AGRICULTURE Weekly issue

ACA FINDS HIS LINK TO THE TREE OF LIFE

Mr. Salabiau filtering Virgin Coconut Oil at his VCO shed in Kiuva Bau, Tailevu.

"Never be ashamed of the work you do, as long as it puts food on the table, and provides for the welfare of your family."

This sentiment is what drives Mr. Aca Salabiau as he hustles for his young family.

His hustle being the production of Virgin Coconut Oil (VCO).

Although he is relatively new to producing VCO, that has done little to deter him from achieving his short and long term goals.

Ironically, he took up VCO production following a training held at his village of Kiuva, Bau in Tailevu for the village's women's group in 2015, aimed at elevating and fostering sustainable livelihoods for its core participants.

"I am a man, and this process of VCO production is often thought to only be for women, but I took a particular interest in it, my wife would often growl at me but I found my passion in it and I knew I could do it," he said.

"I sat in during the training, and I was fascinated at how easily we could make a living out of what surrounded us, especially coconuts," said Mr. Salabiau.

With his interest piqued and a will of stone, Aca was adamant to try his hand at VCO processing by putting all that he'd learnt during the training to good use, totally disregarding any negative criticism that would come of it.

"I saw women doing it and marveled at the transformation, the outcome of the whole process, nothing is left out," said the father of two.

"When I first started, it was more of a practical, I would follow what I had learnt and review the progress and by this practical, it also allowed me room to know what I was lacking and what I needed to do to produce the perfect VCO," he shared.

During the early stages of his production, his VCO was used solely for sampling purposes, and he'd receive mixed reviews and was subjected to critique from those closest to him, but he did not falter.

"My wife, at one stage, was upset as I was dedicated to something that was not generating income but I had faith that one day, luck would come my way," he said.

"Everyday I would collect coconuts and follow the process of VCO until I heard over the radio the assistance provided by the Ministry of Agriculture on VCO," he said.

"I contacted former Principal Agriculture Officer (Central) Ms. Tepola Seniloli to enquire about the assistance and it coincided with the Agriculture Show that was being held in Nausori," he recalled.

"Upon the advice of the then PAO I took my product to the show for display and it was there that I met my buyer, Mr. Pomani Taraivosa who motivated me to continue my passion," he said.

"That's when I truly believed that when you do something wholeheartedly, there is always a reward."

After discussions the duo drew up an agreement for Mr. Salabiau to supply 15 liters every Mondays and Thursdays to the Suva market.

"This process requires concentration and dedication as it can go wrong when you miss a step and it is essential that all the steps are followed," he said.

The Fijian idiom "vinaka vaka-niu" is also what he lives by as he uses every part of the coconut for value-adding; "Nothing is left out, VCO requires the flesh, and the other parts are used for producing other materials within and around the house," he said.

"Once the flesh is extracted, I then use the husk to fuel the fire, the shell is used for charcoal replacement and handicrafts and the coconut water is used for drinking which is high in vitamin B, proteins and ascorbic acid which is also a treatment for sunstroke, stomach ache and urinary problems," said Aca.

"There are other uses of the other parts of the coconut tree, nothing is left out, from the leaves, the midribs, the palmis, the spathe and inflorescence, the trunk right to the roots.

In 2016 Aca was amongst a few participants who attended a training on Virgin Coconut Oil at the Mua Research Station in Taveuni.

As the sole individual engaged in this trade in the village, his day starts with the scraping of coconuts and ends by midday and because he uses the traditional VCO processing, he needs to manually squeeze the grated coconut to extract the coconut milk.

His commitment bore fruition in 2018 as he was assisted by the Ministry of Agriculture with a VCO processing shed inclusive of an electrical coconut scraper.

"The production increased from 2 ½-3 liters (4 dozen coconuts) to 5 liters (6 dozens for big coconuts and 8-10 dozens for small coconuts) when the electrical coconut scraper came in," he said.

"Apart from the electric scraper, all the others are done manually and the process is all done at home from husking to extractions to filtering."

"After husking, cracking and scraping (the finer you shred the more the milk), comes the extraction of the creamy milk with hands using lukewarm water," explained Aca.

"It is then collected into a white bucket with a blanket to cover it for 24 hours, after the 24 hours there will be four layers curdled, separating VCO from the rest," he said.

The top and third layer consists of sinusinu which will then be heated after a week of collection for traditional coconut oil whilst the second layer consists of VCO and the last layer of vinegar which can be used 14 days afterwards with added salt in meals and food preservations.

