ASSESSMENT OF ORGANIC CERTIFICATION IN THE COCONUT OIL VALUE CHAIN IN VANUATU

FOSTERING THE DEVELOPMENT OF GREEN EXPORTS THROUGH VOLUNTARY SUSTAINABILITY STANDARDS

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This study is part of UNCTAD's efforts to tackle vulnerabilities and build resilience in small and vulnerable economies, while prompting structural diversification and upgrading. It strengthens national capacities to design and implement complementary trade and agricultural policies supportive of small scale and subsistence-oriented farmers, including female farmers and vulnerable groups, and supportive of local food security. It provides evidence-based analysis that feeds national, regional and international policies with the aim of generating inclusive sustainable development.

The information in this report has been gathered from various sources, including interviews with key informants in the country, over the course of the year 2018. The Vanuatu-based consultant company Development Services was contracted to carry out interviews and surveys with relevant stakeholders across Efate, Santo and Malekula. Interviews were conducted with public and private stakeholders, including representatives from the Department of Industry, the Department of Agriculture and Rural Development, the Department of Biosecurity, the Department of Cooperatives & Ni-Vanuatu Business Development Services, domestic and international organizations and the private sector. Invaluable support was provided by the Government of Vanuatu, in particular the Department of Industry, which generously shared information and reviewed the final draft.

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ACRONYMS AND ABBREVIATIONS

ACO	Australian Certified Organic
CIDP	Coconut Industry Development for the Pacific
COPSL	Coconut Oil Production Santo Limited
CNO	Crude Coconut Oil
Dol	Vanuatu Department of Industry
DoB	Vanuatu Department of Biosecurity
DARD	Vanuatu Department of Agriculture and Rural Development
FSA	Farmers Support Association
IFOAM	International Foundation for Organic Agriculture Movements
INGO	International NGO
KII Key	Key Informant Interviews
NCO	NASAA Certified Organic
NGER	National Green Export Review
NSDP	National Sustainable Development Plan
MALFFB	Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity
OPC	Organic Pasifika Certification
PGS	Participatory Guarantee System
POETCOM	Pacific Organic and Ethical Trade Community
UNCTAD	United Nations Conference on Trade and Development
VAC	Vanuatu Agriculture College
VARTC	Vanuatu Agriculture Research Technical Centre
VBS	Vanuatu Bureau of Standards
VCCE	Vanuatu Copra and Cocoa Exporters
VCMB	Vanuatu Commodities and Marketing Board
VCO	Virgin Coconut Oil
VSS	Voluntary Sustainability Standards

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EXECUTIVE SUMMARY

1. VOLUNTARY SUSTAINABILITY STANDARDS:

Voluntary sustainability standards (VSS) is a claim that producers and businesses in the supply chain get fair pay and decent working conditions, and/or the supply chain pays due attention to environmental sustainability. Organic standard is the most widely applied VSS in the agricultural sector, with about 2.7 million organic producers in 178 countries in 2016 and increasing. As consumer demand for organic ingredients rapidly grows particularly in the food and personal care products sectors, more and more international buyers request producers in developing countries to have their agricultural or forestry commodities receive certification that they meet organic standards of importing markets.

2. CHALLENGES: Obtaining organic certification from third-party certifiers is associated with significant and recurring costs, and this seems to have prevented the entry of smallholder producers and micro, small and medium enterprises (MSMEs) to international or regional organic markets. In addition, there is limited government support to organic production and exports due partly to the fact that the government lacks data and evidence-based information on the state of production and export prospects of organic agricultural products.

3. OBJECTIVES: Under the project "Fostering green exports through VSS", the United Nations Conference on Trade and Development (UNCTAD) helps developing countries build their capacity to capitalise on growing demand for green and sustainable products and to achieve inclusive and sustainable growth through green exports. Under this project, UNCTAD conducted a study to identify strategic options for the Vanuatu coconut oil value chains to viably enter green or organic markets in a manner that contributes to inclusive and sustainable development. Coconut was selected as the sector supports 80 per cent of the rural population in Vanuatu through the provision of traditional household needs and opportunities for income generation. The study was conducted in close partnership with the Department of Industry under the Ministry of Tourism, Trade, Industry, Commerce and Ni-Vanuatu Business.

4. METHODS: The study draws upon data collected through chain referral sampling of stakeholders in the coconut oil value chain. Stakeholders included coconut producers, middlemen as well as coconut oil processors and exporters. Stakeholders were consulted on current

barriers and opportunities in moving ahead with organic certification to enhance sales and exports of coconut oil products. Producers in Efate, Malekula and Santo were surveyed to assess their perceptions and motivations with regard to organic certification. Other value chain actors were interviewed in depth.

5. VALUE CHAIN: The majority of smallholder coconut farmers are engaged in primary processing e.g. splitting and drying the coconut kernel. The resulting copra is predominately exported in bulk through two key exporters. Crude Coconut Oil (CNO) extracted from copra is both sold domestically for biofuel and exported. Small cooperatives and small-scale producers are producing Virgin Coconut Oil (VCO) for the domestic market, while several established processors are now successfully selling VCO and Refined Bleached and Deodorized (RBD) oil in international markets. Value-added, pre-packaged VCO and RBD are currently sold across various domestic and international retailers in Vanuatu.

6. PERCEPTIONS OF ORGANIC CERTIFICATION:

A growing number of smallholders coconut producers are certified organic under third-party certification systems. Approximately half of the medium-large scale processors and exporters are currently certified, and many others are interested or currently pursuing organic certification. Most non-certified actors were interested in certification with primary motivation to increase income and to gain access to export markets. Non-certified actors however had little knowledge of what it would take to get certified.

7. IMPACT ON SUSTAINABLE DEVELOPMENT: The

majority of stakeholders across the value chain expressed their belief that third-party organic certification could drive the sector's growth and increase the value of coconut production for smallholder producers. Beyond economic implications, stakeholders had mixed opinions regarding the impact of organic certification upon factors that influence the achievement of the Sustainable Development Goals (SDGs), such as food security, gender equality and environmental sustainability.

8. CHALLENGES: Access to information is a critical barrier. Obtaining third-party certification was time consuming and costly, and maintaining the certification posed a persistent pressure on certified producers and/or processors. Value chain actors approached organic certification in a fragmented manner resulting in higher time and financial costs. Smallholder producers faced a greater challenge as they lacked the financial and business literacy required by third-party certification. None of the third-party certification bodies operating in Vanuatu were based in Vanuatu, forcing producers and processors to depend on external auditors flying in from Australia, New Zealand or even Europe pushing up the certification costs. The magnitude of the price premium offered to organic producers varied and did not always provide incentives required to maintain organic certification.

9. POLICY OPTIONS: Drawing upon the stakeholder survey and interviews, the study recommends policy options in two areas. First, reduce barriers to the acquirement and maintenance of third-party organic certification by streamlining external audits and training to allow for cost sharing, developing in-country internal auditors to increase compliance and therefore reduce costs and identifying potential subsidies. Second, establish a national management body that oversees the management, coordination and support of organic certification in Vanuatu. A national management body can act as a multi-stakeholder centralized outlet for information, training and internal systems support for producers and processors.

1. INTRODUCTION

The National Green Export Review (NGER) of Vanuatu conducted in 2016 found that coconut was one of the sectors that presented untapped "green" export potential (UNCTAD, 2016).¹ The importance of the coconut sector for Vanuatu cannot be overstated. Through its different roles, the coconut sector supports 80 per cent of the rural population of Vanuatu (UNCTAD, 2016). In terms of trade, exports of coconut-based products traditionally accounted for a large share of Vanuatu's total merchandise exports. Over the period 2012 to 2015, for example, copra represented an average 20 per cent of total exports followed by coconut oil, with 18 per cent (Vanuatu National Statistics Office, 2017).² Major export destinations for coconut-based products include the Philippines, Japan, Fiji, and Europe.

Market opportunities for "sustainable" coconut oil

The past decade has witnessed growth in global consumer interests in coconut-based products such as coconut oil, desiccated coconut, coconut flour, coconut water and oleochemicals as ingredients to food and personal care products. The demand for coconut-based products in high-income countries in North America and Europe is forecasted to achieve double-digit growth in a decade from 2018.³

Within the coconut sector, the coconut oil value chain demonstrates a multi-product structure with a variety of final consumption including food, pharmaceutical uses, biofuel, feedstock, and a wide range of personal care products such as body lotions, soaps, creams, and hair oils. Already in Vanuatu, a growing number of small-medium artisanal manufacturers are producing Virgin Coconut Oil (VCO) or Refined Bleached and Deodorized (RBD) oil for domestic tourist markets or high-value international markets. Similarly, demand for Crude Coconut Oil (CNO) has been increasing both domestically and internationally with growing interest in production of biofuel.⁴ The global market for coconut oil (consisting of 74 per cent RBD oil and 26 per cent VCO) is forecasted to reach US\$ 8.4 billion by 2025, from US\$ 4.9 billion in 2017.⁶

Within the international market of coconut oil, demand for "green" or "sustainable" coconut oil, i.e. those that adhere to certain voluntary sustainability standards (VSS) particularly organic standards, is expected to grow particularly fast. Adhering to VSS can be considered as evidence that such coconut-based ingredients are produced in a manner that contributes to social, economic and/or environmental sustainability, e.g. being natural or organic and/or ensuring fair wages and decent working conditions for producers, among others. A rise in VSS-certified products in the global coconut markets reflects rising consumer interests for food and personal care products that are based on ingredients that are natural, organic or sourced ethically or sustainably.⁶

Organic certification thus improves the marketability of Vanuatu's coconut-based products in overseas markets. Additionally, Vanuatu producers may own comparative advantage in organic production vis-à-vis producers in other (developed) countries. Many in Vanuatu consider agriculture in Vanuatu is "organic by nature", primarily based on traditional, environmentally-sound subsistence methods with few producers having access to chemical fertilizers, herbicides or pesticides. Institutionally, the principles of organic certification also align closely with the Vanuatu National Sustainable Development Plan 2016-2030 (Government of Vanuatu, 2016a).

