



# Pacific Horticultural and Agricultural Market Access Program (PHAMA)

## Report to the Vanuatu Market Access Working Group (VMAWG)

Investigation of Diagnostic Requirements to Service Various Value-added Industries  
in Vanuatu

23 MAY 2011

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## Table of Contents

<b>Executive Summary .....</b>	<b>iv</b>
<b>1 Background .....</b>	<b>1</b>
<b>2 Recommendations .....</b>	<b>2</b>
<b>2.1 High .....</b>	<b>2</b>
<b>2.2 Medium .....</b>	<b>3</b>
<b>2.3 Low .....</b>	<b>3</b>
<b>2.4 Other .....</b>	<b>3</b>
<b>3 Current Diagnostic Requirements and Issues .....</b>	<b>4</b>
<b>3.1.1 Food Safety Broadly .....</b>	<b>4</b>
<b>3.1.2 Water Quality .....</b>	<b>4</b>
<b>3.1.3 Cocoa .....</b>	<b>4</b>
<b>3.1.4 Copra .....</b>	<b>5</b>
<b>3.1.5 Kava .....</b>	<b>5</b>
<b>3.1.6 Vanilla .....</b>	<b>5</b>
<b>3.1.7 Spices .....</b>	<b>6</b>
<b>3.1.8 Coffee .....</b>	<b>6</b>
<b>3.1.9 Frozen Root Crops .....</b>	<b>7</b>
<b>3.1.10 Dried Fruit and Vegetables .....</b>	<b>7</b>
<b>3.1.11 Nuts and Oils .....</b>	<b>8</b>
<b>3.1.12 Beef .....</b>	<b>8</b>
<b>3.1.13 Fisheries Products .....</b>	<b>9</b>
<b>3.1.14 Noni Juice .....</b>	<b>9</b>
<b>3.1.15 Dietary Supplements/Pharmaceuticals .....</b>	<b>9</b>
<b>3.1.16 Pentecost Development Association .....</b>	<b>9</b>
<b>3.1.17 Tourism Industry .....</b>	<b>10</b>
<b>4 Options for the Establishment of Cost Effective and Timely Future Diagnostic Services .....</b>	<b>11</b>
<b>5 Limitations .....</b>	<b>12</b>

## Appendices

Appendix A Activity Schedule Vanuatu Market Access Priorities following VMAWG Meeting 1

Appendix B Consultations held in May 2011

## Abbreviations

<b>Abbreviation</b>	<b>Description</b>
ACIAR	Australian Centre for International Agricultural Research
DLQS	Department of Livestock & Quarantine
EU	European Union
FFA	Free Fatty Acid
FTDC	Food Technology Development Centre
JICA	Japanese International Cooperation Agency
NGO	Non-governmental organisation
NZMAF	New Zealand Ministry of Agriculture and Forestry
NZAP	New Zealand Aid Programme
NZFSA	New Zealand Food Safety Authority
PARDI	Pacific Agribusiness Research for Development Initiative
PHAMA	Pacific Horticultural and Agricultural Market Access Program
PIC	Pacific island country
SMP	Santos Meat Packers Ltd
URS	URS Australia Pty Ltd
USA	United States of America
VMAWG	Vanuatu Market Access Working Group

## Executive Summary

Preliminary market access priorities were identified by the Vanuatu Market Access Working Group in February 2011 and included in the Pacific Horticultural and Agricultural Market Access Program (PHAMA) 3-Month Strategic Plan for April to June 2011. This report covers one of the two priorities included for Vanuatu – investigation of diagnostic requirements to service various value-added industries.

The value-added industries included in the terms of reference for this study were cocoa, copra meal, virgin coconut oil, kava, vanilla and small quantities of other spices. During discussions with commercial and government representatives it was found that diagnostic related issues also existed for a range of other current and potential export industries, namely copra (rather than copra meal), coffee, nuts (fresh and for oil), frozen root crops, dried fruit and vegetables, and dietary supplements. No issues were identified for copra meal and coconut oil. Overarching issues were identified with a lack of capacity to conduct basic testing and inspections for food safety issues.

