

Green exports to foster sustainable development





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#### **Note**

All data and prices used throughout this guide are based on 2023 and are subject to change. Users are advised to verify any information and consult with relevant authorities, organizations, or professionals before making decisions related to the export process, certification, or pricing strategies. This guide is for informational purposes only and does not constitute legal, financial, or professional advice.

The term "dollar" (\$) refers to United States dollars unless otherwise specified.

The term "PGK" refers to the Papua New Guinea currency (kina) unless otherwise specified.

# **Abbreviations and acronyms**

**GST** General Sales Tax

HS Harmonised Commodity Description and Coding System

IPA Investment Promotion Authority

IRC Internal Revenue Commission

NAQIA National Agriculture and Quarantine Inspection Authority

PNG Papua New Guinea

SERc Social and Environmental Responsibility certification

SMEs Small and medium-sized enterprises

PoetCom Pacific Organic and Ethical Trade Community

UNCTAD United Nations Conference on Trade and Development

VSS Voluntary Sustainability Standards

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Introduction

1

#### Introduction

The purpose of this export guide is to provide producers, processors and exporters of vanilla in Papua New Guinea with detailed information on the requirements and procedures to follow to export vanilla to customers and buyers worldwide. Additionally, it aims to encourage and facilitate exports of vanilla to sustainability-oriented markets, which are expected to increase in volume in the coming years.

There is more to the task of exporting than just sending vanilla out to a customer. A lot of work usually precedes and follows the task of agreeing a sale, ensuring quality of the product, following all procedures as required by the Papua New Guinean authorities and that it meets international and specific customer standards. It is envisioned that, by preparing this guide, anyone who is interested in becoming an exporter, will be fully aware of both the opportunities and the significant risks involved, but most importantly the considerable effort that it requires.

# What are the expected benefits for exporters and Papua New Guinea?

In addition to the above, this guide will also serve to:

- a) Increase awareness among potential vanilla exporters regarding the minimum requirements expected by different countries and different customers.
- b) Strengthen and improve the institutional, logistical and supply network to facilitate vanilla production, transportation and export.
- c) Support Papua New Guinea's vanilla industry through increased export of quality product.

# Green trade as a central element of sustainable development

In 2020, the Melanesian region was introduced to the concept of green trade and Voluntary Sustainability Standards (VSS) through a study conducted in Vanuatu by UNCTAD (2020). Leveraging the knowledge gained from this initiative, UNCTAD and the Melanesian Spearhead Group (MSG) Secretariat lead the MSG Green Trade Project aimed to extend the benefits of green trade to the entire region, inclusive of the Papua New Guinea vanilla sector. Significantly, green trade fosters inclusivity, offering opportunities for rural communities, including women and youth, to reap the benefits of sustainable economic growth and actively engage in trade activities.

# Voluntary Sustainability Standards to improve the quality of exports

Although still new for policy makers, producers, processors and exporters of vanilla in Papua New Guinea, VSS markets are increasingly being used to guide quality exports for reassurance to customers and catch premium price. Organic quality vanilla is in demand in the highest paying markets such as Australia, the European Union, Japan and the United States of America.



# 1

# **Before exporting**

### 1.1 The basics

# 1.1.1 What species of vanilla?

Two commercial species of vanilla are grown in Papua New Guinea, *Vanilla planifolia* and *Vanilla tahitensis*, locally known as bikpela lif and liklik lif respectively. *Vanilla planifolia* is used broadly in many markets, whereas *Vanilla tahitensis* has a smaller market and is mainly used in gourmet single beans and vanilla extractions (feeding other industries, such as ice cream). There are also three native vanilla species in Papua New Guinea; two have small pods and are not approved for food, the other species is sterile and often confused with *V. planifolia* but will never flower or give pods. Technically the part of vanilla for sale is called a pod but often people call it a vanilla bean. Here, the guide uses bean or pod interchangeably.

Ensuring the correct species is exported to customers is critical, given the distinct aromatic profiles (flavour and scent) of the two commercial species in question. Most buyers express interest in only one of the species, and even those interested in both will typically request separate packaging. Failure to adhere to these specifications, such as providing a mixed lot or the incorrect species, can result in the loss of customer trust due to a perceived inability to meet basic requirements. It is advisable to learn how to visually distinguish between the two species. Additionally, if both species are being purchased or produced, it is recommended to store them separately to prevent cross-contamination of their respective aromas.

# 1.1.2 What vanilla product to export?

Cured vanilla as a raw ingredient can be exported in four basic forms:

- whole beans.
- cut beans.
- ground vanilla (also sold as powder after drying).
- vanilla caviar (the seeds and pulp without the skin).

Vanilla can also be exported as an extract, after spending some time in a mixture of ethanol and water. There is a market for single origin extract for small volumes but it is small and difficult to penetrate distribution mechanisms. Most commercially available extracts are made by very large companies that blend different regional production to make consistent extraction for flavour and aroma profiles.

# 1.1.3 How good is the quality of vanilla?

Four factors contribute to the quality of vanilla. They are visual appearance, smell, vanillin content and percentage humidity. The first two factors do not require any equipment to be assessed, only experience in noticing the subtle signs that distinguish good and exceptional quality from mediocre and poor quality. The last two factors, however, must be tested in a laboratory. For percentage humidity the test can be performed routinely with the adequate equipment and a modicum of training. For vanillin content, however, the test requires both access to expensive equipment and must be performed by a highly trained technician with extensive expertise. Although the last two factors contributing to quality are more difficult to ascertain (than the first two), they have the advantage of being unambiguous and objective measures of the condition and thus quality of the sold vanilla.

The most important factor, by far, is aroma, given that this is what vanilla is famous for. The basic note of the smell should be slightly sweet and evoking warm feelings, without any unpleasant off notes, such as metallic, varnish, urine or smoke. On top of the basic note, there can be additional pleasant scents, reminiscent of leather, wood, flower and other spices. This combination of scents is what is referred to as the vanilla bouquet. The more pleasant and complex this bouquet, the higher the quality of the vanilla. It takes experience, however, to assess the quality of vanilla using one's sense of smell alone. And that is the reason the other three factors are also used to assess quality, to complement the subjective nature of smell.

Visual appearance is important. First, because it will affect which type of market the exporter aims to reach with the vanilla: gourmet or extraction. Gourmet beans are typically bought individually or in small bunches by consumers in a supermarket or speciality store. They must be visually close to perfect, which for vanilla means, being uniformly dark in colour (ideally black not just dark brown), straight, looking plump (full-bodied instead of flat), and with a smooth satin skin devoid of any visual defects (scars, bite marks or splits). Vanilla beans that do not meet any of these exacting standards will likely end up in an extraction facility, where bean appearance matters little. Second, the visual appearance of a vanilla bean is very informative as to how the bean was grown, looked after and processed and hence of its overall quality. Again, this takes experience to interpret visual signs correctly.

Next is vanillin content, which is the molecule responsible for the main note in the taste and scent of vanilla. A variety of methods exist that can measure the percentage composition (relative to dry weight) of vanilla beans. However, to translate this percentage into a measure of quality, the species of vanilla must also be considered, because of their different aromatic profiles. Fourteen different phenolic compounds contribute to the aroma of vanilla (Brunschwig et al. 2009) and vanillin is only one of them. The vanillin content is typically higher in *Vanilla planifolia* (typical range: 1.6-3.6 per cent) than in *Vanilla tahitensis* (0.8 to 2 per cent). However, the total aromatic content across all fourteen phenolic compounds shows the opposite, with *Vanilla tahitensis* having higher total percentages (4.2-5.1 per cent) than *Vanilla planifolia* (2.1-4.2 per cent). The bouquet of *Vanilla tahitensis* is therefore richer and more complex (less dominated by vanillin alone) than that of *Vanilla planifolia*, and contains several phenolic compounds, barely or not present at all in *planifolia*.

For both species, the higher the content in vanillin, the higher the vanilla quality, but the minimum value to exceed will be different: 1.5 per cent for *Vanilla planifolia* and 0.8 per cent for *Vanilla tahitensis*. The other reason vanillin is such an important measure of quality is due to vanillin's anti-fungal and anti-bacterial properties. A high vanillin content means that vanilla will be less likely to spoil and develop fungal growth, which will be invaluable to customers who may want to keep the vanilla for extended periods of time (up to three years under good conditions).

Finally comes relative humidity (or what proportion of the vanilla weight is contributed by water). During the curing process, relative humidity is brought progressively down to a value close to 35 per cent, at which point most farmers will sell their vanilla. Different customers will request different humidity of the vanilla

based on how they intend to use vanilla. Generally, for vanilla the higher the humidity content the more chance of fungal growth occurs if the beans are stored for a long period of time in boxes. As an exporter, it is important to purchase beans that meet the export requirements of the customer as closely as possible and maintain their moisture content for as long as possible. Otherwise there is a risk of financial loss as the beans may lose weight through drying or develop fungal moulds (and thus cannot be sold).

