doesn’t have many comparative advantages, that’s just bad luck” (Firth, 2000 pg. 190). Today, the negative effects predicted by Firth have dominated disputes around the Pacific’s isolation, vulnerability and dependency, arguably culminating in the development of unfair and unsustainable trading systems (Winters & Martins, 2004; Naidu, 2009; Throsby, 2013).

2.3.2: Historical and Environmental Knowledge: The Concept of Terroir

Historically the oldest, most well-developed and widely recognised system of GI legislation belongs to the French and a classical example of a product with a protected status is the bubbling French wine, Champagne (Bowen, 2010). Champagne has epitomised the evolution of product characterisation and delineated territorialisation since its origins within the French system (Simon, 1962). The French system is unique, in that its first place-based delimitations for wine ‘terroir’ (Figure 2.4), were passed as early as 1905 (Trubek, 2008) with further state involvement creating the National Institute for Appellations of Origin (INAO, 2012) and appellation d’origine controlee (AOC) in 1935. Analysing the importance of state support for inter-regional and international wine trading, Moran’s theory (1993) shows the significance of public-private sector collaboration, by revealing how it protects the economic interests of local producers (Moran, 1993). Unlike many other countries, the French system has always allowed local people to retain substantial influence over their link to place by agreeing to grant those involved, the agency to maintain the use of the ‘local’ (Sylvander, 1995).

It is this state involvement, coupled with collaboration from community residents, that is often lacking in developing countries as most governments do not have the capacity to support strong legislative systems for localised GI protection and this certainly seems to be the case for the Nonu Industry in Samoa.

FIGURE 2.4

FIGURE 2.4 | Elements of Terroir: The concept of terroir is displayed as a central result of three inter-related factors or elements: (1) biological, (2) human and; (3) environmental, that form the basic qualities used in the designation of origin (Hocquette *et al.*, 2012). Note how terroir, EU-GI and sustainable development all share the same rudimentary principles.

2.3.3: Strengthening Traditional Knowledge

A further factor or basis for the ‘terroir’ concept is the proposition that public-private sector collaboration serves to strengthen the legitimacy of local knowledge. Continuing the analysis by Moran (1993) there is the suggestion that the state creation of appellation d’origine controlee (AOC) acts as a legal representation of a set of specifications, which – in effect – transforms local knowledge into intellectual capital or property rights (Moran, 1993). Assuming those who take part are willing to ‘buy in’ or agree to follow AOC state regulations, these property rights can then be ‘owned’ by individual vineyards or a collection of vineyards operating in the same area (Moran, 1993). Once formed, AOC specifications and local knowledge can together create a sense of ‘product identity’ with the idea that this then promotes the

territory or region of product origin (Murdock, Marsden, & Banks, 2000). Reputation is then constructed through a series of 'embedding' or 're-embedding' product identity into territorial identity, and vice versa (Thorne, 1996). But Bowen (2010) is quite right to point out that, "a more robust and critical analysis of the concept of embeddedness is needed", one that considers the processes by which territorial identity becomes (re)embedded but more importantly one that recognises the 'power relations' that underlie these dynamics (Bowen, 2010 pg. 211).

As already mentioned, European GI schemes that had licensed '*terroir*' had been designed to protect local knowledge (Berard & Marcheney, 2006; Bureau & Valceschini, 2009) by assigning them to a legal framework of individual property rights. However, in contrast with Moran's view of public-private sector collaboration, Ploeg (*et al*, 2000) tends to suggest a more 'grounded' view of local knowledge, not as being 'fixed' into a set of specifications that become regulated by the autonomy of the state but that local know-how is continually, recognised, reinvented and 're-cast' by local culture (Ploeg, *et al*, 2000). Thus, promoting aspects of 'self-realisation' (Naess, 1973) and "a sense of attachment and commitment to place" amongst the culture of local people (Ray, 1998 pg.11).

2.3.4: Using Culture and Identity to Position Place

Although some believe that the main aspects of certain cultures have been radically altered by the processes of globalisation (Dirlik, 2000) culture and the concept of 'place', have been increasing grounded in what Escobar views as, "an important object of struggle in the strategies of social movements" (Escobar, 2011 pg. 139). Based around human and therefore, social activity, place has been described as an open, fluid space, a 'hybrid' (Harvey, 1996; Massey, 1996), containing elements of the "global in the local" (Castree, 2004 pg 130). Place is where people live on a day to day basis, grounded through the forming and re-forming of relationships (Harvey, 1996), building livelihoods and constructing cultures on the basis of 'being' and of being

actively engaged in the processes of everyday life and of 'dwelling' in place (Heidegger, 1971). While this seems like an over-simplistic statement of what the concept of 'place' may mean within recent cultural discussions, it seems clear – from the current literature – that there is movement toward its restoration. Harvey (1996) again summarises this best by stating that, *"the evocation of the particular qualities of place become(s) a means to explore an alternative aesthetic to that offered through the restless spatial flows of commodities and money"* (Harvey, 1996; pg. 303). Thus, this 'alternative' is being witnessed through the actions of those who have the closest connections to place, with place becoming, *"a rallying point"* (Escobar, 2011 pg 139) for those involved in working the land, who are typically deemed to be members of the working-class.

Class struggles have been inscribed in space through the uneven development of the qualities of place (Lefebvre, 1991) particularly in respect of the impacts of neo-liberal policies on the reconfiguration of social systems and institutional frameworks. At the local level, those involved in the response appear to display a dogged 'resistance' to defend place against the 'placelessness' of globalisation (Barham, 2003). Termed *"resistance identity"*, Castells (1997 pg. 64) theorises that by using materials constructed from history, namely, 'god', 'nation' and 'locality', local actors and producers can build a new identity that redefines their position in society and can also aim to, *"change society by introducing new sets of values"* (Castells, 1997, pg 66, 2011).

Therefore, when we assess an Institute National des Appellations d'Origine (INAO) definition of GI, as that which is, *"defined from a human community (that) builds along its history a set of distinctive features, knowledge and practices"*, it is possible to show commonalities between this definition and that which Castells defines as resistance identity (INAO, 2012) (Figure 2.5).

FIGURE 2.5

FIGURE 2.5 | Fa'amatai System of Samoa: The traditional indigenous form of governance in the Samoan Islands, whereby the holders of Matai chief titles govern their family, maintaining their history and culture; *right* - three Matai elders circa 1890-1910 (Malama, 1987) and; *left* - a recent Matai ceremony, going a little way to demonstrate how the Samoan culture has prevailed to present day (Field, 2002).

Together, they reveal how GI's are a product of human influence. They are a place where local communities construct an identity for themselves whilst 'defending' their own sense of place. This defence or 'politics of place' (Amin, 2002, 2004) may well have its origins firmly endorsed within the territorial autonomy of region building within the EU and beyond – as previously discussed – but the notion of supporting place as a region of 'resistance', appears to have filtered into the consumer space in the form of what may be termed the 'ethical' or moral economy.

2.3.5: 'Place' and the Producer-Consumer Dynamic

Literature – on the consumption of commodities – reveals that they are central to the capitalist system but at the same time commodities may serve to hide important dimensions of how they are produced (Coe, Kelly, & Yeung, 2007). The exchange value of a commodity – i.e., the price – may reveal little about the production process or the social relations that connect it to the customer.

As a result, consumers in the capitalist system are largely ignorant of the geographical origins and histories of the commodities they consume (Coe, Kelly, & Yeung, 2007). Moves toward a more moral or 'ethical' economy, are revealed within patterns of behaviour that drive consumers to question the morality of capitalistic practice. These "political consumers" (Micheletti, 2003 pg 21) have sought to combat the tendency towards cultural homogenisation and the de-localising impacts of global agri-food networks (Urry, 1995; Marsden & Acre, 1995; Goodman & Watts, 1997; Goodman, 2004; Murdock, Marsden, & Banks, 2000) by raising concerns around the 'hidden' agendas of these dominating dynamics (Hartwick, 1998; Watts, 1999; Friedberg, 2004). In this way, Hartwick views the consumption exchange as an 'entry point' for conscientious consumers who can "think about" (their) political and ethical responsibility through the purchase choice of a commodity product (Hartwick, 2000 pg 433).

Moral economies – and the ethical consumers operating within those economies – are increasingly active about seeking out commodities which appear to originate from place-based local origins, on the premise that they can trust local foods more than those which are produced 'on masse' (Allaire & Boyer, 1995). Loosely called the 'quality turn' (Ilbery & Kneafsey, 1999), the phrase is based on an assertion that consumers view locally produced foods as somehow fresher, more 'wholesome' or nutritious than processed foods, notwithstanding the fact that this 'authenticity' is in itself a socially constructed metaphor (Adorno, 1973). Local producers have responded to this external demand by using localised place-based imagery – in the form of signs and labels – to convey ecological, environmental and social characteristics, typical to a particular place (Whatmore & Thorne, 1997; Ray, 1998). By using localised place-based imagery, producers can resist the dominating dynamics of global agri-foods (Barham, 2002; Goodman, 2004; Guthman, 2007), thereby, allowing conscientious consumers to actively seek out more information on the commodities they consume (Barham, 2002).

Through the purchase of a commodity, consumers can express a certain kind of “loyalty to place across space” (Harvey, 1996 pg 303). In this way, a GI can be viewed as a way to localise the elements of place while being able to offer an ‘alternative’ space, which is intertwined with the motivations and purchasing power of extra-local consumers (Raynolds, 2000).

2.3.6: Markers of Origin

Nearly every commodity contains a ‘message’ that will attract a consumer. This may either reveal or conceal the origin of the product being purchased (Urry, 1995; Cook & Crang, 1996; Pred, 1996; Asp, 1999; Mansvelt, 2005). Consequently marketing – and advertising – become increasingly important for product promotion and can be used to differentiate on the basis of the ‘image’ that is being constructed and projected (Dalgic & Leeuw, 1994; Marsden & Smith, 2005). By combining pictures and words, labels can emphasise certain values and emotions that are associated with a product. For instance, ‘organic’ labels can reveal how products are processed, whilst the ‘fair-trade’ label and logo can reveal how value is distributed along the supply chain (Loureiro, 2002) (Figure 2.6). Thus, labels, markers and signs can convey a wide variety of social, environmental or ecological values that relay an ‘image’ of those particular values to the consumer (Loureiro, 2002). A common marketing trait across many labels and signs is the idea of tradition. Appeal to the traditional origins of production helps to produce an image that encapsulates centuries of use. It recognises ownership of the product, its production techniques and its generic branding by local communities, creating a form of scarcity value (Kim & Mauborgne, 2005). This appeal to tradition – and its use – has considerable potential to create leverage for high market premiums in global markets but what is critical is how this is recognised, codified and protected, both locally and globally.

Alywin, Coombe, & Chan, (*In Press*) are currently assessing how labelling and ‘marks of origin’ fit into current trends within IP and GI legislation. Suggesting that IP was once used purely as an ‘economic tool’ to ‘solve public

goods problems’, they now propose that IP and GI’s are being ‘served up’ in conjunction with a development agenda, with development itself becoming ‘more cultural’ in origin and with both GI’s and IP now being seen as a means to “serve the needs of the world’s most impoverished, marginalised or vulnerable peoples” by supporting aspects of, ‘identity politics’ and even, ‘ethical consumption practices’ through the actions of WIPO and the World Bank (Aylwin and Coombe, 2010 pg 2).

FIGURE 2.6

FIGURE 2.6 | Markers of Quality and Standards: A selection of images and logos that convey a certain message to the consumer regarding product; quality, standards and in the case of PGO's and PGI's (not displayed above) the origin of place (Ecolabel Index, 2013).

Aylwin and Coombe agree that culture appears to have been being given a new value, by being used as a resource that is often, ‘packaged as tradition’. Recognising the economic value that traditionally made products have in global markets, they identify the appearance of an important debate around

the intersection of IP – and forms of GI – with development and human rights, making the suggestion that local communities have a ‘right’ to control their own traditional, cultural resources (Alywin & Coombe, 2010 pg 3). This blends with Dwijen Rangnekar’s suggestion that GI’s seek to ‘resist’ property rights and the market, by offering a level of authorship – by communities of local people – who can then be granted the rights to use their own traditional and cultural practices, under specific guidelines that guarantee an authentic link between product and place (Rangnekar, 2011).

2.4: Nonu as a Narrative

2.4.1: The GI Codex

Marketing narratives are tools, used to engage and connect with consumers in an emotional way. They are essentially ‘storytelling’ methods (Shani & Chalasani, 1993). Used in combination with a GI, a product narrative can create a story, or image for the product that draws on its different characteristics. These could be focused on place, culture or method of production and can be used to enhance its image and promote its position in the market. Processors in the Nonu Industry make use of four place-based narratives to market their Nonu product: (1) Samoa’s geographic location, (2) its ‘exotic’ image’, (3) its tradition and culture, and; (4) the environment in which the Nonu plant grows. These features will be presented in detail in Chapters four and five.

In addition to product narrative and product image, all commercial foodstuffs need a set of specifications that can be recognised as an industry standard (Henson & Jaffee, 2008). Food safety standards are used to ensure that products are handled and labelled correctly, in the interests of the protection of the public. Mandatory classification must include information on the

products nutritional content, its additives as well as any contra-health warnings. For a GI to be registered under an EU protection system, it needs both narrative and industry standards (Henson & Jaffee, 2008).

2.4.2: A Nonu Codex

At present the Nonu Industry has no specific codex detailing the characteristics and features of the Nonu fruit, its juice or other commercial products. A regional Noni codex is currently the only documentation available (Appendix A). The generic list of the standard features of the Noni fruit and juice are in direct contradiction to the concept of the GI, as the codex is regional and does not stress any identifying features that could link the Noni - Nonu fruit to its specific geographic location. Therefore, for Samoa to develop the concept of a Geographical Indication, a Nonu specific codex needs to be detailed that not only describes the standard or generic features of Noni fruit Pacific-wide, but the differentiating features of Samoan Nonu from all other Noni products.

2.5: Chapter Review

The classification for Noni and Nonu reveals that there is still a large amount of uncertainty surrounding the plant's sub-varieties. The literature highlights the three main Nonu varieties but also stresses that there is the potential to identify further sub-species, within the *Morinda citrifolia* var. *citrifolia* type, by highlighting evidence to suggest that the plant self-pollinates. Morinda has been commonly used as a traditional medicine in the Pacific for thousands of years but it was its modern-day use that sparked worldwide interest and led to its popularity. The market for Nonu juice has recently contracted due to the global recession and unfounded health claims by the global leader Tahitian Noni. Tahitian Noni manufactures juice on a large-scale and this type of model causes wide-spread concern because it needs to be sustainably managed. Environmental resources need to be managed with care, by those who know and understand the local area, local people who have a 'right' to

maintain traditional practices. GI's can promote this if well-managed. A GI is a special kind of intellectual property but has little commonality as both US and EU markets cannot agree on a definition. GI are popular for the proposed benefits to development but are only in their infancy in the Pacific and Samoa. GI's also promote the idea of place, culture and identity, through codification, as they are built on human influence, but this becomes political for both producer and consumer when the Nonu product is viewed as a 'purchase'.

3

CHAPTER

Methodology

Methodology

3.0: Chapter Summary

This chapter describes the research methods and approaches used to study the influences of both US and EU-GI protection systems in Samoa, in addition to establishing the unique components of the industry. This involved the compilation of both primary and secondary data in order to assess the objectives. The first section explains and justifies the choice of methodological approach, by outlining and summarising the research design procedure and use of methods/approaches to primary and secondary research. The following section details the participant selection criteria and procedure. Section 3.2 outlines the choice of sampling methods and sample size followed by a description on; data collection methods, semi-structured interviews, ethnography and participant observation. The succeeding sections cover; data processing and analysis methods, ethical protocols and concludes by outlining some methodological issues, limitations and management challenges due to funding issues.

3.1: Methodological Approach

In the absence of information relating specifically to GI systems and policy in the Pacific and as a way to add to the very small body of literature – that could assess the costs and benefits of applying GI protection systems – (Bowen, 2010), this research was designed to incorporate both primary (qualitative) and secondary (qualitative and quantitative) data.

Primary data was collected through a qualitative case study approach with a global commodity chain structure (Gereffi & Korzeniewicz, 1993). The majority of primary information was obtained through invitation to observe Nonu processing from Gary Vui, Managing Director of Nonu Samoa Enterprises but also included on-site observations from five members of the Samoan Nonu industry, as well as interviews with individuals from the Samoan business community. On-site observation provided a fixed context for the study of Nonu production in Samoa. It allowed me to be an 'active' participant of the industry and was a valuable method to use as there are a great many stages and a great number of actors involved in the Nonu juice making process, from its local collection as a raw material, to the final product that is ready to be distributed to the global market. Additionally, the commodity chain approach enabled a 'break-down' of these global to local linkages (Hartwick, 1998). This facilitated exploration of the inter-connections between; (1) individual local lead firms, the NASI organisation and its management of the industry as a whole, (2) how this transmits back to current codification of the Nonu product within the Pacific region and; (3) the related effects of the position of GI within government policy in Samoa. Furthermore, through ethnographic observations of the social and cultural practices of the industry, a more specific Nonu juice codex was compiled by myself with the assistance of the Samoan Nonu community.

Secondary data collection was designed to obtain information on: (1) the biology of the Noni-Nonu plant; (2) sustainable development in the context of global trade policy; (3) different policies and approaches of the USA, EU and Pacific on GI protection; (4) place-building of products through GI protection and codification and; (5) the global to local linkages within the industry, that arguably define the narrative of Nonu as a place-based product. This enabled me to create a comprehensive literature review, developing my understanding of GI; both historical and current, global and local. With the knowledge gathered, I was then in a position to make informed decisions to aid observations made in Samoa. I maintained the theme of a producer-

consumer dialogue, as a way to assess the attitudes, perceptions and motivations of consumers and producers, allowing me to simultaneously assess global to local linkages through the lens of a GI as a place-based marketing tool.

3.1.1: Primary Research

Underpinning the methodology used for the case study is the idea that the EU-GI system incorporates aspects of development that emerge from the ground up. The idea then, is that the study should contain an appropriate theory that recognises the value of local perspectives and knowledge (Tandon, 1988; Shiva, 1989; Chambers, 1983). Grounded theory is a qualitative research design that complements this focus and provides a framework for analysis of qualitative data (Strauss & Corbin, 1998). Its key focus is that data is generated or 'grounded' by participants. By using a grounded theory method, I was able to consider the extent of GI application in Samoa and how this was shaped by the views of the participants who had experienced and worked within the Nonu Industry.

Aspects of grounded theory also provided me with an avenue to analyse how local groups worked together to establish GI. Theoretically, this meant exploring how the system itself acts as a 'social glue' (Rangnekar, 2011) binding participants in a common cause, by helping them to find locally appropriate solutions to their problems (Hall, 1981; Slocum, Wichart, Rocheleau, & Thomas-Slayter, 1995; McTaggart, 1997). The approach had its positives and negatives. It potentially benefitted local participants by developing a dialogue to increase motivation and achieve goals concerning the application of the GI; positing questions of what the system would look like, what it could include and how this could be accomplished. In its negative aspect, this did mean that much of opinion that was formed was dominated by the perspectives of Nonu processors, majority male business owners and lead actors within the Samoan community and as a result, the study lacks the less powerful voices of the more marginalised villagers, the growers of the

Nonu fruit. In this way the research acknowledges that it may be prone to bias and power related distortions, despite all reasonable attempts being made to create a 'fair' presentation of these findings.

3.1.2: Secondary Research

Secondary research was initially conducted as a wide-based search of peer-reviewed literature with the aim of gaining a preliminary reading for the context of the Nonu Industry in Samoa. Apart from recent VUW contributions, it was found that the literature was sparse and information limited or even unavailable. As a result of these limitations, I had to extend my search to include content analysis from a much broader literature base. This included books, reports, journals, electronic databases, newspapers, audio and video media, Internet portals and web pages. I used key-word descriptors, such as 'Noni', 'Nonu' or 'Morinda' and 'geographical indications' for Internet data searches. These external sources were used to identify prominent academics, who could contribute valuable information to the study. They included the work of Dwijen Rangnekar (University of Warwick, UK) and Elizabeth Barham (University of Missouri-Columbia, USA) (amongst many others) – whose academic research provided me with detailed information on both US and EU protection systems. The work of Stephen Rogers – based in Samoa – enabled me to 'piece together' the rudiments of how the Nonu Industry could potentially operate in the context of marketing Samoan Nonu as a place-based product and where this could fit into global GI systems. More specific information linking to the primary research was also found on the web portals of CCK, Nonu Samoa and Pure Pacifika. These were then extensively reviewed (CCK., 2011; Nonu Samoa., 2011; Pure Pacifika., 2012).

3.1.3: Research Design Procedure

Organisation for the case study research began in late 2011, after drafting a research proposal that provisionally outlined my interest in Samoa and the

Nonu Industry. This was completed and forwarded to VUW Post-Graduate Programme in Development Studies for approval. In the meantime, I was aware that the main driver of the research was based on an existing relationship that had already been built between Professors John Overton and Warwick Murray of Victoria University and Garry Vui, Managing Director of Nonu Samoa Enterprises in the summer of 2010. This communication was extended through a second visit from my colleague and fellow researcher, Catherine Jones in 2011. I then maintained this relationship through a process of personal communications with Vui throughout 2011/2012, whilst I worked to establish new contacts with others involved within the industry.

During this period, I simultaneously focused upon content analysis of the available literature – as outlined above – as well as focusing on the practicalities of organising a nine week field trip. My initial focus was to gather the necessary documentation to allow me to conduct my field trip. This involved (1) establishing new contacts (2) obtaining a visa from the Samoan authorities (3) evidencing ‘country approval’ for my NZ Postgraduate Field Research Award and (4) approval of research topic and research approach from VUW Human Ethics Committee. Establishing new contacts was paramount to broadening recruitment for participation. This was achieved with assistance from members of the Voluntary Services Abroad (VSA) in particular, Junior Ulu, who was instrumental in compiling a ‘list’ of officials from various agencies in Samoa. E-Letters of invitation were then sent to selected personnel from various government agencies, Non-Government Organisations (NGO’s) and members of the small business community, outlining my research topic, aim and objectives. Most did not elicit a response. In the meantime, copies of the consent form and four sets of interview questions were sent to VUW Human Ethics Committee for approval and compliance. Additional equipment for recording data was procured from VUW in the form of a digital Dictaphone. Thirty interviews were conducted in

the social space, which was requested by, or was most convenient for the participant. This tended mostly towards the formalised setting of the CBD in Apia (Figure 3.1; Table 3.1) – for government ministers – and the more informal setting of individual lead firms, which tended to be their place of work or home. Semi-structured interviews formed the basis for the majority of interviews that took place. These generally lasted between 1-2 hours for government officials. Nonu processing observations took between 3-5 hours, with the detailed observation at Nonu Samoa lasting 9 hours over a 1 day period. 90% of interviews were transcribed in the field. Transcription took place on the day or, at the latest, the next day. On return to New Zealand, collected data was analysed and processed. Additionally, a variety of notebooks, journals and a diary were purchased, to be used for personal note-taking and to record ethnography and participant observation. Images of the Nonu production process were captured with a digital camera

FIGURE 3.1

FIGURE 3.1 | Map of Interview Locations Around Apia: A complementary image to Table 3.1 displaying the locations of interviews conducted whilst in Samoa (numbered 1-30) with the Nonu processing plants; (7) Nonu Samoa, (8) Yoshida Commercial, (9) CCK, (10) R+L Keil Holdings and; (11) Pure Pacifica, denoted by a blue circle. Source: Author's own.