Based on this investigation, it is recommended to the Vanuatu Market Access Working Group (VMAWG) that a range of general and commodity specific follow-up activities be done:

High priority activities are a stocktake of available local facilities for microbial and water quality testing; investigating off-shore providers to conduct testing and provide training; specific activities for copra, vanilla, small value consignments of dry spices, and frozen root crops; and building on activities under the Pacific Agribusiness Research for Development Initiative.

Medium priority activities relate to testing and maintaining moisture content of green coffee beans.

Low priority activities relate to meat inspection and testing.

Activities relating to kava should only occur as part of any future agreed strategies to develop this export market.

## Background

The purpose of this report is to outline requirements and options for diagnostic testing to service various value-added industries in Vanuatu. Further background is given in the Activity Schedule (see Appendix 1).

The report is structured into:

- Recommendations for the Vanuatu Market Access Working Group
- Highlights from discussions held with members of value added industries and the Government of Vanuatu to determine current diagnostic requirements.
- Options for the establishment of cost effective and timely future diagnostic services.

Consultations were held with commercial, government and community representatives (see Appendix B) in Vanuatu from 12–19 May 2011.

## Recommendations

Based on this feasibility study, it is recommended to the Vanuatu Market Access Working Group (VMAWG) that a range of general and commodity specific follow-up activities be done. These are listed below in suggested priority groupings and further details are given in the following section.

### 2.1 High

#### *General*

- A stocktake should be conducted of all available, and possible, local laboratory and testing facilities and service providers.
- Options should be investigated to contract on off-shore service provider to conduct testing, provide re-fresher and additional training to Food Technology Development Centre (FTDC) staff, and assist with establishing basic capacity in Vanuatu to conduct microbial testing of plant and meat based products.
- For water quality testing, the current cost, availability, scope for increasing, and options for individual facilities in different locations should be investigated.

#### *Copra*

- Arrangements for testing of copra from other countries in the region should be investigated to determine available options and scale of tests being done.
- Technical requirements for testing moisture level and Free Fatty Acid (FFA) of copra should be investigated to determine feasibility of doing these tests locally.

#### *Vanilla and spices*

- Options for testing vanillin levels should be investigated to determine if other off-shore providers are more economic and if feasible options exist to test routinely test vanillin and microbial levels during collection and processing.
- Existing exports requirements for vanilla, and all products of potential interest, to Australia and New Zealand should be collated and made available to the VMAWG.
- Alternatives offered by New Zealand Food Safety Authority (NZFSA) for small value consignments should be investigated.

#### *Frozen root crops*

- An analysis of the frozen root crop pathway should be conducted and specific diagnostic, research, logistical and supply needs identified; relevant components for Pacific Horticultural and Agricultural Market Access Program (PHAMA) support can then be agreed.

#### *Coordinating with other projects*

- Opportunities for PHAMA to supplement upcoming support from Pacific Agribusiness Research for Development Initiative (PARDI) on the canarium nut, taro and tamarind supply chains should be investigated.



## 2.2 Medium

### *Coffee*

- Options and cost to set-up humidity controlled storage facilities for green coffee beans in Tanna and Port Vila should be investigated.

## 2.3 Low

### *Beef*

- Support for the training of meat inspection staff should be considered if New Zealand Aid Programme (NZAP) support is not available.
- The need and, if relevant, options for Department of Livestock & Quarantine (DLQS) to conduct independent testing at the abattoirs and domestic butchers should be investigated further.

## 2.4 Other

### *Kava*

- Support for diagnostic related issues for kava should only be considered as part of any future agreements between government and the commercial sector on strategies to develop this export market.

### *Coordinating with other projects*

- The VMAWG should engage with the Huhu Gaituvwa Association to seek requests for support and consider how this group could be involved in jointly delivering activities in Pentecost.

## Current Diagnostic Requirements and Issues

### 3.1.1 Food Safety Broadly

Other than at the abattoirs, there is effectively no capacity in Vanuatu to conduct microbial or chemical testing for food safety purposes or provide approval of processing facilities. Two trained officers are employed at the Food Technology and Development Centre but do not have the capacity/funding to conduct any tests. Following accreditation of training materials in 2010, the FTDC staff have been providing basic food handling and safety training to ~150 people involved in food preparation. The previous owners of a company supplying cleaning products (Pacific Supply) had indicated interest in providing food safety related testing (e.g. cleanliness of bench tops) but it is not known if the current owners have pursued this. Facilities may also be available at the Department of Geology & Mines.