Quality vanilla can be of any size. There is a misconception that larger beans are of higher quality. In practice, each size of bean has its own market. Some buyers buy larger beans at a higher price as the larger the bean the more likely there is enough vanillin content to reduce mould growth. Smaller beans are more easily overheated during the processing and tend to be drier and grow fungus more quickly. However, if pods are picked when ripe and processed correctly all beans can reach a high quality.

Understanding customer requirements in terms of relative humidity, size, and acceptance of beans with marks or scratches is vital for adapting strategies to meet customer demand effectively.

#### 1.2 Market research

There are essentially two ways to connect to a market, known as the 'push' and 'pull' approaches. The initial focus on one of these approaches can be decisive for the success of an exporting business. The 'push' approach involves first producing a market-ready product and then seeking a customer interested in that product. This can lead to frustration if the product does not fully align with a potential buyer's needs. Conversely, the 'pull' approach begins with an understanding of customer demands, followed by the production of a product that meets those specific needs, thereby increasing the likelihood of success. VSS and international standards are relevant to know as well as the individual countries import requirements to meet customer's needs.

There is a growing demand for vanilla in the United States of America, Asia and Europe. The global vanilla market was valued at \$2,854.99 million in 2021 and is projected to reach \$4,701.91 million by 2030, growing at a compound annual growth rate of 5.7 per cent over that period (Straits Research, 2023). Vanilla is essentially used to add flavour and fragrance to products, mostly food but also in cosmetics, and perfumes. Additionally, some consumers believe that vanilla has medicinal properties such as anti-inflammatory, antioxidant, and antidepressant properties as well as health-promoting elements, such as vitamins, minerals, and phenols, which is leading to the increasing demand.

The Asia-Pacific region is the fastest growing market, but an increase in the bakery industry in Europe, as well as an increase in dairy products in the United States of America is driving global sales. Vanilla demand in the healthy drink market has also fuelled growth.

The main market for vanilla is the United States of America, followed by the European Union and then China (Table 1). Australia and New Zealand are smaller but interesting markets for Papua New Guinea, due to their preferential trade tariffs and proximity.

Although the value of world imports of vanilla has increased sharply between 2020 and 2021, it should be noted that this is partly due to the increase in international vanilla prices between 2019 and 2021. The increase in volume was more moderate.

Table 1. Major markets for vanilla

#### EXPORT MARKET

#### IMPORT MARKET

US\$ EconomyPercentage of MillionsEconomyMadagascar620.463.8United States of AmericanceFrance70.87.3FranceGermany44.14.5Germany	US\$ Millions  ca 324.3 196.2 97.2	Percentage of import market 35.7 21.6
France 70.8 7.3 France	196.2	
		21.6
Germany 44.1 4.5 Germany	97.2	
dornary 11.1		10.7
Indonesia 39.9 4.1 Canada	70.3	7.8
Canada 31.3 3.2 Netherlands	56.6	6.2
Papua New Guinea 30.1 3.1 Indonesia	15.8	1.7
Uganda 25.2 2.6 Switzerland	14.8	1.6
Netherlands 24.3 2.5 Denmark	13.1	1.4
United States of America 13.3 1.4 Italy	11.1	1.2
Poland 10.7 1.1 Poland	11	1.2
Mauritius 10.3 1.1 Japan	9.6	1.1
Belgium 6.1 0.6 Mauritius	9.1	1
French Polynesia 6 0.6 Australia	8.5	0.9
Czech Republic 5.7 0.6 Belgium	8.2	0.9
Comoros 4.7 0.5 United Kingdom	7.7	0.9
Switzerland 3.7 0.4 Czech Republic	5.77	0.6
Denmark 3.2 0.3 Sweden	5.52	0.6
Australia 2.8 0.3 United Arab Emirates	4.6	0.5
South Africa 2.3 0.2 Austria	4.2	0.5
Austria 2.2 0.2 Republic of Korea	3.8	0.4

Source: Tridge, 2023.

The price of vanilla is driven by supply and demand. Price fluctuations from one year to the next are sometimes extreme, which can be difficult to navigate and respond to. When the price is high, usually because of high demand or supply shortages due to events like cyclones in Madagascar (see Figure 1), it is generally easy to find a market for the vanilla. The price difference between high-quality and low-quality vanilla narrows, giving a false impression that exporting vanilla is straightforward and risk-free. On the other hand, when the price is low due to reduced demand, two difficulties arise. Margins suddenly shrink to almost nothing or, in extreme cases, become negative (one gets less money for selling vanilla than has already been spent or is going to be spent to export it). Additionally, customers become more demanding regarding quality and may reject vanilla that would have been acceptable when supply was low. The only way to survive these unpredictable episodes is to *always* focus on quality and as much as possible to secure a contract with buyers where the price is set in advance (before putting together the order). Occasionally, this may result in a lower price than the current trading price if there has been an unexpected rise. However, the potential loss in earnings is usually a lot less than the risk of holding stock when the market collapses.

Historically, the price of vanilla has been low for many years in a row (Figure 2) and only increased dramatically, sometimes getting as high as silver, when there was a massive shortage of vanilla in Madagascar. These shortages are unpredictable and have coincided in the past with civil unrest and severe cyclones that disrupted the flowering of vanilla over most of the island. If the price falls sharply, there is no way to tell when will be the next hike in vanilla price, but it may be several years in the future and always unpredictable. The average price for the last 30 years has been around \$60-100 per kilogramme.

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Madagascar Indonesia Papua Mexico **New Guinea** China Uganda 

Figure 1. Production of vanilla from 6 largest producers (in tonnes)

Source: FAOSTAT, n.d.

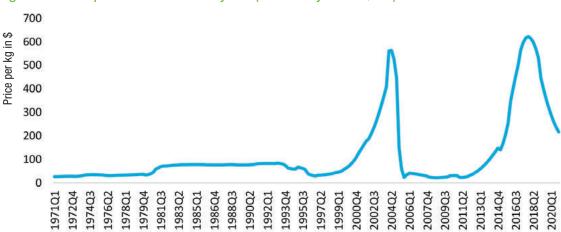


Figure 2. Vanilla price over the last 50 years (NB: mostly below \$100)

Source: Khan et al., 2022.

There is usually a contraction of vanilla production world-wide especially in countries with high labour costs. The behaviour of abandoning vanilla when market is low and returning to re-planting when demand is high is thought to add to the volatility of the market. Madagascan farmers, however, keep producing vanilla even when prices are low, while waiting for better days to come. In Papua New Guinea, vanilla if grown at its productive maximum per hectare will provide an income higher than cocoa or coffee even at a market price below \$30 per kilogramme. That being said, a hectare planted with vanilla will require more labour to maintain than a hectare of cocoa or coffee.

# 1.2.1 Finding a customer

It is important to find a customer that demands the right volume. Some customers may need several tonnes of vanilla shipped to them once or twice a year, other customers a few hundred kilos and yet others

just a few kilos. Therefore, it is essential to identify customers who align with the volume of vanilla planned for export. However, reliance on a single customer poses long-term risks; diversifying with a minimum of six customers is advisable to stabilize the portfolio.

The biggest buyers of vanilla, those who buy 40 tonnes or more of vanilla for extraction annually, will be out of reach for most exporters. The demands for food safety certification, documentation and other social and environmental certification can be beyond the capacity of small to medium operators to get into this market. They usually work with a small group of companies that they have traded with for a long time and do not buy small volumes of vanilla from many different suppliers. However, there are many other customers seeking quality vanilla in smaller volumes.

# A. In the retail sector (selling vanilla to consumers)

Supermarkets are not likely to buy vanilla directly from Papua New Guinea, but from a wholesaler instead that would brand and package vanilla to be sold in supermarkets. It should be noted that the larger the supermarket chain, the larger the volume that is required to be supplied. Therefore, it is advisable to choose a wholesaler whose demand can be met. Specialist food stores and spice merchants (especially those with an online presence) often stock small volumes of vanilla (e.g., as small as 200kg). Even if these retailers have established suppliers, there may still be interest in a new species of vanilla (e.g., *V. tahitensis*) or a new origin, such as Papua New Guinea, as long as consistent quality can be delivered.

#### B. Artisan bakeries, ice cream makers and confectioners (incl. chocolate)

Vanilla remains an expensive and luxury ingredient, so look for small firms and companies that cater for the high-end markets and discerning customers who will pay premium prices for quality. These companies will not be easy to find, though, as most of the sector survives on volume and keeping costs down (by using synthetic vanillin) wherever possible. There are however many artisans that are looking for good quality vanilla.

# 1.2.2 Countries to export

When looking for customers and buyers, the choice of target country will need to be made. There are basically two factors to consider: economical and geographical.