3.2: Participant Selection

The research targeted members of the Nonu Industry and Samoan government officials. These included members from related Ministries of Agriculture, Commerce, Industry and Trade, members from the Intellectual Property Office, as well as individuals from lead firms in the industry and members of the local business community. In this respect, I focused on specific individuals who could meet the following criteria: (1) they must consent to participate, (2) they must have worked or have extensive knowledge of the Nonu Industry or – in the case of Government officials – must represent a ‘voice’ of authority that could give opinion on the current state of the industry and its relationship to the Government and Government policy (3) they must be deemed (by the local community) to have built a reputation for having biological knowledge of the Nonu fruit as a plant and (4) they must be deemed (by the local community) to have knowledge of the plant’s historical tradition and its medicinal properties.

The following are a selection of participants who gave consent to participate, as in criteria (1) and who matched criteria (2), (3) or (4) or a combination of each and included: the Samoa Association of Manufacturing Enterprises (SAME), Small Business Enterprise Centre (SBEC) Scientific Research Organisation of Samoa (SROS), the Ministry of Agriculture and Fisheries (MAF), the Ministry of Natural Resources and Environment (MNRE), Ministry of Commerce, Industry and Labour (MCIL) Ministry of Foreign Affairs and Trade (MFAT), Chamber of Commerce (COC), Intellectual Property Office (MCIL), Food and Agriculture Organisation (FAO), Deputy High Commissioner of New Zealand, five Managing Directors from the Nonu Industry and a few members of the Nonu growing community. All agreed to sign the consent form and offer assistance and support.

3.3: Sampling Methods and Sample Size

In order to investigate the concept of GI in the Nonu Industry, it was essential to have a sample from a broad section of the community and all those involved in the commodity chain. By collecting multiple sources of evidence from along the chain, I believed this would validate common findings and exclude any one-sided bias that might arise. However, as I began to meet local people, I realised very early on that I had already been received as a ‘palangi’*, and as such, this would mean that I would not be ‘invited’ into the interior of the islands, where most of the Nonu growers lived. With this realisation, I recognised that my sample would have to target those who were more accessible – and involved within the industry – but who may also be perceived as ‘local elites’. Four owner-operators were selected. They were targeted because they were independent producers but whom also worked together as an association. One other independent producer was also selected on the basis of observing a differentiated production method. I targeted five processors because I believed this would give me a good cross-section of local processing methods. I used this information to assess differences and similarities from producer to producer.

It was also essential to target the policy aspect of the research. This included sampling of two Government officials from Samoa’s Intellectual Property Office, who were currently involved in writing up Samoa’s Intellectual Property Act. They were selected on the basis of their long-standing experience with general Trademark laws, Patents and Industrial Design, having both served in their respective posts for 3-5 years. Moreover, each participant volunteered information of their involvement in GI policy writing and its technicalities. This allowed me the scope to discuss a variety of issues, namely around the choice of agricultural products that the government were investigating for potential GI. The research gained from these sampling methods allowed me to focus on the technical criteria for the Nonu GI product.

* Refer to Glossary of Terms

This was important because GI – and its relation to Samoan produce, is in an area of a limited amount of documented data. All participants had a good understanding of the Nonu product, its production methods and where the industry was positioned within local government policy. I believe these observations to be from knowledgeable practitioners which I therefore considered to be representative.

3.4: Data Collection Methods

3.4.1: In-Depth Semi Structured Interviews

3.4.1.1: Interview Protocol

Interview protocol was observed at all stages of the interview and the data collection process. This occurred across all of the samples that I conducted. I also consider that participants were subjected to minimal risk and that the probability and magnitude of discomfort anticipated in the research did not exceed any ordinary encounter in daily life.

3.4.1.2: Confidentiality

All information given by participants was guaranteed ‘in confidence’ and has remained in confidence. Any participants, who wished to remain anonymous, have remained such. Those participants, have been included within a table of interviews (Table 3.1) and are listed as ‘anonymous’. Participants were also informed that feedback – on the research project – would be sent (via email) in a timely manner and assurances given that this would be conducted before the deadline date of the 31 September 2012. As I have continued to remain in contact with three key participants, there has been an agreement for sharing the research before a final hand-in date at the end of March 31st 2013. For this reason, I see no issues of confidentiality arising. Another two participants – whose input was minimal – have requested feedback on the finished project

TABLE 3.1

No.	Date/Time	Place	Name	Position	Summary
COMMODITY CHAIN INPUT					
1	13.7.12	Saleiamoa	Richard Cook	Owner/ Smallholder	Nonu Variety
2	20.6.12	Aggie Grey's	Eugene Paul	Household Producer	Nonu Trad. Med
3	17.7.12	APIA. CBD.	Laki Uaea Apelu	Producer	Trad. Methods
4	07.7.12	Motoo'tua	Anonymous	S.U.N.G.O.	Use of 'Spot Cash'
5	26.6.12	Vavau	Anonymous	Household Producer	Nonu Trad. Med
6	03.7.12	Saleilua Falealili	Anonymous	HouseProducer	'Black Nonu'
COMMODITY CHAIN TRANSFORMATION					
7	14.6.12	Vavase Uta	Garry Vui	Pres. N.A.S.I Director 'Nonu Samoa'	Comprehensive on-site observations
8	06.7.12	Vaitele	Chikara Yoshida	ISO 9001 Consultant Yoshida	Marketing Image and GI
9	02.7.12	Vaitele	Iulia Blakelock- Toma	Production Manager. C.C.K.	Marketing Image and Comparative Advantage
10	02.7.12	Vaitele	N. Fujimoto	Operations Manager@R+L Keil	International Marketing and Company Strategy
11	02.7.12	Vaitele	JR. Pereira	Manager@ Pure Pacifika	Large Scale Manufacture of Nonu
12	11.6.12	Crops Div. Nu'u	Anonymous	MAF Representative	Demonstration of Nonu propagation
13	26.6.12	Crops Div. Nu'u	Anonymous	MAF Representative	Cultivation of Nonu monocrop
14	29.6.12	APIA CBD	Mateilili Leaana	MAF Representative	Samoan Biodiversity

TABLE 3.1 Summary of Interview Details: Each of the 30 interviews were carried out with the focus on gathering information about the various stages of the Nonu commodity chain and has been structured accordingly. Source: Author's own.

TABLE 3.1 *Continued*

COMMODITY CHAIN DISTRIBUTION					
15	11.6.12	APIA CBD	Karras Lui	Statistical Analyst	Trends/Export Stats for Nonu
16	29.6.12	APIA CBD	Grant Percival	Coordinator SAME	Creating a GI/CODEX for Nonu
17	28.6.12	Lefata	Eddie Wilson	Vice Pres. Of SAME	Sus. Dev. of Agro-food Industry
18	26.6.12	APIA CBD	Stephen Rogers	FAO Consultant. Case Study Author	Comprehensive info on Nonu as export crop
19	17.7.12	Vailima	David Hunter	CEO@SROS	Research and Dev.
20	5.7.12	Taufusi	Margaret Malua	CEO@SBEC	Nonu as semi-com. business
21	13.7.12	Mulinu'u	Lutera Tauvale	Metorologist@MNRE	Data Analysis of Climate
22	13.7.12	Mulinu'u	Cecilia Amosa	Scientific Climate Officer@MNRE	Climate Patterns/Soil
23	12.7.12	Ululoloa	Fatima Strickland	Managing Dir@Le'Vai	Bottling/Ship Delays and Constraints
24	12.7.12	APIA (Port)	Lemalu Peti	Manager@Samoa Maritime Services	Freight Schedules
25	25.6.12	APIA (MCIL)	AlatauaTuliaululu	Intellectual Property Officer	Intellectual Prop/GI Policy for Nonu
26	12.7.12	Taufusi	Anonymous	Chamber of Commerce	Loto nu'u Branding
27	21.6.12	N.Z High Commission	Stuart Horne	Deputy High Commissioner	NZ/Samoa Trade Agreements
COMMODITY CHAIN (OTHER)					
29	19.6.12	APIA CBD	Anonymous	PHARMA	Improving Biosecurity Prerequisite
30	09.07.12	M.N.R.E.	Filisita Ikenasio-Heather	Assistant CEO	New System for Registering Land

TABLE 3.1 Summary of Interview Details: Continued

3.4.1.3: Semi-Structured Interviews

As will be subsequently discussed, the difficulties of conducting the research without 'country approval' resulted in a certain amount of compromise in terms of the collection of data. Nevertheless, a total of 30 interviews were conducted onsite, with a variety of representatives from various government departments and small business owners, with the aim of filling the gap by 'supporting' observations made onsite at the five main Nonu processing plants (Scheyvens & Storey, 2003). Meetings for interviews were conducted through the code of ethics, with an initial recap of the current events, a reading of the participant information form and a signing of the consent form. By signing the consent form, the participants acknowledged that they had been provided with information on the research as well as the problem (and lack of) 'country approval' but were still willing to take part. Questions were delivered through a semi-structured form, with the flexibility of using the question sheet as an aide-memoire. This allowed the conversation to follow a 'natural' direction (Tremblay, 1982). My responses were taken down in notation form only. Notes were summarised after interviews and sent back to participants by email – the same day – for their approval. No interview was electronically recorded.

3.4.2: Ethnography and Participants Observation

Dress code was an important element for ethnographic consideration as 60% of interviews were conducted with Government officials within the corporate 'space' of Ministry buildings. Samoan females are expected to cover certain areas of the body that should not be exposed according to cultural customs. This necessitates full covering of the legs, a bodice top that incorporates sleeves, which do not expose the shoulders or top of the arms and a medium neckline that does not suggest cleavage. The clothing of Westernised females, including tourists is tolerated to a degree but due to the nature of the interview sessions, my femininity – and my wanting to create a business-like

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impression in a predominantly male-orientated environment – I adapted my interview attire to suit the Samoan custom. Thus, I hoped to be perceived as both respectful and taken seriously as committed researcher – and ambassador of VUW – despite the discomfort of wearing additional clothing in conditions of intense heat and high humidity.

Interview sessions began with an introduction to my research intentions, research topic and objective. I used a semi-structured schedule with open ended rather than closed ended questions. This provided a high degree of flexibility during the interviews. I guided participants through semi-structured questionnaires, speaking slowly. Face-to-face interviews also facilitated probing of responses to investigate and ensure that each participant gave full answers (Dunn, 2005). Attitudes, passions, perceptions were also easy to gauge following face to face contact. Direct contact also allowed me to expound on a few areas of GI that I had intentionally ‘kept’ for face-to-face contact. This was because – overall – the GI concept is fairly complex and can be difficult to explain to those who have little experience of it. Additionally, the EU-GI contains the concept of the ‘public good’ element, an idea that again requires some explanation. Therefore, the face-to-face interviews provided the opportunity for greater understanding of GI systems, concepts, terminology and meaning. I believe face-to-face contact facilitated confidence in the participants by allowing them to explore their own understanding of the GI system. I also believe that this motivated participants to contribute their own ‘self-definitions’ of GI to the dialogue, resulting in the presentation of a provisional codex from the Nonu community.

3.5: Data Processing and Analysis Methods

3.5.1: Analysis of Field Notes

On return to New Zealand, the data was then grouped into specific themes of: economy, culture, environment and policy, to help me to ascertain important information regarding participant's knowledge, attitudes, motivations, decisions and practices regarding their involvement in the industry – or Government involvement with the industry. I then made a list of master themes and sub-titles, which were clustered under several headings (Neuman, 2005). Although the data analysis stage was conducted after the fieldwork data collection stage, there were still certain elements of Nonu codification that needed clarifying. This led me to continue regular email contact with three of my participants, thus highlighting the organic nature of this method for data analysis.

3.5.2: Transcriptions of Interviews

The information gathered through interviews, was read and re-read, so that I could become familiarised with the data. Interesting or significant information was marked according to emerging themes or categories. All of the qualitative data was analysed manually to come up with clear understanding of how some of the variables – industry standards vs. storytelling narratives – determine Nonu codification and its contribution to marketing the Nonu product. In order to ensure that objective 4 – community self-definition of the Nonu GI – was fulfilled, I looked at International and European examples of product codification and made comparisons on the basis of their success and relevance to marketing of the Nonu product. These findings appear in Chapter two of the literature review but are also referenced throughout the research. Particular attention is drawn to the case study in Chapter four, where fitting descriptive quotations are drawn from the transcribed interview records of Nonu Industry members. They have been used to describe the opinions of those working in the Nonu Industry and are the members own 'self-

definitions' of a Nonu GI. These are combined, with my own contribution and are discussed as a specific Nonu juice codex in Chapter five.

3.6: Ethical Considerations

As outlined below, and due to the restrictions of a five week waiting period, it was inevitable that I would be forced to conduct some interviews on an 'informal' basis. Paramount to managing this situation was the ability to remain conscious of the Victoria University of Wellington's Code of Ethics, which requires all students to consider the ethical implications of their presence within a developing country. In accordance with these requirements, those interviewees whom I had already established contact with were advised of the situation by email during the first week of my arrival in Samoa. A modified 'participant information form' and a 'consent to participate' form, outlining the current situation and lack of 'country approval' was also forwarded by email to participants. It was then left to interviewees to send a return email, stating acceptance – or non-acceptance – of the situation and agreement for an interview date.

3.7: Issues and Limitations

The practicalities of organising a project are an important consideration for anyone wishing to embark on a cross-cultural research project and prospective researchers need to consider the amount of organisation that is required to complete the project. Taking time out from a busy family life and all its social and financial commitments can be a daunting prospect, along with the uncertainty of additional costs, associated with working on the project and the technicalities involved in acquiring permission to research in the country of choice. In order to finance my research in Samoa, I applied to the New Zealand Aid Programme for Postgraduate Field Research and was delighted when I received confirmation of an award. However, the devil is in the detail, as the governing body currently states that researchers need 'country approval' before arrival.

governing body currently states that researchers need 'country approval' before arrival. Despite various visits to the Samoan High Commission and lengthy conversations with government officials – representing Samoa in New Zealand – most appeared confused by this terminology and were ultimately unable to provide definition of this current change, despite taking many weeks to arrive at a decision.

Thus, as a researcher running out of time and with general advice to, 'apply in Samoa', the technicalities of arriving without due approval resulted in my facing an ethical dilemma – How does the researcher conduct research without country approval? Thus, as previously outlined, the length of time to conduct interviews with the appropriate country approval, was constricted to a period of four weeks out of nine, which I believe severely compromised the collection of data. During this time, one of the hardest lessons to learn was the ability to, 'embrace uncertainty' (Friere & Horton, 1990; Keough, 1998) and accept that the best laid plans are always susceptible to flux. Despite these constraints, I believe that I conducted my research with due diligence and integrity and managed to gather a great deal of data in the short time available.

3.8: Chapter Review

I used a grounded methodological approach with qualitative methods to derive the required data from the respective commodity chain actors. This seemed the most appropriate method to use as its participatory nature complemented the 'bottom-up' aspects of the EU-GI, by incorporating the views of local people in their place of work. Grounded theory was highly-effective and helped me to understand the reasons why local processors worked together, how their collective action benefitted the consolidation of industry standards and how they applied aspects of their own culture and identity for 'self-defining' product image. I used the commodity chain approach to provide the basis for sectioning the 'chain' into individual

segments, for ease of documentation. Interview content focused mainly on relevant policy and legislation, fundamentally addressing the influences of the US-EU systems. Primary data was mostly collected through ethnographic observations and captured through detailed field notes and photography. Many interviewees felt that they did not want their opinions electronically recorded during meetings, but I was allowed to document their views via note-taking. A large proportion of primary data was based on the free exchange of information from Gary Vui at Nonu Samoa but I was also welcomed to observe processing at CCK Trading, Yoshida Commercial and Pure Pacifika, with a brief visit to R+L Keil. I researched the background for GI policy and systems and found this was prolific. General literature on the Noni and Nonu industries was scarce, so this demanded that I use a variety of sources from the Pacific region. I researched most of this background before I visited the field, focusing on topics that I believed would be relevant and useful when I arrived in Samoa. All of the necessary ethical and confidentiality protocols were followed and due to adhering to these strict guidelines, I ran into difficulties when country approval failed to come through in a timely manner. Fortunately, this was overcome by effective time-management during my final four weeks.

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4

CHAPTER 4

Case Study Results

The Commodity Chain of Nonu

4.0: Chapter Summary

Condensed in this chapter is the data collected during the nine week field station in Samoa. Using step-by-step procedures for chain organisation and analysis, the chapter is structured according to the rationale behind the commodity chain approach and is sectioned into the following: (1) input – highlighting Nonu’s composition as a raw material and establishing its ecological link to the environment, locality and place (2) transformation – detailing the process adopted by Nonu Samoa, using their own specialised production techniques and (3) distribution – which uncovers dimensions of Nonu Industry governance, defining specific details of ownership, culture, technology, market strategy and product image for each of the NASI members.

4.1: Part One of the Commodity Chain - Input

4.1.1: Samoan Nonu

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4.1.1.1: Nonu Varieties

Morinda citrifolia var. *citrifolia* is the botanical name for Samoan Nonu. Its fruit is the main component for the juice product. Although this variety is globally identified by its broad ovoid leaf shape and large fruits – as discussed in Chapter two - Samoan producers and processors believe that the local plant shows variations from these typical indicators. As Nonu Samoa's processor Gary Vui explains, "Having worked over in Hawaii, I can definitely say that there is a difference of shape in the leaves of the plant". "Samoan Nonu has a narrower and longer leaf shape and the plants that we use for processing here have small fruit, not large". "I have seen this large-fruited type in Hawaii and in comparison, the Samoan type gives 50% more juice, even though our fruit is smaller" (Vui, 2012). Vui's observations of a characteristic narrow, or 'strap-like leaf' and small fruit (Figure 4.1 – centre image), support my own, as I was shown (and examined) many samples, particularly on various visits to MAF's Crops Division department at Nu'u (Figure 4.1 - right), but none seemed to display the broad ovoid leaves or large fruit which are said to be characteristic to its classical

FIGURE 4.1

FIGURE 4.1 | Samoan Nonu Varieties: left – the classical broad ovoid leaves of *M. citrifolia* var. *citrifolia*; right – cultivating Samoan Nonu at the Ministry of Agriculture, Crops Division, Nu'u;

centre top and centre bottom – biological evidence of two sub species of *M. citrifolia* var. *citrifolia*; centre – Samoan Nonu displaying both the 'strap-like' leaves and small fruit size
Source: Author's Own, 2012.

taxonomy (Figure 4.1 - [left](#)). A few weeks into my fieldwork research, I was offered the opportunity to visit Richard Cook, Managing director of Malaefono Organic Plantation and a locally recognised expert on Nonu cultivation. Cook was able to take me onto the plantation to show me two different varieties of Nonu (Figure 4.1 *centre top* & *centre bottom*; Figure 4.2 *right*). By observing the leaf shape, we were able to note that neither of the two plant types showed any colour variation in the leaf, so could not have originated from the ‘*potteri*’ sub-species, nor did they show any type of ‘bract’ on the stem of the plant, so were not from the ‘*bracteata*’ sub-species. Therefore, by a process of elimination, Cook was able to speculate that although Samoan Nonu may originate from the classic variety of *M. citrifolia* var. *citrifolia*, it displays an uncommonly small-fruit type, as opposed to the more classically identified large-fruit type (Figure 4.2 *right*).

Comment [s10]: Reformat so you don't have short hanging bits like this (orphans and widows they are called)!

FIGURE 4.2

FIGURE 4.2| Two Different Fruits of *M. citrifolia*: Richard Cook presented me with two different varieties of the sub species *M. citrifolia* var. *citrifolia*. By allowing me to photograph them side by side, I was able to show the contrast in size. In addition the associated leaf types have been placed in the background of the image; *left* – the smaller more pear shaped Nonu (5 – 7 cm), most commonly found in Samoa and used for Nonu fruit production; *right* – a second type that s more bulbous (10-15 cm), not used by producers or processors because, despite its appearance, it does not produce as much juice as the small fruit. Source: Author’s own.

Cook believes that this small-fruited type is not currently accounted for in taxonomic classifications or academic literature. To some, this may seem an irrelevant observation but if GI is primarily based on establishing a strong link between the distinct characteristics of ecology, place and production, then it is important to discover and support the source of what could be argued as these 'unique' qualities of Samoan Nonu.

4.1.1.2: Optimal Growing Conditions

Most plants need warm sunny climates and enough rainfall to grow effectively. Samoa is characterised by its tropical climate which is hot and humid, only tempered by winds from the ocean environment. These environmental aspects impact on the way Nonu grows. Within the tropics there is what is known as a continual growing season. This is largely due to high temperatures that occur all year round (Whistler, 2005). Temperature is critical for plant growth and Nonu is exposed to an average annual temperature of 28.5C, with little seasonal variation. The islands climate is also marked by a distinctly wet season (November-April) and a dry season (May-October). Even in the dry season, the average humidity is still around 86% but can reach up to 90% in inland areas especially in the capital, Apia (MNRE, 2012). This high moisture content would be problematic for most plants but Nonu is very tolerant and unaffected by high levels of humidity. Therefore, this makes it an extremely easy plant to grow.

Mean annual rainfall for an area also determines its suitability for growing desirable plant types. In Samoa, rainfall varies from 2,500 mm in the North-Westerly parts of Upolu, to over 6,000mm in the highlands of Savaii. This can be observed in the rates of precipitation in Figure 4.3. The chart shows differences in rainfall from various locations. Faleolo, off the main West Coast Road in Upolu, has much lower precipitation rates than those at Togitogiga and this is due to its North Western location. In contrast, Savaii's main ferry

port at Saleologa, has much higher levels of precipitation than Taga in the North-West (Percival, 2012). By outlining all these environmental factors, this may determine an optimal or ‘ideal’ climate for growing Nonu plants in specific areas, which may support EU-GI criteria.

FIGURE 4.3

FIGURE 4.3 | Monthly Average Rainfall: Four graphs comparing rainfall in millimetres for; *top left* – Faleolo, *bottom right* – Togitogiga (Upolu), *top right* – Taga , *bottom left* – Saleologa (Savaii) Figure provided by Percival (2012) SAME Coordinator.

4.1.2: The History of Nonu

Nonu has a long history of use in Samoa and local households and producers tend to make their own Nonu juice for medicinal purposes. They use techniques handed down to them from generation to generation, from a traditional knowledge base that has existed for thousands of years. Traditional Samoan juice is called ‘Black Nonu’, named ‘black’ because of its dark brown, almost black colour.