- A stocktake should be conducted of all available, and possible, local laboratory and testing facilities and service providers.
- Options should be investigated to contract on off-shore service provider (e.g. AsureQuality in NZ) to conduct testing, provide re-fresher and additional training to FTDC staff, and assist with establishing basic capacity in Vanuatu to conduct microbial testing of plant and meat based products.

This will be vital as part of efforts to increase the production and export of processed products for human consumption and as dietary supplements. For example, conducting testing during the research and product development phase, increased capacity to enforce the Food Regulations, providing oversight and approval of food processing facilities, and collecting +/- processing samples for testing during commercial production. Training could be aimed at initially establishing capacity to test duplicate samples to what is sent off-shore for analysis.

### 3.1.2 Water Quality

Supply of town water in Luganville and Port Vila is commercially operated by UNELCO and water quality testing is conducted in-house. Many facilities (e.g. VAL abattoir, Rainbow Farms, Tanna Coffee) do not have access to town water and rely on bore, rain and/or river water. Procedures to monitor or improve the water quality vary from nil through to complex filtering systems and monthly testing through UNELCO's lab. Concerns were raised on the capacity of this single provider to conduct larger numbers of tests.

Access to reliable water of known quality will be increasingly important if Vanuatu wishes to expand the production and export of semi-/processed goods. This will depend on reliable testing and ability to treat as required. The specific needs will not be known until opportunities for the processed

- For water quality testing, the current cost, availability, scope for increasing, and options for individual facilities in different locations should be investigated.

### 3.1.3 Cocoa

Small volumes of cocoa beans are exported to Asian and European markets for processing. Quality requirements exist but no specific concerns relating to testing or diagnostics were raised. A range of other projects are underway or being developed for the production and processing of cocoa (e.g. small scale chocolate production). The report of a scoping study to Malekula in 2010 is expected shortly (through the Department of Industry) and a request has been prepared for AusAID support for an

NGO led project. It is assumed that any processed cocoa products made in Vanuatu would be a niche market and unlikely to be of export scale but opportunities for future PHAMA support may be identified in the scoping report.

### 3.1.4 Copra

Copra is a key export commodity for Vanuatu and is primarily sea freighted directly from Santo to Asian markets. Exports are roughly consistent throughout the year. Copra meal is also exported but industry representatives have not raised any concerns relating to testing or diagnostics. The testing needs raised for copra were moisture level (maximum of 7%) and free fatty acids (4% maximum) with a price penalty of 1% for every 1% outside of the specification. Test results need to be available before sales are confirmed. Samples (2–5kg) are currently either sent to off-shore labs such as a commercial lab in Papua New Guinea (Madang) or a lab within the processing facility of a buyer in the Philippines. A preference is for the testing to be conducted in Santo or Port Vila to reduce the turn-around time and, ideally, freight and testing costs. Given the importance of this commodity to the region there may be benefits in developing national or regional testing capacity.

- Arrangements for testing of copra from other countries in the region should be investigated to determine available options and scale of tests being done.
- Technical requirements for testing moisture level and FFA of copra should be investigated to determine feasibility of doing these tests locally.

### 3.1.5 Kava

Restrictions on access for kava to the European, Australian and USA markets due to toxicological concerns has been a significant issue for some years – these market access issues are not considered in this report. A range of issues on quality and consistency of kava products which related to exports into other markets were also raised. These included implementing a regional standard, moisture testing to improve handling and processing, routinely measuring kavalactone levels, calibrating kavalactone levels to varieties and type of tissue (root/stump etc), using kavalactone levels to differentiate the product in the market, and enforcing the Kava Act (e.g. controlling the export of peel). Export of kava products is a competitive and fragmented industry. Commercial interest also exists in developing a standardised liquid form of kava for export. For example, using the facility currently producing a dietary supplement in Port Vila to produce single serve vials that would be acceptable to regulatory authorities in Australia, New Zealand and Pacific region. Effort has previously gone into developing liquid forms of kava (e.g. Vanuatu beverage) but they have been of limited success.

- Support for diagnostic related issues for kava should only be considered as part of any future agreements between government and the commercial sector on strategies to develop this export market.