The buyers in Japan and European countries pay the highest price for vanilla but at the same time they demand the highest quality vanilla and have stringent food safety standards to comply with. The United States of America has a much larger market and takes vanilla over a wider quality standard. This is due to different national legal requirements on vanillin content. The market, while larger, tends to offer lower prices.

Finally, if possible, export to a nearby country, such as Australia and New Zealand. This approach reduces shipping costs, and customers in these countries may already be familiar with vanilla from Papua New Guinea. The downside is potential increased competition from other local exporters.

Here are a few more things to consider about each regional market:

#### A. The Australian and New Zealand market

Australia is the largest market in the Pacific and a large market for certified products, such as Organic, Fairtrade or Rainforest Alliance, which is growing rapidly (FiBL 2022). Australia consistently was the top destination for Papua New Guinea's vanilla exports in 2020 and 2021 (UN Comtrade, n.d.).

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#### B. The European Union market

In the European Union market, Germany, France and the Netherlands are the largest importers of vanilla. The European Union, like Australia, is also an attractive market for certified products, as the bloc represents the second largest organic market after the United States of America (FiBL 2022). Food safety certifications as well as quality will help find markets in the European Union.

#### C. The United States of America market

The United States of America Market is the largest by volume. However, prices tend to be lower in comparison with the markets discussed above, but quality requirements also tend to be less stringent, meaning that it is easier to comply with export requirements. The United States of America market is dominated by extraction and use of vanilla in dairy product markets. For this market as well (like those mentioned above), it will be an advantage to have food safety certification.

#### D. The domestic market

It is useful to consider the attractiveness of the local market before embarking on exporting. Selling in the local market can offer a good return if one factors in all the costs and paperwork involved in exporting the products (see further below in Section 1.3.2). It is also important to consider that for exporting, maintaining product quality until it reaches the customer can represent a lot of extra work.

# 1.2.3 Emerging "green" trends in the market

There is a growing demand globally for products that are healthy, produced organically, socially responsible and do not harm the environment, across all commodities. Large industrial food companies (e.g., Nestlé, Kellogg's, Mars) are taking note and are starting to respond, demanding that their supply chain move towards better practices. This also applies to vanilla but in peculiar ways.

In the retail sector (see 1.2.1.A above), where vanilla is sold directly to customers, it is common to see vanilla with an Organic or Fairtrade certificate. In this sector, customers may either pay a premium for certified vanilla or will preferentially buy vanilla that is certified over vanilla that is not. The share of certified vanilla in the retail sector is expected to increase steadily in the coming decade (Straits Research, 2023).

In the bakery, ice-cream, confectionery industry, the demand for certified vanilla is not there yet, for a simple reason. For a food product to be labelled organic or fairtrade, it does not need all its ingredients to be certified, only those that contribute to the majority of the weight (95 per cent) of the product. Because vanilla makes up much less than 1 per cent in weight of the final goods and remains quite expensive, most manufacturers use uncertified vanilla to keep their costs down.

# 1.2.4 International Standards and Voluntary Sustainability Standards (VSS) as an opportunity

In the VSS for vanilla in Papua New Guina, several green (sustainable) initiatives are discussed. As an exporter, it is necessary to be aware of the work involved in getting the right type of certification and in complying with the requirements of these new markets.

# A. Organic

To obtain organic certification, the vanilla to be exported must be grown and cured using natural means, without any chemical inputs (fertilizers, insecticides, fungicides, etc.) and remain free of chemical

contamination until it reaches the customer. Simply declaring the produce as organic is not sufficient; proof that the vanilla was grown organically, potentially including soil or vanilla samples, is required. Additionally, full control over the traceability of the vanilla from farm to export is necessary. This certification is one of the most demanding and constraining certifications. As a result, it is very expensive and difficult to obtain. For most certification bodies an individual farmer cannot get a certificate, only a group can be certified. Obtaining this certification takes a minimum of four years.

Typically, the exporter, prepares all the documentation and helps the auditors (often travelling from overseas) inspect the vanilla blocks and its own operations as well as pays for the certification. Each farm needs to be plotted, each farmer registered and all internal control measures and records of inspection completed. Warehousing is inspected, transport from the farmer to the warehouse needs to be clean and records kept. Organically certified vanilla needs to be kept separately from non-organically certified and farmers/exporters should have manuals and systems in place to keep them apart.

The exporter needs to secure a partnership with those farmers before beginning the process of getting a certification. There is a requirement to have full traceability on who produced the vanilla where, so consider an investment in agricultural technology to record and monitor all farmers. Also bear in mind that a certificate will only apply to the farmers that were declared during the certification process and have been monitored for at least three years. Any vanilla bought from other farmers, even if they live in the same areas, will not benefit from the certificate (at least not until they have been added formally to the certificate after an audit).

Although an organic certificate opens new markets for vanilla, it comes at a considerable price (time and money invested). For those new to exporting, it may be beneficial to focus on gaining experience in exporting for a few years until it becomes familiar and routine before considering organic certification.

#### B. Food safety standards

Food safety regulation is always part of exporting food. Food safety always figures prominently among the requirements of customers, who want reassurances that the vanilla is safe to use as food and has not been contaminated by harmful substances (e.g., heavy metals, fungal toxins, household pesticides). The focus here is on what happens to the vanilla throughout its growth, transportation, and storage phases.

CODEX Alimentarius is a collection of standards, guidelines and codes of practice adopted by the Codex Alimentarius Commission (overseen jointly by the Food and Agriculture Organisation and World Health Organisation), aimed at protecting consumers' health and ensuring fair practices in the international food trade. There will soon be a specific CODEX on vanilla. It is posed to be endorsed by end 2024.

HACCP stands for Hazards Analysis Critical Control Point. It is a management system for food safety that puts in measures for control of biological, chemical, and physical hazards from production, procurement and handling, to manufacturing, distribution and consumption of the finished product. Some customers may ask for this certification, which can be obtained by locally registered companies.

ISO22000<sup>2</sup> sets out the requirements for a food safety management system and can lead to a certification. It explains what an exporter needs to do to demonstrate its ability to control food safety hazards in order to ensure that food is safe. This certificate is recognised in the food industry worldwide and can be obtained by Papua New Guinea registered companies.

Regardless of the chosen or mandated food safety scheme, a crucial consideration for exporters is having a dedicated and controlled storage facility that meets food safety standards. Additionally, regular laboratory testing should be conducted to ensure the vanilla is safe for consumption.

¹https://www.fda.gov/food/guidance-regulation-food-and-dietary-supplements/hazard-analysis-critical-control-point-haccp

<sup>&</sup>lt;sup>2</sup> https://www.iso.org/iso-22000-food-safety-management.html

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#### C. Other standards

Some certification schemes, such as Rainforest Alliance, also focus on reducing deforestation, and improving human rights, livelihoods and climate. Rainforest Alliance is important for large food conglomerates such as Mars and Nestlé having signed agreements that all their ingredients will be made to meet these standards. Having this certificate may not only open new markets but also help comply with any future regulations pertaining to environment or social protection.

The European Union has recently drafted a new regulation requiring that European Union based companies make sure that their imports and exports do not contribute to deforestation and do not lead to abuses of human rights.<sup>3</sup> In January 2024 this law will come into effect. Seven commodities will be directly affected: cattle, coffee, cocoa, oil palm, rubber, soy and wood. Vanilla is currently not on this list, but this may change in the future. It is therefore something to take into account if exports to the European Union are planned.

All certification schemes listed above require full traceability of the vanilla, meaning knowledge of its origin down to a single farm and maintenance of records of that origin. This presents a significant challenge for exporters. Traceability is increasingly important to customers, regardless of interest in certification schemes, for food safety reasons. This allows for quick recall of vanilla batches found unfit for human consumption, such as those contaminated.

# 1.3 Estimating costs

Once a potential market has been identified, it is necessary to estimate the economic cost of exporting and the viability of such an operation. Table 2 below presents a rough estimation of the cost of exporting 1 tonne of vanilla when the price is high and when the price is low (additional costs like taxes are not included).

Table 2. Example of expenses to export 1 tonne of vanilla at different prices

Expenses	High price PGK*	Low price PGK**
Cost of raw materials	250 000	50 000
Cost of domestic freight	20 000	20 000
Cost of packaging	1 250	1 250
Cost of export related activities (NAQIA, customs)	1 000	1 000
Cost of export freight	100 000	100 000
Labour (6 workers min wage, manager 80,000)	107 300	107 300
License, business license	3 000	3 000
Total estimated cost	482 550	282 550
Export price (income)	500 000	100 000
Potential benefit (not including cost of,		
warehousing, and other operational costs)	17 450	-182 550
If customer pays freight	117 450	-82 550

Source: Own creation based on interviews.