During a visit to Apia a local grower guided me through the Black Nonu process (Paul, 2012). The method is very simple. Growers take selected ripe fruit – pale green/yellow Nonu – and wash them clean with water. Whole fruits are then placed in an air-tight container and are left unopened for a considerable amount of time, usually around 3-5 months. Around the three month stage the ‘black’ juice starts to seep naturally out of the fruit. Once the container is opened, the juice is then drip-extracted and can be kept unrefrigerated for many months.

Many local growers suggest that this method produces superior juice because it is in its purest form (Paul, 2012). It is not subjected to heat treated pasteurisation, so does not lose any of its chemical composition and the extended ageing process allows for more activation of polysaccharide compounds. This gives it a sweeter taste when compared to conventional juice. As far as I am aware, no commercial producer in Samoa is using this traditional method for processing, possibly because it is more labour intensive, time-consuming and would be difficult to export to International markets because of food safety regulations. But it is a diverse method of production and one which could be cultivated as a GI on the basis of its unique name and its link with Samoan life.

4.2: Part Two of the Commodity Chain - Transformation

4.2.1: The Transformation of Nonu

The idea of ‘place-based’ production forms part two of the commodity chain analysis. Using the Nonu Samoa case study to focus on the *transformation* process of the Nonu fruit, it details how Samoan people use specific materials

and techniques on – a day to day basis – to craft the Nonu product and is best described by (Rangnekar, 2011), as a ‘localised specialisation’, a reflection of the locality and cultural history of Nonu processing in Samoa. This detailed observation of the process may prove useful for indexing policy specific codification, especially when applying for GI registration and more generally, it is hoped, will achieve greater distinction for regional and global trade.

4.2.2: Sourcing the Fruit

The Nonu plant is predominantly cultivated by local household growers in their own “backyards” (Rogers, Tuioti-Mariner, & Tuoro, 2009) and is often found springing randomly out of cracks in the rocky soil. As previously explained, the supply is known locally as a ‘wild harvest’ and Samoan producers and processors are at great pains to point out the difference between the supply of ‘wild’ Samoan Nonu and that of ‘mono-cropped’ varieties, cultivated by other commercial producers around the world (Figure 4.1).

4.2.3: Harvesting

Nonu known as ‘wild harvest’ is grown in places all over Savaii and Upolu but for simplistic purposes, Upolu will be the area of focus, as this is where all the main processing plants are housed. The area of Vaitele, a sub-division of Apia, (shown in Figure 3.1) has five main processing plants; i) Nonu Samoa, ii) R+L Keil, iii) CCK Ltd, iv) Yoshida Commercial and independent operators, Pure Pacifika. At the time of study, only Nonu Samoa, R+L Keil and CCK Ltd were producing. ‘Wild’ Nonu is supplied to the processors by village communities located mainly on the West Coast Road. This includes: Saina, Toamua, Puipaa, as far as Saleimoa, and Vailele, Letogo and Salelesi to the East. West coast villagers have been the main choice of fruit supply for many years (Vui, *Personal Communication*, 2012). This is because they are located on the volcanic soils of the coastal plain, where they grow and incorporate important trace elements and minerals that make Nonu juice a health tonic.

4.2.4: Collection

A day at the Nonu Samoa plant begins around 7am, with workers gathering around the receiving area. Their first task is to organise this section of the warehouse, as this is where the growers can drive onto the site and park their trucks. The area has to be cleaned to receive the fruit, so the workers make preparations to brush down and wash the floor with high pressure water hoses. No chemicals are used as Nonu Samoa Enterprises is an organically certified processor and this is good for protecting the health of the staff as well as being environmentally sound.

FIGURE 4.4

FIGURE 4.4| Collection and Delivery of Nonu Fruit: *left* - Wild Nonu is collected by various village members and it is common-place to store Nonu fruit within hand woven baskets; *Right* - the bags, sacks and baskets containing Nonu fruit are offloaded by the truck owner and his nephew at the recently cleaned receiving area. Trucks are often used as communal transport in most villages, as the majority of growers cannot afford individual ownership of a vehicle. Economically this makes sense as it cuts down on fuel as well as the additional cost of annual road tax and general maintenance. The driver will be paid a few extra tala for his troubles. Source: Author's own.

About an hour later, the first trucks arrive and pull up in front of the receiving area, as shown in Figure 4.4 - *right*. The trucks are loaded with various bags, sacks and baskets containing the Nonu fruit. The majority of the baskets are made by the women in the villages. They use raw local materials like coconut

and banana palm leaves and once plaited, these baskets make very sturdy containers (Figure 4.4 – *left*). There is a strong element of sustainability in the collection method, as the baskets are biodegradable and bags and sacks are recycled to use for the next collection and it could be useful for the company to use this to market advantage.

4.2.5: Selecting Raw Materials

Fruit is then lifted from the truck and poured out of the baskets onto long stainless steel tables. Five or six of the staff then sift carefully through the fruit, selecting the pale-green yellow types as shown in Figure 4.5. From a productivity approach, this may sound labour intensive and time consuming but this technique is totally appropriate because it utilises the existing knowledge base of local people. Instead of fruit being selected by machine, Nonu Samoa staff have the experience to recognise desirable characteristics in the fruit. Most have worked at the company for many years so they instinctively ‘know’ the quality of the fruit. ‘Hand-picked’ imagery is often used as a marketing strategy by other producers and could be incorporated into Nonu Samoa’s characteristics of GI distinction.

Pale-green yellow fruit – of any size – are the preferred type of Nonu for juicing, but they must not be discoloured, cut, damaged or diseased in any way. During collection, some of the very small green fruits do find their way into the villager’s baskets and sacks. Usually these small green fruits are rejected by other processors because they say they make the juice taste harsh and bitter and leave the mouth feeling dry. However, Nonu Samoa accept them because the villagers need the money and they have been able to turn this ‘waste’ produce into powder by slicing the fruit and drying it in the sun.

Ripe fruit is then piled into white barrels and moved to the spray washing area (Figure 4.6). Fruit is then constantly rotated by hand under the power spray, whilst still being checked for suitability. Individual fruits eventually reach the end of the table, where they are pushed into large blue barrels and left to drain.

FIGURE 4.5

FIGURE 4.5| Hand Picked Selection: One of Nonu Samoa's staff preparing the fruit on the selection table. Good natural lighting assists open air fruit preparation as it helps to identify with fruit quality selection. Warm temperatures also assist with fruit drying. Source: Author's own.

FIGURE 4.6

FIGURE 4.6 | Spray Washing Area: Sterilising the fruit is a vigorous process, therefore gloves, hat, apron and boots must be worn at all times to ensure there is no contamination of the fruit. Source: Author's own.

Comment [s11]: I assume these are your photos – it is important to attribute their source.

Finally, these barrels are carefully tipped into large square plastic containers that can be lifted onto the fork-lift truck. They are then weighed. A typical average load varies between 450/500 kgs – minus 49 kgs for the container base. The selected fruits are then set aside to dry out completely so that the washing water has time to evaporate and does not add to the moisture content of the fruit.

4.2.6: Crushing Nonu Fruit

The next stage in the preparation occurs in the grinding area and is the only part of the production that uses machine mechanics to prepare the fruit. The grinding machine is a single function unit, shown in Figure 4.7 and unlike most large-scale industrial systems, it is not automated or linked to a centralised computer system. This makes processing relatively straightforward by commercial standards as the unit is plugged into the wall and has one main off/on switch. Inside the unit is a series of interconnecting blades or ‘teeth’ that mash the fruit, giving it the consistency of a soft paste. Apart from these teeth, which have to be replaced every six months due to acid erosion from the fruit, the machine can be serviced by Nonu Samoa staff. Most of the mechanical parts can be ordered from overseas – although this does cost – and needs to be organised well in advance so that it does not impact on production. Production is a simple two-man operation. One operator individually feeds each piece of fruit, including skin and seed – as ‘whole fruit technology’ – (Nonu Samoa, 2012), into the top funnel of the machine, while the other operator collects the mashed fruit pulp into black fermentation barrels at the bottom of the machine. Pulp is then transferred to large numbered tanks in the storage area (Figure 4.7), with each batch number being dated and documented. The heads of the tanks are wrapped in cling-film to keep out moisture and the heat from the sun assists the anaerobic process.

FIGURE 4.7

FIGURE 4.7| Crushing and Storing Nonu 'Fruit-Juice' : *left* – Single unit fruit grinder, a simple piece of equipment, easy to operate and maintain, *right* – Outside storage area houses both conventional (stored in grey tanks) and organic pulp (stored in green tanks). Although both processes are the same, juice production is strictly separated. Strict standards of organic certification mean that the two can never be processed on the same day. Source: Author's own

4.2.7: Fermentation Materials and Techniques

At the heart of the Nonu process is the fermentation technique. Fermentation is the practice of 'ageing' the juice and is used for both conventional and organic juice types. In conventional juice, this technique usually takes 2-3 months before the fruit is mature enough to process (Figure 4.7). Yet most processors seem to believe that the longer the fruit is kept fermented, the more it matures, producing a better quality juice with more phytochemical content. Phytochemicals are generally measured by their 'BRIC'* content. This idea would benefit from further explanation, in order to establish why this is important for the 'diversity' element of the GI concept and will be presented in Chapter five.

Comment [s12]: Capital letter for Five?

4.2.8: The Pressing Process

Nonu Samoa ferment their juice for around 2-3 months and once this is complete, the pulp is transferred to the pressing area. Like the grinding unit, the 'pressing' or extraction unit is a simple device that it does not incorporate complex mechanics. The unit is similar to a basket press where the 'basket' or in this case a round wide tub with a slotted bottom, is filled with fruit pulp (seen in the background of Figure 4.8). Inside the tub is a mechanism or long screw shaft. The shaft has a metal handle-bar at the top and a flat metal plate at the bottom. Pressure is applied through the shaft to the plate by twisting the metal handle-bar at the top, forcing the plate down onto the fruit and separating the fleshy skin and seeds from the juice. The juice is then pressed to the bottom, through four pieces of muslin cloth, through to the slots and into a 'collection bath' where it is allowed to 'settle' before the next process.

Fruit pressing (shown in background) is one of the oldest techniques of extracting juice. This simple method used by Nonu Samoa is very similar to the traditional basket style press and the basic design has not changed in nearly 1,000 years. It takes more time to press fruit using this method than other large-scale industrial machines but this ensures that all the vitamins, minerals and essential nutrients are extracted. Thus, it produces a higher quality of juice.

4.2.9: Syphoning

It takes around 24 hours for the heavier, fleshier bits of pulp to settle to the bottom of the collection bath. Once this occurs, the lighter, less pulpy juice can be syphoned off. A series of tubes are located towards the top of the collection bath and these are connected to the filtration tanks (Figure 4.8). This ensures that the lighter, clearer juice is being collected from the top of the bath whilst leaving the heavier, denser juice at the bottom. 'Fleshy' or pulpy juice needs to

FIGURE 4.8

FIGURE 4.8| Pressing to Pasteurising Nonu ‘Fruit to Juice’: *left* – pressing and syphoning, hanging in the background is the traditional pressing unit and in the foreground the collection bath where syphoning takes place; *right* – Heat treatment. Exported juice is subject to strict regulations and health safety standards and products are generally sample tested before export. Specific tests include: Ph. acid levels, alcohol levels, mould, yeast, TC (number of entero bacteria like salmonella or e-coli), CF (Chloriform), as well as vitamins, minerals, trace elements and phytochemical levels (BRIC). Most samples are sent to the Scientific Research Centre of Samoa (SROS) for basic tests with further testing appropriated on arrival at their International destinations. Source: Author’s own

be avoided and is not used for processing as it deteriorates much faster and results in a shorter shelf life.

4.2.10: Filtration

Syphoned juice is then pumped through to the filtration tank (pictured in foreground of Figure 4.8). By this stage it is virtually clear and contains little residue but is still closely monitored through observation of its colour, texture and clarity. Tubes and flow monitors (pictured to the far right of photograph), pump the juice over another layer of muslin cloth. Cloth is of an eight layered thickness and is the final stage in the filtration process. Again, juice quality is closely monitored by staff, through hand and eye observation.

4.2.11: The Pasteurising Process

Pasteurising or 'heat-treated' sterilisation is the final stage in juice production and occurs once the filtered juice has been moved into the pasteurising units. Juice is transferred to a series of large metal 'vats' or pans – the pasteurising units – as seen in Figure 4.8. Vats are similar to conventional cooking pots and are filled with the juice. A series of butane gas elements are then fired up. The vats are then set to stand on the burners and heated to 90 degrees. At Nonu Samoa, the juice is 'held' for 3 seconds. For other processors, the length of sterilisation depends on food safety standards for exported goods – which vary from country to country – or customer orders. Once sterilised, the product is allowed to cool for around an hour and can then be transferred to the storage and packing area.

4.2.12: Storage

Once the fruit is transformed into juice, Nonu is ready to be distributed to overseas markets. Batch tanks of 1,000 litres of juice are stored as 'stock' until ordered, with up to 20,000 litres always kept as extra and included in the inventory. More often, the juice is immediately transferred to a 1,000 ltr 'Space Kraft' container (Figure 4.9 - left), a tough reinforced cardboard carrier that contains a central plastic inner lining with a double membrane that protects the product and counteracts leaks and spills.

4.2.13: Bottling

Most of the Nonu processors ship their Nonu juice in bulk for three reasons (1) the facilities for on-site bottling and packaging in Samoa are limited (2) bulk juice can be distributed without being subjected to high tariffs and (3) bulk juice is less likely to be subjected to rigorous biosecurity checks. Firstly, the facilities for both bottling and packaging in Samoa are poor. 'Apia Bottling' is one of the main business' involved with bottling in the country (Diary Reflection/Notes, 2012).

FIGURE 4.9

FIGURE 4.9| Bulk batch and bottled juice ready for distribution: *left* – The batch of freshly sterilised juice is then transferred into bulk 1,000 litre plastic storage tanks and is then sealed and date stamped. Batch tanks are stored until ordered and then packed into Space Kraft containers at a cost of around \$SAT 4,000-6,000. They can be reused but more often, the cost of the container is built into the price; *right* – ‘Nonu Samoa Juice’ bottled and labelled ready for distribution, a visual display of ‘value added’. Source: Author’s own.

The company is mainly occupied in recycling plastic bottles for one of the main bottled water suppliers in Apia. Other than that, they supply brand new glass bottles. But glass is more expensive than plastic and the weight of the glass adds unnecessary cost to those wanting to export overseas. Therefore, most processors opt for plastic as a more economical alternative.

Out of five companies that were interviewed, three Nonu companies do not have the production-line technology/capacity to bottle and package juice onsite. Nonu Samoa – in particular – is affected by their lack of ‘on-site’ technology. They have no production-line or mechanised system for bottling juice, so when they need to package – for the domestic market – this has to

take place by-hand, when the juice is literally ‘scooped’ into bottles – out of barrels – and the bottle caps screwed on by-hand. This is labour intensive and time-consuming and because it takes so long, this can constrain the size and speed of the order.

Nonu Samoa has found it difficult to find a supplier that can meet their needs – a bottle that is practical in size and shape – but is also attractive to the consumer and at a price that is affordable. They currently order their bottles from a supplier in China but a common fault is that the bottle tops or caps do not fit well. Sometimes they can ‘burst’ with the pressure of the liquid juice, causing customers to receive faulty goods that are spoiled due to spillage. These are effectively returned as ‘damaged’ and this creates even more cost for the supplier in ‘double handling’ of the product.

Secondly, the majority of processors distribute Nonu juice in bulk packaging. This is because the net cost of each unit – or bottle – destined for overseas markets, rises due to the addition of importation tariffs. Tariffs are significantly higher if the goods have already been bottled, packaged and labelled. In the past, this has meant that there has been little motivation, to create a differentiated product as the opportunity to ‘add value’ is negated, due to the added cost of adhering to import regulations and taxation. This has an effect on the profit margin. So, to avoid complications, most producers have tended to export the product as a ‘generic’.

In addition to the cost of high tariffs, processors also believe that it is easier to have a bulk consignment ‘accepted’ through customs and biosecurity channels. Therefore, consignments that are classed as ‘organics’ – products made from raw materials – are often deemed to be more hazardous than non-organics. So materials – like Nonu juice – are often heavily scrutinised by biosecurity officers. And there is always a risk that the consignment will be rejected.

4.2.14: Packaging and Labelling

As with bottling, the facilities for packing and labelling Nonu for export are limited in Samoa. Finding a Samoan company that deals directly with the supply of boxes or crates for shipping consignments, is generally tricky. Choice of packaging is often narrow with limitations on box size and sealants (Iulia-Blakelock-Toma, 2012). Quality is often poor and can be costly compared to overseas suppliers. Most business owners and Nonu processors tend to source their packaging from overseas.

Along with bottles for the Nonu juice (Figure 4.9 - *right*), processors also import their packaging from overseas – mainly China – because it is generally better quality and more cost-effective than that which is produced locally. Boxes and crates sourced from China are generally inexpensive and more durable. This is an advantage when lifting heavy consignments of Nonu juice. Labels are also imported from China. They are made from a strong polythene base, so are more resistant to the intense heat and humidity of the Samoan climate (Vui, 2012). Labels need to be ‘sticky’ as this helps them to stay in place in the moist atmosphere. Chinese suppliers have the technology to reproduce intricate and complex designs, to precise specifications. Their labels have bright and vivid colours due to the intensity of the chemical inks and dyes they use. This makes the label design more intense and ‘catches the eye’ of the consumer. Overall, most Samoan processors prefer to use foreign suppliers, as they can produce a label that incorporates a sophisticated ‘finish’ while processors still retain control over the design.

After the product has been packaged and bottled, the juice then needs to be transported to its various destinations. At the Nonu Samoa site, most of the juice is shipped in bulk. Their largest orders are from Japan and the USA. Shipping times vary, but orders bound for the USA usually occur around once every fortnight, with orders to Japan, around once every three to four weeks.

4.2.15: Design

As we have seen, most of the juice that is made on-site is transported in bulk. In order to add value to the product, local producers must seize the opportunities to use packaging and design effectively and in a way that can create product differentiation. When design is used to market a product, the selected image communicates with the consumer through its design. The message or image has been known to make or break a marketing campaign. Therefore, it is imperative that local processors understand what their target audience want. And if consumers want to buy products that they feel are 'exotic' or made by the local communities of people in far-away places, then the product design needs to convey this and show how it comes from a specific place, with a unique identity (Figure 4.9 – *right*).

4.3: Part Three of the Commodity Chain - Distribution

Currently used in many international regulations and policies to provide support for the diversification of agricultural products, marketing can be seen as, 'an active process of place-building' (Overton, 2010) where place promotion is defined as, "the conscious use of publicity and marketing to communicate selective images of specific geographical localities to a target audience" (Gold & Ward, 1994 pg. 118). The idea of a regional image is relatively new to the Pacific, especially Samoa (Coates, 2010), but most Samoan business owners believe that its cultivation is crucial, in order to improve export performance for both the Nonu Industry and for addressing trade deficit patterns in general. As individuals they are well-aware that the industry needs to find a way to market its own comparative advantage, if it is to remain competitive in overseas markets. Attempts to achieve this have been made by individuals from the Nonu Industry and the local business

community. They have banded together to work as two collective associations: previously described as NASI, and the Samoan Association of Manufacturing Enterprise (SAME). The collectives have continued to work on identifying appropriate 'markers of origin' whilst developing the foundations for their own GI framework.

4.3.1: Nonu – A Collective Culture of Production

NASI is a local group of four private sector entrepreneurs that currently produce and export Nonu juice. The group was formed in 2009 and was founded for three reasons; primarily as a reaction to the absence of government legislation and support, secondly, to unite for the good of the industry – by sharing knowledge and 'best practice' – and thirdly, to improve quality standards to improve trade. NASI members have found that the best way to promote trade was to develop marketing strategies that create comparative advantage (Vui, *Personal Communication*, 2012). Although they work as a communal collective, members ultimately control their own methods of production and each has their own 'unique' Samoan identity – such as their Matai or tapa heritage – used to differentiate their product within local and international markets. While a collective organisation is not a requirement set forth by US-GI protection systems, it is for EU-GI's. In practice, this has been shown as one of the key factors for success. Once the links between place and product are identified, then the rights and credibility of its success rely on the use and 'good governance' of the community in charge of the GI.

4.3.2: The Image of Loto Nu'u

SAME is also a collective of local business entrepreneurs and various stakeholders who are not directly involved in producing Nonu – on commercial basis – but who have been actively involved in constructing a 'brand image' for Samoa, one that represents a 'marker of origin' for the country and can be used for the general purposes of marketing export products.

For members of SAME, the creation of a marker of origin to support brand image was vital to improve the regulation of product quality standards and applied standardisation – both nationally and internationally – assisting consumers with recognition of a niche ‘brand’ that could authenticate those products produced in Samoa (Figure 4.10). Loto Nu’u was initially created in 2003 by SAME president Grant Percival, Chairman, Eddie Wilson and various stakeholders, the Samoan marker of origin has been built on three features: (1) the name, (2) the ‘image’ or technical design of a Pandanus and; (3) a set of specifications that outline its use and application. Since 2006, Loto Nu’u has become recognised as a regional ‘marker of origin’ and was officially ratified to licence in 2007 by the Ministry of Commerce, Industry and Labour (MCIL., 2012). However, there are questions around its use as an international marketing tool, with some believing that the Loto Nu’u brand does not translate easily to international markets, as its name is difficult to recognise and its associations with Samoa are vague.

FIGURE 4.10

FIGURE 4.10| Place-Based Identification: The name of Loto Nu’u ‘my country’ and the image of the Pandanus (red). Together they represent a brand, whose features are used to guarantee that the individual, group or company (known as ‘the entity’) have produced a product in accordance with a set of specifications, denoting that the product has been finished in Samoa. Source: Percival [2012]

Both SAME and NASI have worked to design a market image to enhance export trade. For members of NASI, this has been less focused on its technical application and more focused on incorporating a ‘storytelling narrative’ to provide an image which targets a distinctive niche market.

Drawing on aspects of Samoan heritage and cultural identity, NASI members have identified narratives that link product to place using elements of the following; (1) tradition (2) culture and (3) environment. They also market through the construction of a discourse around ideas of the 'exotic' (Murray, 2000) and Samoa's 'place' in the world – in its remoteness and isolation. But let us not forget that there is a fine-line between theoretical 'constructions' of culture in 'place' and what Samoan producers consider to be 'truth' – processing as a part of the 'real-life' production of Nonu – carried out on a day-to-day basis. Samoan processors are passionate about the integrity of their industry and genuinely hold a belief that aspects of Samoan culture and heritage are not 'invented' but are a very real 'part and parcel' of their own traditional practice. For this reason this section will honour the application of these narratives as they were expressed by Samoan processors. This information will be used to explore the narratives of three companies; Yoshida Commercial, Nonu Samoa Enterprises Ltd, CCK Trading Ltd. Additional content from R+L Kiel and Pure Pacifika will be used as a means to establish the reasoning behind their marketing strategies and to provide the social and cultural background for each.