Organic certification as a challenge

Organic standards are not self-declaratory. To sell Ni-Vanuatu products as organic, they need to be formally certified, i.e. receive organic certification from third-party independent auditors that the products meet the organic standards of importing countries.

Third-party certifiers are required to monitor and audit certified internal systems of producers on an annual basis, and then provide a guarantee that is recognized by specific markets. Details of third-party organic standards and their certification requirements vary across countries. Many countries have adopted an international standard developed in Europe by the International Foundation for Organic Agriculture Movements (IFOAM), while other countries have developed their own standards, for example Japan (Japanese Agriculture Standard, JAS) and the United States of America (National Organic Program, NOP). In other cases, several organic standards coexist within a country, as in the cases of Australian Certified Organic (ACO) and NASSA Certified Organic (NCO) in Australia, and BioGro and AsureQuality Limited in New Zealand. Exporters of organic products thus need to get certified separately for different

^{1.} The Vanuatu NGER was conducted by UNCTAD in close partnership with the Vanuatu Department of Industry in 2016.

Recent trade statistics by Vanuatu National Statistics Office (VNSO) indicate that kava overtook the position of Vanuatu's largest export commodities in 2018/2019. VNSO July 2019 Highlights reports that kava accounted for 49 per cent of total merchandise exports of the month

^{3.} See MarketWatch Press Release (9 November 2018).

^{4.} COPSL (2018) Our Production, http://copsl.com.au/our-production

^{5.} See Reuters Plus "Coconut Oil Market Size, Share, Industry Trend, Global Analysis, Key Players and Business Prospects by Forecast to 2025" (4 March 2019).

^{6.} Ibid

countries even when technical requirements concerning traceability, chemical free production and handling, ethical use of labour and environmental protection are similar (Dryer, 2016). Many certified coconut oil exporters in Vanuatu have opted to attain certification through BioGro or ACO to cater to their identified regional clientele.

Obtaining third-party organic certification may present significant challenges particularly to smallholder coconut producers in Vanuatu. First, the cost of getting certified by a third-party auditor can be very high. This study found that the cost of an external auditor is approximately US\$110 a day, and annual audit costs can vary between US\$2,000 - 10,000 depending on the number of products and producers included under the certification (see Section 4.1). Considering that, according to the World Development Indicators, the GDP per capita of Vanuatu has ranged between US\$2,802 and US\$3,265 over the last ten years, the average cost of organic certification is beyond the reach of most smallholder producers and micro, small or medium enterprises (MSMEs) in the coconut oil value chains. Moreover, the cost is recurrent in order to maintain the organic certification. That is, the production needs to be audited periodically in order to renew the certification on an annual basis. Second, organic certification requires technical and administrative capacity and business literacy on the side of producers. Regarding public-sector support, there exist various measures to support promotion of green or organic coconuts for exports, but they are implemented by different government agencies or development partners without much coordination among them.

Identifying policy options based on a "reality check"

UNCTAD and the Department of Industry jointly commissioned a study to investigate the state of play of the Vanuatu coconut oil value chains, and how coconut oil stakeholders perceive and are prepared for the new market opportunities of organic coconut oil. The field survey and in-depth interviews of coconut oil stakeholders were conducted in April-May 2018. The field survey was administered at coconut producing sites in Efate, Malekula and Santo islands using the UNCTAD VSS Perception Assessment Toolkit. In-depth interviews with stakeholders were conducted to complement data and information collected from the survey. Using evidence-based information collected from the field enabled the assessment of:

- Coconut oil value chains structure and embeddedness;
- Opportunities and challenges related to organic certification perceived by different stakeholders; and
- Strategic options to improve capacity of coconut-oil multi-stakeholders and the government to capitalise on market opportunities overseas in a manner consistent with the objectives laid out in the Vanuatu 2030: National Sustainable Development Plan 2016-2030 (Government of Vanuatu, 2016a).

This study is structured as follows. Section 2 presents the coconut oil value chain analysis. Section 3 discusses the key findings on the stakeholders' perception or preparedness vis-à-vis organic certification for coconut oil based on the outcome of the survey and in-depth interviews, followed by Section 4 that presents an assessment of opportunities and challenges facing different stakeholders. Section 5 presents a set of strategic policy options for consideration by the coconut oil stakeholders and the government.

BACKGROUND – ECONOMIC STRUCTURE AND SOCIAL DEVELOPMENT INDICATORS

Vanuatu is a small archipelagic state with a land area of 12,281 square kilometres, a population of roughly 250,000 people, and population density of about 19 persons/ km2 (Vanuatu National Statistics Office, 2011). Its territory consists of mostly mountainous islands of volcanic origin, with narrow coastal plains. Its smallness, scattered archipelagic structure and remoteness from major markets are structural features that translate into competitive disadvantages for Vanuatu, stemming from high transport costs (domestic and international), lack of economies of scale, and high costs of infrastructure development. The country's strategies to achieve sustainable development by the year 2030 are laid out in the Vanuatu 2030: National Sustainable Development Plan 2016-2030 (Government of Vanuatu, 2016a).

Vanuatu is exposed to natural hazards from intense volcanic activity, floods, drought, earthquakes and sea level rise, making the country consistently ranked the world's most disaster-prone country in the World Risk Index (UNU-EHS, 2016). Against a background of extreme weather events and market volatility, farm diversification is a risk-hedging strategy in the Vanuatu context.

In structural terms, Vanuatu has a dualistic economy, with a large traditional subsistence agricultural sector and a growing formal, or cash, economy. This latter includes commercial agriculture and associated trading, manufacturing, banking and shipping services, alongside the country's growing tourism and construction industries. The contribution of agriculture to national GDP has grown from 21 per cent in 1990 to around 28 per cent in 2014. Services accounted for about 65 per cent of GDP on average over the period 2000-2014. The share of manufacturing is low at about 4 per cent of GDP, and its activities low value added.

The rural economy is still largely subsistence-oriented though the subsistence sector in Vanuatu is increasingly integrated to markets: expenditure on consumer goods has increased significantly among rural households; raising transport, communication and education costs have amplified the need of rural households for cash income (Vanuatu National Statistics Office 2008 and 2013). Vanuatu's level of absolute poverty is relatively low (12.7 per cent compared to around 40 per cent mean for developing countries). Destitution is rare in Vanuatu: subsistence and semi-subsistence farming provides an important safety net and safeguard against extreme (food) poverty. Virtually all (98 per cent) the rural population is active in agriculture, which contributes an estimated 70 per cent of total rural household income (Vanuatu National Statistics Office, 2008). Most rural household are semi-subsistence, with limited opportunities for cash income. There are pockets of poverty, particularly in urban areas, and many people in rural areas suffer from what has been defined as "poverty of opportunity" in terms of a lack of access to basic services, infrastructure, jobs, and education (Government of Vanuatu, 2010).

Vanuatu's population is relatively young, with a median age of 20.5 years, and fast growing: it has more than tripled in size, from 78 thousand in the late 1960s to over 234 thousand at the time of 2009 Population Census. There are still significant differences between men and women in terms of educational attainment, school enrolment, literacy rates and labour markets, despite genuine efforts and significant progress towards bridging the gender gap. The extent of the gender gap markedly differs between urban and rural constituencies: shortfalls in human development, services and income-generating opportunities are more numerous in rural than in urban areas.

2. MAPPING THE COCONUT OIL VALUE CHAIN

2.1THE COCONUT OIL PRODUCTION CHAIN

The structure of coconut oil production chains, from harvesting to final markets, is presented in Figure 1.

Primary processing

Harvested coconuts may be sold as green coconut or white/black copra. Many smallholder farmers in Vanuatu are engaged in primary processing, splitting and drying coconut kernels to be sold as either white or black copra, depending on the techniques used.

Copra is produced by drying coconut kernels and is utilized in the extraction of coconut oil. Vanuatu's copra industry is export-oriented with most outputs shipped to the Philippines, Indonesia and India for further processing. The copra market is vulnerable to volatile fluctuations in price. Ni-Vanuatu producers see copra sell at the price anywhere between 20,000VT - 70,000VT per ton (around 160 to 562 US\$), depending on the short-term demand of regional or international markets for copra. Several traders and exporters interviewed observed that the quality of Vanuatu copra is low as many producers still use the traditional method of smoke drying instead of sun or hot air drying. Pre-Independence, agricultural officers and regulatory bodies such as the Vanuatu Marketing and Commodities Board (VMCB) used to monitor the quality of copra, but government capacity to support copra production seems to be waning according to some stakeholders.

Secondary processing

VCO is produced from the fresh coconut kernel (at times referred to as 'green copra' in Vanuatu) and is typically used for human consumption or further processed into high-value beauty or health products. VCO extraction is well suited to small and medium scale producers using basic technology and production methods, and thus presents potential for achieving value addition at the upstream producer level. A study by FAO suggests that VCO can improve coconut farm incomes by several times over traditional copra production or sale of fresh nuts (FAO, 2006).