<sup>\*</sup>High price: Buy beans 250 PGK/kg, sell at 500PGK/kg

<sup>\*\*</sup>Low price: Buy beans at 50 PGK/kg, sell at 100PGK/kg

<sup>&</sup>lt;sup>3</sup> https://environment.ec.europa.eu/topics/forests/deforestation/regulation-deforestation-free-products\_en

For Papua New Guinea, a recent value chain analysis estimated that there is little margin for exporters when the world price is at \$100 or less (Coote *et al.* 2019). Air freight and domestic freight is particularly high in Papua New Guinea, compared for example to Indonesia. It would therefore be difficult for vanilla from Papua New Guinea to be competitive on a global market in terms of price. Papua New Guinea vanilla can only continue finding a market if the quality of its vanilla is better than its competitors.

### 1.3.1 Tariffs (similar for certified and regular vanilla)

When exporting vanilla, a declaration for Papua New Guinea customs must be prepared, complete with the correct classification (HS<sup>4</sup> code) relevant to the destination country for the vanilla. The HS code for vanilla is 0905.10 for whole beans and cut beans and 0905.20 for crushed or ground beans. Different countries have different agreements for importation from Papua New Guinea which ultimately will affect the price of vanilla to the customer. Import duties and taxes are generally the responsibility of the customer.

Here are some examples:

- Australia: Vanilla products are exempted from import duties (0 per cent).
- European Union: There is no import duty on vanilla from Papua New Guinea to the European Union under the "Special Arrangement for the least-developed countries".
- India: Import duty of 30 per cent.
- Japan: There is no duty for vanilla imports.
- New Zealand: Vanilla has the most favoured nations tariff rate of 0 per cent.
- **United States of America:** It is possible for an exporter to apply for a duty-free exemption for vanilla as part of the "Generalized System of Preferences" (GSP). Assistance from the customer for this process is also possible.

Even if there are no import duties, the customer may have to pay Gross Sales Tax (GST) (sometimes called Value Added Tax, or VAT) on the value of the imported goods.

# 1.3.2 Various taxes/fees in Papua New Guinea

Additionally, vanilla producers and exporters need to comply with quality and certification measures that incur payment of fees. The specific fees and minimum requirements can be found in the table 3 below:

<sup>&</sup>lt;sup>4</sup> Harmonised Commodity Description and Coding System.

Table 3. Specific fees and requirements to export vanilla

Documentation	Cost	Contact
Business or Company name registration (when creating a company)	Check website (www.ipa.gov.pg) for fees	Investment Promotion Authority (IPA)
2. Business license, renewable every year	PGK 150 per year for Business Registration PGK 500 for Company Registration	Local District where the company operates
3. Industry Export license, Renewable every year	PGK 1 500 per year	Spice Industry Board
4. Certificate of origin (part of the export documentation)	PGK 60 per book PGK 100 per stamp for European Union market or Generalised System of Preferences Certificate of origin	Papua New Guinea Stationary Office (Port-Moresby) National Trade Office (Port-Moresby)
5. Customs agency fee	Depends on agent	Customs and Inland Revenue (see contact in Annex 1)
6. Customs fee	PGK 30	Customs export fee (per export, including samples)
7. Inspection of goods	Depends on time spent to inspect, ca. PGK 250	National Agriculture and Quarantine Inspection Authority (NAQIA)

Source: See contact details in Annex 1.

#### 1.3.3 Customs

Customs brokers facilitate the export process by assisting with the completion of required paperwork and ensuring proper payments when lodging exports with Customs. Utilizing a customs broker is mandatory; self-lodging by exporters is not permitted. A registry of qualified customs brokers is accessible on the Papua New Guinea customs website.<sup>5</sup> The Association of Custom Brokers also provides a list of agents on its Facebook page.<sup>6</sup>

With the assistance of a customs broker, exporters are required to make a customs declaration and prepare and provide copies of the commercial invoice and packing list. A certificate of origin must also be submitted, using the appropriate form depending on the destination country. Additionally, customs agents require copies of the export license, issued by the Spice Industry Board, which are registered in the Automated System for Customs Data (ASYCUDA).

Maintaining open communication with both the customer and the commerce department of the destination country is crucial to avoid complications upon arrival of the exported goods.

#### 1.3.4 Testing laboratories and facilities

There are two laboratories in Papua New Guinea that can conduct testing on vanilla (see contacts in Annex 1):

 The Papua New Guinea UniTech Food standards laboratory can carry out both microbiological analysis (food safety test) and chemical analysis (quality test) and vanillin tests using High Performance Liquid Chromatography (HPLC).

https://customs.gov.pg/noticeboard.php?q=general&slug=updated-list-of-licensed-customs-brokers-agents-in-png

<sup>&</sup>lt;sup>6</sup> https://www.facebook.com/p/PNG-Customs-Brokers-Association-100067243534857/

• The National Agriculture Research Institute (NARI) Chemistry Laboratory under direction of Prof. John Kola can conduct vanilla tests using HPLC, microbial tests (total plate count), moisture content and most other nutrients and/or other tests (e.g. heavy metals) that may be necessary for assuring product quality for exports. The laboratory is accredited in ISO/IEC 17025 (Chemical Testing Techniques for Water) with Papua New Guinea Laboratory Accreditation Scheme (PNGLAS) under the National Institute for Standards and Industrial Technology.

There are many options for testing in Australia where freight is cheap to send samples, but custom controls are more difficult. Laboratories in Europe tend to be cheaper per test although freight is more expensive.

A humidity machine/moisture analyser which costs around PGK 10,000 is a good investment. They are very simple to use. A bean or sample is ground and run on the machine and results are usually given within 20 minutes. Then for every batch or lot, the humidity content can be communicated to the customer. Additionally, an ultraviolet (UV) spectrometer to do vanillin content analyses costs around PGK 50,000. Customers however will require samples tested at independent certified laboratories.

#### 1.3.5 Certification costs

The cost of certification for vanilla will depend on the chosen certification system. Please refer to section 2.3 for the certification procedure. Its cost can range from PGK 2,000 to 200,000.

# 1.4 Getting local support

Several local public offices and private businesses can provide support for exporting vanilla to international markets (further detail in Annex 1):

#### **Export assistance:**

 To obtain assistance with exporting, finding information, and accessing online procedures, reach out to: the Spice Industry Board; the Department of Commerce and Industry; the National Trade Office; and European Union trade delegations.

#### Technical assistance:

 To assist in meeting market certification requirements for production facilities, reach out to: the Spice Industry Board; NAQIA. This includes obtaining, Phytosanitary Certificate, and standards Certification.

#### Marketing assistance:

• Contact the Department of Commerce and Industry, the National Trade Office, the IPA in particular the Investor Servicing & Promotion Division and the Export Promotion Unit.

#### Financial assistance:

• Some banks offer commodity loans (with interest) based on contracted sales to help with cash flow.

1. Before exporting 15

# 1.5 Help finding a buyer overseas

One of the easiest ways to export vanilla is to find a partner directly in the export markets who can offer support in the administrative process. However, there are also multiple channels available through various trade departments and organizations designed to assist Small and Medium-sized Enterprises (SMEs) in locating buyers. These include (more details in Annex 1):

- Australian High Commission in Port Moresby
- Department of Commerce and Industry
- European Union Chamber of Commerce and Industry
- International Federation of Organic Agriculture Movements (IFOAM) certified SME groups also collectively work to locate markets for smallholder groups
- Investment Promotion Authority (IPA)
- National Trade Office (NTO)
- Pacific Community (SPC)
- Pacific Horticultural and Agricultural Market Access Program (PHAMA Plus)
- Pacific Trade Investment (PTI)

In addition to these options, another alternative is to build a website to advertise products directly to potential customers. A well-designed website not only allows for a comprehensive presentation of offerings but also serves as an efficient channel for customer inquiries and transactions. It can further demonstrate compliance with certifications and regulations, attracting international buyers.





# **Getting ready to export**

# 2.1 Register as an exporter

Here are the steps to become an exporter of vanilla:

- 1. Register the business name with the IPA.
- 2. Obtain a Spice export license from the Spice Industry Board.
- 3. Obtain a business permit to operate, issued by the local District Authority.
- 4. Obtain a Tax identification Number (TIN) from the Internal Revenue Commission (IRC).
- 5. If annual turnover exceeds PGK 250,000, register for GST with the IRC; for turnovers less than PGK 250,000, register for Small Business Tax.
- 6. Open a bank account.
- **7.** Find an accountant.
- 8. Identify market requirements to start exporting vanilla.
- 9. Develop a website to improve visibility and attract potential customers.
- 10. Create a lot and batch system for product traceability throughout the supply chain.
- 11. Establish a recall system for addressing customer complaints.
- 12. Create a storage system for long-term sample retention, segregated by different batches.