4.3.3: Yoshida Commercial

4.3.3.1: Ownership

Yoshida Commercial, formerly known as Yoshida International, is one of the smaller private sector entrepreneurs. The company are located in the semi-urban area of Vaitele Village, northwest of the island's capital, Apia. Many of the Nonu processors are situated in this area but as is the case with much of Samoa, none of the producers have a designated street name or number. At times, this can be problematic for specifying a delivery point. The Yoshida site is quite sprawling and houses four small areas of production with one main reception/office area. Production areas vary in size, with the largest – around 1,000sq ft. – housing assembly line units.

4.3.3.2: Culture

Yoshida Commercial started back in 1998 and is jointly owned by the Yoshida Brothers, Chikara and Ken. The two are originally Japanese and are married. This has probably supported assimilation into Samoan culture. Both brothers own around 50-60 acres of plantation on Samoa's second island, Savaii.

4.3.3.3: Technology

In the beginning, the brothers only produced cocoa, trialling a few different beans on their plantation in Savaii. However, they had major problems with selecting varieties of beans that could withstand the island's hot, dry climate and tropical storms. After much trial and error, they made the decision to switch to multi-cropping a year later and began to produce both cocoa and Nonu under a managed cropping system. Their hard efforts paid off as they were the first company to gain National Association of Sustainable Agriculture in Australia (NASAA) certification and have their cocoa approved organic.

4.3.3.4: Marketing Strategy

At the time of my visit, the company were not producing juice as they were in the process of re-vamping their product for the Chinese market. When asked why the company thought it necessary to scale down Nonu production, Yoshida explained, *"Well, the reason why we decided to stop producing Nonu was because we realised that we needed to move away from selling bulk to a position where we were adding value to the product"* (Yoshida, Personal Comms., 2012) . *"We had been selling in bulk for a long time but when the price really began to drop in 2007... and then it never came back again, we had to think about how we could change the situation, so that we could have more control over the price"* Thinking about what measures they could take to stem price decline, I asked Yoshida what the company could do to control pricing.

He replied, *“There was only one thing to do”. “We needed to find a niche market, one where we could market a quality product that was commanding a high price”* He said, *“It was difficult to find the right market”, especially because the global demand had dropped off and because competition from America, Australia and Japan,”* had increased *“but we finally found this (market) in Shanghai in 2010”. “It has taken us some time to finalise but we are now finalising.”*

4.3.3.5: Product Image

Although the company is clearly aware of the concept of niche and where their product is placed within the global market, I asked Yoshida to explain why it had taken nearly two years to finalise their new product in China. He explained that, *“It has taken a long time because we had to negotiate the exact requirements for bottling, labelling and packaging”. “This is the old product.”*

FIGURE 4.11

FIGURE 4.11| Yoshida Commercial Product Image: The old label had hues of green and yellow to mimic the colours of the Nonu fruit but as a direct result of the consumer drive and specific ‘demand’ for the product, the new packaging will become more tailored to the Chinese market. Source: Yoshida [2012]

(holding up a narrow oblong cardboard box with a light green/pale yellow artist impression/drawing of a Nonu fruit; Figure 4.11). *“When we first showed our customers this product, they didn’t like it.” “They thought the packaging had too*

much green and so we had to negotiate a secondary colour, to give it a brighter appearance, so in the new pack, the writing will appear in red. Also, they did not like the sketch so the Nonu will be photographed as a shrub, with a close up of the fruit bearing white flowers". "The product bottle will also change. The size will remain the same but our customers didn't like the clear glass". "We are going to bottle it in a dark brown bottle as the Chinese believe that the Nonu will retain its phytochemical properties and it will keep better for longer".

Having explained the importance of product image, I was then curious to see the extent of Yoshida's knowledge on geographic indications. I decided to test this by asking how he thought GI could be incorporated into Nonu production and received this reply. *"Well, in Japan, at the consortium, and overseas, we have always been asked, 'what makes your brand different from everyone else's?' and we have always promoted Samoa as being a pristine country, with no heavy pollution". "We understand that this makes people think Samoa is a very pure country...the lava flows in the soil... and that the Nonu comes from the communities, friendly, small communities and we are working this idea to our advantage". "We also promote growing our own Nonu in Savaii". "This gives us an advantage over companies producing Nonu in Samoa". "At the consortium's we always tell people that Samoan Nonu is different from other Nonu products in the world, because it's better, richer and more pure but we also try to explain that our product is also different from other products in Samoa. We have used this idea to our advantage and been able to command much higher prices for our product". "The old (product) price was USD\$50 a litre, but we believe (with the changes they are making) that we can get much higher prices now but we are not rivals (other Nonu producers) as we always work together to help each other out". "We are members of NASI, so this is not a problem and we all work together".* Judging by this response, it seems clear that the company has good understanding of the GI concept and how they can create and design packaging that shows signs of their cultural heritage and that can create a product with a clear, differentiated image of place.

4.3.4: Nonu Samoa Enterprises Ltd

4.3.4.1: Ownership

Size is often used as a marketing technique, with most consumers generally believing that the more intimate the company, the less gets 'lost' on mass production. So their perception is that the smaller the firm, the better they are at being able to produce a quality product. Nonu Samoa is the second largest producers of Nonu on the island but to counteract this image, the company market themselves as a local, family-based firm. Headed by three directors, Garry and Mosiula Vui in Samoa and Fred Siaosi in the USA, all directors have the advantage of being related by marriage, so the company is split into two operations; with Mosiula owning 50% and Siaosi, the other 50%. Technically, this equates to one domestic and one international operation. The Vui family control the process in Samoa, shipping bulk juice over to the USA whilst Siaosi bottles and adds value. Mosiula also acts as financial manager and her brother David, the main supervisor. Many of Vui's extended family are also employed in company operations. In fact, most of the family live in domestic accommodation that has been built on-site. So Vui, his wife and family, his brother-in-law and his family, all live as a close family unit. The company itself incorporates a partnership that is fairly unique as it needs no middlemen. Proceeds are divided equally between domestic and international operations according to overheads. Vui believes that it is important to market themselves as a local 'family-based' company as this ties into associations of quality. Because the company is small and local, this fits with the idea of the 'quality turn' and of 'niche' production as opposed to mass (Vui, *Personal Comms*, 2012).

4.3.4.2: Culture

Apart from family members, the majority of Nonu Samoa's supervisory staff is what the company call 'district representatives'. More than just employees, Nonu Samoa representatives serve a dual purpose. They represent the company but simultaneously hold a position of responsibility in their own villages. These district representatives are Samoan Matai chiefs. Samoan 'Matai' title – as discussed in Chapter one – is a title that is bestowed on members of the village. More often than not, Matai are selected for leadership because of their personal characteristics, for having integrity and strong moral values. Already highly respected members of the Samoan community, they embody these values and this is then reflected in their role as district representatives for Nonu Samoa. Thus, the Matai title is not only unique to Samoan village life but is also a unique aspect of the employees of Nonu Samoa. This brings a distinct cultural quality to the production of Samoan Nonu juice which is marketed as an aspect of Samoan culture that is embedded within the Nonu product, reflecting Bowen's statement on the incorporation of these qualities as a GI (Bowen, 2010).

4.3.4.3: Technology

Nonu Samoa Enterprises Ltd, pride themselves on being one of the first to take the traditional juice-making technique from Hawaii and apply it to fit the local culture – to make it 'Samoan' (Vui, *Personal Comms*, 2012; Rogers, *Personal Comms*, 2012). This happened in 1995, so technically they have the longest traditional history of making Nonu on the island. If this were incorporated into a GI, Nonu Samoa would have the advantage of being the oldest company to produce Nonu, being classed as having the most traditional techniques and knowledge.

The Nonu Samoa site is based in Vaivase Uta, a mere 15 min drive to the capital, Apia. On the right-hand side of the site is a simple warehouse-type structure, consisting of six main posts, concrete flooring and a flattened corrugated iron roof. This is technically known as the 'receiving area', an open

space which protects processing staff from harsh weather and allows for easy access of villager's trucks and vehicles. Good use of roofing space incorporates 'drying racks', harnessing solar power to dry out Nonu chips

Inside the plant, many of the operations are carried out by hand – as previously explained – as most on-site equipment is simple and low-tech. Although these practices sound archaic, there are benefits of adhering to simple manufacturing processes, as all aspects of the mechanics of processing can be regulated and maintained by Nonu Samoa staff. Thus, technology is appropriate to local skills. These simple processes can be used to create market advantage as many GI products on the market are often sought after for the idea that they have either been 'handmade' or that they have been made using very low-tech processing.

4.3.4.4: Marketing Strategy

Both Vui and Siaosi hold Matai titles in their own right and this is both meaningful to the family and valuable as a cultural image. As such, these values – that are an integral part of the Matai title – and Samoan culture – are mirrored in the way that the directors run their business. The company incorporates aspects of fa'a Samoa – also discussed in Chapter one – into their business practice. This means that they try to work with the best interests of the families. But as the nature of family life is often at odds with economic efficiency, this can be troublesome. As we have already seen, rural Samoan's are generally occupied as subsistence farmers (Paulson and Rogers, 1996). They grow a wide variety of food such as banana, breadfruit, coconut and taro as 'staples' for domestic consumption. Thus, on the local level, when Nonu is grown by local families, it is often on an 'ad hoc' basis, in or around local 'farmland' (Rogers, Tuioti-Mariner, & Tuoro, 2009). As Nonu tends to grow as a wild plant, sprouting up through cracks, it is often regarded as a secondary cash crop, selling for spot cash when it is available. This random approach makes it difficult for Nonu Samoa and other processors to predict volume and it can mean there is constant fluctuation with the supply but the

company accept this and do not apply pressure to any of the families (Vui, 2012).

Overall, the company adopt mixed business strategies, by using both palangi and Samoan models of trade. Vui claims that being “*too palangi*” does not work in Samoa. He says, “*You need to know when to push but you have to understand that people work differently here*” (Vui, *Personal Comms.*, 2012). This flexibility and attitude towards the Samoan way of life is also reflected in the contribution they make to their employees and community. Daily spot cash awards are made for ‘employee of the day’ and a SAT\$1,000 monthly bonus is paid for most improved employee. Employees, farmers and their families are also helped by offers of scholarships, payments for school fees, uniforms and food box gifts. Overall, the blend of palangi and Samoan business practice has allowed Nonu Samoa Enterprises to function successfully at both a local and an international level. By adapting aspects of both cultures, the company can use these values as an integral part of their marketing image and can create a GI narrative that incorporates their own cultural identity and traditional customs within a place-based image (Figure 4.9 *right*).

4.3.4.5: Product Image

The use of tradition as a marketing strategy is an important means of creating ‘value-added’ for market premium. When incorporated into a GI, it also has considerable potential to provide a basis for protecting traditional knowledge embedded within the product. Needing to create a marketable image for the brand, Vui has taken the opportunity to incorporate traditional aspects of Matai into an image which he believes reflects his own cultural heritage and identity as a Samoan (Figure 4.9 *right*). The bottle shape, Vui considers inconsequential – and a matter of using what is cost-effective and available – but what is important is the colour and design of the label. In the design, Vui has used a block colour of bright green. He believes this represents the natural environment in which the Nonu is grown and also reflects the shade of the Nonu leaf when it is at its youngest and most vibrant (Vui, *Personal Comms.*,

2012). Superimposed is a central image of a young Nonu fruit – and (Vui believes) is an almost iconic representation of Nonu’s ‘place’ within the region. The flowing circular pattern in the background is based on a design that Vui’s family have used for generations and is used to reflect the ‘heart’ of his family (Vui, *Personal Comms.*, 2012). The colour and line, although slightly modified to modernise the design, represent the ‘everlasting unity’, of the family. The curled swirl representing the family lineage, their integrity and a universal symbol of continued prosperity and good luck (Vui, *Personal Comms.*, 2012). An as marketable image, it conveys the idea of a differentiated product that honours the family heritage and generations of Matai, transmitting a message that the product is embedded with values and integrity, characteristics that are something to uphold and treasure.

4.3.5: CCK Trading Ltd

4.3.5.1: Ownership

CCK Trading is the smallest commercial Nonu juice producers on the market and the company is owned and managed by Ken Newton. Newton, an original member of the island’s group of Nonu entrepreneurs (Rogers, Tuioti-Mariner, & Tuoro, 2009), employs two managers, one in Apia (interviewee for this study, Iulia Blakelock-Toma) and one in Savaii. The company first started trading in 1985 but Nonu juice processing was not part of the original business plan (Blakelock-Toma, *Personal Comms.*, 2012). Initially the company focused on producing coffee, cocoa and kava – hence the name CCK – but the business hit massive set-backs in the early 1990’s, when cyclones and tropical storms destroyed most of their plantations. Catastrophe struck again in 2000, when the bottom dropped out of the global Kava market. Fortunately, there were already plans to capitalise on the growing Nonu fruit market and on-going research and development led to the export of their own Nonu juice in 2000-2001. Since then CCK have been ‘diversifying’ (Blakelock-Toma, *Personal Comms.*, 2012), their preference to function as a low-risk, multi-structural company which incorporates the importation of clothing and soft furnishings,

whilst still retaining an interest in agro-food products through Nonu production.

4.3.5.2: Culture

Like Nonu Samoa, CCK have strived to design and construct a place-based narrative to market their Nonu product and they have used an important aspect of traditional Samoan culture in the design of their label – the Siapo. Figure 4.13 shows an image of the product that is sold on both the domestic and international market. Interviewee Blakelock-Toma explained why this design had been chosen and this is worth inclusion. During interview, he explained that CCK had used the Siapo or ‘tapa’ design on both the top and bottom of their label for a number of reasons. First, he explained that the Siapo is one of the oldest cultural art forms in Samoa. That throughout Samoan history the Siapo has maintained its role as, ‘an item of exchange’ for formal presentations, marking important occasions, such as births, deaths, weddings and the investiture of the Matai title (Figure 4.12). Elaborating on the exchange process, he stated, *“It has always been made from the bark of the paper Mulberry Tree”. “When the outer bark is stripped from the inner bark...this is then beaten and scraped. It begins to make a cloth... this is called U’a*. He explained that the ‘U’a is then given as a gift. In this way, he states that the company can utilise the symbolism – and concept of the ‘U’a’ – in their product design, capturing a sense of this ‘exchange’ within Samoan culture, in order to market the authenticity of Samoan Nonu as a traditional product (Blakelock-Toma., 2012).

4.3.5.3: Technology

CCK Ltd has created a web-based Internet site to advertise how their product is made. The web-site claims that, *“Our juice factory houses multiple extraction presses, filters and one new computerised pasteurising unit, whilst our dried fruit factory is fully equipped with six milling machines and a separate area to house five solar drying units”* (CCK., 2011). Due to this mechanisation, CCK has been able to produce up to 25,000 litres of juice a month. However, despite the fact that

the company are keen to demonstrate their technological versatility – and the use of cutting-edge manufacturing – they may be better served by incorporating EU-GI characteristics (and narratives) of low-tech, hand-crafted product assembly to link with current consumer demands.

4.3.5.4: Marketing Strategy

Being the smallest operator in Samoa, CCK Trading work with only 5-6 ‘big’ family growers. Two are from Savaii and the rest from Upolu (Blakelock-Toma, *Personal Comms.*, 2012). The company use their own trucks to make direct visits to the two families in Savaii because of the inaccessibility of some of the villages. The rest of the families prefer to bring in their own fruit. Over in Upolu, fruit is rarely collected by the company, as the villagers prefer to ‘save’ money by combining a ‘drop off’ at the factory with a trip into the capital, Apia, thereby reducing on petrol consumption (Blakelock-Toma, *Personal Comms.*, 2012). Additional payments of 50 cents per kg for each barrel are made by both Nonu Samoa and CCK (Vui, *Personal Comms.*, 2012). This makes a good incentive for growers to deliver the fruit to the processing plant and again shows the communal (and sustainable) angle that could be incorporated into a GI narrative.

As with Nonu Samoa, employment and production contracts between CCK families and are all verbal. The produce (fruit) is visually checked onsite by both parties and a consensus reached for both quality and weight. A cash-in-hand payment is then made and receipt given to the family. Because all fruit is from a ‘wild harvest’ and not managed cropping, it means money goes direct to the family. CCK work with families who produce (on average) around 250kgs of Nonu fruit per month. In June 2011, the company was paying SAT\$2.70 per kg for dried Nonu and SAT\$0.50 per kg for raw. At the time of this study (June, 2012), rates had reduced to SAT\$4.00 for 20kg barrel but

FIGURE 4.12

FIGURE 4.12 | The Twelve Design Elements of Siapo:

(1) Fa'a 'au' upega / Net - this design symbolises the nets used in catching pigeons and turtles; 2) Fa' a 'ali' ao / Trochus Shell - the shell is triangular in shape and can be used in many different formations such as a diamond; (3) Fa' a lau paogo / Pandanus Leaf - is Samoan for a particular type of Pandanus tree, however, is also used to describe the Pandanus tree in general; (4) Fa' a tuli / Sandpiper, Fa'a gogo / Terns, Fa'a vae tuli / Footprints of sandpiper - the bird forms take on many designs. These symbols offer the most opportunity for creativity; (5) Fa a' Aveau /Starfish - this symbol has sometimes been mistaken as the sun; (6) Fa'a' anufe / Worm - this symbol is found in earlier works of Siapo, however, it is seldom used and has almost become extinct; (7) Tusili'i / small lines or wavy lines - the small lines represent the

midrib of the coconut leaf. The wavy lines symbolise the hand woven Sennit (braided coconut fibre), (8) Fa'a sigago / Male Pandanus Bloom - when the Pandanus blooms, the flower hangs down and the narrow petals end in a cluster of sharp point, (9) Fa'a lau ulu / Breadfruit Leaf - the whole leaf pattern may be used or just the edge; (10) Fa'a tumoa or Fa'a moa fai / Banana pod - this symbol is used in two ways, the closed or un-bloomed banana pod or the blooming pod with its petals open; (11) Fa'a masina / Rolled Pandanus Leaves - this symbol is sometimes mistaken for the moon and; (12) Fa'a atualoa / Centipede - this symbol has also had been phased out over time and is now being reintroduced. Source: Siapo.com (2012).

remained the same rate for dried. This fluctuation is normal as the price of generic juice tends to be directly influenced by internal factors and the global market. By incorporating more GI narratives and certification – to add value – this could alleviate the problem.

4.3.5.5: Product Image

Symbolism is an important aspect of CCK's trading design and the company use traditional shapes and designs of the Siapo on their product, to represent their own cultural heritage and their identity as a Samoan company. This has been achieved in two ways; (1) the use of traditional colours and (2) the use of traditional symbols. Colour is an important aspect of the total design and the company maintains that they try to represent this, by staying as close to the original Siapo colouring as possible. The main colour on the Siapo band (Figure 4.13) is a traditional dark brown shade. This represents the original base dye that would have been used before the introduction of synthetic alternatives. The base dye is called O'a, and is extracted from the Bishofia Javanica tree. The second base colour is 'Lama', a black dye made from the burnt soot of the candlenut. The third base colour is called 'Loa' and is a crimson red. This was traditionally extracted from a plant known as the "Lipstick tree". The final colour is 'Ago', a shade of yellow ochre which was traditionally extracted from the root of the Turmeric plant (Blakelock-Toma, *Personal Comms.*, 2012). CCK uses traditional Siapo colours because the company believes that this creates a certain 'authenticity' for the image, which links into the creation of a 'cultural identity' for the product.

There are 12 shapes or symbols of the Siapo. In general, each symbol is a geometric drawing of a single square that contains a shape. This can be viewed as the interpretation of a single unit of nature – a reflection of the natural world – and can range from the 'Tusili'i' – a pattern of small wavy lines that represent the midriff of the coconut leaf – to the 'Pe'ape'a, a semi-circular pattern that represents the shape of a bat's wing (Figure 4.12). These single units can then be used in a particular series or sequence – a grid of

FIGURE 4.13

FIGURE 4.13 | CCK Trading Product Image: in an attempt to display some aspects of the Siapo symbology incorporated into the product logo a range of angles are provided. Source: CCK Limited [2012]

squares – to create a pattern or ‘story’ which then attaches greater meaning to the Siapo piece. In the CCK design, the company has used a combination of single units to create a traditional story. These symbols are; the Fa’atuli – sandpiper bird, the Fa’agogo – terns, the Fa’ a vae tuli – footprints of the sandpiper bird and Fa’a aveau – the starfish. Although these symbols are not directly related to the company or to Nonu production, they represent Samoan traditions of the sea, of fishing and of the delicate relationship between man and nature. The company believe these symbols operate as a ‘marker of origin’, which infers the sustainable use of natural resources (Blakelock-Toma, *Personal Comms.*, 2012).

4.3.6: R and L Keil Holdings Limited

Richard Keil, owner of R + L Keil Holdings Ltd, was unavailable for interview at the time of this study. However, I was able to arrange a brief meeting with Operations Manager, Nobby Fujimoto but only managed to collect a relatively small amount of company data, which will be briefly summarised in this short paragraph. R+L Keil are considered to be the largest company in Samoa, in terms of export volume (Fujimoto, 2012). Although I was not given any export statistics figures to evidence this statement, it seems that most of the Nonu processors are in agreement with this statement. The company manufactures a Nonu product for the domestic market but mainly export Nonu in bulk. Largest markets include sales to Japan, America and Germany respectively. On-site observations showed a highly mechanised process, with fruit being transformed into juice on a production-line process. R+L Keil are also part of the NASI organisation and have a strong relationship with other NASI members.

4.3.7: Pure Pacifika

4.3.7.1: Ownership

Pure Pacifika produce Nonu juice as a large-scale manufacturing operation and are the newest processing company to enter the market in Samoa. Part-owned by All Black, Michael Jones, they first started producing in Niue but officially opened the Samoa plant in December 2011. Overall, Pure Pacifika employs 34 full-time staff – most of whom are based in Auckland – however, JR Periera is the general manager at the Samoan plant, where they also employ a factory manager and a collection team.

4.5.7.2: Culture

Pure Pacifika own 500 acres in Savaii and they mostly use the fruit that is grown there, with the rest being taken from growers in Upolu. The Pure Pacifika team go out once a week to collect fruit or the growers call in two or three times a week (by arrangement with the company).

Therefore, collection times are often dependent on supply. Because the company have processing operations in both Niue and Samoa, they collect fruit from both islands. But it is not clear if the fruits are combined to make one juice product. Ultimately, they do not produce juice exclusively from Samoa. Therefore, the company would find it difficult to qualify for EU-GI certification of origin without evidence of separate processing.