Several Ni-Vanuatu micro or small-scale producers or cooperatives produce VCO. They are typically family-run businesses operated from the home, with only one to two people engaged in production, and little to no training in marketing, finance management or business skills. There are around 10 medium-scale VCO producers which usually operate as cooperatives with support from the Vanuatu Office of the Registrar of Cooperatives. They may have 10-20 people working on an informal or formal basis. There are also large-scale VCO producers such as Coconut Oil Production Santo Limited (COPSL) and Plantation Russet du Vanuatu (PRV). Pre-packaged VCO is typically sold in small quantities, with a standard price of 700 vatu (VT), around US\$5.6, for 250ml, or approximately 3,400VT (around US\$27.3) per litre.⁷

CNO is extracted from copra using heavy pressure, heat and chemical solvents to produce a raw material that is a source of several starter compounds (fatty acids, fatty alcohols and glycerine) for natural oleochemicals, which is used in detergents, soaps, shampoos and other personal care and pharmaceutical products (UNCTAD, 2017).



Figure 1. Coconut Production Chain

7. Based on price list provided by domestic retailer (April 2018).

The overall quantity of copra and CNO produced annually is in decline, and many producers seem to have shifted away from copra production to alternative cash crops such as kava. This, in addition to a nationwide ageing stock of coconut trees across Vanuatu, has contributed to a visible reduction in the total volume of copra and CNO exported out of Vanuatu. Statistics drawn from Vanuatu National Statistics Office (VNSO) showed that, in 2013, only 42 per cent of coconuts were harvested and used for copra production (Government of Vanuatu, 2014).

Manufacturing

CNO is processed into RBD or biofuel. RBD oil, used as cooking oil or as an ingredient to food, personal care or pharmaceutical products, is considered a sophisticated downstream processing as it requires large scale capitalintensive industrial operations, modern commercial processing and packaging technologies.

At the time of conducting this study, there was only one RBD producer identified in Vanuatu - El Cres Plantation produces "Epi Cooking Oil" which is a high value RBD product that is certified under Australian Certified Organic and exported to regional markets.

Opportunities to capitalize on an expanding biodiesel market both domestically and internationally have been identified. According to COPSL, the largest exporter of Vanuatu coconut oil, coconut-based biofuel can be competitive vis-à-vis imported fuels but not yet to be competitive in international markets.[®]

2.2 THE COCONUT OIL VALUE CHAIN STAKEHOLDERS

Vanuatu coconut-oil stakeholders include input suppliers, coconut producers (including producer associations and cooperatives), transport operators, processors, wholesalers, exporters and international buyers of coconut oil, as presented in Figure 2.

Input suppliers

In Vanuatu, there are very few input suppliers for the coconut oil sector. Smallholder farmers rarely use chemicals or modern farming equipment to harvest and process their crops. Herbicide and pesticides are sold by a few selected retailers in Port Vila and Santo, targeted mostly at established operations in the horticulture and beef industries. At the time of conducting this study, the

Department of Biosecurity, under the Ministry of Agriculture, Livestock, Fisheries, Forestry and Biosecurity (MALFFB) was developing legislative strategies to monitor the use of chemicals which will require importers and distribution channels to hold a licence and track the sale of their goods. The recent threat of a rhinoceros beetle infestation has made the registration of chemical products, particularly pesticides/insecticides, an urgent need.

Figure 2. Mapping of Vanuatu Coconut Value Chains



Another major threat to the coconut industry today is the ageing of the nation's coconut trees. There have been efforts by the Government to supply farmers with coconut seedlings for replanting. The Vanuatu Agricultural Research and Technical Centre (VARTC) and the Department of Agriculture and Rural Development (DARD) have worked together to grow coconut seedlings and distribute across the outer islands. The DARD targets to replant 100,000 coconuts each year through free coconut distribution.⁹

Coconut producers

Coconut producers in Vanuatu are predominantly smallholder customary landowners managing plantations of between 1 and 3 hectares. Farming systems are subsistence-oriented, using traditional processing techniques with minimal equipment, resource technology or chemicals. Smallholder farmers are commonly involved in the primary processing of coconut, working with family or community members to split and dry roast the coconut in traditional roasting houses using smoke or hot air-dry systems. Independent smallholder famers have the freedom to make choices over the type of product they sell (whole coconuts, green / black / white copra, VCO) and to whom they sell based on the domestic market prices available, though access to market information may be limited in the outer islands compared to Santo.

^{8.} COPSL, "Our Production".

^{9.} VARTC is the central body in Vanuatu for research and development on high-yield coconut species.

Survey findings indicate that, in Santo, producers will typically transport their raw or semi-processed harvest by public transport truck or boat to the nearest collection point for sale to traders. Those on the outer islands are slightly more likely to sell their products via association or cooperatives. They too predominately depend on public transport to move their products to central ports for sale to exporter agents.

There are several large-scale coconut plantations, including PRV in Malekula and El Cres plantation in Epi, that contract coconut farmers and community members for the collection and/or the primary processing of coconut stocks.

Producer associations and cooperatives

A number of producer cooperatives and associations have been established to help smallholder farmers jointly manage transportation and sales. Several associations currently engage in value-addition activities i.e. VCO production for domestic sale. A farming association in Ambrym currently sources coconuts from its members to produce VCO at their locally based, small-scale factory. For example, Malekula Virgin Coconut Oil Cooperative brings women of the Vinmavis and Lingarek communities together under a cooperative to share the labour and returns of a valueadded VCO product for domestic sale.

Processors

Processors are those who process green, white or black copra into the production of CNO, VCO or RBD. Several processors in Vanuatu are advanced in terms of their product development and marketing capabilities e.g. highquality packaging and labelling and branding strategies. Some have reached international markets of organic VCO or RBD.¹⁰ Large-scale processors often complement production from their own plantations with raw or semiprocessed coconuts (copra) from smallholder coconut producers, producer associations or traders.

Small-scale processors are typically involved in the VCO production commonly through traditional methods that do not require established infrastructure. The supply capacity of VCO producers is still constrained by limited managerial and financial capacity. The majority suffer from inadequate capacity in quality control, packaging, branding and marketing. Small-scale VCO production very often struggles to increase production to keep up with increased demand. Women-operated businesses are also subject to restrictions on hours available for operation, as women are expected to work only after their domestic, food preparation and child caring activities are completed.

Wholesalers and Exporters and International buyers

In the export segment, COPSL and the Vanuatu Copra and Cocoa Exporters (VCCE) account for the bulk of copra and CNO exports with emerging players including Pacific Pride Limited and Agri Pac Limited. Copra and CNO are exported in high volumes predominantly to the Asian markets through regional branches of large trading houses. For those selling copra, CNO or VCO in bulk for further processing for exports, prices are generally dictated by international buyers and a fluctuating global price, since domestic traders are less influential in determining farm gate purchase price. High value, pre-packaged VCO and RBD products are sold through niche/boutique markets in Australia, New Zealand or New Caledonia. They are also subject to pressure by international retailers to provide competitive wholesale price.

Transport Systems

Transport is an integral component of the coconut value chain in Vanuatu, where rural farmers must navigate complex and costly infrastructure to move their product to market. For farmers seeking to access export markets, all products need to be transported to Luganville, Santo, where the sole export wharf for commodities is located. Domestic shipping is expensive and unreliable with a low-quality service, risking products being contaminated by sea water. Delayed shipping schedules can also be detrimental to the product quality.

Most rural coconut producers rely on public transport to move products to market or shipping ports. It can cost between 2,000VT - 10,000 VT per journey (around US\$16 -74), which represents two or more weeks' salary for typical Vanuatu manual labourers. To avoid transportation costs, some producers sell their green, black or white copra to cooperatives or traders that will buy directly at the farmgate. In some instances, large-scale coconut oil processors or exporting firms offer collection services, which substantially increase coconut producers' net income.

^{10.} Such firms include Tanna farms, Venui and Epi Coconut Oil.

2.3 INSTITUTIONAL FRAMEWORK FOR AN ENABLING ENVIRONMENT

Institutional frameworks in support of the coconut oil value chains include the following. First, the National Sustainable Development Plan 2016-2030: Vanuatu 2030 provides the overall development framework, forming the backbone of all national policy with an overarching goal to achieve a stable, sustainable and prosperous Vanuatu. Economic, environmental and social goals are expanded in national policy and frameworks for implementation by relevant government departments.

Second, regarding agricultural production, the Vanuatu Agricultural Policy 2015-2030 provides policy frameworks to be implemented by government agencies such as the Department of Agriculture and Rural Development (DARD) of the Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity (MALFFB). The National Coconut Strategy 2016-2025 outlines a framework to further build the capacity of the coconut industry and explore new opportunities to maximize returns to farmers and their communities. The National Organic Strategic Plan 2018-2030 is currently being developed under DARD to build on the previous Overarching Productive Sector Policy 2012-2017 and outline strategies to develop a coordinated, robust, and resilient productive sector.

Third, there are institutions that can support the development of the coconut oil value chains, such as the Vanuatu Commodities and Marketing Board (VCMB) and the Vanuatu Bureau of Standards (VBS). VMCB is a public body established to enforce standards of copra and CNO to align with national export requirements. In recent years, however, political instability has challenged the effectiveness of the Board and limited the overall influence within the sector. VBS is a government body recently established to support producers and processors with quality control testing for agricultural products including VCO. The outcome from the survey and interviews however indicated that very few VCO processors were aware of this service rendered by VBS.

Regarding capacity development in organic certification, the Pacific Organic and Ethical Trade Community (POETCOM) has established Organic Pasifika Certification (OPC) and helps Pacific producers build capacity in achieving organic certification based on a Participatory Guarantee System (PGS). The Farmers Support Association (FSA) currently acts as the trainer and guarantor of OPC in Vanuatu.

