

VANILLA CULTIVATION, CURING, PROCESSING AND MARKETING:

Bougainville Workshops
6th April to 8th April 2020

Professor Matthew Allen, James Cook University
CEO Broken Nose Vanilla, FNQ, Australia





VANILLA CULTIVATION, CURING, PROCESSING AND MARKETING: BOUGAINVILLE WORKSHOPS 2020

Preamble: overall Papua New Guinea situation

Papua New Guinea (henceforth PNG) has a history of more than 30 years of vanilla growing, curing and exporting. In fact, climatically it is an ideal environment for vanilla cultivation. However there have been three basic impediments to the success of the industry:

1. Quality of vanilla beans has been highly variable;
2. Volume of vanilla beans has been unreliable;
3. Price of vanilla beans has been variable.

Underlying these three impediments have been a number of related issues:

1. Limited horticultural advice passed on to farmers;
2. Limited and often ill-informed advice about growing, picking and curing vanilla;
3. Farmers walking away from plants if unable to achieve appropriate payment in short term scenarios;
4. Few farmers or entrepreneurs with the necessary skills to cure and process vanilla beans to a high international standard;
5. Farmers being underpaid for green vanilla beans;
6. Few farmers' cooperatives able to consolidate growing, production and sales of vanilla beans;
7. Unscrupulous buyers from overseas underpaying farmers and suppliers for their products;
8. Limited and limiting lack of physical infrastructure that allows transport of products to ports for sale.

The overall picture of vanilla growing in PNG is one which could be improved, at a reasonable economic cost, and quickly. The proposal below attempts to address some of these issues through the implementation of workshops, training sessions, information distribution sessions, and discussions with farmers and processors.



TRAINING/PRACTICAL WORKSHOPS

In 2020 **Professor Matthew Allen**, owner of Australia's largest vanilla producer, **Broken Nose Vanilla**, will visit Bougainville, PNG and run workshops, training sessions, information sessions, and have discussions with farmers and curers of vanilla in the region. *These will be practical, hands on sessions, with opportunities for participants to ask as many questions as they have.*

CONTENT

These workshops will provide farmers and interested parties with information about:

- *Vanilla planifolia* – how to grow/propagate
- Greenhouses versus tree planting:
 - Pros and cons of each approach
- Ideal planting and harvesting times:
 - Emphasis on:
 - ensuring plants produce rapidly
 - ensuring harvesting is done at the best times;
- Ideal soil and sun requirements:
 - Emphasis on:
 - pH levels
 - mulch
 - and appropriate shade;
- Curing techniques:
 - Emphasis on:
 - Facilities needed for heat killing, sweating, sun drying
 - Theories behind curing
 - Community cooperation in curing processes
 - Grading beans both before and after curing
 - Assessing moisture content of beans
 - Stabilising beans
- Storing techniques
 - How to condition and store beans
 - Length of time required to condition beans
 - Storage facilities
 - Mould control
- **And most importantly, overall quality control.**



Establishing growers' networks

These workshops will also facilitate discussions within regions that will enable growers to work together (growers' networks) to meet demand from overseas for their product and to help set prices.

Discussions will include how to actually instigate growers' networks through technology and through face to face meetings conducted at certain times of the year – planting, pollinating, harvesting and curing times.

Discussions will also ask how to identify leaders within vanilla communities and how networks will actually function.

Advantages of establishing vanilla growers' networks

Establishing growers' networks is crucial for the development of the industry.

- Having centres of knowledge and information about various aspects of vanilla growing, processing and curing will facilitate expansion and regularisation of income.
- Centres of knowledge via growers' networks will also enable growers to establish quality control and help establish price structures that are sustainable into the future.
- Such structures provide growers with more confidence to move forward producing high quality vanilla as a commodity for specific markets.
- These structures also provide buyers with confidence that they are able to purchase high quality vanilla.
- These structures will enable vanilla farmers to diversify their risks, enable them to store excess vanilla for future years, and enable them to provide certainty of income in future years.
- These structures will enable vanilla farmers to swap information about appropriate methods for dealing with problems – climate, disease, pests etc.

Onsite training programs

These programs will help farmers learn about ideal growing conditions for vanilla and discuss:

- how and when to plant
- how to design and build greenhouses
- how to irrigate
- how to protect vanilla from pests, bugs and other damage
- how to advance pollination after planting (tip pruning):
- how to actually pollinate vanilla flowers;
- when to harvest;
- how to harvest beans individually – not as a bunch;

- how to cure vanilla;
- how to store vanilla;
- how to grade vanilla;
- how to add value to vanilla;
- how much income to expect from green and cured vanilla.

These programs will take the form of onsite visits and q and a sessions with farmers.

OTHER POTENTIAL WORKSHOP TOPICS: SPECIFICALLY FOR MANAGEMENT

GLOBAL ECONOMICS AND VANILLA

- Links of local vanilla prices to global commodity prices and factors that relate to the establishment of these prices
- Rapid fluctuations in global prices
- How these prices are set, and why such mechanisms exist
- How to read market reports to ensure price stability
- How to stabilize price expectations
- Understand economies of scale and implications of these for pricing

MARKETING

- Importance of understanding markets: domestic, international and how to penetrate these markets.
- Develop products/packaging to conform to market expectations – one size does **not** fit all markets
- Decide which markets to focus which products on
- Do market research
- Develop connections with buyers/wholesalers both domestically and internationally
- Consider vertically integrated models of production/distribution

LOCAL ECONOMICS

- Working as local communities
- Sharing labour
- Sharing curing
- Sharing marketing and knowledge of markets
- Work together to develop contacts to ensure fair trade pricing
- Driving the above are competitive advantage, based on the idea of growers' networks.