4.5.7.3: Technology

All juice production is carried out by machines and computerised programming. Processing is regulated through a 'flow chart' that company uses for the juice making process. They follow this rigidly. Like Nonu Samoa, the juice is Ph tested for bacteria and fungus and is generally carried out in conjunction with Samoa's SROS. The company have five filtering drums – as opposed to Nonu Samoa's hand-filtered process – and the pasteurising machine is state of the art technology, heating juice to 80' at 500 litres an hour. The pasteurising machine pumps Nonu juice through the factory, into purpose built REEF shipping containers that are housed outside the plant and hold 24,000 litres. This completely fills the container space. At the moment, Periera says that collection is 'slow' as they are waiting for documentation. However, the intention is to run the business five days a week.

4.5.7.4: Market Strategy

Pure Pacifika have plans to concentrate on the Asian market. They have already established a large contract with Japan to supply organic juice. Because of the Japanese market, they now only collect organic NAASA certified fruit. They estimate that they have a market of around 800,000 litres a year but plan to label and bottle in Samoa. However, this is not completely finalised and they are currently exporting in bulk.

4.5.7.5: Product Image

Michael Jones and design team were involved with the design of the product label in New Zealand (Figure 4.14), so Peiriera could tell me very little of its origin. Although he was not privy to the details, he was fairly sure that it took a considerable amount of time to design the shape, colour and finish of the product.

FIGURE 4.14

FIGURE 4.14| Pure Pacifika Product Image and Marketing: *(left)* a 250 mL glass bottle of Pure Pacifika Noni juice, with a simplistic design and silver, black, bright green colour scheme symbolic of the natural environment from which the noni fruit grows. *(right)* the natural Samoan habitat of the Nonu plant. Images derived from www.purepacifika.com (11.01.2013)

4.6: Chapter Review

Localised specialisation – viewed through the commodity chain – was shown as the main focus of the case study, and was presented as a proposal for the central component of the Nonu GI. The chain was used partly to show the interconnections and relationships of the lead firms and partly to build

evidence to support the specific physical and human characteristics of Nonu as 'Samoan'. I assembled case data according to specific GI components, with a focus on Nonu variety, Samoa's climate and aspects of Samoan culture and headed these under chain sections as; input, transformation and distribution. Literature on the Morinda sub-variety was again considered in some detail and correlated with my own findings – visits to Nu'u and the Malaefono Plantation – and this fits with my recordings of local villagers and Samoan processors. These ideas were also extended to explain the growing conditions of the Samoan plant. Continuing to build on the formation of a Nonu GI, the review was planned to incorporate aspects of traditional knowledge, to try and provide strong evidence for Samoa's cultural diversity. A large part of the study focused on the distinctive Matai and tapa heritage, which was strongly evidenced as a factor that I consider to be 'embedded' within the culture and I argue that these aspects could be marketed as such, to create comparative advantage over similar Noni products. Marketing of the product was featured at the end of the distribution section as the main 'goal' of the processors, to 'tie-in' with the products distinctive character and to help with development of the Nonu GI.

5

CHAPTER 5

Discussion

Discussion

5.0: Chapter Summary

In this chapter, I will analyse some of the main findings of the research in the context of the objectives that were presented in the introduction. In Section 5.1, the discussion seeks to address objective one, by outlining the regulations pertaining to the GI system – both internationally and nationally – to assess how GI has recently been used in Samoa. This section will also consider objective two, by assessing the local to global links in relation to the producer-consumer dynamic and how this relates to trade and production within the Nonu Industry. Section 5.2., ‘Nonu as a global commodity’, continues to address objective two, by outlining the political context of the producer-consumer dynamic. It discusses the motivations behind the purchase of products and continues with an overview of global trading challenges and how this impacts on the distribution of the Nonu juice product. Section 5.3., presents the evolution, structure and governance of the Nonu commodity chain and addresses objective three by highlighting the relevance of the environmental, cultural and technological characteristics that enforce localised specialisation. Section 5.4., addresses objective four, by illustrating my own – and the community’s – elements for the use of a sustainable GI design. Finally, Section 5.5., addresses the specifics of the codex in relation to place-based marketing and its potential benefits to the local community.

5.1: Global to Local IP-GI Regulations

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5.1.1: The Advantages and Disadvantages of Global, Regional and Local GI Regulations

5.1.1.1: Global Regulations

One of the main areas that this research considers is the implications of applying differing global protection systems to developing countries – like that of Samoa – and the potential cost of the current US trademark system to local producers in the Pacific. As illustrated in the examples given in the introduction – and shown in Figure 1.1. – there is no single coherent international system, or even a common definition for a GI. This makes it difficult for developing countries – like Samoa – to secure protection as both systems tend to create particular and diverse standards within overseas trade and markets. So, although the TRIPs agreement promised a harmonised approach to legislation governing international trade, with the first ‘top-down’ multilateral definition of a GI, it has been argued that the IP element, in legislative trademarks and patents, had resulted in the evolution of two very different systems; (1) US law, with a focus on open market trading and (2) EU law, which has been argued to have incorporated a more protectionist stance but required a certifiable product origin. Given some of the historic literature that I have reviewed, I would agree with the argument that TRIPs only served to offer a legal framework to open industrial-scale trading, by supporting an internationalised and unrestricted circulation of goods. This only appeared to serve the interests of well-established traders in the global North. Its IP element, ultimately blamed for bringing about a ‘divorce’ from food production in its local and cultural context (Giovannucci, Barham, & Pirog, 2009).

GI's are by no means viewed as a panacea for the ills of rural development but the main thrust of the literature shows that they have been both successful and cost-effective when adequately managed. Thus, there is no reason to believe that this would not be the case in Samoa. The EU-GI approach has been designed to accommodate small-scale agricultural development and is in marked contrast to those who wished to register 'intangible ideas' through the US patents and trademark system – as there is a requirement to register and transfer the idea to each country where one wishes to trade – and this is a costly process. Globally, this approach, coupled with unfair ruling on the appropriation of tariffs, has been argued to have taken little account of the characteristics linked to small units of production and their survival, particularly for those in the global South. Therefore, many have criticised the US-IP trademark protection systems, as having accelerated the mobility of capital and having contributed to the uneven patterns of distribution we have come to see today (Giovannucci, Barham, & Pirog, 2009).

On a different note, I would also agree with other suggestions that the EU-GI protection system – with its specific *sui generis* element – is seen to have worked to assist with the difficulties of rural development by focusing on a 'bottom-up' grassroots approach that is more appropriate and beneficial for niche production and small-scale producers, like those in Samoa. Unlike the acquisition of IP and its commonality of individual ownership, EU-GI's have arguably been structured in a way that serves the greatest number of people, with the ability to avoid capture by a few elites. Therefore, if the Samoan government continues to follow the influence of the WTO, within its own Intellectual Property Act, I would contest that this would not benefit small-scale producers in the same way as an EU-GI, because the Act will not incorporate the potential control of the resource through the power of the EU public good element.

5.1.1.2: Regional Regulations

This research argues that GI's in the European Union have a long history of being used successfully as a development tool. GI's have been the centrepiece behind local development initiatives. For example, in recent years, the EU has made exploitation of the marketing potential of GI's, an important element of its agricultural and rural development strategy. Today, about 6,000 GI's are recognised in the EU alone and the European Commission claim that this strategy has met with considerable success (E.C., 2000). This is because they have been shown to maintain a strong sense of place-based 'identity'. Primarily the EU-GI is based on geography, the land and its people. An EU-GI has been argued to be a source of cultural capital. Its legislation deliberately promotes the collective action of communities and people and supports the use of cultural 'self-definitions' to provide product distinction. For this reason I believe that the EU-GI should be used as a preferred protection system for Samoa because EU-GI's are inherently orientated toward local people and the places in which they live.

The adoption of an EU-GI constitutes – not only the name of a place – but the place itself. Thus, in the case of a European approach, the GI cannot be moved, bought or sold. If adopted in Samoa, this would 'fix' capital and would build investment – over time – within the country and local industry. EU-GI regulations also facilitate equitable distribution, with those at the bottom of the value chain – the producers and individuals most vulnerable to global price fluctuations – covered by a collective 'right' to equal participation. Again, I would argue that this collective nature of the system runs counter to Samoa's current Act, with its concept of IP/GI product registration as a 'name' – that may be unconnected to a place of origin, allowing for the sole-ownership – and moreover, individual control – of a commodity. Thus, an EU-GI would be a more appropriate system for local communities within Samoa, as it can help to retain local ownership and control of the resource at 'ground level', defending the local against the appropriation of 'outsider' self-interest.

5.1.1.3: Local Regulations

As a result of Samoa's membership into the WTO in 2012, the Samoan Intellectual Property Act came into force in the same year. The 2012 Act includes basic provision for Geographical Indications in Part 7, which has already been outlined in Chapter 1 – as being influenced by WTO membership and the US-GI – but then specifically references the characteristics of a GI as being as essentially attributable to its geographical origin in Sections 83 and 90 (Appendix B). Therefore, I argue that Samoa's Act has been interpreted in the same manner as the TRIPs definition and is basically akin to US/IP legislation, which does not make adequate provision for certifying the collective link between product and place, nor does it include the certifiable use of a product place name as a public good.

In addition, Part 7 of the Act contains ruling for the use of a place name as the indication of the geographical 'area' but omits to give specific recognition to its own geographical status. Samoa is both a country and a set of islands and therefore by definition, it could be argued that it already has a 'natural' delineated border. Surprisingly, this de-lineation has not been highlighted. Therefore, I subsequently argue for its inclusion as a potential asset, which may act as a complement to a system already oriented towards place-based definition.

5.1.2: The State of Regulations in Samoa

Commercial production of Samoan Nonu began with the success of the American based company 'Tahitian Noni International' (TNI) and as already stated in the introduction, the industry reached a peak of Nonu juice production in 2005, with around SAT\$8.3 million – or 30% of the country's total GDP – being exported overseas (Figure 5.1). At this time, the unit value – on average – was just under SAT\$12 a litre (CBS, 2011).

FIGURE 5.1

FIGURE 5.1 | Key Markets of Samoan Nonu Juice: The United States, Japan, Australia and New Zealand represent the key export markets for Samoan Nonu Juice between 2000 and 2010 (CBS, 2010)

Later, in 2006, the total amount produced – including fruit used for the dried Nonu product – was around 2,120, tons with a slight increase in 2007 to around 2,300. However, by 2008, the total amount of processed Nonu had dropped to around 1,500 tons. Since then, average export figures have continued to decrease, with only 500,000 litres being exported in 2010 (Jones, Murray, Overton, 2012) (Figure 5.2). Despite its recent decline, Nonu had still remained the most significant agricultural export until January 2012, when its value dropped to a trading low of \$SAT0.2 million. It has now been topped by most major exports (CBS, 2012) (Figure 5.3). This implies a marked decrease in the unit value, to around SAT\$4 per litre. In general, the drop in global demand has been blamed on a number of factors; (1) the economic crisis of 2007, (2) the Nonu Industries inability to provide rigorous world-wide research on the health benefits of the juice and (3) inter-regional competition -

FIGURE 5.2

FIGURE 5.2 | Volume & Value of Samoan Nonu Juice: the volume of juice exported between 2000-2013 is reported in 1000 litres (blue) and the value in one million Samoan Tala (orange) (Lui, 2012; CBS, 2013).

FIGURE 5.3

FIGURE 5.3 | Samoa's Export Composition: Nonu Juice formed 30 % of all foreign trade in 2005 and by 2012 had been reduced to just 6 % with other exports such as, fresh fish and crude coconut oil becoming a larger segment of the export composition. Source: CBS, 2012

due to a lack of technical expertise/inability to add-value at country level. Based on the evidence contained in the case study, it seems reasonable to suggest that the export success – of a Nonu GI in Samoa – depends on two main factors: (1) the strength of the structure of GI legislation – at local and state level – and; (2) the collective group of commodity chain actors that support production.

Firstly, there are a number of government strategies, such as the Samoan Strategy for Development (SDS, 2012) and the National Export Strategy (NES, 2012), which identify the agricultural sector as a main driver for economic growth and employment creation. This is mirrored by outside assistance – in the form of funding from the World Bank – which currently supports the implementation of Samoa's Agricultural and Commercial Export Plan (SACEP) (World Bank, 2011). However, the Bank's plan makes no specific allowance for expanding Nonu production – despite it being the country's most prominent agricultural export up until 2005. And while Samoa's agricultural policy – from the Ministry of Agriculture and Fisheries – makes some reference to the Nonu Industry, this is only minor. Therefore, if the Samoan government wishes to create opportunities for increased export trade, it needs to create a specific policy which is geared explicitly towards the needs of the industry. This needs to be achieved as a public-private partnership, with the government conducting lengthy consultations with those involved in the industry, from the smallest local producers to the largest independent exporters. More cooperation and negotiation with donor partners is needed, as the current system seems 'mismatched' and uncoordinated to industry need.

Secondly, it has been encouraging to see that Nonu has since been recognised by the regional WHO/FAO Codex Alimentarius Committee, as an 'important trade product' (WHO/FAO, 2012) despite its development as an export crop being somewhat 'overlooked' by its own government policy. Initially tabled in 2006, Nonu's potential was recently re-identified by the Pacific's codex committee in Papua New Guinea, (WHO/FAO, 2012), where it has since

been considered for what the committee defines as ‘increased specification’. It remains to be seen, whether Samoan codification will become co-opted by the influence of ‘top-down’ WHO/FAO contributions, who may adopt a ‘one-size-fits all’ definition to the Nonu product, streamlining product codex to suit all Noni-Nonu from the Pacific region – by upholding or supporting the current belief – and PINA philosophy, that ‘all Noni is the same’. Or whether it will adopt more customised versions of codification to suit – what I would assert – are the characteristics of individual Nonu that are arguably represented within each country and within each variety. In any case, Samoan Nonu codex documentation needs to give a comprehensive account of clear, accurate details that have specific reference to the Nonu Industry. This is fundamental, as all GI’s have a strong sense of identity but the ‘link’ between the characteristics of the Nonu GI product and the geographical area of Samoa, needs to be clearly represented, particularly in the marketing, so that the product can be easily recognised by global consumers.

Thirdly, it is also argued that the Samoan Nonu Industry would be better served if it utilised the existing ACP-EU, trade agreement to export Nonu to European member states and agreed to adopt the EU system via market mechanisms for creating an ‘identity’ for local products (ACP-EU, 2000-10; Scolley, 2010). Samoa is small but has retained a deep-rooted focus on tradition, family and community. As a country, it has a strong sense of identity, with expressions of Matai and Tapa heritage. Again, these characteristics would act as a natural complement for EU-GI strategies that fashion the development of local agri-food produce from its ‘grass-roots’ origin, if the difficulties of ‘trust’ between strong ‘clan loyalties’ can be overcome (Duncan & Nakagawai, 2006). Adopting EU regulation as a valuable mechanism – by which a place and its people can come to realise and bring to fruition, a unique and valuable asset that is already there – will enrich Samoa’s identity – as a country – and enhance its global reputation. But the downside is that European import standards and regulations are complicated and confusing and distance to global markets may always be a distinct debilitator.

5.2: Nonu as a Global Commodity

Commodities are of central importance to the capitalist system. Largely, their position has arguably been heightened by the development of modern trade. Mechanised processing, storage and transportation have speeded up production of goods resulting in cheaper, faster and more frequent supply chains so that food is no longer tied to a locality. However, this drive to maximise profits has often been blamed for 'short-cuts' that have arguably affected the quality of mass produced foods. What once characterised the globalisation of the agri-food industry – the practice of standardisation as *de rigueur* – now appears to be trending towards the 'quality turn', with general consumer perception that local produce is somehow safer or more trustworthy because it can be traced back to a particular place of origin. As Delaney (2010) states, the 'who' and 'what' that contributes to an international reputation are no longer enough and 'where' is becoming an increasingly important marketing tool. Some shoppers have therefore, become more discerning of packaged and branded food and this drive has opened a host of niche markets, developed for ethical consumers who want a guarantee that they are spending their money on products that support ethical production and fair trade.

Consumers – whom we have previously termed 'conscientious' and 'political' – generally search for labels which represent quality, encapsulate the (good) reputation of a product and certify the origin of the product, as a means of conveying trust. Additionally, and perhaps more importantly, political consumers arguably make a statement through their purchase – to boost positive development of communities – believing that their purchase makes a contribution to support sustainable production and are keen to 'buy-in' to some kind of concrete support for building a better world. These interconnections between producers and consumers have – for the purposes of this research – been framed as a producer-consumer dynamic and are a large part of what has been termed the 'glocalised' interconnections that occur between local producers and global consumers. Described as a complex

'interconnected' and interactive space (Robertson, 1995), this 'glocal' conversation simultaneously incorporates the 'fluidity' and influence of both spheres, with consumer motivations affecting aspects of production and vice versa. In much the same way, the incorporation of a GI into the production of the Nonu product can act as a 'middle ground' between both local and global space, as it is claimed that the role of GI's is to provide a 'link' between the externality of 'placeless' global markets and the 'fixed' internal defence of place, culture and identity (Barham, 2010).

Sadly, in its current position, Samoan Nonu is competing in a global market not a niche and for that reason is disadvantaged by a number of factors that impact on its success. Some of these disadvantages occur externally: (1) in the form of export costs and; (2) tariffication. Others are a result of internal constraints that impact on trade and trading standards. Samoa has the disadvantage of being a small country trading in a large international system. This 'smallness' has placed constraints on its ability to compete effectively. Like most PIC's, access to trade has been limited by the international tariff system. In the previous years, it has been argued that the system has been a major drawback to fair trade. With import duty and taxation often reaching double the amount of the cost of unit production, tariffs have often acted as a major de-motivator to deploy value-added in the country of origin. Recent concerns over this system have led to its restructuring but it is increasingly argued that tariffication has merely been replaced by international trade standardisation.

Export trading standards – for developing countries – are often ridged and intricate. This makes them highly confusing, especially if local industry members have no experience of these regulations. It is therefore, no surprise that the existing ACP-EU agreement to export Nonu juice to EU member states – which should have given Samoa trading advantage – has not been exploited. Under EU regulation EC 258/97 (EC, 1997) all 'novel' food – and this includes Nonu – must undergo a special approval process that involves the production of dossiers to substantiate 'safety' for global consumers.

Application of this policy at the local level is complicated, lengthy and expensive for members of the industry. But without it, the Nonu product has little chance of being approved. So industry members are in a 'Catch 22'. Even though they have been granted access to EU markets, they cannot utilise this opportunity because they do not have the knowledge or experience to do so.

On a similar note, since 2006, the EU have required standardisation in the form of ISO 9000/1 and HACCP certification for processed food – destined to EU markets – from developing countries (HACCP., 2006; ISO., 2012). But for this to be useful to any industry in a developing country, people need training to implement the requirements. Samoan business operators have experienced similar difficulties – on the ground – with technical application for export standardisation and have also struggled to navigate around stringent international biosecurity systems and regulations. They argue that this is one of the areas that needs urgent attention and have expressed concern over factors that constitute 'acceptance' or 'rejection' of their product, noting that this process is often arbitrary and that import regulations are repeatedly 'interpreted' to variable standards by individual customs officers. One processor commented that this was "extremely confusing" (Percival, *Personal Comms.*, 2012) as the 'rules' are constantly changing. Essentially, this makes it tricky to envisage how to 'present' the consignment – and invariably – creates unpredictability and enhances export risk. Technical assistance is required from the EU to explain what is required for Nonu export. Otherwise, these so called 'agreed' requirements, only act as a barrier rather than enabler to access European markets and trade.

Other disadvantages to the industry continue to be of a logistical nature and may relate to many industries throughout the Pacific. It has long been documented that PIC's face major challenges because of their isolated position (Murray, 2000). Situated on the periphery of global markets, it is often a problem for many PIC's to 'do business' when the physicality of distance makes it so difficult to stay 'in touch' with global trade trends. Gaps in market knowledge and trading patterns are often hard to discern and lack of up-to-

date information may always leave many Pacific companies 'trading on the back foot'. Speed and cost of transportation is also major issue.

Shipments to main markets, like the USA, Japan or Europe often take weeks or even months to arrive. For example, with average arrival times for shipments from Samoa to NZ – three weeks – Samoa to USA – five weeks and Samoa to Japan – 7 weeks, this impacts substantially on the amount of time it takes for an order to reach its destination. Customers can become frustrated when orders are delayed; especially when it may be possible to order from destinations closer to home – as processing time is faster. Additionally, the financial cost of transporting Nonu – and other goods – to overseas markets remains high. Samoa's export market overall is small and their imports are twenty times higher. This imbalance leaves large amounts of container space on the return journey. Empty space still needs to be paid for and equates to an additional cost which has to be factored into the final unit price of the product. Unfortunately, this higher unit cost again reduces Samoan Nonu's overall competitiveness in the global market.

After outlining the majority of international and localised constraints which impact on the competitiveness of the Nonu Industry in Samoa, there perhaps remains one factor, above others which needs to be addressed and that is the export of the product in 'bulk' form. It has already been mentioned that import tariffs have played a role in this – by acting as a major de-motivator. But shipping Nonu juice out of Samoa in 'bulk' containers is not going to enhance its value. Nonu – as a 'bulk' product – bears no name, no marker of origin and is indistinguishable from other goods belonging to the same commercial category. As a result, it enters the market as a 'generic', where producers and processors have to accept a 'price', which is determined by the rates of supply and demand and other market conditions. In this position, Nonu juice will always be subject to the risk of price fluctuations and a 'race to the bottom' to produce the cheapest commodity. One way to overcome this

disadvantage is to provide the product with specification and character and this has been acknowledged by local processors for some time.

5.3: Evolution, Structure and Dynamics of the Nonu Supply Chain

5.3.1: Evolution of the Nonu Industry

For the purposes of recognition – for a Samoan Nonu GI – its history needs to be clearly outlined to prove that the link between product and place clearly exists. Historically, Nonu’s popularity is straddled over two time periods. The first is its 2,000 year old traditional association with the Pacific, where Nonu had arguably already established a ‘safe reputation’ for its use. The second is the global boom of the early 2000’s, when it became popular as a modern herbal health tonic, despite its benefits being misrepresented by Morinda Bioactives.

Compared to the plant’s history and the traditional knowledge embedded in its medical qualities, the Nonu Industry in Samoa is only a recent formation, spanning a period of development of around 25 years. So, it could be argued that although producers and processors have adopted both traditional and semi-modern methods, they still rely heavily on observational techniques, based on a history of generational knowledge and local know-how.

In the early years, one of the main motivations for expanding into global markets was the limitation of Samoa’s domestic market. A second motivator was witnessing the expansion of Nonu as a high value product in global markets. Encouraged by the elevated global prices of the mid 1990’s, processors sought a semi-modern technique for juice extraction and found it in the USA. When the technique was brought to Samoa, processors used an existing stock of fruit from wild trees for the supply. Samoan Nonu has normally been marketed as a ‘luxury’ health product, bringing high end-value benefits. It has fitted well into Samoa’s tradition of semi-substance

farming and its 'spot cash' payments have made a welcome contribution to rural incomes. However, the global market is contracting and has witnessed a steady decline in demand since 2005. New players from India, the Philippines and Malaysia are entering the market and they have good processing capacity, with the ability to increase yield and reduce unit cost under intensively managed mono-cropped systems. Again, Samoan producers and processors are restricted by economies of scale and high transportation costs. They need to find high value niche markets to offset this.