3. PERCEPTION OF COCONUT OIL STAKEHOLDERS REGARDING ORGANIC CERTIFICATION

Stakeholders in the Vanuatu coconut value chain are becoming aware of the international demand for organically certified coconut oil particularly RBD and VCO. Several large enterprises already export their organically certified coconut oil to Australia and New Zealand, two major markets in the region. Apart from organic standards, other VSS such as Fairtrade and Rainforest Alliance have not yet been actively pursued in Vanuatu.

This section provides key findings from the surveys and interviews of coconut oil value chains stakeholders conducted to check their perception or preparedness for obtaining organic certification for their coconut produce. The sample survey data was collected in three sites -Efate island, Santo island (and the offshore island Malo) and Malekula island from a sample of 87 producers and processors using a standardized questionnaire to collect quantitative data on grassroots knowledge and perception of certification schemes and sustainability initiatives.

Detailed information on the methodology of the survey and interviews are provided in Annex 2 and 3.

3.1 CHARACTERISTICS OF THE SURVEY RESPONDENTS

The sample respondents were sought from two groups, i.e. those who had already certified organic and those who had not. Within each group, respondents were clustered according to gender, age, and the level of education, among others. The characteristics of the respondents are summarised below.

Already certified organic or not

Of 87 farmers and processors surveyed, 18 per cent were certified for the Australian Certified Organic or BioGro New Zealand. Most of the certified producers or processors were in Santo and Malo. None of the respondents in Efate were certified. Only 4 out of 21 respondents in Malekula were certified, though several were in the process of being certified. Note that the study specifically sought certified actors to collect information from them. The total proportion of certified actors in Vanuatu coconut value chains would be considerably lower than 18 per cent.

Gender

Women accounted for 31 per cent of total producers/ processors surveyed or interviewed. Among non-certified respondents, 34 per cent were female (24 out of 71) and 19 per cent of certified respondents were female (3 out of 16).

Age

The respondents were evenly distributed in terms of the age ranging between 18 and 60+. For certified producers and processors, the average age was higher: Around 50 per cent of them were in the range between 50-59 years of age, and a further 37 per cent over 60 years of age. None of the certified producers/processors were below 39 years of age. This may be an indication of older farmers having more access to social, knowledge or economic resources required for the certification process, or more confidence to conduct the process.

Educational level

The level of education may play a decisive role in obtaining third-party organic certification as the certification process requires detailed recording and reporting of the state of farming and some business literacy.

There was little overall difference in educational levels between certified and non-certified respondents (Figure 3). Forty-four per cent of the respondents finished their schooling in primary school. Only a small percentage of the respondents received no primary education. A greater number of certified producers/processors had received vocational training than non-certified ones. Regarding higher education, 46 per cent of the non-certified respondents and 50 per cent of the certified respondents said they had progressed to secondary school. It should be noted perhaps that current education statistics indicate that many students leave secondary school by Year 8, with only 1.3 per cent of the total national school enrolment in 2015 consisting of Year 13 students (Government of Vanuatu, 2015). Among those surveyed, only 6 per cent of the noncertified respondents had a university degree. In planning any capacity-building on exports of organic coconut oil, the general degree of formal education and literacy levels may need to be considered.

Figure 3. Educational level of the surveyed respondents



3.2 PERCEPTIONS OF DIFFERENT STAKEHOLDERS OF ORGANIC CERTIFICATION

In the sample survey, a separate set of questions were designed for the non-certified group and the certified group, with a view to obtaining data which would help the study highlight differences in their perception of organic certification. Annex 2 provides a list of questions that were used during the survey and interviews.

3.2.1 Perception of the non-certified producers/processors

Do you know how the organic certification works?

First, the non-certified respondents were asked if they had heard how the organic certification system works. The result suggests that the non-certified group had limited knowledge on organic certification. On average only 24 per cent of them had heard of organic certification systems (Figure 4). The level of knowledge was higher in Santo and Malekula where major processors or exporters of coconut oil have been helping local producers to receive organic certification.

Figure 4. Non-certified respondents: Do you know how organic certification works?



Are you interested in getting organic certification?

Second, the non-certified group was asked if they would be interested in obtaining organic certification. Despite the lack of information on the certification system, the dominant majority (87 per cent) of them said "yes" to the question (Figure 5). The main reason is an economic one. Many noncertified producers/processors thought organic certification would increase the price or improve marketability of their products, with 41 per cent stating they want to get organic certification for getting higher income, 18 per cent for helping their business or helping them get into exporting markets (Table 1).

Figure 5. Non-certified respondents: Would you like to get organic certification?



Table 1. Non-certified actors: What motivates youto get organic certification? (56 respondents - someprovided more than 1 reason)

Higher income	41%
Better business opportunity	18%
Better exporting opportunity	18%
Helps me learn more about product	9%
Less income fluctuation	5%
Helps me learn new farming skills	5%
Improves the quality of my product to	2%
international standards	

international standards

Would it be easy or difficult to get organic certification?

When asked if they thought obtaining organic certification would be easy or difficult, 37 per cent of them thought it would be very difficult and 17 per cent thought moderately difficult (Figure 6). Around a third of non-certified producers/ processor had no idea if certification would be easy or difficult and did not know where to go to find more information on certification. Lack of access to information was also confirmed in the interviews of key stakeholders: Several established processors in the value chains expressed their desire to obtain organic certification but had limited understanding on how to get more information.

Figure 6. Non-certified respondents: Would organic certification be difficult to get?



The non-certified respondents were then asked for their views on major barriers in obtaining organic certification. Despite the general lack of knowledge on the organic certification system, 65 per cent of them thought all the paperwork required in the certification process would be a severe or moderate barrier, and 58 per cent thought that the time required for certification would be a severe or moderate barrier for them (Figure 7).

Figure 7. Non-certified respondents: Barriers to organic certification



3.2.2 Perception of the certified producers/ processors

When the certified respondents were asked their views on the difficulties in obtaining organic certification, the key barriers they listed included time spent on certification, required paperwork, certification requirements, the cost of training workers, and access to finance (Figure 8). Surprisingly, 69 per cent of certified respondents thought that the cost of certification would not be a barrier, indicating that most certified producers are under certification systems of major processors/exporters which cover the entire cost associated with third-party organic certification.

Figure 8. Certified respondents: Barriers to organic certification?



Certified, % (n=16) multiple answers allowed

Perceptions of certified producers/processors towards organic certification suggest - to an extent - the success of past programmes that encouraged organic farming in Vanuatu. In the country, organic certification started in 2012 following a programme implemented by organizations such as World Vision and African Pacific.

World Vision and African Pacific played a significant role in the initial implementation of third-party organic certification for producers in South Santo and Malo, over 400 of whom now are included under the certification system managed by COPSL, a processor/exporter of coconut oil. Similar frameworks are currently in place in Malekula, where Plantation Russet du Vanuatu (PRV) has achieved third-party organic certification for their plantation and is supporting the inclusion of additional smallholder coconut producers to be covered under PRV's organic certificate.

COPSL and PRV help smallholder coconut producers obtain organic certification by covering the costs associated with the certification process, such as inspection by auditors and document preparation. Out of 16 certified respondents, 13 had received assistance from one of the bodies mentioned above, ranging from preparing the documentations required for certification, paying for certifiers' farm inspections, and training and planning for process improvements, among others. This is perhaps the main reason why many of the certified respondents did not think the cost of obtaining organic certification or undergoing farm inspections would be significant barriers.

3.3 CONTRIBUTION OF ORGANIC CERTIFICATION TO SUSTAINABLE DEVELOPMENT

The study also aimed to assess if and to what extent stakeholders value the potential contribution of organic certification to the achievement of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs).

In this context, the respondents were asked a series of questions regarding their views on if and how obtaining organic certification could improve their capacity to progress towards the achievement of the SDGs through positively influencing aspects such as food security, economic empowerment of women, decent working conditions, environmental protection (Table 2).

Table 2. Organic certification and SDGs

Sustainable Development Goals (SDG)	Aspects of sustainable development that organic certification may contribute
SDG 2 (Zero Hunger)	Improved food security Higher agricultural yield Higher product yield from ingredients
SDG 5 (Gender Equality)	Economic empowerment of women
SDG 1 (No Poverty) SDG 8 (Decent Work and Economic Growth)	Higher price for product Increased wealth Higher quality product Improved workplace conditions
SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action) SDG 14 (Life Below Water) SDG 15 (Life on Land)	Improved conservation of natural environment

The survey respondents were asked to what extent they agreed that organic certification could contribute to the selected aspects of sustainable development. Reponses are summarized as a "constellation of perception" chart in Figure 9.

The "constellation of perception" chart was constructed by assigning different scores to different answers, e.g. 5-6 to "Strongly agree that certification has impact" and 1-2 to "Strongly disagree that certification has impact", then obtaining the average score for each aspect separately for two groups, the non-certified respondents and the certified respondents. Note as a caveat that the sample size is small as the study removed "Not sure" answers, which accounted for around a quarter of responses of the non-certified group (Figure 10)."

The chart demonstrates that the non-certified respondents consistently provided higher scores to the impact of organic certification across different aspects of the SDGs. This trend is consistent even when the data is disaggregated in terms of gender or location, i.e. among different islands. This is likely because the non-certified respondents knew little about the nature and the process of organic certification, thus had greater expectation on the impact of organic certification, according to detailed notes from the survey and follow-up interviews. More detailed analysis of the respondents' perceptions on the impact of organic certification upon different aspects of sustainable development is provided below.

Figure 9. Constellation of Perception: Contribution of organic certification to sustainable development

Certified vs Non-certified perceptions of impacto of certification on global SDG goals



Figure 10. Does organic certification contribute to aspects of the SDGs?



Organic certification and product prices and quality (SDG1 & 8)

Both certified and non-certified respondents strongly felt that obtaining organic certification would make their products fetch higher prices in international markets as well as obtain higher quality.