### 3.1.6 Vanilla

Vanilla is grown by individuals across the country that supply a small number of distributors and exporters (e.g. Vanui Vanilla) either directly or through co-operative type arrangements (e.g. Syndicat Agricole/Farm Support Association). Vanilla beans are exported based on moisture content and vanillin levels. Attempts had been made to use moisture meters but these proved unreliable and assessment is now based on appearance and texture. Vanillin levels have been tested by a

commercial laboratory in Brisbane but are considered expensive (A\$300/test, ~10 tests required each year to cover all material for export). Testing of one sample was done by the University of the South Pacific but concern existing over its validity. Larger buyers require the vanillin level to be tested. Microbial testing is not currently required but one Australian buyer has requested that generic testing be done. Due to the beans being sourced from a large number of growers and locations and concern exists over ensuring they are not contaminated (e.g. Salmonella). Preference is for a cheap microbial test that could be randomly done as beans were sourced each year.

Vanilla beans have access into Australia and New Zealand under generic requirements for processed products. Vanilla is also included in the New Zealand Ministry of Agriculture and Forestry (NZMAF) standard for fresh produce which is potentially confusing.

- Options for testing vanillin levels should be investigated to determine if other off-shore providers are more economic and if feasible options exist to test routinely test vanillin and microbial levels during collection and processing.
- Existing exports requirements for vanilla, and all products of potential interest, to Australia and New Zealand should be collated and made available to the VMAWG.

### 3.1.7 Spices

Spice production in Vanuatu includes pepper, chilli, ginger and turmeric. Dried products are sold whole, crushed or powdered. Fresh product is sold fresh on the domestic market and there is limited processing into paste type products (e.g. chilli, tamarind) aimed at the tourist market. Some export occurs (e.g. through Vanui Vanilla) with a network of small-holder suppliers across the country that supply direct or through co-operative type arrangements (e.g. Syndicat Agricole/Farm Support Association). Pepper (white and black) is considered the key export opportunity in terms of volume and market interest. It is classified as a prescribed good by NZFSA so requires specific testing (for Salmonella) to enter the NZ market. The standard requirements for on-arrival testing are based on large consignments and are not feasible for the small (e.g. less than 50kg) consignments from Vanuatu. Options exist for small value consignments including providing “alternative evidence” such as a Heat Treatment Certificate and these should be investigated further. For example, standardising the production process including the heating and developing a system for DLQS to provide approval and certification.

- Alternatives offered by NZFSA for small value consignments should be investigated.

The tamarind value chain has been identified as one of the priority crops for Vanuatu through the PARDI program. Issues being considered include supply (from wild grown trees throughout Vanuatu), drying and processing, and product development.

- Opportunities for PHAMA to supplement upcoming support from PARDI on the tamarind supply chain should be investigated.

### 3.1.8 Coffee

The coffee produced by ~350 growers on Tanna and processed in Port Vila accounts for ~90% of domestic consumption, there is unmet demand for roasted product for the tourist market and small volumes are exported to Australia, New Zealand, Fiji, the USA and France. Other buyers have exported small volumes of green beans in recent years as supply has increased. Opinions vary on whether markets should be sought for green beans (as production increases) or to focus on the value

added roasted product. Further donor support to expand the production base in Tanna, establish trees on Efate, and improve productivity and processing capacity is keenly sought. The only required analytical testing during production is moisture level of the air dried beans being purchased from growers in Tanna. The target moisture level for air dried beans is 10.5%, a lower price is paid beans at up to 13%, and beans over 13% need to be dried further. Any required further drying is done by the grower or, if significant return travel to their land is required, by the buyer in Tanna. The green beans are stored in Tanna (maximum of 30t at any time) then shipped to Port Vila in ~5t loads. Given the effort to reach target moisture levels, a limitation in the current value chain is that the green beans cannot then be stored in humidity controlled environments prior to roasting. This is considered to impact on the quality and negate efforts made to adequately dry the product. A possible solution is the use of sea containers in Tanna and Port Vila with a conversion to add a de-humidifying capacity.

- Options and cost to set-up humidity controlled storage facilities for green coffee beans in Tanna and Port Vila should be investigated.