5.3.2: Terroir and Diversity throughout the Supply Chain

As the case study chapter shows, GI's have been viewed as a different approach to agricultural development, with potential to support and protect the unique values associated with local places. Not only do they provide a strong link between ecology and production, by helping to retain market diversity against homogenisation, but they can also provide a 'border' or demarcation of the local area, which effectively protects a product from being counterfeited elsewhere. A GI place name can 'fix' the product into its place of origin – as the name of a place cannot be moved – and is argued that this stems the 'placeless' flow of capital. The GI place name incorporates a notion of terroir. This is shaped by a complex array of factors, but is primarily linked to the biophysical properties of a particular place. One of the defining characteristics of the Nonu commodity chain is the fact that actors from all stages of the chain share an understanding of terroir and there is more than a widespread belief that the Nonu product is defined by the physical characteristics of the land.

In the Nonu case study, some basic statistics have been provided to show a variety of climate in four areas: Faleolo, Togitogiga (Upolu) and Saleologa and Taga (Savaii), that arguably affect the growing conditions of the raw material, thus creating diversity within in the Nonu fruit. Study research also points to villages on and around the West Coast Road where terroir could be

differentiated on the basis of nutrient concentrations in volcanic lava soils, again reflecting diverse environmental growing conditions of the Nonu plant. Chapter four offers an example of the Nonu plant as a native variety, indigenous to Samoa by way of its evolution and its possibilities for self-pollination.

Most fundamentally, the case study shows that even along a widely distributed genetic plant material, a certain localised specialisation can be discerned. However, despite these positive observations, the main factor that weakens both terroir and variety is that Samoan producers currently 'mix' Nonu fruit from different villages and regions and this increases the variability of the Nonu juice and does not provide a distinct 'type'. Additional differentiation for 'areas' where Nonu grows, would constitute more power further down the value chain, where it is more likely that the natural resource base will be protected.

5.3.3: Localised Specialisation

Most of the time, the GI concept is linked to the physical world of landscapes, ecosystems and plant varieties but these aspects could not exist without the practices and local knowledge of the societies that create it. Human influence within the GI is an integral part of product identity and the quality of its characteristics are associated with habitat and cultural practice (Figure 5.4). GI's are authored by the community of producers. It is they who build definitions into the location, based on a history of values and norms and they who legitimately protect and safeguard the 'rights' of knowledge acquired by generations of producers. Hence, the protection element of the GI has the ability to assist in strategies of localising economic control by 'locking' knowledge of the GI firmly into place. Even though this can be achieved through a collective forum, there is still the potential for misuse if the 'tie' between product and indications is not clearly defined in the product specifications. Therefore, it is vital that the set of specifications give a clear,

accurate and specific definition of the condition of production. During fieldwork research, the Nonu process was observed on many occasions, within many different processing plants.

FIGURE 5.4

FIGURE 5.4 | Product Identity: The label of Samoan Gold is a perfect example of how the natural habitat and cultural practices (of Samoan society) have, in combination, influenced the identity of a product (CCK Trading Limited, 2012).

The Nonu process presented in the case study was carried out at the Nonu Samoa plant in Vaivase Uta and this example provides some commonalities and differences. These ethnographic findings have been written up and recorded in photographic form. It is hoped that by providing a visual aid, this may assist the reader to gauge the nuances and intricacies of each stage, providing some clarification for Samoa's localised specialism and the overall condition of production. When GI's are high quality products, they may also be labour-intensive and rarely manage to achieve the size and economies of scale required to compete on a direct price basis with similar products from more industrialised processes. Nevertheless, the connection between quality and place – the noted terroir that encompasses both agro-ecology and local

know-how – that GI's facilitate for a consumer – enables artisan producers to thrive in very competitive markets. In the midst of increasingly homogenised and industrial processes – that bring us our food – new alternatives are emerging, that often represent a desire to relate to unique tastes and relationships that are embodied in local foods, and thus many GI's.

5.3.4: Constructing Quality

According to some of the views in this research, GI's can guarantee the 'quality' of a product by creating a path which traces the product origin and reveals the transparency of its production. GI's have been described as 'markers of origin', where the marker can be said to encapsulate social, cultural and environmental factors which define the specifics of the local product. These factors are secured through a series of regulations that guarantee the 'authenticity' of the product as a localised food. GI's are 'markers' that are socially constructed by local producers but are often highly politicised by networks of global consumers, who increasingly seek 'safe' paths of production that reflect transparency and traceability. The most interesting aspect of these current proposals is the emphasis on controlling the production process, its consistency and enforceability.

The link between a GI product and its geographical area is based on quality or the 'reputation' of characteristics that set the GI product apart from other products. But this takes time to build. Current proposals for discussions of Nonu quality are framed in very technical terms, emphasising measurable quality parameters, such as: age of Nonu, percentage of sugar, permitted ingredients. However, this focus is narrow and precludes a more complex contextualisation of quality that could incorporate: Nonu biodiversity, environmental factors – such as soil and climate – producer knowledge at village level and processing techniques at processor level. Ultimately, it is argued that the current codex proposal actually reduces the specificity of Nonu as its technical parameters define a minimum level of quality but are not sufficient to guarantee explicit characteristics. Future standards must

describe the differentiation of the product and stress the interplay of tradition, authenticity and terroir in the creation of a Samoan Nonu GI.

5.4: Geographical Indications and Sustainability

5.4.1: EU and GI Elements

One of the most important factors for creating a GI in the EU system is the incorporation of a 'group' or association of producers and processors. It has often been stated that this promotes cooperation. And a strong element of cooperation can already be evidenced throughout the case study observations, so this is useful in respect of creating a GI. In Samoa, the group element is an inherent part of most local business structures, even more so for the Nonu Industry. This may be because as the island is small and as most local firms interact with one other on a daily basis, they know each other well. It may also be a lack of government support. In previous years, with little in the way of a public – private partnership, processors found that they needed to strengthen industry development by working as a collective.

NASI was formed in 2008 as a first stage to establishing an association of processors that could supply and share industry information. Together, they are managerially autonomous and non-profit making and have been proactive in regulating and maintaining standards. Along with the establishment of general industry requirements, such as HACCP and ISO 9000/9001 – that can pave the way to entrance into international markets – they have voluntarily created a scheme of management, on the principle that the structure and operation of the scheme should represent the economic interests of all the various branches of the Nonu commodity chain. Additionally, they have verbally created voluntary specifications that identify all the characteristics of the Nonu product and the conditions necessary for processing. Written documentation is already underway. NASI already share the rudiments of a

GI requirement and if they continue to maintain this collective approach, it will create cohesion, would correspond with the GI framework and may continue to close gaps in the supply and sharing of information.

Interestingly, another aspect of creating a GI under the EU system is the recommendation to establish a 'control body'. The control body operates outside of the Nonu Industry and is an independent, impartial governing board that oversees the system. It controls the processes of production, preparation and the phytochemical composition of the product and reports any improper use. The governing board should be internationally accredited to operate a product certification scheme. This certification needs to take the form of a remit, in which the main priority is to draw up: (a) a product specification, (b) its controls and requirements, (c) product history, (d) the demarcation of the geographical area of production and (e) product traceability. Certification is complex – as demonstrated – and the industry is a long way from reaching these demanding standards. Samoa's SAME and IRETA-USP, have gone some way to establishing both mandatory and voluntary specifications to identify all the characteristics of the product, in order to enhance its diversity. But, this is only a start. Nevertheless, this next section may help to illustrate how complex product specifications can be built; what needs to be included as a basic, but more importantly, what needs to be included to demonstrate the legitimacy of the Nonu product.

5.4.2: A Sustainable GI Design

The product specification section is the chief document underpinning a GI but standard features for the current Nonu juice codex are common to all Noni-Nonu and this does not do the product justice. Fieldwork research identified many unique features of Samoan Nonu but these are not currently expressed in its codification. In the interests of the industry, a Nonu codex should contain a much broader description of product specification, providing as much differentiated detail as possible to strengthen the link between the Nonu juice product and its place-based origins in Samoa. Furthermore, knowledge

of consumers and the psychology behind their purchase, points to the desire to buy – not only a piece of place – but to purchase the past, in the form of a story. Through my observations and communication with local people, I have conceptualised the following information into a broadly defined ‘sustainable GI design’ or codex. This GI codex, will be set out as: (1) standard features, (2) differentiated features and; (3) a story or narrative which is based on community perceptions and ‘self-definitions’ of what a Nonu GI should ‘look’ like, with anticipation that this will be of use to reinforce the multiplicity of Samoan Nonu.

5.4.2.1: Standard Features

Name

The standard feature for the proposed codex uses the singular name of ‘**NONI**’ to describe what is colloquially known in Samoa as ‘**NONU**’.

Variety

The standard feature for the proposed codex uses the Latin name *Morinda Citrifolia* L. The standard feature does not provide any further details for the presence of extended sub-varieties that may exist within the *Morinda Citrifolia* L. species.

Appearance

In the proposed codex, the appearance of the raw material (Nonu fruit) does not allow for clear, accurate identification. The standard describes ‘**RIPE**’ fruit when providing a definition for the ‘ageing’ process but it does not define the colour, shape or texture of fruit that is ‘ripe’, nor does it define when fruit is deemed to be ‘overripe’.

Cultivation

The proposal does not include any references to disparities in the CULTIVATION of the Nonu plant.

Terroir

Current policy codification makes no mention of the TERROIR in which the Nonu plant is located.

Demarcation

The present codex does not include reference to DEMARCATION of the geographical area of processing.

Technology

The current codex proposal contains three basic, industry standard classifications, for processing an agri-food product. They are categorised as: 2.1.1 Aged Fruit, 2.1.2 Non-aged Fruit and 2.1.3 Reconstituted Fruit (Appendix B). The current codex does not provide details for the localised specialisation of the product.

Culture

The current codex proposal contains no specific reference to the products CULTURAL background

5.4.2.2: Differentiated Features

Name

A choice of a differentiated product name is obviously essential and has to take into account several factors, notably the geographical place and the source variety. Fieldwork interviews and observation noted that most of the local growers and all of the processors – that were interviewed – call the plant by the Samoan vernacular of ‘NONU’. Therefore, it would seem advantageous to use the name ‘NONU’ as opposed to ‘NONI’ in any policy wording, especially as the brand leader, Tahitian Noni International and many producers from the Pacific region, use the term ‘NONI’ for their product. Using the term ‘NONU’ would provide a specific product name for Nonu from Samoa, and create a differentiated feature that could strengthen product branding.

Variety

Identification of plant characteristics will strengthen codification if the link to a distinct variety can be proven. The Samoan variety has been observed by local growers and processors as having a combination of '**small – sized fruit**' and long '**strap – like leaves**'. This is supported by academic research from Hawaii and local case study field observations that highlight the possibility that *Morinda citrifolia* var. *citrifolia* is a self-pollinator and that the plant may have evolved into an unclassified separate sub-varieties. It is recommended that further biological research, such as DNA identification or [chemical fingerprinting](#)* could be undertaken, as this may uncover a variety that is endemic to the Samoan islands. This differentiated feature could then be applied to the codex.

Appearance

It is recommended that the **colour, shape and texture** of the raw material should be differentiated within the codex with greater accuracy. Observational results from the case study reveal that Samoan Nonu processors are clearly able to identify when fruit is at the stage where it is 'fit' for processing.

Cultivation

Opinions documented throughout the case study fieldwork, suggest that many Nonu growers have observed a distinct difference in quality between Nonu which has been highly managed (**mono-cropped**) and that which is allowed to grow '**wild**', with the local perception that 'wild' makes a better strength and quality of juice. It is recommended that these aspects are incorporated into a differentiated feature. There could be more investigation into Nonu's growing conditions, as this could strengthen claims of juice quality and enhance Samoan Nonu juice as a differentiated product.

Terroir

Is one of the main aspects of the GI framework and its importance has been outlined extensively in Chapter two. Any future codex policy must provide

* Refer to Glossary of Terms

some basic representation of Samoa's environmental factors, to include examples of specific soil type, hours of sunshine and the level of precipitation that is specifically related to Samoa's climate. The Ministry of Natural Resources and Environment (MNRE) have recently accumulated statistical data and condensed these figures into climate 'mapping' of local areas. This should be continued and expanded to include differentiation for: climatic indices and values, rainfall regime, mean rainfall (mm/year), climatic classification, mean, maximum and minimum temperatures, frost regime, solar radiation; geology and lithology, soil characteristics, composition, texture and profile; altitude, latitude, hydrology and hydrogeology, coastal influences, rivers and mountain chains or any characteristics that have a bearing on the growing conditions of the Nonu plant and the specificity of the product, which could be included in future codex proposals.

Demarcation

Future standards clearly need to set the product in its geographical area. Demarcation is fundamental when drawing up the product specification because GI's are defined by their geographical area. The name '**SAMOA**' or '**SAMOAN**' placed at the beginning or end of the product will not only denote the origin and geographical zone of the product but it will also assume product history and cultural heritage and will provide the product with an important place-based distinction. Thus, the place name **SAMOA** becomes a '**marker of origin**', providing consumers with the assurance of quality, that the product associated with the GI, comes from its stated geographical region. Using the words '**SAMOAN**' and '**NONU**' together will provide the product with a strong place-based distinction and producers and processors will earn the entitlement to bear the name of the GI as a 'right'.

Technology

Future standards need to retain basic industry standard classifications but additionally need to highlight traditional knowledge and human skill as features of the processing of Samoan Nonu juice. This is especially true for the

‘aged juice’ process. Standards need to show more detail to illustrate how these aspects are ‘embedded’ within Samoan culture.

Culture

GI’s make culture tangible and any future standards need to highlight product history and heritage. The standards need to place more emphasis on a codex that describes the long-standing use of Nonu as a resource and its place in Samoan: **practice, ritual, spirituality and cultural worldview**. This should, in essence, reflect a body of knowledge, developed by people with extended histories of interaction with the natural environment. Evidence is required, in the form of historical documentation, that can provide proof of product history and reputation, as this will ensure traceability. No recommendations are made here, as this research cannot conceptualise this complexity. But some helpful suggestions may include greater recognition of **Samoa’s Matai and Tapa heritage**, especially as they could be used as aspects of **marketing** the Samoan Nonu product. This would certainly provide further strength to the codex and if included, the cultural characteristics would add an extra dimension to the identity of the product.

5.4.2.3: Nonu Narrative

Name

Traditionally, local households – producing their own juice – choose to call this ‘**Black Nonu**’, because of its black-brown colour. As a title or name, this is dynamic and provocative, with use of the adjective giving a vivid description of the ‘type’ and ‘style’ of the juice. It could also be argued that this type of juice could possibly be classed as ‘raw food’ as it is not subject to pasteurisation or heat but is completely free from treatment. Local households may do well to use this to their advantage, when pitching at high-value niche markets. However, the difficulty of processing to international food safety standards and biosecurity requirements may counter-act the benefits of marketing this as a ‘natural’, un-processed product.

Variety

The study recommends that the GI could be based on giving the plant a definition for its 'place' of origin. The case study included research from 2010 (Razafimandimbison, McDowell, & Bremmer, 2010) that suggests that Nonu has its origins in the Pacific, as opposed to that of India, Asia or the Americas. A much more exciting discovery is the research conducted by McClatchey. There is a suggestion that the plant could be a 'self-pollinator' and that observations carried out on 256 herbarium specimens, show distinct differences in leaf size and shape, with Samoan Nonu displaying characteristics of a 'long, strap-like leaf shape' (McClatchey, 2002). This may mean that the plant has had the capacity to 'morph' to its environment, in order to survive. If this is the case, then it could be argued that Samoan Nonu has particular characteristics that are not found anywhere else. Much of Whistler's research supports this observation, where it is suggested that 50% of all plant life in Samoa is 'endemic' and that this may have been largely due to its geographic remoteness and isolation (Whistler, 2005).

Appearance

Processors understand the plant really well. They know that when fruit is lending towards a pale green yellow, it can be used. Processors can also note when fruit colour is translucent and deemed unfit for processing. It is recommended that the standard makes clearer definition for fruit colour, shape and texture to provide greater accuracy, so that features pertaining to SAMOAN NONU fruit can be distinguished objectively from other products belonging to the same category.

Cultivation

Nonu is extremely hardy. It has adapted to harsh environments and can weather most natural disasters. It has the ability to withstand tropical storms, due to its strong deep, root system and can easily tolerate salinity as it grows most abundantly amongst the salty-waters of coastal areas. It is especially

unaffected by the high levels of atmospheric humidity that are ever-present in Samoa. Nonu is also easy to propagate. It does not need the additions of phosphate fertilizers or chemical cultivation as it is currently disease-free. This makes it a cost-effective alternative for the grower as there is no need for chemical cultivation and it makes growing and processing safe and more environmentally friendly

Nonu has multiple advantages as an agricultural crop. This can be evidenced by showing its strengths. The plant is prolific. Sometimes it is even considered to be invasive, as wind-blown seeds germinate randomly and the plant is often found springing out of rocky, uncultivated ground. Nonu produces fruit all year round and so can be harvested 365 days of the year. As there are no 'seasons' where Nonu does not grow, this means the international market could be supplied whenever there is a demand by consumers. At its current capacity it is a sustainable crop. However, its capacity is weakened when product demand fluctuates. A decline in demand usually results in producers chopping down the existing stock to make way for crops that are considered to be 'in demand'. Thus, when the tree stock is reduced, it cannot supply fruit, and it takes a further 12-18 months before a new tree can be harvested.

Terroir

Proving the terroir of the Nonu product is a vital link to the success of the product. In previous years, Nonu's success was based on its medicinal properties and claims to benefit human health. These claims lay in the products phytochemical properties and how this was related to the plants ability to 'take on' beneficial nutrients from Samoa's volcanic lava soils. Samoan soil types are crucial to creating place-based characteristics. Further research into the relationship between the content of Samoa's volcanic soil and Nonu's phytochemical composition, may indeed prove that Nonu juice is advantageous to human health. In Samoa, locals believe that Nonu can reduce blood pressure. A simple blood pressure experiment may quantify these claims.

Demarcation

The use of a place name is fundamental to establishing the GI, as only products from that area are able to earn the entitlement to bear the name of the GI. But if the name 'Samoa' is to be included as part of a recommendation for future use, it needs to be evidenced as having been recognised and employed as such, prior to the application of the GI. As is indeed the case for local producers Nonu Samoa and CCK 's 'Samoan Gold'. Documentation needs to be found which details the first use of the name and any description of the processing method. Literary quotes and references in literature, current or old labels that allow the product to be linked historically to the place – particularly in terms of human expertise – are useful, as are oral testimonies of local inhabitants, elderly persons, authorities or even endorsers from outside the region.

Thus, evidence of the combined use of 'Samoa' and 'Nonu' will support the assertion that the product is 'Made in Samoa' from the producers and processors involved within the Samoan Nonu Industry. Additionally, policy standards could grant license for local processors to officially 'name' the locality from which the Nonu fruit has originated. Localising place names and villages, such as those on Samoa's West Coast Road could support the use of 'identifying' the name of a place, creating more specific localised specialisation. However, it has already been noted that this may not serve the industry if juice continues to be a 'blend' of many fruits from different areas.

Technology

The localised specialisation is the transformation of fruit to the juice product and is the **technical core of the GI codex for Nonu**. It highlights the conditions of production that impact on the specificity of the product, showing how the product is indicative of the social and cultural practices of individual processors in relation to their geographical origin. This specification has been detailed in Chapter four. The transformation chapter basically outlines the distinctive features of the process. It identifies each

specific stage, from sourcing the fruit to its pasteurisation. This is of course, limited to the production of juice at the Nonu Samoa site. Other processing sites vary according to the governance of each individual company. However, all things considered, most company methods are locally appropriate and environmentally sustainable. As a general point of consideration, future codex policy should include a 'standard' description of the Nonu juice process, with a focus on hand-crafted, low-tech methods that support product specialisation and can be used to promote artisanal products for select niche markets.

Culture

Samoa is a small island with a small population, where the pace of life is generally slow and family relationships are paramount to the social fabric. Families are generally close-knit – as seen with the Nonu Samoa family – and the island has a traditional family culture, with strong blood-ties between relatives. As a rule, the Matai title generally makes society cohesive as it involves everyone. But this is sometimes 'at odds' with current neo-liberal values of self-interest, where the drive for 'status' and commodification is growing stronger. Most Samoans live simply, with enough resources to sustain immediate and extended family. However, there is increasing pressure for individual attainment. This is becoming more prevalent, with some believing it is creating imbalance. Many believe that there is always a danger that traditional culture will begin to disappear. Therefore, in the case of Nonu, there is a danger of traditional techniques being eroded by the 'ease' of technology. Once this skill-base has gone, tradition will be lost forever but a GI has the potential to retain and protect this.

5.5: Nonu as a Niche Commodity

Even though access to data at village level was limited, the overall research of literature, observations and case study findings suggest that there is the opportunity to combat the decline of the Nonu Industry, if the EU-GI concept is used in combination with place-based niche production.

I argue that the role of a Nonu GI – as a ‘glocal’ concept that sits between both global and local – works with – not against – the local, and reinforces provincial characteristics in ways that large-scale industrial models simply cannot appreciate nor comprehend. GI’s take into account all of the environmental, social, cultural and often spiritual understanding of places and the land in which Samoan people have lived for many years. These ideas can render significant potential for increased product marketing opportunities, generating useful synergies and extended opportunities for sustainable development within the geographical area. Additional positive externalities include better employment, governance and improved infrastructure.

Much of the above shows the positive aspects of the GI design, but, as a word of caution, GI’s will not suit everyone. Applying protection under GI regulations is not a ‘quick’ fix. Like familiar branding, GI’s take many years to become recognised by consumers. It takes time to establish product quality and reputation, with the possibility that the GI may use scarce resources – over a long period of time – which may already be stretched in developing countries like Samoa and become insufficient to apply usefully. GI’s have been associated with some potentially negative aspects; (1) they can be badly managed and dominated by political interests, (2) can be appropriated by one or two individuals, which can exclude the poor (3) are likely to incur local governance and institutional costs and (4) have been argued to reduce innovation, due to an increased protectionist attitude. As a worse-case scenario, they have even been known to erode culture and damage the environment. Therefore, the potential for economic and socio-political negativities must be considered by producers, processors and governments, as the decision to pursue a GI process requires careful measuring of US and EU mechanisms.