# 2.2 Summary of requirements to export

Exporters must check with the vanilla distributor/buyer in the destination country what the requirements for import are. Usually these will cover:

#### a. Hygienic and quality requirements

- Requirement to be clean and free of contaminants: seed, soil, animal and plant debris and other biosecurity risk materials.
- Pesticides (usually no allowable amounts according to European Union and United States of America standards).
- Maximum level of natural toxicants.

#### b. Testing

- Microbiological analysis (while not necessary for every export, quarterly tests are recommended).
- Quality of vanilla analyses- vanillin content, relative humidity (moisture).
- Pesticide testing (not available in Papua New Guinea).

#### c. Packaging

- Each consignment of goods to be packed in clean and new packaging that can be demonstrated as food safe (MSDS sheets).
- Each customer will have different requirements, from vacuum bags to open beans in boxes, to tin boxes.
- All products that are in contact with the vanilla must be certified as food safe.

#### d. Inspection/Certification

 Phytosanitary certificate is the recognized quality assurance certificate, or food control certificate required to import the product to the country.

#### e. Labelling (see example in Annex 3)

- In English language.
- Food identification (name of food, lot identification, name and address of supplier).
- "Use-by date" or "best-before date".
- Direction for storage and use (optional).
- Nutrition, health and related claims (optional, must be scientifically proven fact).
- If the vanilla has undergone a process (extraction, powdered), a statement that describes the nature of that process.
- Country of origin.
- Keep a sample of the export in case there are any issues later with the Lot and Batch numbers that can be tested.

**DO NOT FUMIGATE.** Vanilla is a product sold for aroma and taste. No fumigation on export is allowed in any markets.

In the next subsections, this guide will outline the distinct requirements that are necessary when exporting vanilla to various countries. Each country has unique rules and guidelines, which are essential to understand in order to facilitate a successful export process. The focus will be on major markets such as Australia, the European Union, Japan and the United States. To learn more about exporting to specific markets, businesses may consult the guidelines provided by the importing countries on their official websites. For instance, the document "Guidelines on Imports of Organic Products into the European Union" offers insights into the regulations for exporting organic products to the European Union.

#### 2.2.1 Australia

#### a. Hygienic and quality requirements

- Requirement to be clean and free of contaminant seed, soil, animal and plant debris and other biosecurity risk materials.
- Requirement to use permitted processing aids and food additives.
- Maximum residue limits for agvet chemicals in vanilla production is Acephate, Azoxystrobin, Chlorpyrifos, and Penconazole at 0.1 mg/kg, while Imidacloprid and Pyrimethanil have a limit of 0.05 mg/kg. Metaldehyde and Sulphur dioxide have limits of 1 mg/kg, and Bromide ion is set at 400 mg/kg. Notably, Azoxystrobin, carbendazim, Metalaxyl, and Propetamphos share a limit of \*0.1 mg/kg, while Methyl bromide and pirimicarb are constrained to \*0.05 mg/kg. Chlorpyrifos has a limit of 5 mg/kg.

<sup>&</sup>lt;sup>7</sup> An asterisk (\*) indicates that the maximum residue limit is set at the limit of determination.

#### b. Testing

- Microbiological Analysis.
- Chemical analysis.
- Phytosanitary certificate, recognized quality assurance certificate, or food control certificate of Australia.

#### c. Packaging

Each consignment of goods to be packed in clean and new packaging.

#### d. Inspection/Certification

- Based on the analysis on the control certificate, the authorized officers may conduct an inspection.
- Exporters must submit applications for food control certificates, and authorized officers determine the need for food inspection or analysis before issuing the certificate.<sup>8</sup>

#### e. Labelling

- In English language.
- Food identification (name of food, lot identification, name and address of supplier in Australia).
- List of ingredients; specific source name of oil.
- "Use-by date" or "best-before date".
- Advisory statements, \*warning statements and declarations.
- Direction for storage and use (optional).
- Nutrition, health and related claims (optional).
- Country of origin (If the food was packaged using food from more than one country: (a) Identify where
  the food was packaged; (b) Indicate that the food is of multiple origin).<sup>9</sup>

#### f. Traceability

• Country of origin, in the form of trade description.

# 2.2.2 European Union<sup>10</sup>

#### a. Hygiene and Quality requirements

- Ensure adherence to European Union food safety and hygiene standards, including monitoring, general provisions, and detailed requirements throughout production and distribution.
- There are very strict Maximum Residue Levels (MRLs) for vanilla. The complete list can be found under the "EU Pesticides Database".<sup>11</sup>

#### b. Testing

#### c. Packaging

<sup>&</sup>lt;sup>8</sup> Control certificate form can be found at:

https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/importing/ifn08-19-food-control-certificate.pdf

<sup>&</sup>lt;sup>9</sup> Find the country of origin labelling guide at: https://www.accc.gov.au/about-us/publications/country-of-origin-food-labelling

<sup>&</sup>lt;sup>10</sup> Useful guide: https://www.cbi.eu/market-information/spices-herbs/vanilla-0/market-entry

<sup>&</sup>lt;sup>11</sup> https://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/start/screen/products/details/285

#### d. Inspection/Certification

- Phytosanitary certificate issued by the exporting country.
- Import certificate.
- To export vanilla as an organic product, importers need an inspection certificate from the exporting country's competent authority or body.<sup>12</sup>

#### e. Labelling<sup>13</sup>

- Name of the food.
- List of ingredients.
- Net quantity of the food.
- Date of minimum durability or "use by" date.
- Special storage conditions and/or conditions of use.
- Name or business name and address of the food business operator.
- Country of origin or place of provenance.
- Instructions for use (when necessary for appropriate food usage).
- Lot-marking, denoted by the letter 'L' must be placed on pre-packaged foodstuffs for easy lot identification.
- Products conforming to organic rules can use organic labelling with an equivalence certificate and the certificate of inspection from European Union authorities.<sup>14</sup>

#### f. Border Measures

- The competent Member State authority verifies compliance by conducting document checks on all consignments and random identity checks, with physical checks based on potential non-compliance.
- Complete the Summary Declaration once goods arrive at the customs.
- Provide the customs authorities with the Importer's Declaration SAD (Single Administrative Document).

#### g. Traceability

 Exporters must implement a strong traceability system for product tracking and ensure proper labelling for easy traceability through documentation.

#### 2.2.3 Japan

#### a. Hygiene and quality requirements

- Processing, storage, transport and packaging in a clean and sanitary manner.
- Importers must verify food safety and maintain import records for potential checks. Violations require immediate reporting.

https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A32008R1235#d1e34-38-1

<sup>&</sup>lt;sup>12</sup> Please find certificate of inspection for the import of organic and in-conversion products in the Annex: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02021R2306-20220701 .

<sup>&</sup>lt;sup>13</sup> Labels must be in the language of the country you are selling to.

<sup>&</sup>lt;sup>14</sup> Please find request forms at:

<sup>&</sup>lt;sup>15</sup> The document check includes inspection certificate for organic products.

#### b. Testing

#### c. Packaging

#### d. Inspection/Certification

- At the quarantine station, the necessity of inspection will be decided. If inspection is required, it can be either:<sup>16</sup>
  - 1. Documentary examination: raw materials, production criteria.
  - 2. On-the-spot inspection: appearance, foreign substances, storage conditions, and documentation.
  - 3. Testing: assessments of agricultural chemicals, microorganisms, and genetically modified foods.
- Phytosanitary Certificate must be obtained to determine the absence of quarantine pests.

#### e. Labelling<sup>17</sup>

- Item name (Vanilla バニラ).
- Country of origin.
- Net content.
- Expiration Date of the Product (Y/M/D).18
- Name and Location of Production Facility.
- Storage instructions.
- If organic, organic JAS mark is indispensable for labelling as organic food.

#### f. Notification

 Import notification to quarantine station right after the arrival of a cargo or 7 days before planned arrival through an Advance Notification System. The import notification form in English is available at https://www.mhlw.go.jp/content/11130500/000788796.pdf

#### 2.2.4 United States of America

# a. Hygiene and quality requirements

- The exporter and its counterpart (local importer) confirm supplier adherence to the United States of America safety standards, identifying potential risks in imported foods (biological, chemical, physical) through regular audits, tests, or record reviews.<sup>19</sup>
- Restricted use of adjuvants, production aids and sanitizers during the production process.
- Exporters should focus on personnel hygiene and sanitary requirements at manufacturing premises to ensure food safety and adhere to regulations while processing vanilla.
- The tolerance level for carfentrazone-ethyl residues in vanilla is set at 0.10 ppm.

#### b. Testing

<sup>&</sup>lt;sup>16</sup> Inspection requirements are only for dried vanilla beans. Fermented vanilla is exempted from inspection.

<sup>17</sup> https://www.caa.go.jp/en/policy/food\_labeling/

<sup>&</sup>lt;sup>18</sup> For vanilla, the reference is the "best-before date".