When "Don't Know" answers were filtered out of the list, 81 per cent agreed that prices would increase. 86 per cent agreed with the statement: "It is easier to sell and market products that are certified organic than non-certified products". Coconut oil retailers, traders and exporters who were interviewed also agreed that organic certification could be a viable investment with a view to receiving higher prices and getting better access to high value niche markets.

^{11.} It became clear during the survey and interviews that most non-certified respondents had little knowledge of sustainable development or had heard of the SDGs.

Some exporters however noted that, even if certified organic, it would be difficult for Vanuatu coconut oil exporters to increase the production quantity to meet the demand. In this context, they suggested other policy options such as upgrading processing methods, which may provide greater returns on investment than obtaining organic certification. Regarding the domestic market, VSS or organic certification does not influence domestic demand for coconut oil, thus would not fetch a higher price.¹²

Regarding the impact on product quality, many considered organically certified products to be of higher quality. This is likely to be rooted in their knowledge that organic certification requires producers to have certain internal control systems that can positively influence product quality. As noted above, however, there is no additional premium for certified products in the domestic markets, and they are sold at similar prices to non-certified products.

However, there were reports from processors in Santo and Malekula stating that internal quality control systems are not always maintained among local producers. Some processors noted that, when certified copra was received and unpacked at the processing site, they found that certified producers did not follow required drying or packaging methods, resulting in low quality copra. Because products were bought in bulk from many producers, it was not possible for the processors to track back the source of lower quality materials. Some processors revealed their view that, unless a consistent and rigorous government quality testing system was re-established in Vanuatu, quality of certified copra would continue to be an issue.

Organic certification and food security

Survey respondents were asked if they had enough healthy food for their household throughout the year. Ninety-seven per cent of them said that they did. One respondent noted, "food is not a problem for us here – we have the plants, the sea, the fruit. There is plenty of food." The Post Pam Mini-Census of 2016 also noted that 82 per cent of households within Vanuatu were subsistence farmers – that is, they grow at least one root crop for household sustenance (Vanuatu National Statistics Office, 2017).

There were mixed responses about whether organic certification had any impact upon food security for households (Figure 11). Fifty per cent of certified respondents agreed or strongly agreed, while 37 per cent disagreed. As regards non-certified respondents, 40 per cent agreed/strongly agreed with the statement while 26 per cent disagreed. Food security in Vanuatu is linked mainly to environmental and climate factors. As such, certification or non-certification may not be seen as a factor relevant to food security, as drought, ashfall, heavy rain or cyclonic activity crops affect all producers whether they are certified or non-certified.

Figure 11. Organic certification and food security

Certified farmers have greater food



Organic certification and gender equality in the workplace

The study included several approaches to increase gender diversity in responses collected. The survey questionnaire included questions to identify gender of respondents, and to measure perceptions of women's and men's roles within the value chain. Field research team leaders selected locations and times of days to provide a diverse gender mix of respondents.

Sixty-nine per cent (corresponding to 60 respondents) of the survey respondents were male and 31 per cent (27 respondents) were female. Regarding interviews, 25 per cent of stakeholders interviewed were female.

Women form a large part of the workforce in coconut growth and processing. Around a quarter of the respondents noted that women were found in management or supervisory positions in their operations. Within the current socioeconomic context in Vanuatu, this is a significant gender representation at the decision-making level in a productive activity. Improving women's access to training and information could further contribute to their economic empowerment within the coconut sector. When asked about agricultural training completed in the last 12 months, only 3 of the 24 female respondents to the survey had attended any type of training. This accounts for 3 per cent of the total 87 survey respondents, compared to 22 per cent who were male respondents that attended some form of training.

^{12.} Interview with Domestic Retailer (2018)

Interestingly, when asked who makes the financial decisions regarding the farm or agricultural business for the family: over a third (37 per cent) of the female respondents replied that they were making the decision, while 33 per cent said they made financial decisions jointly with their husband. As financial decision-making is one of the global indicators of gender economic equity, this outcome is an important indication of the achievement of SDG5 in the coconut value chain.

Organic certification and decent work

According to the 2016 Mini-Census, only 30 per cent of the Vanuatu population (15 years and older) self-identified as being in paid employment, 35 per cent identified their primary economic activity as producing goods, and 32 per cent self-identified as performing unpaid work.¹³ Within agricultural production chains, many of the actors involved are likely to identify as producers or 'engaged in unpaid work'. While the survey responses to this study are not statistically representative of the entire population in the coconut value chain, it does give an indication of self-perceived employment status and the majority simply reported themselves as the 'owner' of their farm. Only 3 per cent identified themselves as employees (Table 3).

Table 3. What is your role (on the farm / plantation)?

Owner	80%	41%
Manager	13%	18%
Staff member / employee	3%	18%
Other (Family / Help out)	3%	9%

From a self-employment perspective, the priority for decent employment is receiving consistent and increasing income. Workplace health, safety, advancement and gender equity did not appear in the interviews or surveys as issues of priority in the context of Vanuatu. The surveys revealed that 7 per cent (6 of 87 respondents) had experienced health or safety incidents on their farm in the past 12 months. Currently Vanuatu does not have national health and safety legislation to inspect or enforce in agricultural workplaces, and minimal staff or financial resources for enforcement of health and safety legislation.

The survey and interviews also measured child participation in agricultural production as part of coconut production and processing and found that child labour was not considered a major problem in the study findings. Around 70 per cent of the 87 survey respondents confirmed that children under 12 years of age work on the family farms, food gardens or plantations. Many saw it as a normal part of childhood – that children finish their school day and then help the family on the farm. Some interviewees clarified that children are only asked to do light work such as collecting empty coconut husks. However, there is no national monitoring system available to ensure any work conducted by children is within safe or ethical guidelines.

Medium-large scale producers, processors and traders noted that they had some policies in place to prevent child labour, but all admitted that there was no formal monitoring system to check the actual ages of young workers (e.g. checking birth certificates or other proof of age identification), and some noted that the communities asked them for work for youth during school holidays as a way for young people to earn income towards their schooling.

Under the Vanuatu Employment Act, [Cap 160], child labour restrictions do not apply to family-owned agricultural undertakings. Programmes to reduce or monitor child engagement in agricultural production would be best implemented through collaboration with the government agency responsible for protection of children in Vanuatu: Ministry of Justice and Community Services (MoJCS), or through one of the INGOs working in collaboration with MoJCS such as Save the Children Vanuatu.

Organic certification and environmental sustainability

Environmental conservation or protection was not identified in the interviews or surveys as an issue of priority in the context of Vanuatu. Although there is national awareness and action on climate change mitigation and adaptation, integrated ecosystem sustainability and reduction on plastic pollution, this is largely championed by an urban population, with small awareness at rural levels.

While usually it is expected for organic certification to improve the ecological and socio-political environment in which the chain operates, this was not identified as a key driver of organic certification in the surveys. Since the current methods of coconut production in Vanuatu are de facto organic, certification thus – according to respondentswould not necessarily bring about more sustainable practices.

^{13.} Vanuatu National Statistics Office (2017).

Other aspects of sustainable development to which organic certification may contribute

Views of the value chain actors and stakeholders expressed in the survey and interviews suggested that there might be other areas of sustainable development that organic certification may generate impact upon.

The collection of data through third-party certification could become a valuable resource in terms of national policy and planning. Information on plantation size and production that is collected and recorded through certification processes may provide the government with a level of data information that could boost the implementation on the development of the coconut sector. Today, certified producers hold the rights to their data and are not required to share this with external bodies. With the collaboration of the public sector in certification systems, opportunities to share this information may emerge. For example, as pointed out in the National Coconut Strategy, the aging of coconut trees presents one of the greatest threats to Vanuatu's coconut industry (Government of Vanuatu, 2016b). A focused effort on re-planting by the Government has failed to resonate with producers, where land security and fluctuating economic returns act as a disincentive to invest time and resources in replanting. The formal mapping of plantations through certification, and the premiums available on produce can provide better incentives for producers to engage in replanting efforts and reinvigorate a key national sector.

Additionally, the certification of a producer requires the owner to produce a map of the plantation, including land title boundaries and the exact number of trees on the plantation, and highlight other key points such as access to water systems and neighbouring farming systems. These formalized mapping and recording systems of plantations can provide opportunities to smallholder producers to build longer term agricultural plans, giving families and communities financial stability over time and allowing producers to invest with greater confidence into more significant and value-adding projects. An experienced trader noted also that the certification process could provide a lot of advantages for producers in defining land ownership, resolving customary land disputes, and accessing the equity in their land. This directly corresponds to Target 1.4 under SDG 1 (No Poverty), which calls for all men and women to have equal rights to economic resources and ownership and control over land and other forms of property, among

others, by 2030.14

4. OPPORTUNITIES AND CHALLENGES OF ORGANIC COCONUTS

Findings from the interviews of value chain actors and the survey results helped the study to collect factual and evidence-based information on what appeared to be opportunities and challenges with regard to organic coconut production and exports of Vanuatu.

There was consensus from stakeholders across the value chain that third-party organic certification has the potential to increase the value of coconut production for smallholder farmers. Government priorities echo this interest within the private sector to further drive organic production.

Opportunities available in organic certification to Vanuatu stem from the following factors. First, current farming practices in Vanuatu require minimal modification, and a planned push from government for tighter controls over chemical distribution will further enable the certification of producers. Second, major local processors and exporters are already aware of international demand for organic coconut oil, and they seem to be willing to extend their support to individual coconut producers to help them obtain organic certification.