5.6: Chapter Review

The costs and benefits of applying two different systems of policy protection to the Nonu Industry in Samoa were reviewed and analysed through the research objectives. Difficulties were highlighted by showing the positioning of the industry, within the 'middle ground' of international 'top-down' policy and current attempts to apply US influenced GI codex from the 'bottom-up' and are argued as inappropriate. Examples from the literature present this as a counter-argument – in favour of an EU-based policy – and as central to the successful – and arguably, more sustainable – development of Nonu export production in Samoa. Showing the rapid advance of the Nonu export industry from 2000-2005, through a series of statistical graphs, the discussion details the rise and decline of the market, giving reasons of 'smallness', isolation, distance to markets, internal constraints, lack of public-private partnership and unsubstantiated health claims as a few of the factors for Nonu's decline. Strengthening the producer-consumer dynamic could reverse this trend. Starting with an overview of the current Samoan Intellectual Property Act (2012), the chapter discusses strategies to strengthen current legislation, extending current GI policy, from that which is that 'essentially attributable', to that which provides criteria for more rigorous certification and guarantee of origin for consumers. To do this, I discuss the formation of my own and the community's definitions of a sustainable GI design, and incorporate the richness of the environment and culture as a product 'story' or narrative, which serves to differentiate the Samoan Nonu product from other Noni products and will curtail the necessity to distribute the juice as a cheap bulk generic.

6

CHAPTER 6

Conclusion

Conclusion

6.0: Chapter Summary

This chapter concludes the thesis through a series of sections. The first section concludes on the producer-consumer theme that runs throughout the thesis, stressing the desires of some present day consumers to be able to track their purchases from their origin to their consumption. The second section mirrors the introduction in addressing the aim of the thesis, emphasising the outcomes of research conducted on the two main systems of protection. The third section concludes on the key findings of the research and is structured by the five principle thesis objectives, with the benefits and limitations of these findings addressed and recommendations made, and the last section reviews the final reflections upon the thesis and the importance of supporting the sustainable development of local products through the maintenance of local identity in an increasingly homogenised and globalised world.

6.1: Reconnecting: GIs and the Importance of Place in the Consumer Space

This research has shown how the essence of a European idea – a localised GI – can be transferred from the locality of place, across the consumer space to be presented as a globalised commodity. Therefore, it could generally be argued that the main role of a GI is to ‘reconnect’ the producer with the consumer, in what has otherwise been known as a disconnected global market, inundated

with increasingly homogenised products. Specifically, the European based GI guarantees a transparent pathway for consumers by presenting 'place' as a 'marker of origin'.

The EU approach to product protection provides an interesting model for development. Historically, GI's have been viewed as a way to support agricultural production in marginalised rural regions, places that have previously struggled to adapt to globalisation. Now deemed as a contemporary approach to the rural economy, this evolved GI system of agriculture has the potential to support developing countries, such as Samoa, and the unique values associated with this place and its product. The current EU-GI provides a range of benefits to many distinctive geographic locations and provides the potential for other regions to utilise this concept.

For the Nonu Industry in Samoa there is no specific Nonu related GI. Therefore, the application of an EU-GI could provide support for: (1) product production, (2) product processing, (3) governance, (4) distribution within international trade and; (5) inspire different levels of action from local to global and from social to economic. Furthermore, the EU-GI represents opportunities for sustainable development and encourages the involvement of a wide selection of key actors in the control, management and development of the GI, addressing several segments of the population, from producer right through to distributors and retailers.

Thus GI's go beyond straightforward economic gains. Not only can their correct application provide *direct economic benefits* such as; improved market access and increased employment and income, they also provide *indirect benefits*, such as; greater regional cooperation, improved local governance and spin-off's like tourism. Furthermore, they provide *social benefits* like; improved social cohesion, validation of place-based identity for local inhabitants and the elevation of local self-esteem. GI's are also a valuable communication tool, as cultural recognition in the marketplace, facilitates the transmission of traditional and artisanal skills.

EU-GI policy has positioned 'place' at the heart of rural development in Europe. Thus, the geography of place, territoriality and the shaping culture of local communities and business are all significant in providing place-based distinction for rural agricultural products. During a European Community (EC) evaluation, the benefits of applying a GI were summarised as amplifying: (1) regional cooperation, (2) positive identity of regions (especially referring to culture and the environment), (3) profiling of a region as an attractive business location, (4) improvements in general infrastructure and; (5) improvements in environmental quality, linked to the sustainable utilisation of resources.

6.2: Addressing the Aim

Motivated by the narrative of the humble Cornish pasty and the more exotic Noni juice drink from 'Tahiti', this research has emphasised how the concept of a GI can be interpreted in different ways, but needs to be applied in ways that are appropriate to country needs. Two examples were used to introduce the current but contrasting GI systems, (1) a GI from the publically orientated EU system and (2) a GI from the privately orientated US system. These examples illustrate two important key points that are linked to the aim of the thesis.

Acknowledging that the use of Geographic Indications in Samoa is in its infancy, the opportunity stands to develop a GI system that would best promote and support the Nonu Industry. Therefore, when addressing the aim *'How can the application of a GI support sustainable development of the Nonu Industry in Samoa?'* two fundamental questions were formed; (1) Can the current US influenced GI protection system promote and support sustainable development of the Nonu Industry? and; (2) Would the adoption of an EU influenced GI provide better support for the sustainable development of the Nonu Industry?

Results from this research argue against the ‘top-down’ influence of the US system in Samoa. One of the major concerns raised is that a US definition of a GI is arguably more ambiguous than an EU-GI. Therefore, the product pathway is not clear. This lack of clarity raises the subject of potential pitfalls. With little transparency – and individual owners left to design their own quality controls – the US system is more likely to foster deception and the ‘passing-off’ of products, as evidenced in the Tahitian Noni example. As a result, it is my view that Samoa should lean toward the development of an EU-based GI that can support the existing ACP-EU export access to the European market and *inherently guarantees* product origin as opposed to the US influenced protection system that *does not*.

So, to harness the purchasing power of consumers and increase the prospects of producing a high-end value product, it is vital that certification for place of origin is applied, alongside of promotion for the sustainability of elements that makes the Nonu product GI worthy. Government departments – such as the Ministry of Agriculture and Fisheries (MAF), Ministry of Natural Resources and Environment (MNRE) and Scientific Research of Samoa (SROS), need to work with Nonu Industry members to adopt a clear definition of origin for a GI, with much stronger, clearer policy guidelines than are currently available.

Policy for Nonu should include at least some of the factors evidenced in the case study and summarised in the discussion (Section 5.4.2), namely; place name, delineation, climatic indices, biological variety, culture and localised specialisation methods. If policy is well-researched and defined, this should counteract any ‘loopholes’ that can be manipulated, particularly when referencing product characteristics which are supposed, ‘essentially attributable’ to the local area. Such a policy should provide all-important market transparency for the consumer. Thus, the role of the public sector is essential to provide the legal framework to prevent fraud and deception, so that the market can operate for the benefit of both consumer and producer.

6.3: Addressing the Objectives

6.3.1: Objective 1: An Assessment of the GI Systems – and how they are used in Samoa

In the context of Samoa, influences from two systems can be seen within policy and legislation surrounding the current GI (Figure 1.2). The figure shows that the majority of influence stems from the USA and has led to the development of Samoa's Intellectual Property Act (2012). Additionally, figure 1.2 shows the positioning of the product codex, as juxtaposed between the influence of 'top-down' policy from the WTO/FAO and 'bottom-up' representation from local industry members within the region.

The regional codex represents all Noni/Nonu fruit production in the Pacific. Thus, due to these confines, the research argues that the opportunity to differentiate and support high-end niche value is sadly lacking for Samoan Nonu. Additionally, the success of Tahitian Noni – which is dominant in Pacific Rim markets (USA, Japan, China, Australia, New Zealand) – has led to the Tahitian product becoming a global standard to which other Nonu and Noni products find it almost impossible to match – on both scale and reputation.

Therefore, although influences from the European system are relatively scarce, more engagement with an EU system could provide the opportunity to create and establish an EU influenced GI, assisting with access to Europe which may provide a unsaturated and lucrative export market. However, the product must comply with the publically oriented EU definition of a GI which is currently in direct juxtaposition to the privately oriented IP act. Apart from the more obvious distinction of 'public' versus 'private' rights, the US influenced system is arguably weaker than the EU in many ways. These are detailed in the following section.

6.3.2: Objective 2: A Description of the Local to Global Links of the Nonu Export Industry

EU-GI's are the embodiment of global to local links as they are at the heart of 'glocalised' goods and services that participate in the global market, while at the same time, being supportive of culture, economy and local environment. In the context of the Nonu export industry, these links have been identified through two channels; (1) the commodity chain structure and (2) the producer-consumer dynamic. Commodity chain links have been used as an approach to investigate the physical link between the product and its place of origin, while the producer-consumer dynamic was used as a theme to interrogate the psychological and often abstract links that drive the supply chain.

Managing the physical global to local links via the commodity chain structure is crucial to the export success of the Nonu Industry. Much of this success will depend upon establishing a 'two-pronged' approach, with strong GI legislation from government sources and the continued support of commodity chain actors on the ground (Figure1.2). For many decades the Nonu Industry has struggled without any specific support from the Samoan government. Current policy is still limited and only makes minor reference to industry facilitation. Therefore, it is only due to the unwavering determination of local processors – to build and develop – that the industry has survived.

In many ways, Nonu Samoa, CCK Ltd, Yoshida Commercial and R+L Keil have gone a long way to establishing the foundations for solid supply chain management. Moreover, each NASI processing plant operates as an individual business – producing Nonu juice through slightly different methods – whilst working together in unison to govern standards and facilitate common features of the Nonu product, that focus on maintaining quality and consistency. One criticism of this type of localised control is that it can lead to a lack of innovation and resistance to change. However, as local processors

working within NASI, have collectively managed to improve on product quality and diversification, by constantly re-vamping product image and standardisation, stagnation seems highly unlikely.

Nonu stakeholders need to continue to cooperate, as they have managed to; enhance the Nonu product, reduce transaction costs and may, with additional technical assistance, comply with increasingly ubiquitous public and private market standards. Theoretically, localised control has possible negatives, in that it increases the potential to create unequal financial distribution. But witnessing the enduring and inherent integrity of Samoa's cultural systems, of Matai and Tapa heritage, it is unlikely that this will be the case as these strong connections are likely to override or dispel any individualistic attempts to consolidate power and economic value within the supply chain. A further positive of applying a commodity chain approach is that it creates product transparency by physically linking the place of origin to the consumer. This connection is useful as opens up the chain. Each section can be broken into 'bite size' pieces, which helps the consumer to understand product production and can be 'sold' to the consumer.

6.3.3: Objective 3: An Analysis of the Nonu Industry through a Commodity Chain Case Study

In May 2012, I embarked on a nine week field trip to Samoa. This gave me the opportunity to assess the potential for GI's. During this time, I was able to meet and speak with a number of people involved in the Nonu Industry. Through these meetings and my own ethnographic observations, I was able to record and gather a variety of information and local knowledge, as well as assess the local space. Discussion of story-telling and narratives also played a pivotal role in understanding the marketing of place. Most of this information has been used to distinguish the Samoan Nonu product to give it more commercial value.

Ethnographic observation of the Nonu Industry revealed some significant findings: (1) differences in mental attitudes to work, (2) Nonu in village culture, (3) ties to Matai and Tapa heritage, (4) localised methods of the transformation process and; (5) constraints of distribution. One of the main observations was the different approaches to work and the working day. Western cultures tend to view the work day as an average 7-9 hour period, where we apply ourselves to all manner of tasks in order to be considered 'employable' and 'productive'. In contrast, I noted that Samoan work attitudes are arguably very different. Most Samoans are strongly influenced by their environment and surroundings. Their daily activity is determined by the heat of the day. High temperatures reduce physical action. So, like many Mediterranean cultures, Samoans take quite long strategic 'breaks' from work, during the hottest part of the day. Although many Westerners would perceive this as 'unproductive', Samoans have developed an attitude where their pace of life and work is dictated by climatic extremes.

Noticing that the main source of wild Nonu plants are maintained by local families in Samoan villages, I observed that although the growing of the fruit is run by the families, it is the Matai who elect village members to collect the wild fruit and who organise its delivery to the Nonu processors. But because Nonu grows wild, there has been little or no control over the maintenance of the Nonu plant and in previous years, villagers have often been keen to 'spray' plants, in the belief that they are managing them more effectively. Therefore, regulation and monitoring of the plant's maintenance has been difficult and it has proved problematic for processors to obtain organic certification.

Recently, because of the establishment of strong links between Nonu Samoa Matai and village Matai, the Matai from Nonu Samoa have been providing villagers with information to choose between chemical or none chemical maintenance. The Matai of Nonu Samoa have been able to explain the

differences between fruit needed for conventional and organic juice. They have found that more villagers are switching to none chemical use. Thus, like the requirements for a GI, a fruit that meets the standards – and does not get sprayed – sells for a higher price because it is organic. Villagers are slowly realising that they get more money for fruit that is certified as organic. They are also finding that it ‘pays’ – in more ways than one – to protect the natural resource and the surrounding environment. Therefore, Samoan villagers already hold the rudiments of standardisation for the environmental elements of an EU- GI.

Watching how Nonu fruit is transformed to a juice is a very specialised process, as each company has their own individual methods and machinery. Most methods are low-tech and take many hours – even days – to produce. Lots of effort, hard work and a great deal of pride and passion for the product give it individual characteristics and in most cases, the product could be classed as ‘handmade’. The upside is that these methods can be marketed as GI’s. The downside is that these methods are slow, so this limits the amount that can be produced. Made in this traditional way, the Nonu Industry will always have a sustainable threshold, or ‘glass-ceiling’, which limits the capacity of production – but if marketed correctly – this can actually help to retain consumer perceptions of ‘scarcity’ and its GI value within niche markets.

Observations show that the Nonu product is currently limited by processors inability to add-value at source. As evidenced, the majority of Samoan Nonu is exported as a low-value ‘generic’ product. This means that the majority of Samoa’s GDP comes from selling Nonu by the container load. Not adding value at source means that other companies reap the benefits of the Samoan Nonu juice, by applying their own label and claiming the product as ‘theirs’. This eventuality completely defeats the object of trying to differentiate through a GI. So, the industry must try to find ways in which value can be added on-site potentially utilising other local businesses. The EU-GI represents the best way to break-out of the commodity trap, as this can be

achieved by evidencing product origin through narratives, design, market image and promotion.

Nonu Industry members need more chances to move into marketing. Although many have been trying to establish new contracts in; China, Macau and Korea, by organising trade fairs, there needs to be more focus on training, so they can acquire the skills to market the product effectively. Training in product design, marketing techniques and market intelligence in general – especially the characteristics of end markets – would be an advantage. Facilitation for this could come in the form of workshops and technical assistance from international organisations like OXFAM, VSA or other development institutions. Otherwise, the product will only ever be classed as a generic and no comparative advantage can be created. It will have to compete with other numerously similar and homogenously mass-produced products that trade primarily on price and will always be subject to fluctuations in the global market.

6.3.4: Objective 4: Application of Place-based Imagery and Product Distinction through Self-definitions of the Nonu Community

Marketing is central to the success of the Nonu product – and along with the chance to develop these skills – members of the Nonu Industry have already considered the benefits of applying place-based imagery to define the identity of the Nonu product. As GI's are claimed to be at the intersection of culture and geography, the application of an EU-GI, is more likely to develop and promote cultural identity than a US-GI. A Nonu GI under the EU system would benefit from stronger associations with place-based imagery and narratives. It could exploit how Samoa is internationally regarded as a warm, tropical paradise, with a clean, pollution-free environment, continuing to build on more specific references to Samoa's exoticism and endemic species, to show how this relates to Nonu production.

Definitions of Nonu production and processing are outlined in a number of ways and they have been observed as creative expressions of individuality. For example, CCK – with the Tapa band around their label – use pictorial units of traditional Siapo design and symbolism to illustrate a ‘story’ and show that they want to convey a sense of commitment to upholding the traditions of culture. Similarly, Nonu Samoa incorporates a very personal design that has been carried through the generations. Their marketing focus is on family heritage, the lineage of the Matai and how values, such as ‘honour’ and ‘integrity’ are intrinsically ‘threaded’ throughout the entire Nonu process, giving the consumer a sense of how these values are embedded in the way that the company is run.

In the same way, processors believe that by creating different signs and different labels, they also are creating competitive advantage. I agree with this, up to a point, but suggest that too much contradiction causes confusion for the international consumer. To counteract this, I believe that the product itself should have some unifying aspects that can solidify product identity. Therefore, I recommend that NASI members need to keep in mind the following two points; (1) consistency for product name and (2) consistency for product origin. It is really important to establish one word for the product to provide marketing continuity. I would propose that NASI members use the colloquial word ‘Nonu’ – not ‘Noni’ – on all Nonu products because it is an excellent differentiator – within Pacific markets – and provides a unified marker of origin for international consumers. It is equally important to provide a consistent approach to product origin. Therefore, I suggest that the word ‘Samoa’ or ‘Samoan’ be used on all Nonu products, again to act as a differentiator from Noni products from other areas.

6.3.5: Objective 5: Benefits and Challenges of Developing a Place-based Codex for the Nonu Industry

The current Pacific codex available is a generic Noni fruit document that covers – in no great detail – the standard features of Noni fruit derived from the greater Pacific region. To advance in the direction of an EU-GI a more specific Samoan Nonu codex would aid in stressing the uniqueness of the product and effectively differentiate Nonu from Noni.

Through the aid of the Nonu community and use of a commodity chain approach, viewed through the lens of a producer-consumer dynamic, the challenges of recording and documenting a Nonu specific codex were minimal. The unique attributes of the fruits; (1) growing environment (soil, climate), (2) biogenic properties and varieties, (3) the technology used to convert the fruit to a juice, and; (4) the cultural and social narrative – developed over many generations – were conveyed to me during my nine week field station by key actors of the industry. This enabled me to contribute to the present generic standard features of the Noni codex by detailing the differentiated features specific to Samoan Nonu, highlighting the distinctive differences of Samoan Nonu from all other noni products of the Pacific and around the world. Furthermore, a Nonu narrative was documented in the knowledge of the producer-consumer dynamic. Exploiting the power of the consumer purchase, a detailed history or narrative was created to ‘sit’ behind the product. Thus, the ‘story’ enables consumers to more effectively ‘buy-into’ a piece of Samoa when they buy the Nonu juice. This appeals to consumers desire to purchase a piece of the Samoan Nonu ‘story’, and feel as though they have contributed in some way to the cultural and sustainable practices of Nonu production, as well as mutually benefiting themselves through the purchase of the health tonic.

To create benefits, it is recommended that NASI identify the standard and differentiated features of the research codex and synchronise both, to use them as a ‘recipe’ for the production of their product. One product, with a single

name, will create a strong identity. It will be easily recognised by the consumer and will create comparative advantage and reduce inter-island and international competition. Unfortunately, the limitations for creating quality and product reputation still lie with the ability to add-value on-site, as this leaves GI efforts redundant when juice is sent out as a generic. My research recommends that NASI continue to apply prerequisites for EU-GI based on the synchronised codex and continue to request more governmental support to shape EU influenced GI policy. NASI need to continue the engagement of this synchronised codex to support narratives in marketing and advertising the product, despite the lack of policy specific to Nonu

6.4: Final Reflections

By taking the initiative to complete a Master's degree in Development Studies, the compilation of this thesis has shaped and re-confirmed three personal beliefs; (1) that as consumers, we should consciously trace the pathways of our food, to provide more certainty for its quality and safety (2) that as consumers, we have a responsibility to choose produce that can be seen to promote the sustainability of communities and the environment and (3) that we are all part of an interconnected world and our actions have consequences for others.

Firstly, I believe that we should all be conscious of being able to 'trace' a path, for our food choices. It is of consequence, that by researching and viewing the position of the Nonu product and the industry in Samoa, that this thesis – in itself – provides a transparent academic document that reveals the; 'who', 'where', 'why', 'what' and 'how' of the Nonu product process and that this exposure can increase awareness, by stimulating the interest of a wider audience. I hope that this research has gone some way to contributing to the small body of literature – by assessing the benefits and challenges of applying GI to the Nonu product – through the five objectives and hope that this thesis will start and keep the conversation going, inspiring others to do the same.

Secondly, this research reflects my own efforts to resist the purchase of cheap, mass produced products and to stress the need (or consumer desire) for others to join me, to begin to seek out and purchase identifiable products in an unidentifiable globalised space, even if it means we pay a little more. My own reflections concur with a concluding remark on GI's, which appears to summarise – with some eloquence – the potential of the concept as the following; 'GI's may be as close to a comprehensive, equitable and market-orientated rural development package as we have ever seen' (Giovanucci, 2009 pg 9). Although documentation on the costs and benefits of applying GI's is in its early stages, it is hoped that this claim comes to fruition and that GI's, with their market-oriented aspect will not be globalised for 'corporate' investment (Alywin, Coombes and Chan, 2010).

Finally, this thesis has taken me on a reflective journey half way across the globe. It has led me to recollect the history of my own place-based identity – in the UK. Thus, the Cornish pasty 'story' represents a 'place' from my homeland and acts as a personal connection to all the things I remember – as part of my past – but is also representative of the influences that made me the person I am today. This is my identity. Thus, from the UK to New Zealand to Samoa, through the creation of this action, I am personally connected and experience the inter-connections of local and global spheres across the world, within space and time, writing my own 'glocalised' version of events that are mirrored within a globalised world.

Glossary of Terms

Appellations of origin	Appellations of origin – as well as Geographical Indication – are not defined in the same way everywhere. AO was one of the earliest forms of GI and was first mentioned in the Paris Convention, however, the Lisbon Agreement was the first to formally use the term and provide a single registration procedure. AO is the geographical denomination that serves to designate the quality or characteristics of the product. The later TRIP's definition was derived from this.
BRIX	BRIX is used in the food industry for measuring the approximate amount of sugars in fruits, vegetables, juices, wine, soft drinks and in the starch and sugar manufacturing industries. Different countries use the scales in different industries. In the UK brewing is measured with a 'specific' gravity X 1000. European brewers use 'Plato degrees' and in the US industries, they use a mix of specific gravity, Plato degrees and Baume degrees.
Certification body or organisation	Certification bodies are authorised to establish control procedures to ensure that producers follow the established code of practice. They are generally private organisation although some are government agencies. They are accredited to international standards (so are a requirement) and help to regulate the GI market.
Certification mark	A certification mark is any word, name, symbol or device that signals the registered certification of a producer's quality characteristics. It conforms to specifications laid out by the owner, which require some verification has been met, but this may or may not, include geographic origin.
Claw back	A term used to restore 147 products from their generic use (in other countries) to regain exclusive ownership in Europe.