<sup>&</sup>lt;sup>19</sup> Foreign Supplier Verification Programs (FSVP) for Importers of Food for Humans and Animals.

#### c. Packaging

- Adhesives in food packaging should meet safety conditions, including ingredient compliance and proper labelling.
- Maximum tolerance limit for Polychlorinated Biphenyls PCB content: 0.2 ppm in animal feed and 10 ppm in human food packaging.

#### d. Inspection

• The items will be inspected upon their arrival at the port.

#### e. Labelling<sup>20</sup>

- Food name (Vanilla).
- Food ingredients (Vanilla).
- Net quantity of content.
- Name and place of business of manufacturer, packer, or distributor.
- Food Allergen Labelling.
- Labelling Claims.<sup>21</sup>
- FDA Registration (along with facility identifier).
- The word "Organic" and its symbol can be used in the principle panel of packaging and the information panel, if vanilla is produced organically as per the definition by USDA.<sup>22</sup>

#### f. Notification

- Registration is required before a facility begins handling food for consumption in the United States and should be renewed every other year.
- Prior notice for Food and Drug Administration (FDA) review is required for shipments, with specific time frames based on the mode of transportation: 2 hours for land (road), 4 hours for land (rail) or air, and 8 hours for water arrivals.<sup>23</sup>

#### g. Authorization

 Facilities must register before manufacturing, processing, packing, or holding food for consumption in the United States of America. Registration by an authorized individual is allowed.<sup>24</sup>

# 2.3 Obtaining certification for organic/fairtrade vanilla

Certification can enable products to reach high value markets and more markets. Various types of certifications are available, and each has its own set of criteria and benefits. The 5 most common certifications are summarized below:

<sup>&</sup>lt;sup>20</sup> See Food Labeling Guide at: https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-food-labeling-guide

<sup>&</sup>lt;sup>21</sup> Any claims made on the label, such as "organic," or "natural," must comply with specific regulatory definitions given by the FDA under the Food Labelling Guide (see footnote 24).

<sup>&</sup>lt;sup>22</sup> Organic classification as per USDA is available at: https://www.ams.usda.gov/rules-regulations/organic/labeling

<sup>&</sup>lt;sup>23</sup> Please see the guide to Prior Notice System Interface at: https://www.fda.gov/food/importing-food-products-united-states/filing-prior-notice-imported-foods

https://www.fda.gov/food/guidance-regulation-food-and-dietary-supplements/registration-food-facilities-and-other-submissions

- The Pacific Organic certification.
- Organic Standards (e.g., NASAA, Australian Organic, USDA, EU Organic, Japan Organic).
- Fair trade certification.
- Rainforest Alliance.
- Social and Environmental certification (e.g., ECOCERT).

At present most certifiers do not have offices in Papua New Guinea and therefore their costs to fly from overseas are added to the cost of certification. At some point the multiple costs of many certifications are not cost effective compared to the increased margin gained from the certification. Therefore, conducting market research and securing contracts with customers are essential steps to justify the costs of certification.

# 2.3.1 Pacific Organic certification

1. The first step is to get in contact with the Pacific Organic and Ethical Trade Community (PoetCom) to enquire about the steps to get certified.

Website: https://www.organicpasifika.com/poetcom/membership/organic-pasifika-certification/

2. Identify a suitable certification system (depending on the target market) and follow through the required steps. Smallholder farmers use a Participatory Guarantee System (PGS) certificate as a marketing tool to gain access to organic markets. Farmers work in groups and with other stakeholders to strengthen organic standards and production methods, as well as to produce, process, and often market their products collectively. This certification is based on internal monitoring (peer review) rather than external agency inspection. This process will facilitate groups to learn and understand the process of documentation for certification.

For those targeting local and regional markets, including Australia and New Zealand, a PGS certification is necessary.

# 2.3.2 Organic certification

Organic certification indicates that a product has been produced sustainably, adhering to strict guidelines that cover various aspects including the environment, soil, and water. This process often leads to higher retail prices as consumers are willing to pay more for sustainably produced goods.

To obtain this certification, detailed record-keeping is necessary, documenting every stage from cultivation to consumer sales. This includes full traceability of the product, storage segregation from non-organic products, and adherence to specific export and import regulations. The certification process is stringent, often demanded by customers and necessary to comply with national and international standards.

Engaging in the organic certification process involves choosing the appropriate certification body, depending on the targeted markets, such as the European Union or the United States of America. Certifying agencies, like National Association for Sustainable Agriculture Australia (NASAA), offer third-party certification, which might encompass multiple regions (for an addition \$300-600 per extra certification). It comes however with substantial costs including audit fees and operational expenses. Typically, the certification costs are in the range of PGK 100,000 per year.

All use of labels must be authorised by the certifier. The code of certification must be displayed and reported on all products. It is usually considered a criminal offense to sell product as organic when it has not been certified and enforced by the government in most jurisdictions. It is possible to "lose" certification

status if documents have not been maintained, there is no evidence of checks of the farm, or there is mixing of organic and no organic product anywhere in the chain.

For those new to the concept of organic certification, most certification bodies offer informative resources on their websites to guide individuals through the process (refer to Table 12 in Annex 1). Additionally, specialized consultants can be contracted to assist in preparing documentation, mapping, and understanding the required evidence before submitting an application for certification.

There are also extra processes required to register the export as organically certified as it is exported and imported into the destination country. It needs to be declared on invoices, custom documents with the certification number and extra channels (government websites) to register the product before export.

#### 2.3.3 Fairtrade certification

Aimed at ensuring that farmers receive fair prices for their produce, Fairtrade certifications bring transparency to the pricing process. While Fairtrade certification can be beneficial for some products, a cost-benefit analysis should be made as the price mark-up is not always high. Steps for Fairtrade Certification:

- 1. Click this video and follow the 3 steps to apply: https://www.youtube.com/watch?v=yF\_LCTy2GdU\_
- 2. Follow this link https://text.flocert.net/start-trading-fair-today/ to begin the certification process.
- Cost of certification is €3,500 as an exporter (around PGK 13,500)
   For more information, visit their website https://www.fairtrade.net/act/get-certified

#### 2.3.4 Rainforest Alliance

The Rainforest Alliance certification verifies the environmental impact of crops grown in rainforests, covering aspects like fuel and waste management, land destruction, and traceability. Notably, in 2022, several chocolate manufacturers, including MARS, pledged to attain this certification for their products, influencing the cocoa markets. However, since vanilla constitutes less than 1 per cent of a chocolate bar's content, its certification is not legally required, potentially making the cost-to-benefit ratio for vanilla certification unfavourable.

# 2.3.5 Social and Environmental Responsibility certification (SERc)

The demand for SERc is rising due to increasing legislation focusing on fair payment, environmental conservation, and just work conditions, including prohibiting child and forced labour. Certification bodies assess the complete value chain of organizations, scrutinizing their energy usage and carbon footprint. Given the growing emphasis on sustainable practices, many buyers, especially in the high-value vanilla market, prefer certified companies and are willing to pay a premium for products that meet SERc standards.

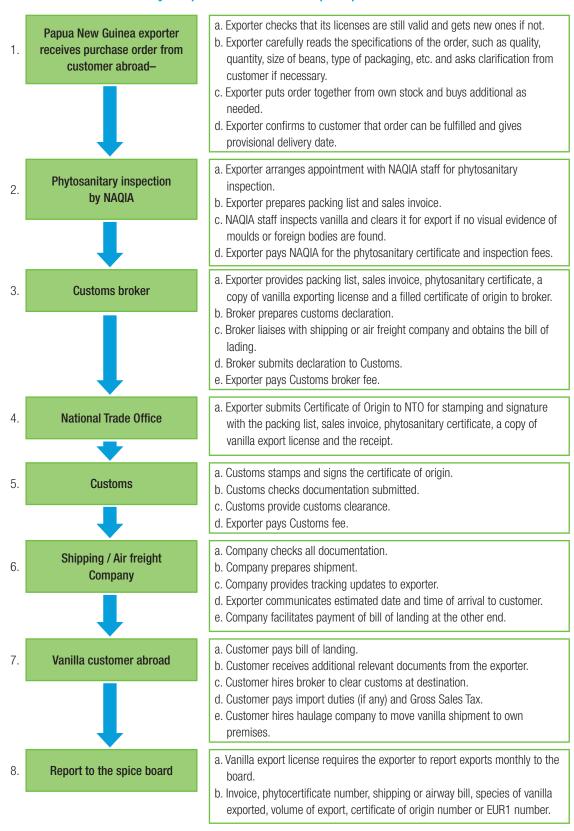
Most SERc can be processed remotely providing documentation to auditors. The price of these certifications is based on annual turnover and are in the range of \$1,000 to \$4,000 depending on the extent and type of audit required. It is quite common for customers to request a certificate in SERc. Two widely used certification bodies are listed in Table 4 below but there are many more. Both take about one year to complete.