Interviews with exporters suggest that third-party organic certification is the most sought-after and influential VSS in the international market for copra and CNO. But the study identified COPSL as the only corporation currently committed to purchasing third-party organically certified copra mostly within SAMNA Community Coconuts Association. COPSL pays a premium to organically certified copra producers at around 5,000VT (around US\$40) (at the time when this study was conducted) on top of the standard selling price of copra and sells to a contracted buyer in Australia. The level of premium is determined by COPSL taking into account the need to reward contracted smallholders for quality production, but also to remain competitive in domestic and international markets.

The interviewed stakeholders also pointed out that the Vanuatu coconut value chain faces numerous obstacles as

^{14.} The full text of the SDG target 1.4 states: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

regards third-party organic certification, preventing greater uptake of organic certification. Such obstacles include limited access to information and training, the cost of certification and the lack of managerial capacity required for organic certification.

Limited access to information and training

For most coconut oil stakeholders, the initial hurdle is accessing information on the process of certification. The majority of the producers surveyed indicated that access to information was a critical barrier, and while most expressed interest in the concept of organic certification, very few had any understanding of the process, requirements and possible benefits. Small-medium scale processors looking to expand into export markets also identified a critical lack of information on certification. Stakeholders who are interested in obtaining organic certification are for example unable to understand the differences between the various certification schemes (e.g. third-party certification or PGS), the requirements and costs of inspection, certification and auditing, and the market demand and expectations associated with organic products, among others.

With no central source of information readily available and accessible, the power of information lies with the certified enterprises. Established operations, often with expatriate coordination, typically identify the need and processes involved in certification directly from export contacts, or the certifying agencies themselves. Information will typically flow from the certified enterprise to the producers, sometimes with the assistance of support agencies such as World Vision or the Vanuatu Agricultural Training College (VAC).

For established agri-business Tanna Farms, the attainment of a third-party certification for their VCO product required the guidance of an agricultural consulting agency, which provided a series of internal audits and workshops with the farmers in the lead up to certification. For smaller enterprises and community cooperatives seeking formal certification, there is a visible demand for accessible support structures to assist in these early implementation stages.

The Government Provincial Agriculture officers are a trusted source of training and information, and the National Organic Sustainability Plan (still in Draft form with the Department of Industry) highlights the intention to train extension officers in organic farming systems to disseminate information and capacity-building across rural communities. The Department of Agriculture and Rural Development (DARD) signals plans to develop the capacity of their extension workers to provide information on organic certification to farmers in the coming years.15

The Farmers Support Association (FSA) is a locally based NGO that provides a support mechanism for producers seeking PGS certification,¹⁶ however their limited capacity typically requires interested parties to approach them for information, with little outreach available for information dissemination.

Cost of organic certification

The cost of third-party certification is highlighted as a significant challenge for Ni-Vanuatu enterprises. Annual audit costs can vary between US\$2,000 and US\$10,000, dependent on the number of producers included under the certification and their compliance rate. With the minimum wage set by the Government of Vanuatu at US\$290 per month, this positions as a significant investment for smallholders. This fee extends from the external audit, where an auditor from the certifying agency must travel to Vanuatu to complete the audit on an annual basis.

The POETCOM have been working at a regional level to reduce the financial burden of auditing by negotiating an agreement that would allow one standard auditor to cover all IFOAM certifications. With this in place, all certified enterprises in Vanuatu would be able to share the cost of a single auditor and their travel, partially reducing the annual auditing costs and expenses of third-party certification in general. Additional opportunities exist to reduce the burden on individual enterprises, with space to distribute the costs across the individual farmers. In 2015, World Vision tested a method of cost distribution amongst the 400 certified farmers, requiring each farmer to pay approximately 3000VT (around US\$24). The trial demonstrated that farmers were able and willing to pay this fee, but simply required a management body to coordinate the collection.

The distribution of audit fees can create a more enabling environment for established enterprises, however for smaller businesses, cooperatives and associations, the acquisition of a third-party certification may still be out of reach. The low level of financial and business literacy observed suggests that less formal operations would need considerable support in the set up and maintenance of third-party certification, which may prove unsustainable. Traditional methods of VCO extraction may also face increased scrutiny, making it difficult for small-scale producers to meet the necessary requirements for successful export.

^{15.} Government of Vanuatu (2018).

^{16.} PGS are an alternate type of organic certification system that is self-regulated without the need for third-party assessments

Two major third-party certifiers operating in Vanuatu (though not only in the coconut sector) are ACO and BioGro to cater for key markets for organic products in the region, Australia and New Zealand. Some stakeholders in interviews suggested that the current dependency on the above external certifiers was a barrier to improving competitiveness of Vanuatu's organic products. Should there be at least two local certification agencies in Vanuatu, this would significantly reduce audit costs and promote more producers opting for organic certification.

Furthermore, it has been identified by external auditors of a third-party certification body operating in Vanuatu that the overall cost of the external audit can be greatly reduced simply by providing better training and ongoing support for producers across the year. The cost of an external auditor for one day is approximately 13,000VT per day (around US\$104), and the number of days required by the auditor depends both on the number of producers under the certification and the overall compliance of each. A recent visit found a high percentage of producers were not compliant, which then required a higher number of overall producer audits and a greater number of days required, with a final bill just under 1 million VT (around US\$8020) for a single annual audit. For quicker and consequently cheaper audits, producers need ongoing support across the year to remain compliant. At present, internal auditors for Vanuatubased enterprises are undertrained, under-resourced and require ongoing support across the year to build and maintain the capacity of the certified producers.

Lack of administrative and managerial capacity required for certification

After the initial establishment of third-party certification. organic certification should be renewed on an annual basis in order to maintain the certified status. The management, reporting, training and internal auditing necessary for the maintenance of organic certification are identified as a persistent pressure. The resources and coordination available under a past World Vison development project in Santo were able to demonstrate the value of a regulated management body that could provide information, guidance and structure to third-party certified producers. In the absence of this project, the private sector has moved in to fill this gap, and established processors including COPSL, Plantation Russet du Vanuatu (PRV), Tanna Farms, Epi Cooking Oil (El Cres) and Venui which have been able to absorb the management of third-party certification into their own internal operations.

Most of the business owners stressed that the effort and time that is required to maintain certification is a burden on their business operations. Nevertheless, they do feel that the benefits associated with third-party certification can justify the expense. These private operations typically cover smallholder producers under their company certification, reducing the cost and physical requirements for the farmer and making it viable to expand their own network of certified farmers. However, for smaller enterprises seeking their own certification, the ongoing requirements in terms of training and management may not be within the organization's capacity.

While there is a value in decentralizing the management of certification across the private sector, an overall lack of coordination has resulted in a fragmented approach that does little to build the overall capacity of the Organic sector in Vanuatu. Greater synergy and communication across certified actors have the potential to reduce duplication and streamline activities.

5. CONCLUSIONS: POLICY OPTIONS

The respondents to the survey and interviews were then asked to provide their views on a desirable type of institutional frameworks that could support viable uptake of organic certification. Their views are categorized into two possible frameworks: (i) reducing barriers to third-party certification and (ii) a national multi-stakeholder managerial body for organic certification.

Reducing barriers to third-party organic certification

The Vanuatu Organic Policy 2018-2030 puts forward the implementation of a "Vanuatu Organic Standard" under the existing Organic Pacifika Standard as well as a national "Vanuatu Organic Brand." Feedback from the policy taskforce indicates that these strategies have not yet been agreed upon at a ministerial level, which leaves a space for greater analysis and multi-stakeholder consultation before being formalized. While the concept of a "National Sustainability Brand" has been raised in various reports" there has been little in-depth analysis on how these additional standards and certifications would function, and more significantly, on their overall core objectives.

The main objective of having a national organic standard is to customise metrics for organic certification to make them contextually appropriate to smallholder Ni-Vanuatu producers. The physical standards required at a farm level are not a prohibitive factor for the smallholder farmer. As discussed, Vanuatu farming is 'organic by default,' and there are limited procedures required to upgrade farming systems to meet certified standards. Barriers to certification have instead been identified within internal management systems, specifically in terms of the ongoing reporting, costs and training involved for third-party certification.

When looking specifically at the coconut oil sector, processors and exporters stated that high competition for niche products such as VCO suggests meeting organic standards of buyer countries via third-party certification is becoming a pre-requisite to ensure that small Ni-Vanuatu producers remain competitive against international competitors. However, it would require many years of hard work to make a Vanuatu national organic standard recognized and trusted by international or regional buyers. Domestically, retailers argue that there is limited or no market interest for certified organic coconuts, hence products certified for a national organic standard are unlikely to be sold at a premium price.

To redress the hardship of third-party organic certification facing small-scale Pacific Island producers, a PGS-based regional brand Organic Pacifika Certification (OPC) was developed by POETCOM and certified by a participatory guarantee system (PGS) instead of third-party certification. PGS are an alternate type of organic certification system that aims to self-regulate without the need for third-party assessments. The advantage of PGS is that it is "a low-cost, locally-based system of quality assurance with a strong emphasis on social control and knowledge building" (FAO, 2018). By nature, PGS enhances producer coordination for ensuring that agricultural production in a given region is converted to organic and remains so. As a downside, PGS certifications are not widely recognized as compatible with organic standards of major importers. PGS is thus generally considered as a viable option of organic certification for agricultural products that are consumed locally but not for agricultural commodities that are exported to international markets.

The OPC was adapted to the local context by the implementing partner FSA, which provides a set of guidelines specific to Vanuatu farmers. This system has elevated the standard of produce and the management capacity of smallholders in Vanuatu for a range of different industries. While there have been no coconut producers certified under OPC to date, coconut producers have indicated interest in this system, which simply requires modification to enable specific guidelines for coconut producers. In terms of the market recognition, the OPC certification has not yet been recognized by major international buyers, though there has been a gradual uptake of interest in informal markets in Australia and New Zealand. Despite the lack of recognition in international markets, PGS-based certification builds capacity of Vanuatu producers in terms of increasing knowledge and skills in maintaining their farms organic, which would significantly contribute to the reduction of third-party certification cost.