Code of practice	A document of standards and specifications (usually agreed by the producer' association/managing consortium, if not part of existing laws). Refers to raw material, production conditions, process, product specification or qualitative requirements and the circumstances in which they are applied/allowed. For the EU, this refers to PDO/PDI (for details see Chapter 1)
Cornish pasty	For those unfamiliar with the Cornish pasty, the product has a long history and association with the Cornish mining community. Beginning around the 18 th century – with the emergence of tin and copper mining – the pasty is said to have been made by Cornish housewives as a lunch food for their miner husbands. Miners worked long hours, often in appalling conditions and needed a portable meal that would last them throughout the day. The pasty contained starchy carbohydrate ingredients – like pastry and potato – and these ingredients may well have been used in this way so that the meal was 'filling' and a good source of energy. The crust or 'crimp' made it easy to hold the pasty with the fingers. However this was discarded once the filling was eaten as the miner's hands and fingers were often coated with dust from the tin (and arsenic), as a highly poisonous substance and a danger to health.
Civil/common law	Civil law gives precedence to written law and is used in many (but not all) European, African, Asian and Latin -American countries whereas Common law gives precedence to prior case-law, most prominently used in the United Kingdom and United States. Both have evolved different approaches to the protection of GI's.
Chemical fingerprinting	A unique pattern indicating the presence of a particular molecule, based on specialised analytical techniques such as mass or x-ray spectroscopy, used to identify a pollutant, drug, contaminant or other chemical in a test sample.

EU, EC and the European Union	EU, EC and the European Union are used in this research as partially interchangeable abbreviations. The EU is a group of 27 independent countries. The EC encapsulates three entities within the Union. EU laws regulate the common market and the community. All laws in relation to GI's in the EU are also EC laws. The European Commission (an institution which administers the EC) is referred to as the European Commission to avoid confusion.
EC Court	The European Court of Justice, where direct action (by private parties) are heard
Generic	A term or sign is considered 'generic' when it is so widely used that consumers commonly view it as a type, rather than as a geographic origin
Geographical Indication(GI)	A GI has no universal definition but when registered, take different forms, such as AO, PDO, PGI, marks. (for details see chapter 2)
Indication of source	A sign or expression used to indicate that a product or service originates in a particular country, region or place, without conveying a specific quality or reputation eg: Made in Samoa.
Intellectual property (IP)	In law, IP is an umbrella term for various legal entitlements which attach to certain writing (copyright), inventions (patents), processes (trade secrets) and names of identifiers (in the US) GI's or marks, where the holder can exercise exclusive rights. 1994 TRIP's made efforts to harmonise them.
MEDC	A More Economically Developed Country (MEDC) is generally regarded as a country with high levels of economic development. This is usually measured by GDP per capita. Additional indicators include low birth, death and infant mortality rates (characteristically around 10; 10 and under 12 per thousand respectively) with high levels of nutrition,

MEDC <i>Continued</i>	secondary schooling, literacy and electricity consumption per head. A Less Economically Developed Country (LECD) generally exhibits the lowest indicators of socio-economic development.
Noni or Nonu	Noni or Nonu is also known as Morinda Citrifolia L. It is used in contemporary society as an 'alternative' medicine and is commonly consumed as a ready-to-drink health beverage.
Origin product	Origin product is a term that applies to any product whose origin is either (1) implicitly known by the consumer (as a result of long-lasting associations of the product with its place of origin) or (2) explicitly identified with that place via a label identifying a GI.
PDO (EU)	A Protected Designation of Origin (PDO) relates to an agricultural foodstuff that is produced AND processed within the defined geographical area. (see chapter 2 for more detail)
PGI (EU)	A Protected Geographical Indication (PGI) relates to an agricultural foodstuff that exhibits some unique contribution (production/processing or preparation) to the defined geographical area but it need not be produced in the geographical area (place).
Palangi	Palangi is a colloquial word used by Samoans, which is said to mean, 'European' or a person of Caucasian descent (white)
Public good	A public good is defined as something which can be used by multiple actors and it is not possible to exclude any actor from benefitting from it, regardless of whether it is produced by the public or private sector e.g. street lighting.
Standards	In global trade, standards are used by many different organisations, to facilitate and coordinate the nature of a good.

Standards <i>Continued</i>	They set the 'rules' of the game, by determining product characteristics and provide product differentiation.
Sui generis	Latin. Literal meaning "of its own kind" (unique). In IP law it is mainly used to identify a legal classification that exists independently from other classifications.
Terroir	French. Literal meaning "of the land" (see chapter 2 for detail)
Trademark (primarily USA)	A GI can only be trademarked in the US if it is recognized by consumers (over time). At that point it acquires 'secondary meaning' or acquired distinctiveness and can be trademarked. The EU, of course uses trademarks, but they operate alongside of GI's and are not interconnected.
TRIPs	The Agreement on Trade Related Aspects of Intellectual Property (TRIPs) was established in 1994 and is overseen by the World Trade Organisation (WTO). The TRIPs agreement does not determine national legislation, but in order to be TRIPs compliant, WTO Member's domestic intellectual property law must establish the minimum level of protection for IPR's as laid out in the TRIP's agreement (73 Articles)
WIPO	World Intellectual Property Organisation is the United Nations organisation for global intellectual property issues whose role is to facilitate discussion and learning on IP. WIPO has cooperation agreements with WTO and keeps the International Register of Appellations of Origin.

Appendix A

DRAFT STANDARD FOR NONI JUICE

Prepared as a discussion document for
comments

SPECIAL EFFORT BY

IRETA - USP

RESEARCH DEPARTMENT

AUGUST, 2004

CONFIDENTIAL INTERNAL USE

CODEX STANDARD FOR NONI PRODUCTS

Noni juice and noni powder

1. SCOPE

This standard applies to packaged aqueous noni juice and dried noni powder as defined in section 2 of this standard and offered for direct consumption including for medicinal purposes. It does not apply to the product when indicated as being further refined, flavoured, sweetened, special extracts or carbonated drinks.

2. DESCRIPTION

2.1 PRODUCT DEFINITION

Noni juice is classified into 3 categories depending on how it is processed:

2.1.1 Aged juice - The noni fruit is allowed to age for a considerable length of time, allowing the ripe fruit to become fully soft. At this stage juice seeps out of the fruit. The traditional method allows active polysaccharide compounds to be further synthesized and released into solution. A long aging (2months) allows the transformation of sugars into organic acids, producing a stable, low ph product.

2.1.2 Non - aged juice - In this process, green (hard) noni fruit is pressed and the resulting juice becomes the finished product.

2.1.3 Reconstituted juice - This is a water extract of the dried fruit powder. If when a quality dried fruit powder is mixed in correct proportion of water a product similar to non-aged juice is formed.

2.1.4 Noni fruit powder - The noni fruit powder is classed in 3 categories

(a) *Mechanically dried fruit powder.*

(i) Ripe noni fruit is washed, sliced and placed in low temperature dryers to preserve the natural enzymes.

(ii) The dried fruit slices are then milked into powder. This milled powder is clean, aseptic noni fruit powder containing all of the active components as well as other compounds.

(b) *Sundried fruit powder*

(i) Ripe noni fruit is sliced and allowed to dry in the sun.

(ii) The dried fruit slices are then milled to powder.

(iii) The powder is sterilized before encapsulation or reconstitution

(c) *Freeze dried fruit powder*

(i) Green hard noni fruits are chopped and frozen

(ii) The frozen noni fruits are milled to powder.

2.2 STYLES

2.2.1 *Noni juice* - Noni juice is pure concentrated liquid without any addition of flavour, sweetness or carbonation processed in any of the three methods as defined in section 2.1, and meets the requirements in section 3 of this standards.

2.2.2 *Noni powder* - Noni powder is clean, aseptic noni fruit powder prepared in the methods defined in 2.1.4, meeting the requirements specified in section 3.

3. ESSENTIAL COMPOSITION AND QUALITY FACTOR

3.1 BASIC INGREDIENTS

3.1.1 *Noni juice*

(a) Noni (*morinda citrifolia*) fruit extrusion is aqueous liquid, free flowing

(b) Water.

3.1.2 *Noni powder*

(a) Dried, milled noni (*morinda citrifolia*) mature green or ripe fruits formed into powder

3.2 PERMITTED INGREDIENTS

(a) Carbohydrates

(b) Water

(c) Ascorbic acid

(d) Calcium

(e) Magnesium

(f) Sodium

(g) Potassium

(h) Xeronine

3.3 COMPOSITON

	Noni juice		Noni powder
Total solids	min	max	
(g/100g)	6.0	7.0	
non fat solids			
(g/100g)	4.0	6.0	
Total fat	0.01	0.03	
Energy kj/100g	80	105	
Ph	3.8	4.0	
Brix RF	7.0	10.0	
	Noni juice		Noni powder
Specific gravity	1.02		
Ascorbic acid	1.3		
(mg/100g)			
calcium (mg/100g)	60		
magnesium (mg/100g)	193		
sodium (mg/100g)	20		
potassium (mg/100g)	240		

3.4 QUALITY CRITERIA

Noni juice shall have normal flavour, odour and colour, characteristics of the product

3.5 CLASSIFICATION OF DEFECTIVES

Any container that fails to meet the applicable quality requirements, as set out in section 3.3 and 3.4 should be considered a "defective".

3.6 LOT ACCEPTANCE

A lot should considered meeting the applicable requirements referred to in section 3.3 and 3.4, when the number of defectives, as defined in section 3.5, does not exceed the acceptance number (c) of the appropriate sampling plans in the FAO/WHO codex alimentarius sampling plans for prepack aged foods (AQL 6.5) (CODEX STAN 233-1969).

4. FOOD ADDITIVES

Ins no level	name of food additive	maximum
4.1	bleaching agents	Nil
4.2	Emulsifier	Nil
4.3	Perservatives	Nil
4.4	Stablizers/thickners	Nil

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provision of this standard shall comply with these maximum levels for Heavy metals established by the codex alimentarius commission for these products.

Maximum heavy metal allowable	Content (mg/100g)
Arsenic	< 0.010
Cadmium	< 0.005
Lead	< 0.005
Mercury	< 0.0025
Selenium	< 0.0005
Beryllium	< 0.005

5.2. PESTICIDE RESIDUE

The products covered by the provisions of this standard shall comply with these maximum residue limits established by the codex Alimentarius commission for these products. For noni juice the following pesticide residue should not be detectable in any sample:

- Organophosphates
- Organonitrogens
- Organochlorinated
- M- methyl clarbamates

5.3. MICRO-ORGANISM CONTAMINATION

The yeast and mold counts test should not show any detectable level of the following; yeast, mold, salmonella bam, staphylococcus, escherichia coli and coli and coliform.

6. HYGEINE

6.1 It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the recommended international code of practice – general principles of food hygiene (CAC/RCP 1-1969, Rev. 3- 1997, Amended 1999), recommended international code of hygienic practice for aseptically processed and packaged low acid foods (CAC/RCP 40 – 1993), and other relevant codex texts such as codes of hygiene practice and codes of practice.

6.2 The products should comply with any microbiological criteria established in accordance with the principles for the establishment and application of microbiological criteria for foods (CAC/GL 21-1997).

7. NAME OF PRODUCT

7.1.1 The name of the product shall be: (a) Noni juice and (b) Noni powder according to the products definitions and composition in sections 2 and 3.

7.1.2 Noni fruit juice prepared by traditional aged method, non-aged juice or reconstituted from powdered shall be indicated on the label.

7.1.3 An appropriate description of the heat treatment or dilution should be given, either as part of the name or prominent position in the same field of vision.

8. WEIGHT AND MEASURES

8.1 MINIMUM FILL

8.1.1 The hermetically sealed container shall be well filled with the product, and it shall occupy not less than 90 percent (90% v/v) of the water capacity of the container. The capacity of the container is the volume of distilled water at 20 degree Celsius which the container will hold when completely filled.

8.1.2 Flexible containers shall be filled as full as commercially practicable.

8.1.3 Classification of "defectives": *A container that fails to meet the required minimum fill as described in section 8.1 shall be considered "defective".*

8.3 LOT ACCEPTANCE

A lot should be considered as meeting the applicable minimum fill requirements referred to in section 8.1, when the number of defectives, as defined in section 8.2, does not exceed the acceptance number (c) of the appropriate sampling plans in the FA/WHO codex Alimentarius plan for prepackaged foods (AQL 6.5) (CODEX STAN 233. 1969).

9. METHODS OF SAMPLING AND ANALYSES

Provision	Level	Method	Principle	Type
Sampling	-	codex stan 233- 1969	-	-

Appendix B

SAMOAN INTELLECTUAL PROPERTY ACT 2011

Prepared by MCIL
(Intellectual Property Office)

PART VII GEOGRAPHICAL INDICATIONS

83. Definitions of area, geographical indication. - For the purposes of this part: **area** includes a country, region, locality or place; **geographical indication** means an indication, however expressed, which identifies a product as originating in a particular area, if some quality, reputation or other characteristic of the product is essentially attributable to its geographical origin; **misleading geographical indication** means a geographical indication that is misleading as described in section 86; **product** means any natural or agricultural product or any product of handicraft or industry.

84. Prohibition against use of misleading geographical indications-(1) No person is to apply a misleading geographical indication to any product. (2) No person shall: (a) sell any product; or (b) import any product for sale in Samoa; or (c) export any product for sale outside Samoa; or (d)

manufacture any product for sale if a misleading geographical indication is applied to the product. (3) Any person who contravenes subsections (1) and (2) commits an offence.

85. When geographical indication regarded as applied to a product –

A geographical indication is taken to have been applied to a product if: (a) the product or its package is marked with, contains or bears the geographical indication; or (b) the geographical indication is used in any advertisement for the product; or

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(c) The geographical indication is used in any other manner that indicates or suggests that the product originates in a particular area.

86. When geographical indication regarded as misleading-(1) A geographical indication is regarded as misleading, when applied to or in relation to a product: (a) if it suggests that the product originates in an area other than its true area of origin and it misleads the public as to the area of origin of the product; or (b) if its application to or in relation to the product constitutes unlawful competition; or (c) in the case of a wine or spirit, if the geographical indication is applied to a wine or spirit that does not originate in the area suggested by the indication, even if - (i) the true origin of the wine or spirit is indicated; or(ii) the geographical indication is used in translation and that translation evokes the original geographical indication; or (iii) the geographical indication is accompanied by an expression such as .kind., .type., .style, .imitation. or the like. (2) A geographical indication is regarded as misleading as provided in subsection (1) if it falsely represents to the public that the product originates in an area other than the products true area of origin, even if it is literally true as to the area in which the product originates. (3) For the purpose of determining whether a geographical indication: (a) suggests that a

product originates in a particular area; or (b) misleads the public as to the area of origin of a product, regard must be given to the general understanding of consumers or users of the product concerned if it has been, is being or is intended to be sold.

87. Institution of proceedings regarding use of misleading geographical indication - Any interested person may initiate proceedings in the Supreme Court in order to: (a) prevent a contravention of section 84; or (b) seek any other remedy arising out of a contravention of section 84.

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88. Remedies available in proceedings regarding use of misleading geographical indication - (1) Any person initiating proceedings under section 87 is entitled to any appropriate remedy available in respect of the infringement of any proprietary right. (2) Remedies available includes but is not limited to the seeking of an injunction or damages. (3) Subject to subsections (4) and (5), the Supreme Court has the power to award damages as it thinks fit if it is satisfied that effective relief would not otherwise be available to the plaintiff or applicant. (4) Despite subsection (3), the Supreme Court must only award damages if it is established that the defendant contravened section 84 and has given regard to: (a) the flagrancy of the contravention; an (b) any benefit shown to have accrued to the defendant as a result of the contravention; and (c) the need to deter the defendant and other persons from further such contraventions. (5) Despite subsection (3), the Supreme Court must not award damages if it is established that the defendant contravened section 84 but that at the time of the contravention: (a) he or she was not aware of the contravention; and (b) he or she had no reasonable grounds for suspecting that he or she was not entitled to use or apply the geographical indication concerned in the manner he or she did.

89. Defences available in proceedings regarding use of misleading geographical indication-

(1) In any proceedings relating to any product involving a foreign geographical indication identifying any wine or spirit, it is a defence to establish that a defendant used the geographical indication concerned in Samoa continuously with regard to the same or a similar product: (a) for at least ten years before the 15th April, 1994; (b) in good faith before the 15th April, 1994; or (c) the relevant indication is identical with a term customary in common language as the common name for such products in Samoa. (2) In any proceedings relating to the application of a foreign geographical indication, it is a defence for the defendant to establish that; (a) the indication is not or has ceased to be protected in the foreign country concerned; or (b) has fallen into disuse in that country.

(3) In any proceedings under this Part, it is a defence for the defendant to establish that he or she is entitled to use the geographical indication concerned by virtue of section 101(3). (4) This section must not be taken as limiting the defences that may be available to a defendant in any judicial proceedings.

90. Presumptions when geographical indication is registered - In any proceedings referred to in section 87 regarding the application of a registered geographical indication it is presumed, unless the contrary is proved, that: (a) the indication concerned is a geographical indication as defined in section 83; and (b) each product which is recorded in the register in relation to the indication concerned has some quality, reputation or other characteristic that is essentially attributable to its geographical origin.

91. Application for registration-(1) An application for the registration of a geographical indication must be filed with the Registrar and must specify:

(a) the applicants name, address and nationality, the capacity in which the applicant is applying for registration and the details of any agents used by the applicant for this purpose; and (b) the geographical indication for which registration is sought; and (c) the geographical area to which the geographical indication applies; and (d) the products to which the geographical indication applies; and (e) the quality, reputation or other characteristic of the products which is attributable to its geographical origin; and (f) such other particulars and information as may be prescribed. (2) An application for the registration of a geographical indication must be accompanied by the determined fee and an authorization of the agent appointing the representative of the applicant, if any.

92. Persons entitled to apply for registration - An application for the registration of a geographical indication may be made by or on behalf of any of the following:

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(a) persons carrying on the activity as a producer in the geographical area specified in the application, with respect to the products specified in the application, as well as a group of such persons; (b) a person who, in the course of business, consumes or uses a product to which the geographical indication is applied or is to be applied; (c) any organisation established to represent or further the interests of persons referred to in paragraph (a) or (b).

93. Filing date, examination and acceptance of application-(1) Subject to subsection (2), the Registrar must accord as the filing date, the date and time upon which the Registrar receives the application for registration of a geographical indication. (2) Despite subsection (1), the Registrar must accord the filing date only when the requirements of section 91 are met. (3) The Registrar must accept an application lodged with him or her in accordance

with section 91 if he or she is satisfied that: (a) the application complies with the requirements of section 91; and (b) the applicant is entitled to lodge the application under section 92; and (c) the indication sought to be registered is a geographical indication as defined by this Act; and (d) the application of the geographical indication to the products specified in the application will not be contrary to public order or morality; and (e) if the application is for the registration of a foreign geographical indication, that it is protected in the foreign country concerned and has not fallen into disuse in that country; and (f) if the application is for the registration of a foreign geographical indication, the relevant indication is not identical with the term customary in common language as the common name for such products in Samoa. (4) If the Registrar is not satisfied, then he or she must reject the application.

94. Applicant to be notified of non-complying application - If the Registrar considers that an application does not comply with the requirements of this Act, the Registrar must: (a) Inform the applicant; and

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(b) give the applicant an opportunity to respond, or to amend the application by correcting only those matters set out in section 91 within a time to be specified by the Registrar.

95. Publication and opposition-(1) As soon as practicable after an application for the registration of a geographical indication has been accepted, the Registrar must cause a notice of acceptance of the application to be published in the Savali. (2) Any person may, within three (3) months from the date on which an application was advertised in accordance with subsection (1), give notice to the Registrar that he or she opposes the registration of the geographical indication on the grounds that the application does not meet any one (1) or more of the requirements specified in sections 91, 92, 93

and 101. (3) A notice of opposition must be given in writing in the prescribed manner and must include a statement of the grounds of opposition. (4) The Registrar must send a copy of such notice to the applicant and the applicant may send a counter-statement to the Registrar within two (2) months of the receipt of the notice of opposition. (5) If the applicant fails to file a counter-statement in accordance with this subsection, the applicant is taken to have abandoned his or her application. (6) If the applicant sends a counter-statement, the Registrar must, within seven (7) days of receiving the counter-statement, provide a copy to the person who gave notice of the opposition and, after hearing the parties, if either or both wish to be heard, and considering the merits of the case, must decide whether the geographical indication should be registered.

96. Registration-(1) If the Registrar finds that the requirements referred to in section 93 have been fulfilled, and either: (a) the registration of the geographical indication has not been opposed within the prescribed time limit; or (b) the registration of the geographical indication has been opposed and the opposition has been decided in the applicant's favour, the Registrar must register the geographical indication in the Geographical Indications Register and issue to the applicant a certificate of registration. (2) An application that does not comply with the requirements of section 93, must be refused by the Registrar.

97. Conditions on registration - When registering a geographical indication, the Registrar may impose such conditions on its registration as in his or her opinion are necessary to protect the rights of the proprietor of any trade mark that was registered or used in good faith: (a) before the date of commencement of this Act; or (b) in the case of a foreign registered geographical indication, before it was protected in the foreign country concerned.

98. Homonymous indications - When registering as a geographical indication a name or word which, when written or uttered, has two (2) or more meanings, the Registrar must impose such conditions on its registration as, in his or her opinion, are necessary to ensure: (a) that the various meanings are differentiated from each other; and (b) that the public is not misled; and (c) if two (2) or more of the meanings refer to different geographical areas, that all producers concerned are treated equitably.

99. Effective date of registration - Subject to section 126, the effective date of registration of a geographical indication is the date on which the application for registration was lodged with the Registrar in accordance with section 91.

100. Effect of registration-(1) Only producers carrying on their activity in the geographical area specified in the register have the right to use in the course of trade a registered geographical indication, with respect to the products specified in the register, provided that such products possess the quality, reputation or other characteristic specified in the register. (2) The registration of a geographical indication must not be taken as giving the registered owner exclusive rights in that geographical indication. (3) Registration of a geographical indication under this Act shall, in any proceedings under this Act, raise a presumption that such indication is a geographical indication within the meaning of this Act.

101. Saving of right to use certain descriptions, names or marks-(1) Nothing in this Act prevents the application to any product of a description or name which is customarily used in Samoa as the

common name for that product, even if the description or name is identical to a geographical indication applied elsewhere to that product.

(2) Nothing in this Act is to limit the right of any person, in the course of business, to use his or her name or the name of his or her predecessor in business, unless his or her use of that name is likely to mislead the public. (3) Nothing in this Act is to prevent: (a) The registration of a mark under this Act that is identical or similar to a geographical indication, if the application for the marks registration was made in good faith before the commencement of this Act or before the geographical indication was protected in its country of origin; or (b) The use of a mark that is identical or similar to a geographical indication if - (i) the mark was registered in good faith under this Act or before the commencement of this Act or before the geographical indication was protected in its country of origin; or (ii) the person who uses the mark acquired the right to do so through use in good faith before the date of publication of this Act or before the geographical indication was protected in its country of origin.

102. Act not to be construed as limiting other laws preventing misuse of geographical indications - This Act must not be taken as limiting any other law which prohibits or restricts the application or use of misleading geographical indications, in particular: (a) the crime of fraud; and (b) the torts of passing off and unlawful competition; and (c) any enactment relating to the labelling or sale of any goods, consumer protection and unfair competition.

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Comment [s14]: I don't understand why you have a section break at the end of this page when it doesn't seem full, or why you have two line spaces before the first entry.. There is also a g missing from the last entry on this page. References should be the last section of the entire thesis – after appendices.

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