### 3.1.9 Frozen Root Crops

Export of fresh root crops from Vanuatu to Australia and New Zealand is approved but in practice is difficult to do due to supply, logistics, biosecurity requirements and competition from larger producers such as Fiji. To overcome this, limited amounts of peeled and frozen root crops have been successfully exported from Vanuatu (Santo and Port Vila). Strong interest from commercial and government representatives remains in this pathway. Limited testing and research has gone into this pathway and particular focus is justified. Possible diagnostic related issues include: testing the effect of different varieties and processing techniques on product quality, monitoring hygiene during processing and nutritional analysis. A functioning near infra-red spectrometer is available in Port Vila and, when visiting students are involved, has been used for the analysis of various characteristics of edible root crops (fresh and flours) and kava.

- An analysis of the frozen root crop pathway should be conducted and specific diagnostic, research, logistical and supply needs identified; relevant components for PHAMA support can then be agreed.

The taro value chain has been identified as one of the priority crops for Vanuatu through the PARDI program.

- Opportunities for PHAMA to supplement upcoming support from PARDI on the taro supply chain should be investigated.

### 3.1.10 Dried Fruit and Vegetables

Interest exists in developing and exporting dried fruit and vegetable products for human consumption (e.g. dehydrated sliced root crops, papaya and tomato) and for production of dietary supplements (e.g. dried island cabbage). Commercial scale drying equipment is being installed (Rainbow Farms, Port Vila) and small scale testing conducted. Reliable regular testing for food safety purposes (e.g. hygiene of bench tops, tools, adequate drying of product, water quality) will be required but a supplier of this service has not been found. Other projects are thought to be underway in the region for the production of dried fruit and vegetable products.

- If production of processed plant based products is a priority for Vanuatu, opportunities to build on or join other projects developing these types of products should be investigated.

### 3.1.11 Nuts and Oils

Small export markets exist for tamanu and nangai (canarium) oil, primarily into the USA (Hawaii) for manufacture of beauty products. Quality requirements are set by the buyers and no specific diagnostics issues were raised. Interest exists in improving the production and quality of tamanu oil and opportunities for support through PHAMA may emerge in the future.

Canarium nuts are considered a potential export product from Vanuatu (and Papua New Guinea and the Solomon Islands) and there is ongoing support for research programs from the Australian Centre for International Agricultural Research (ACIAR).

Known diagnostic issues (e.g. for access into the European Union [EU]) for canarium nuts include lack of nutritional analysis, possible allergenicity, toxicological data and equipment to develop standardised commercial (village and larger scale) drying and roasting processes.

- Opportunities for PHAMA to supplement upcoming support from PARDI on the canarium nut supply chain should be investigated.

### 3.1.12 Beef

Cattle are currently processed at the Santos Meat Packers Ltd (SMP) abattoir in Santo or the VAL abattoir in Port Vila. Building is underway for a second abattoir in Santo with intention to develop an export market to China. The key export market for the SMP abattoir is prime cuts to Japan. The VAL abattoir has access to Australia, New Zealand, Fiji, Solomon Islands, Japan and potentially other Asian markets (access to the EU is no longer being sought). No specific concerns relating to testing have been raised by importing countries or buyers. Effort is going into addressing supply constraints to meet existing demand.

The SMP abattoir in Santo relies on town water and, at times, adequate chlorination may not occur. Approximately one day's supply of water is held in a tank at the abattoir and the operators (with oversight from DLQS) conduct some sampling for chlorination levels. Testing by the water supply company (UNELCO) is only available in Port Vila. Swimming pool test kits have been sourced as a simpler alternative. Improvements to the town water supply and testing at the abattoir are advisable but considered to be outside of the scope of PHAMA. JICA is currently considering support to upgrade the town water supply. Microbial testing of carcasses is conducted in-house by SMP. Improvements to this testing may be beneficial as part of the overall quality assurance process but have not been requested by current buyers nor limiting export opportunities. DLQS provides some oversight of the facility with a Veterinary Officer and 4 meat inspectors.

In-house testing is conducted at the VAL abattoir based on test-kits sourced from NZ. Bore water is filtered to standards equivalent to EU requirements and tested monthly at the UNELCO labs. DLQS provides some oversight of the facility with a Veterinary Officer and 3 meat inspectors.