"The curdled virgin coconut oil is then skimmed off, filtered and sunned for another week before it is bottled and ready for the market," he continued.

"From what we are producing, VCO is $12 per liter for the big bottles and $15 per liter for sinusinu and in a week we can earn approximately $300," he said.

Being a man in a predominantly woman-led trade, Aca has set out plans to expand his business, and be a vessel of change in his community.

"I am planning to plant more coconuts and hybrid coconuts for my business for the next 7 years as I would love to see it rolling," he said.

"The market sometimes drops because there are other VCO processors from the islands and around the country but that will always be the challenge that we face and the only way is to keep going," he said.

"I challenge you all, that men can also do a woman's job and vice versa, but like I said, if it's putting food on your table, there is no need to be ashamed, look around you and make use of the resources that is abundantly available to you," he concluded.

On this track, Aca is well on his way to becoming the main man of Kiuva, Bau, Tailevu's VCO processing and production, all through determination and grit.

VCO STANDARDS

1. Scope
This Standard applies for Virgin Coconut Oil (VCO).

2. References
- SNI (Indonesia National Standard) 7381:2008
- PNS (Philippine National Standard)/BAFPS 22:2007: ICS 67.200.10
- MS (Malaysian Standard) 2043:2007 TCS (Thailand Coconut Community Standard) 670-2004
- APCC Standard for Virgin Coconut Oil

3. Definition
- Virgin Coconut Oil

Virgin coconut oil (VCO) is obtained from fresh and mature kernel (12 months old from pollination) of the coconut (*Cocos nucifera L.*) by mechanical or natural means with or without the application of heat, which does not lead to alteration ofthe nature of the oil.

VCO has not undergone chemical refining, bleaching or deodorizing. It can be consumed in its natural state without the need for further processing.

Virgin coconut oil consists mainly of medium chain tryglycerides, which are resistant to peroxidation. The fatty acids in virgin coconut oil are distinct from animal fats which contain mainly of long chain saturated fatty acids.

Virgin coconut oil is colorless, free of sediment with natural fresh coconut scent. It is free from rancid odor or taste.

4. Essential Composition and Quality Factors of Virgin Coconut Oil

Parameter	
Moisture (%)M	ax 0.1
Matters Volatile at 1200 C (%)	Max 0.2
Free Fatty Acid (%)M	ax 0.2
Peroxide Value meq/kg	Max 3
Relative density0	.915 – 0.920
Refractive index at 400 C	1.4480 – 1.4492
Insoluble impurities per cent by mass	Max 0.05
Saponification Value	250 – 260 min
Iodine Value	4.1 -11
Unsaponifiable Matter % by mass, max	0.2 - 0.5
Specific gravity at 30 deg./30 deg. C	0.915 – 0.920
Polenske Value, min	13
Total Plate Count	< 0.5
Odor and Taste	Natural fresh coconut scent, free of sediment, free from rancid odor and taste

5. Food Additives
None permitted

6. Contaminants

Parameter	Mg/kg
Iron (Fe)	Max 5
Copper (Cu)	Max 0.4
Lead (Pb)	Max 0.1
Arsenic (As)	Max 0.1

7. Gas Liquid Chromatography (GLC) ranges of Fatty Acid Component

Common name	Composition	(%)
Caproic acid	C 6:0	0.10 – 0.95
Caprylic acid	C 8:0	4 – 10
Capric acid	C 10:0	4 – 8
Lauric acid	C 12:0	45 – 56
Myristic acid	C 14:0	16 – 21
Palmitic acid	C 16:0	7.5 – 10.2
Stearic acid	C 18:0	2 – 4
Oleic acid	C 18:1	4.5 - 10
Linoleic acid	C 18:2	0.7 – 2.5

8. Hygiene
It is recommended that the product covered by the provisions of this standard shall be in accordance with the appropriate sections of the General Principles of Food Hygiene recommended by the CODEX Alimentarius Commission (CAC/RCP1-1969, Rev. 4 - 2003).

9. Labelling and Packaging
The name of the food on the label shall be "Virgin Coconut Oil". The provisions of the General Standard for the labelling of Prepackaged Foods (CODEX STAN 1 – 1985, Rev. 6 - 2008) shall apply.

10. Methods of Analysis and Sampling
Based on Codex Alimentarius (Volume 13).