The Department of Industry (Dol) has developed the "made in Vanuatu" guidelines which seek to 'promote locally made products in the domestic and international markets'.¹⁶ The concept brings together all products including handicrafts, food and beverage under one distinguishable brand. As has been highlighted, most of Vanuatu-made products are organic by default, suggesting that there is a space to include some of the principles of Organic certification within

^{17.} UNCTAD (2017) Harnessing Agricultural Trade for Sustainable Development; Vanuatu - Cocoa and Coconut; UNCTAD (2016) National Green Export Review

^{18.} Department of Industries (2018) 'Made in Vanuatu' brand employment advertisement

this new brand, as well as opportunities to draw on other VSS, such as Fair Trade.

Policy 1. Reduce barriers to the acquirement and maintenance of third-party Organic certification for coconut producers and processors in Vanuatu.

- Support POETCOM in streamlining of external auditors to reduce the annual travel costs imposed on third-party certified enterprises. The administration costs for annual audits were a burden on both small and large producers. The proposed national management body should work with POETCOM, external third-party certification bodies and certified enterprises to streamline external audit systems and training.
- Identification, training and funding of an in-country internal auditor to support certified enterprises in ongoing compliance, reducing the time and therefore costs of external audits. The training, upskilling and resourcing of an internal auditor will enable ongoing support throughout the year to increase the capacity and compliance of certified producers and processors. High levels of compliance results in quicker, less rigorous external audit requirements, and therefore overall audit costs.
- Identify possible subsidies for the cost or partial cost of the annual fees associated with third-party certifications. The implementation of subsidies for the annual fees of certification will provide greater opportunity for producers and processors to formalize organic farming systems. Subsidies should assist smaller enterprises to meet the costs of certification and potentially incentivize the private sector to include smallholder farmers under their own certification.

A national management body for production and certification of organic coconut

There is consensus amongst stakeholders that progress in organic certification will be accelerated with the establishment of a national management body that oversees the implementation and maintenance of organic certification and help multi-stakeholder coordination and collaboration. At present, a lack of co-ordination restricts the maturity of the organic sector in Vanuatu. A national management body of organic certification may be established in close collaboration with POETCOM, which provides support to both third-party and PGS certification systems, and FSA, which is currently acting as the in-country implementing partner for the OPC.

The interviews with the stakeholders suggest that they are willing to have a national management body that brings together private actors and government agencies to address key barriers facing organic certification through a collaborative approach. For the private sector, multistakeholder collaboration can open opportunities to share annual training and align external audits, reducing the overall human and financial resources required for organic certification. Many stakeholders also hope that such a management body will enable the provision of a platform to access and share information and training. Most small-medium scale enterprises interested in thirdparty organic certification mentioned they need technical support to establish internal control systems and conduct long-term internal auditing. For established businesses with certification, these processes can be absorbed into internal management structures, but for many there is a heavy reliance on voluntary or external technical support. A dedicated management body with allocated resources for the support and training of certified producers could reduce the burden on producers and processors and increase the overall sustainability of third-party certification.

The National Coconut Strategy 2016-2020 highlights the need to 'establish appropriate administrative and regulatory frameworks to manage the coconut sector'.19 Identified actions include the establishment of the Vanuatu National Commodity Secretariat (VNCS) to act as the overseeing body of the coconut sector. Potential to incorporate a management body for organic certification for coconut products could sit within this proposed framework, given the consistent allocation of human and financial resources. The Organic Policy 2018-2030 also envisages a focal point within the MALFFB with an Organics Officer to "coordinate, monitor and measure implementation of the National Organic policy," although it is unlikely that there will be sufficient human and financial resources under this role to support the overall management of an additional national management body. The Department of Biosecurity (DoB) express the capacity to integrate organic certification management, training and internal auditing within the Compliance Unit and there is a clear value-added- in building the capacity of the FSA to expand their role in the support and management of certified producers.

^{19.} The National Organic Strategic Plan 4th Draft is the most recent draft available as of 22nd May 2018. Department of Agriculture and Rural Development (2018) 4th draft of the National Organic Strategic Plan.

While ideally this national management body would be administrated by the relevant government department, there is a need to ensure that it has the required resources and support to remain effective. The development of a national management body should be planned and negotiated between core stakeholders, including all relevant government representatives, to ensure that it sits within the correct framework and has dedicated financial support. In addition to the representation of established processors and exporters, producers and micro- and small-scale processors should be included to ensure the perspective of smallholders and MSMEs are heard alongside more established actors in the value chain. Smallholder farmers can be represented through co-operatives or associations to provide ongoing feedback - at a grassroots level - on the perceived functionality of the systems in place and on the impact of the measures implemented within this framework. Representation and expertise from regional/international buyers may ensure that proposed strategies are meeting the market trends.

With the increasing access to ICT across Vanuatu, online platforms have become a viable option to support multistakeholder engagement. An example can be taken from the establishment of the Vanuatu National Advisory Board on Climate Change and Disaster Risk Reduction (NAB). This panel was established in 2013 to provide a multistakeholder platform to make decisions about climate change and disaster management programmes being funded in Vanuatu, reduce duplication and increase key coordination between agencies and provide increased access to information and research about the sector.

The NAB utilized two channels for communication and decision-making: regular meetings of senior staff from all key stakeholders; and a web-based platform (the NAB portal) that provided standardized messaging, forms, information, research and media. The meeting format met initial barriers in attendance and engagement. For senior staff, attending meetings often proved to be difficult and resulted in meetings being delayed months at a time until a quorum could be achieved. The web-based platform experienced initial problems due to the same 'staff resourcing' issues. Few departments or CSOs had a dedicated communications staff member to update and monitor the site. This led to a slow adoption in the first few years. A multi-stakeholder national management body should learn from and align with existing national policy and plans. A consortium of national stakeholders should include members across the sector and within the value chain itself.

At the government level, Department of Industry (Dol), Department of Agriculture and Rural Development (DARD), Department of Biosecurity (DoB) and Department of Cooperatives will provide direction on national policy and legislation that can guide streamlined implementation. Government bodies such as the Vanuatu Commodities and Marketing Board (VCMB), The Vanuatu Bureau of Standards (VBS), the Vanuatu Agriculture College (VAC) and the Vanuatu Agriculture Research and Technical Centre (VARTC) will also be required to provide input into the sustainable management, training, and monitoring of organic certifications systems. NGOs with existing capacity in Organic certification such as the Farmers Support Association (FSA) and World Vision also have a supporting role to play.

Planning, capacity building and implementation must be done in alignment with Government Committees already in place to develop policy, including the working group developing the Organic Policy 2018-2030 (currently in draft under the Department of Agriculture and Rural Development).

Policy Option 2. Establish a national management body in support of organic certification.

- Identify and confirm a relevant structure to oversee the management, coordination and support of Organic Certification in Vanuatu. Many stakeholders have limited or no access to information and coordination of training and systems. A national management body would seek to act as a centralized outlet for information, training and internal systems support for producers and processors in addition to allowing cost-sharing for mapping and auditing.
- Re-established previous frameworks for multistakeholder engagement under the coordination of a national management body. A multi-stakeholder platform should seek to share information and resources across the sector through low-cost solutions with clearly defined goals and outputs. Delivery channels need to be investigated further to reach the geographically diverse and ICT-restricted stakeholder group.
- Identify opportunities to collate data on organic producers in Vanuatu via existing online platforms. Further investigation into the potential sharing of data held by certified producers through online systems is also required.

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ANNEX 1: INTERVIEWED STAKEHOLDERS

Jimmy Rantes	Director, Department of Industry, Port Vila
Timothy Tumukon	Director, Department of Biosecurity, Port Vila
Keith Antfalo	Department of Industry, Luganville
Italio Bororoa	Department of Agriculture, Luganville
Jennifer Learmonth	Department of Agriculture, Port Vila
Nambo Moses	Department of Livestock, Board Member of POETCOM, Port Vila
Benoid Charlie	Vanuatu Commodities and Marketing Board, Luganville
Ruth Amos	Vanuatu Bureau of Standards, Port Vila
Norah Rihai	Vanuatu Agricultural College, Luganville
Jonas Masovish	Training and Vocational Education Training (TVET), Luganville
Karen Manusua	POETCOM, Fiji
Steven Hazelman	POETCOM, Fiji
Tony Walker	Australian Certified Organic (ACO)
Kate Allan	Australian Certified Organic (ACO)
George Bumseng	Farmers Support Association, Port Vila
Andreas Lombardozzi	African Pacific, Australia
Adam Trau	World Vision Vanuatu, Port Vila
George Moli	Samna Community Coconuts ACO support / World Vison, Luganville
David Russet	Plantation Russet du Vanuatu, Malekula
Mama Joy	Mama Joy Melanesian Oil, Luganville
Grant Bowker	Vanuatu Virgin Coconut Oil Pty, Luganville
Joelle Kamata	Matui Varae, Santo
Michaela Van der Schaaf	Office of Co-operatives / Vinmavis Cooperative, Lakatoro
Bruce Hannet	Nuts and Oils Vanuatu, Malekula
Jeffery Homal	Coconut Oil Production Santo Limited (COPSL), Luganville
Diason Wilson	Vanuatu Coconut and Copra Export (VCCE), Santo
Hicklington Ngwele	Vanuatu Coconut and Copra Export (VCCE), Lakatoro
Sani Kakkollil	Pacific Pride, Luganville
Nicky Barnes	Pandanus, Port Vila
Cleméntine	Organic Paradise, Port Vila