There is currently no capacity in DLQS to conduct independent testing at either abattoir and the number of trained meat inspectors leaves little scope for down-time or conducting inspections to enforce domestic food regulations. A funding request to NZAP is being prepared for re-fresher training for the existing meat inspectors and training of additional staff.

A potential risk exists in the limited capacity of DLQS to provide adequate oversight of the abattoirs.

- Support for the training of meat inspection staff should be considered if NZAP support is not available.

- The need and, if relevant, options for DLQS to conduct independent testing at the abattoirs and domestic butchers should be investigated further.

### 3.1.13 Fisheries Products

There is a valuable export trade in live aquarium fish from Port Vila primarily to the USA. DLQS provide health certification and some oversight of the two export facilities (e.g. cleanliness of holding containers). No diagnostic related or other issues relevant to PHAMA are considered to currently exist.

There are currently no functioning fish processing facilities in Vanuatu. Facilities used to operate in Port Vila and Santo and a new facility was built in Port Vila in ~2008 (but not operating due in, among other issues, inadequate environmental impact assessment and associated arrangements). There is some interest in establishing fish processing facilities which may result in opportunities for support through PHAMA in the future.

### 3.1.14 Noni Juice

Limited amounts of noni juice are prepared for the domestic (e.g. 500ml bottles) and export (e.g. 1000L) market. Commercial interest also exists in preparing a dried capsule form in-country (currently produced in New Zealand and re-imported but not financially viable for local businesses). Quality standards do not exist for the processing, hygiene or nutritional analysis of this product. There is some commercial interest in expanding production of noni in Santo and Efate. Diagnostic issues exist for the development of this product but are not considered a specific priority for PHAMA unless broader effort is put into the development of it as an export product. For example: food safety, nutritional analysis, developing a standardised processing technique. Interest exists in seeking support (e.g. through any future phases of the AusAID Enterprise Challenge Fund) to develop the supply and processing of noni.

### 3.1.15 Dietary Supplements/Pharmaceuticals

A niche product based on a sea cucumber extract (TBL-12) is being exported to the USA as a dietary supplement and undergoing phase 2 trials with the aim of approval as a pharmaceutical. The gel based product is produced in Port Vila and exported as frozen 20ml vials. All testing (e.g. salmonella plate counts) is done off-shore, currently withASUREQuality in Auckland. Potential exists for some testing to be conducted locally if facilities and trained personnel were available. This type of product may improve the feasibility of developing local capacity for food safety related testing.

### 3.1.16 Pentecost Development Association

The Huhu Gaituvwa Association was formed in 2004 to serve the rural area of Pentecost Island. Its structure is headed by paramount chiefs of the two tribes of Pentecost, an Executive Committee, an Advisory Committee and several working committees. An office was established at Loltong on North Pentecost in 2010 and has a staff of five (one based in Port Vila). A producers cooperative and microfinance system have been established and efforts are underway to identify market opportunities. The current focus is on taro and kava for the Port Vila market but potentially export markets if viable. The Department of Industry is engaged with the association including through providing a marketing officer to assist with finding markets for taro and other products. Funding is available for agreed activities and the Advisory Committee has requested on-going engagement with the PHAMA program.

For example, to obtain advice and training on export opportunities that should be pursued, to use their existing structure to implement new activities.

- The VMAWG should engage with the Huhu Gaituvwa Association to seek requests for support and consider how this group could be involved in jointly delivering activities in Pentecost.

### **3.1.17 Tourism Industry**

The tourism industry is a major contributor to the Vanuatu economy and has long represented a significant potential market for high quality food/processed products both for consumption while in Vanuatu and as souvenirs. With this is also the need to ensure adequate food safety standards which requires improvements to the capacity within Vanuatu to enforce and enhance the relatively newly enacted legislation.



## Options for the Establishment of Cost Effective and Timely Future Diagnostic Services

Based on this investigation there are a range of diagnostic services conducted in Vanuatu and by off-shore providers. Some of these are adequate while others could be provided in a more timely and, ideally, cheaper way. In addition, there are a range of diagnostic services that are not available which is limiting the export of existing products and the development of new products.