Table 4. List of environment and social certifiers

Certifying body	Link to website
ECOCERT- Sustainable Wellbeing Centre	https://www.ecocert.com/en/certification-detail/sustainable-wellbeing-center
B Corporation	https://www.bcorporation.net/en-us/certification/

Source: See contact details column.

# 2.4 Flowchart of key steps in the vanilla export process





# 3

# **Exporting vanilla**

# 3.1 Shipping vanilla

Different customers require different types of packaging and shipping. While some believe that vacuum packing is easier to maintain weight and moisture, there is a large customer base that believes the plastic and lack of moisture has a negative impact on flavour and smell. Some countries even prohibit the export of vanilla beans that have been vacuum-sealed to enforce quality on export.

To export using a vacuum machine, prices range from PGK 5,000 to 50,000 depending on the machine's size. Some machines also allow for the inclusion of food-grade nitrogen in the vacuum packaging to extend shelf life. Additional packing materials such as wax paper, tin boxes, and glass may also be necessary. These items are not readily available in Papua New Guinea and must be specifically imported.

Freight costs within Papua New Guinea are significantly higher compared to other countries. These costs should be considered when establishing contracts and setting pricing with customers. For more detailed information on shipping, contact government agencies (NAQIA) and private shipping companies (DHL, TNT, Fedex, Air Niugini Cargo). See contact details in Annex 1.

# 3.2 Arrival in destination country

Before exporting, it is advisable to discuss with customer and the commerce department of the export country to ensure compliance with local standards (of the destination country).

Upon the arrival of goods at the destined port of entry, the buyer is responsible for ensuring that the goods are cleared by Customs and Biosecurity based on the documents sent to them by the exporter.

To mitigate issues related to importation, retaining copies of all export documents and a sample of the shipped goods is advisable. In the event of lost paperwork, these documents can be presented as evidence. Likewise, if a quality issue or a discrepancy in the goods arises, having a sample provides a basis for comparison with the customer's complaint.

# 3.3 Payments and terms

It is crucial to have a legally enforceable contract with the customer before shipping goods overseas. Taking legal action for non-payment is a complex process and becomes more difficult when the customer is based in another country. It is therefore advisable to prepare a comprehensive terms and conditions document in advance or to secure payment before the goods are exported.

There are many contracts available, but the International Chamber of Commerce has many example templates and booklets online.<sup>25</sup>

<sup>&</sup>lt;sup>25</sup> A. https://iccwbo.org/business-solutions/model-contracts-clauses/icc-model-international-sale-contract/ B. https://2go.iccwbo.org/icc-guide-to-export-import-5th-edition-config+book\_version-Book/

# 3.4 Insurance of goods

Vanilla, whether the price is high or low, is a valuable product and many actors in the value chain often suffer problems of stealing and theft. Aggregators and exporters can lose vanilla to robberies while storing or conditioning before export. In transit vanilla also can go missing. Opting for a more expensive freight courier option with full tracking and weight monitoring can reduce this risk. However, the standard insurance options do not cover the value of the vanilla if goods are damaged or go missing in transit. Therefore, insuring vanilla is essential.

There are 11 international commerce terms (Incoterms) which determine the buyer and exporters' responsibility for the goods being shipped, *i.e.*, at what point does the buyer become responsible for the goods. Most customers request delivery with Cost, Insurance and Freight (CIF) terms. This means the exporter must deliver the goods to a designated port and pay transportation, insurance and loading costs. After that, the buyer assumes the cost and risk associated with transporting the cargo from the designated port to its warehouse or business.

Insurance while goods are in transit is called Marine Transport Insurance. Policies can be taken out annually to insure products while in warehousing, being transported to port and until the goods get to the customer. Alternatively, each shipment can be insured separately.

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# References

Brunschwig C, Collard FX, Bianchini J-P and Raharivelomanana P (2009). Evaluation of Chemical Variability of Cured Vanilla Beans (Vanilla tahitensis and Vanilla planifolia). Natural Product Communications, 4(10): 1393-400. DOI:10.1177/1934578X0900401016.

- Coote C, Bue V, Farrall H and Lamboll R (2019). Vanilla value Chain Analysis in Papua New Guinea. Report for the European Union, DG-DEVCO. Value Chain Analysis for Development Project (VCA4D CTR 2016/375-804), 145p + annexes.
- European Union (2008). Guidelines on Imports of Organic Products to the European Union Version 12.
- European Union (2023). Commission Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs (Text with EEA relevance). Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02006R1881-20230326.
- FAOSTAT (n.d.). Crops and Livestock Production: Vanilla. Available at: https://www.fao.org/faostat/en/#data/QCL/visualize
- FDA (U.S. Food and Drug Administration) (n.d.). Food Additives Status List. Available at: https://www.fda.gov/food/additives-petitions/food-additive-status-list.
- FDA (U.S. Food and Drug Administration) (n.d.). Food Safety Modernization Act (FSMA). Available at: https://www.fda.gov/food/food-safety-modernization-act-fsma/full-text-food-safety-modernization-act-fsma.
- FDA (U.S. Food and Drug Administration) (n.d.). Prior Notice System Interface, Title 21 Code of Federal Regulations (21 CFR), Part 1, Subpart I. Available at: https://www.fda.gov/food/importing-food-products-united-states/filing-prior-notice-imported-foods.
- FDA (U.S. Food and Drug Administration) (n.d.). Registration of Food Facilities and Other Submissions. Available at: https://www.fda.gov/food/guidance-regulation-food-and-dietary-supplements/registration-food-facilities-and-other-submissions
- FiBL (2023). The World of Organic Agriculture: Statistics and Emerging Trends 2023. FiBL and IFOAM, Frick.
- Japan Ministry of Health and Welfare (n.d.). Food Sanitation Act, Act No. 233 of 1947. Available at: https://www.japaneselawtranslation.go.jp/en/laws/view/3687/en.
- Japan Ministry of Health and Welfare (n.d.). Regulations for Enforcement of the Food Sanitation Act Order, No. 23 of 1948. Available at: https://www.japaneselawtranslation.go.jp/en/laws/view/3991/en#je\_ch2.
- Japan Ministry of Health, Labour and Welfare (2023). The Standards for Use of Food Additives. Available at: https://www.ffcr.or.jp/en/upload/Standards%20for%20Use%20July.26%2C2023-10.pdf.
- Khan K, Su C-W, Khurshid A and Umar M (2022). Are there bubbles in the vanilla price?. Agricultural and Food Economics, 10:6.
- National Trade Office (2023). Export Guide for Small and Medium Enterprise, 43pp.
- Papua New Guinea University of Technology (2020). Vanilla Value Chain Analysis in Papua New Guinea.
- Straits Research (2023). Vanilla Market: Information by Type (Bean, Paste and Extracts, Powder), Application (Food and Beverages, Pharmaceutical, Retail), and Regions Forecast till 2030.
- Tridge (2023). Papua New Guinea Vanilla Guide. Available at: https://www.tridge.com/market-guides/PG-vanilla

UN Comtrade (n.d). UN Comtrade Database. Available at: https://comtradeplus.un.org/

World Bank Group and Kinome (2021). Guide on Sustainable Vanilla Production: Good Practices and Cost-Benefit Analysis in the SAVA Region, Madagascar.

# Other useful resources to export

CBI (Centre for the Promotion of Imports from developing countries) (2023). The European market potential for vanilla. Available at: https://www.cbi.eu/market-information/spices-herbs/vanilla/market-potential

Consumers Affairs Agency (n.d.). Food Labelling (Japan). Available at: https://www.caa.go.jp/en/policy/food\_labeling/.

European Commission (2008). Guidelines on imports of organic products into the European Union. Available at: https://agriculture.ec.europa.eu/document/download/7b837ea8-f0da-4911-80d4-2cd8586592cd\_en?filename=guidelines-imports-organic-products\_en.pdf

European Commission (2023). Access2Markets – My Trade Assistant. Available at: https://europa.eu/access2markets/.

European Union (n.d.). Enhancement of international trade and investment opportunities for Pacific Island businesses in the EU. Available at: https://epa-pacific.eu/wp-content/uploads/2023/08/Opportunities-for-Pacific-Island-businesses-in-EU-2.pdf

FDA (U.S. Food and Drug Administration) (n.d.). Guidance for Industry: Food Labelling Guide. Available at: https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-food-labeling-guide.