ANNEX 2: INTERVIEW GUIDELINES

Role and function	 Kindly describe your role (in the value chain OR as a Stakeholder) 	Value chain actor, stakeholder, role and function, power and embeddedness Map out strategic options in Multi- stakeholder platform and National Action plan
Have you ever heard of certification?	 Could you tell us what you know about it? Where did you hear about it? What does it mean to be certified? Do you know how or where to get certified? Do you know any farmers who are certified around you? Why do you think farmers obtain certification? Is it for economic or non- economic reasons? 	Basic knowledge about certification and VSS itself
Do you think it is easy or difficult to obtain certification?	 Are there many or few local producers who are certified in your area? Why is this so? Do you think it is expensive to get certification? Are the certification requirements too strict? 	Barriers to VSS (for example, cost of VSS, too strict)
What do you think are the main challenges of obtaining certification?	 Please identify up to three challenges. Who pays for what in certification? Do farmers pay 100% for the whole process? Kindly explain the process 	Challenges and who bears cost of obtaining certification Do producers receive financial assistance to obtain certification?
Certification, motivation	 Can you tell me about how you got certified? What were the main challenges to certification? Why did you decide to be certified? Were your expectations met? How do you see the importance of certification in the future? 	Build upon structured questionnaire, get a better sense of priorities,
How do you think certification affects you?	 Are the impacts of certification positive? To whom? Why? What are the main benefits? Are there disadvantages of being certified too? Have there been farmers who did not benefit from certification? What are the main disadvantages? Going back to benefits, what types of benefits from certification schemes would most likely be important to producers? To other actors in the value chain? Along the value chain, who do you think benefits most from certification schemes or standards? Why? Please explain your answer. 	Poverty alleviation SDGs e.g. Food security, decent em- ployment, gender equality, environmental conservation, global partnership

Does certification impact the community or country? How? In which way?	 How does certification impact the community? Elaborate on their previous social, economic and environmental perceptions/statements. 	Credibility of VSS, VSS achieving public policy SDGs e.g. Food security, decent em- ployment, gender equality, environmental conservation, global partnership
What do you think are the main challenges of maintaining certification?	 Please identify up to three challenges. Kindly motivate your answers. Do you know of farmers who received certification before but are not certified now? If yes, what happened? Who pays for what in maintaining certification? Kindly explain the process 	Challenges and who bears cost of maintaining certification
Who do you think has the power in your value chain? Kindly explain your answer.	 What kind of power do you mean? e.g. Power over information about certification process, power to dictate production methods; to dictate quality and quantity of harvests; timing of harvest; power to set prices? Does the power lie on a single person or group of persons or is power equally distributed along the value chain? Are the prices you receive for your produce fair? 	Power and embeddedness (e.g. Production methods, quality, Price, Quality)
Please describe coordination in your value chain.	 How do you get information for your production and market (e.g. production methods, market info)? What were the main challenges in collaborating with buyers (and vice versa)? To whom do you discuss your issues or problems? Are these people easily accessible to you? Could you approach extension workers or government agencies easily for help? Kindly give an example. Do you know where your produce goes to? Or what happens to your harvest? Have you seen its final form (in retail)? 	Institutional capacity and coordination across stakeholders
Please describe who bears the risk in your value chain.	 If the produce gets rejected or does not get sold, what will happen (to the produce/ to prices)? Who are the losers and winners when produce fail to meet standards? 	Risk bearing
Role of women	 Do you think certification will help increase work opportunities for women? Do you think certification will allow more women to find meaningful work in agriculture? 	Gender Equality and women empowerment and VSS, SDG 5

Do you think getting one type of certification makes it easier to get another type of certification? Why or why not?

Creation of a national multi-stakeholder platform for voluntary sustainability standards.

- Do you know of other local producers who have multiple certifications?
- For producers, are you interested in getting multiple certifications?
- Who do you think should be represented in the platform and why?
- What should be the first issues that this platform could tackle? How could farmers / other actors in the VC benefit from this platform?
- How do you think this platform should operate? (e.g. where to meet and how often, how often will the representatives be re-elected?)

Interoperability of standards

Multi-stakeholder platform establishment and composition, focus

ANNEX 3: METHODOLOGY SURVEY SAMPLE

There are an estimated 23,164 households in Vanuatu producing coconuts as a cash crop.²⁰ To survey a population of this size with a confidence level of 9 per cent and a margin of error of 5 per cent, 387 surveys would need to be administered. As the transport costs and the time needed to administer these surveys in different locations exceeded the time and budget available, UNCTAD agreed to a sample size of 75 producers to conduct the survey as a pilot study.

Random sampling methods could not be applied to choose the 75 producers to be surveyed, since there are no lists or databases that provide producers' names, contact details or levels of engagement for the coconut oil sector. Instead, participants to the survey were identified using a targeted snowballing strategy that consisted of identifying geographical sites of bulk coconut production, visiting those communities and identifying producers via recommendations by local chiefs, traders and exporters. Producers were also identified through processors and cooperative managers that were interviewed and were able to share information on their suppliers. Organic producers were purposefully targeted in order to ensure representation from both types of producers.

Surveys were conducted on three core islands, Efate, Malekula and Santo, with several additional surveys completed on Santo's offshore island of Malo. Santo and Malekula islands were selected for site surveys based on their high overall value of production as identified by the National Coconut Strategy. Sanma Province, which includes Santo, produced 93,202,000VT worth of coconut products in 2007, and Malampa Province, where Malekula is located, produced 68,943,300VT, the two highest provincial production values in the country. Efate was included due its high percentage of hectares planted with coconuts (52 per cent of total area, compared to the national average of 27 per cent.

The total of 75 surveys was distributed as follows: 20 producers from Efate, 20 from Malekula and 35 from Santo, including both certified and non-certified producers. Overall, the total number of survey participants exceeded the initial

goal of 75, with a total of 87 surveys completed. 71 surveys were with non-certified respondents and 16 were with certified respondents.

While the outcome of the study cannot be considered a statistically significant representation of the situation, it provides a useful snapshot of the preparedness of coconut oil value-chain actors for VSS adoption to enter green export markets. The survey findings are therefore to be taken as indicative of demographics, perceptions and knowledge within rural communities, but not as statistically representative of the entire communities.

SURVEYS

The standardized questionnaires for the survey developed by UNCTAD were adapted to the context of Vanuatu. Two versions of the survey were created: one for certified actors, i.e. the producers who have already been certified for one or more sustainability standards including organic standards, and one for non-certified actors. The primary purpose of this division was to explore certified actors' experience of the certification process and impact on their activities, and to identify the areas where their perceptions differ from each other. The survey questions were translated to the local language Bislama before use. To confirm the logic, translation and respondent comprehension of the survey questions, pilots were run in North Efate with small amendments made to the phrasing and language.

Field surveys were administered by a team of seven numerators who were trained in survey data collection. The enumerators were provided with a half day of training at the start of the field data collection to ensure consistency and accuracy in data recording. They then participated in debriefing at the end of the field visits to provide an overview of observations and central findings. Due to limited internet access in rural areas, hard copy surveys were printed for enumerators' use in the field. The collected surveys were then entered into SurveyMonkey by data entry staff. Exported, disaggregated raw data for both surveys have been supplied separately to UNCTAD to maintain confidentiality. The data has been supplied in Excel format. Identifying information has been removed from these files. Hard copies and soft copies of the survey data will be retained by Development Services for three years and will then be disposed of.

^{20.} Vanuatu National Statistics Office (2017).

IN-DEPTH INTERVIEWS

In-depth interviews were conducted with stakeholders across the coconut value chain who were expected to provide a level of detail or analysis of an element of the value chain. Stakeholders to be interviewed were identified via various reports, research, and consultations, as well as information provided by key research support agents in the Department of Industry. Additional stakeholders were then identified via a strategic snowballing sampling approach, where information gained from early interviews suggested new stakeholders to include in the consultations. Stakeholders interviewed included 10 government officials and public sector actors, five representatives from international organizations and NGOs, six private sector processors, six exporters and traders and two representing organic certifying agencies.

CHARACTERISTICS OF THE SURVEY RESPONDENTS

Data collected through the survey are disaggregated by gender, age and level of education.

Gender: A third of the farmers and processors that were interviewed were women, though the majority (69per cent) of the certified farmers and processors were male.

Gender of survey respondents

	MALE	FEMALE	TOTAL
ALL SURVEYS	60	27	87
	69%	31 %	100%
"CERTIFIED" ACTORS	13	3	16
	14.9%	3.4%	18.4%
"NON-CERTIFIED" ACTORS	47	24	71
	54%	27.6%	81.6%

Age: Across the survey sample, respondents were distributed across the age ranges between 18 and 60+.

Comparison of age-ranges between certified and non-certified farmers and processors			Д	GE			
	18-29	30-39	40-49	50-59	60+	NO RESPONSE	TOTAL
ALL SURVEYS	10	16	22	20	18	1	87
	12%	19%	26%	23%	21%	1%	
CERTIFIED RESPONSES	0	0	1	8	6	1	16
	0	0	1.1%	9.2%	6.9%	1.1%	
NON CERTIFIED RESPONSES	10	16	21	12	12	0	71
	11.5%	18.4%	24.1%	13.8%	13.8%	0	

Education: Almost half the farmers and processors participating in the survey finished their schooling in primary school, with some having received no education at all. Among men, certified respondents were more likely to have received vocational training than non-certified respondents. Among women, a higher portion of certified respondents received secondary education than non-certified respondents.





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