The capacity of the Government of Vanuatu to provide approvals and/or certification based on diagnostic testing is limited, particularly for food safety related issues. In part, this is due to the absence of in-house or externally provided diagnostic services and insufficient capacity/resources to enforce regulations

Any future diagnostic services will continue to be provided both in Vanuatu and off-shore but a more optimal mix is needed, particularly for routine pre-export testing along supply chains. The recommended follow-up activities aim to identify more detailed information on the availability of diagnostic services in Vanuatu and off-shore, and the needs for current and future export products. This is necessary before any informed recommendations can be made on the way forward.

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## Appendix A

# Appendix A Activity Schedule Vanuatu Market Access Priorities following VMAWG Meeting 1

## Activity 1 – Investigation of diagnostic requirements to service various value-added industries in Vanuatu

### Justification:

Vanuatu has a range of small value-added horticultural industries that require diagnostics services to determine compliance with food quality and/or food safety standards. These commodities are cocoa, copra meal, virgin coconut oil, kava, vanilla and small quantities of other spices. Exporters are currently frustrated by poor access to diagnostic facilities that are required to determine quality and compliance with import requirements into other countries. Addressing this constraint would increase the sustainability and profitability of these industries in a cross-cutting manner.

### Immediate objectives

- Determine the current testing requirements, costs and time required for testing of these commodities.
- Determine if there are facilities in Vanuatu that could provide these services.
- Provide a brief overview of possible options for the provision of cost effective and timely future diagnostic services for these commodities.

### Background

Diagnostic testing for food and quality standards of processed and semi-processed products is a requirement of many importing countries to meet food safety and quality requirements.

The ability of Pacific island country (PIC) exporters/potential exporters to ascertain the testing requirements of target markets and develop cost and time effective options for ongoing testing in order to meet import requirements is limited due to lack of information and resources. This is a significant impediment to the development of new and maintenance of existing markets for these products.

### Action plan

Under this activity, Short-term Advisors will be mobilised to:

- Engage with members of value added industries to determine current diagnostic requirements for cocoa, copra meal, virgin coconut oil, kava, vanilla and other spices.
- Provide a report to the VMAWG through the PMO specifying the current diagnostic requirements.
- Provide a brief discussion paper outlining options for the establishment of cost effective and timely future diagnostic services for these commodities.

### Component relationship

This activity fits under Component 3: Research and Development. It will research the food safety and food quality requirements for cocoa, copra meal, virgin coconut oil, kava, vanilla and small quantities of other spices for international market access. It will also provide the VMAWG with possible options and next steps regarding the establishment of a sustainable and cost effective diagnostic service for these commodities.

## Appendix A

### Possible follow-on activities

Pending the outcome of investigations, the activity may lead to further assistance for developing reliable long-term diagnostic services for Vanuatu, underpinning the export of value-added commodities.

## Appendix B

### Appendix B Consultations held in May 2011

<b>Thursday 12 May</b>	<b>Santo</b>
Peter Hoyle	DLQS
Piero Bianchessi	Venui Vanilla Co
Toru Mochizuki	Santos Meat Packers Limited
John Fordham	Kava processor and exporter
Ahman Leong	Localex
<b>Friday 13 May</b>	<b>Santo</b>
Asiante & Gaetan Pikioune	Chapuis Station (kava exporters)
Chris Colmar	Valele Trust
Sethy William	Vanuatu Copra & Cocoa Exporters Ltd
<b>Monday 16 May</b>	<b>Port Vila</b>
Benuel Tarilongi & Francis Qarani	DLQS
Jimmy Rantes	Department of Industry
Alek Berry	Vanuatu Chamber of Commerce and Industry
Peter Kaoh	Syndicat Agricole & Farm Support Association
Charlot Longwah	Kava Store
<b>Tuesday 17 May</b>	
Vincent Lebot	CIRAD/ Department of Agriculture and Rural Development
Terry Adlington	Tanna Coffee Development Co Ltd
<b>Wednesday 18 May</b>	
Joseph Jacobe	Tebakor Island Product
Advisory Committee	Huhu Gaituvwa Association (Pentecost Island)
Sam Grant	Unicorn Pacific Corporation
Paul Smith	Vanuatu Abattoirs Ltd
<b>Thursday 19 May</b>	
Cornelia Wyllie	Vanuatu Direct
Kaltuk Kalmor	DLQS
Emily Tumukon	Food Technology Development Centre
Carolyn Ernst	
Dr. Roger Phillips	DLQS



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