MIPRO (Manufactured Imports Investment Promotion Organization) (2019). Guide to Food Import (Japan). Available at: https://www.mipro.or.jp/Document/hti0re0000000vi2-att/p\_0111go18.pdf

National Trade Office (NTO) (2023). Export Guide for Small & Medium Enterprises. Available at: https://nto.gov.pg/document/sme-export-guide-2023/

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# Annex 1

# **Key contacts**

Table 5. Contacts for Papua New Guinea government agencies

Government agencies/ Consulates	Telephone number	Email address	Website
National Agriculture Quarantine & Inspection Authority PO Box 741 PORT MORESBY, NCD	+675 311 2100		https://png-data.sprep.org/ group/18
Department of Commerce & Industry P.O.Box 375 Heduru Haus, Waigani Drive, Waigani, PORT MORESBY, NCD	+675 325 5311	info@dci.gov.pg	https://www.dci.gov.pg
Customs Services P O Box 923, 2nd Floor Moale Haus, Waigani, PORT MORESBY, NCD	+675 312 7551	servicedesk@customs.gov. pg	https://www.customs.gov.pg
Department of Foreign Affairs PO Box 422 Waigani, Central Government House, Melanesian Way & Kumul Avenue PORT MORESBY, NCD	+675 301 4121	enquiries@dfat.gov.pg	
Investment Promotions Authority Level 1, IPA Haus, Munidubu Street, (Cnr of Lawes Rd & Champion Parade) Konedobu, PO Box 5053 BOROKO PORT MORESBY, NDC	+675 308 4400 +675 321 3900 +675 321 7311	ipa@ipa.gov.pg	https://www.ipa.gov.pg
National Agriculture Quarantine & Inspection Authority PO Box 741 PORT MORESBY, NCD	+675 311 2100		https://png-data.sprep.org/ group/18
PNG National Trade Office P.O.Box 1191, WAIGANI Ground Level, Wing B, Central Government House, Melanesian Way & Kumul Avenue Waigani, PORT MORESBY, NCD PORT MORESBY, NCD	+675 301 44195	info@nto.gov.pg	http://www.nto.gov.pg
PNG Spice Board P O Box 2033 Spring Garden Road, Konedobu PORT MORESBY, NCD	+675 343 5763		

Table 6. Contacts for shipping agencies

Shipping companies	Telephone number	Email address	Website
DHL	+675 302 6555		https://www.dhl.com/pg-en/ home/contact-us.html
PNG Air Freight Limited I Licensee of Federal Express Corporation I PO Box 6645 Boroko I NCD	+675 3252411	pom.accounts@pngaf.com.pg	https://www.pngaf.com.pg
Air Niugini Cargo	+675 327 3316		https://www.airniugini.com. pg/cargo/
Swire Shipping Pte. Ltd.	+675 322 0100	pgsb.sales@swireshipping.com	www.swireshipping.com

# Table 7. Contacts for laboratories

Laboratories	Telephone number	Email address	Website
National Analytical and Testing Services (NATS) Laboratory, PO Box 79 Unitech Lae	+675 473 4571	nal.png@global.net.pg	
National Agricultural Research Institute Chemistry Laboratory P.O.Box 8277 Boroko. Pari Rd, Kilakila NCD	+675 340 4845 +675 7011 9894 +675 7722 7151	narichemistry@nari.gov.pg	www.nari.gov.pg/technical- services/

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Table 8. Contacts for international and local trade organizations

Trade Organizations	Telephone number	Email address	Website
Pacific Trade Invest (PTI)	+61 2 9290 2133 +64 9 529 5165	info@pacifictradeinvest.com nzinfo@pacifictradeinvest	https://www. pacifictradeinvest.com/
SVI (Sustainable Vanilla Initiative)			https://www. idhsustainabletrade.com/ sustainable-vanilla-initiative- svi/
Australia PNG Business Council PO Box 1621, Port Moresby National Capital District	+675 321 0966	pngbc@apngbc.org.pg	www.apngbc.org.pg

Table 9. Contacts for Papua New Guinea organizations

Local Organizations	Telephone number	Email address	Website
Certified Practicing Accountants PNG PO Box 1937 Port Moresby, NCD	+675 321 2105 +675 320 1891 +675 321 7698	cpapng@cpapng.org.pg	www.cppng.org.pg
Custom Brooker Association		pngcba2020@gmail.com	
Business Council of PNG PO Box 404, Konedobu National Capital District	+675 320 0700 +675 320 0419	Executive@bcpng.org.pg	www.bcpng.org.pg
Manufacturers Council of PNG P O Box 598 PORT MORESBY, NCD	+675 321 7143 +675 321 7144	info@pngmade.com	

Table 10. Contacts for Papua New Guinea embassies overseas

PNG Embassies	Telephone number	Email address	Website
AUSTRALIA H.E. Mr. John Kali, OBE High Commissioner PNG High Commission 39-41 Forster Crescent Yarralumla ACT 2600 PO Box E6317 Kingston ACT 2604 CANBERRA	+61 2 62 733 322	kundu@pngcanberra.org	www.pngcanberra.org
MALAYSIA PNG High Commission No. 11 Jalan Linkungan Uthant Ampang 55000 KUALA LUMPUR	+60 3 425 75405 +60 3 425 79260	kundukl@streamyx.com	Kundukl.my
INDONESIA - JAYAPURA Colonel Geoffrey Wiri Consul General PNG Consulate General PO Box 1947, JAYAPURA	+62 9 675 31250	congenpng_id@yahoo.com	
INDONESIA - JAKARTA Mr. Gregory Homboahin Chargé d'affaires PNG Embassy Panin Bank Centre (6th Fl) Jalan Jendral Sudirman 1 JAKARTA 10270	+62 2 1725 1225 +62 2 1725 1218	kdujkt@cbn.net.id	
BELGIUM  Ms. Daphanne Hangatt Chargé d'affaires Papua New Guinea Embassy Avenue de Tervuren 430 Woluwe St Pierre 1150 BRUSSELS	+32 2 779 0826	kundu.brussels@skynet.be	
UNITED KINGDOM Mr. Joseph Varo Acting High Commissioner Papua New Guinea High Commission 14 Waterloo Place LONDON SW1Y 4AR	+44 20 7930 0922 +44 74704 89889	info@pnghighcomm.org.uk pnghc.london@dfa.gov.pg	www.pnghighcomm.org.uk
SINGAPORE Mr Basil Gerari Acting High Commissioner Papua New Guinea High Commission 143 Cecil Street, #19-03/04 GB Building SINGAPORE 069542	+65 6222 9179		

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Table 11. Contacts for international certification agencies

Country/Entity	Label	Contact details	Website
Australia	NASAA Certified Organic	PO Box 768 Stirling SA 5152, Australia Tel: +61 8 7231 7700 info@ncocertifiedorganic.com.au	https://www.pacifictradeinvest.co.nz/
Australia	ACO Certification Limited	Level 21, 12 Creek Street, Brisbane Queensland 4000 Australia (+61) 07 3350 5706	https://aco.net.au/Pages/ABoutUs/ about.aspx
European Union	EU Organic		https://agriculture.ec.europa.eu/ farming/organic-farming/organics- glance_en
Japan	JAS	Japanese Agricultural Standards Standards and Conformity Assessment Policy Office, Food Manufacture Affairs Division, Tel: +81-3-6744-2098 jas_soudan@maff.go.jp	https://www.maff.go.jp/e/policies/ standard/specific/organic_JAS.html
United States	NOP(USDA)		https://www.ams.usda.gov
IFOAM	IFOAM Grower group		https://www.ifoam.bio/our-work/ how/standards-certification/internal- control

# Annex 2

# List of key global vanilla manufacturers

- 1. McCormick & Company
- 2. Nielsen-Massey Vanillas
- 3. Symrise AG
- 4. Symega Food Ingredients
- 5. Givaudan SA
- 6. B&G Foods Inc
- 7. Prova SAS
- 8. Firmenich SA
- 9. International Flavors & Fragrances Inc. (IFF)
- 10. Eurovanille

# Annex 3

#### Labelling example for vanilla

It is against the law in most countries to provide false or misleading labelling on food. The origin, the weights and measures on labels all must be clearly written.

For wholesale vanilla exports, the labelling of vanilla within the export boxes is typically determined by the customer. However, specific requirements apply to boxes and shipments in most countries. There are many templates freely available online. On the box the information should contain generally the following.

- Company logo or mark.
- Country of origin ("Papua New Guinea").
- Weight (in kilograms).
- Number of packages and size of cases (20 bags of 1kg).
- Handling marks (i.e., international pictorial symbols).
- Cautionary markings, such as "This Side Up" or "Use No Hooks" (in English and in the language of the destination country).
- Customer address.
- Port of Entry.
- Notification for customer (email and telephone).
- If there are many boxes per shipment each box should be labelled in running order BOX 1/3, then on the second box, BOX 2/3, and so on. The same should be done for bag number if in vacuum bags (e.g., 20-50).

Source: Food Standards Australia.

Source: EUR-LEX, ANNEX XV.

Source: ISO packaging and distribution of goods which includes guidelines on labelling: https://www.iso.org/ics/55/x/.



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