



Wild Forest Honey

MARKET & SALES STRATEGY RESEARCH REPORT

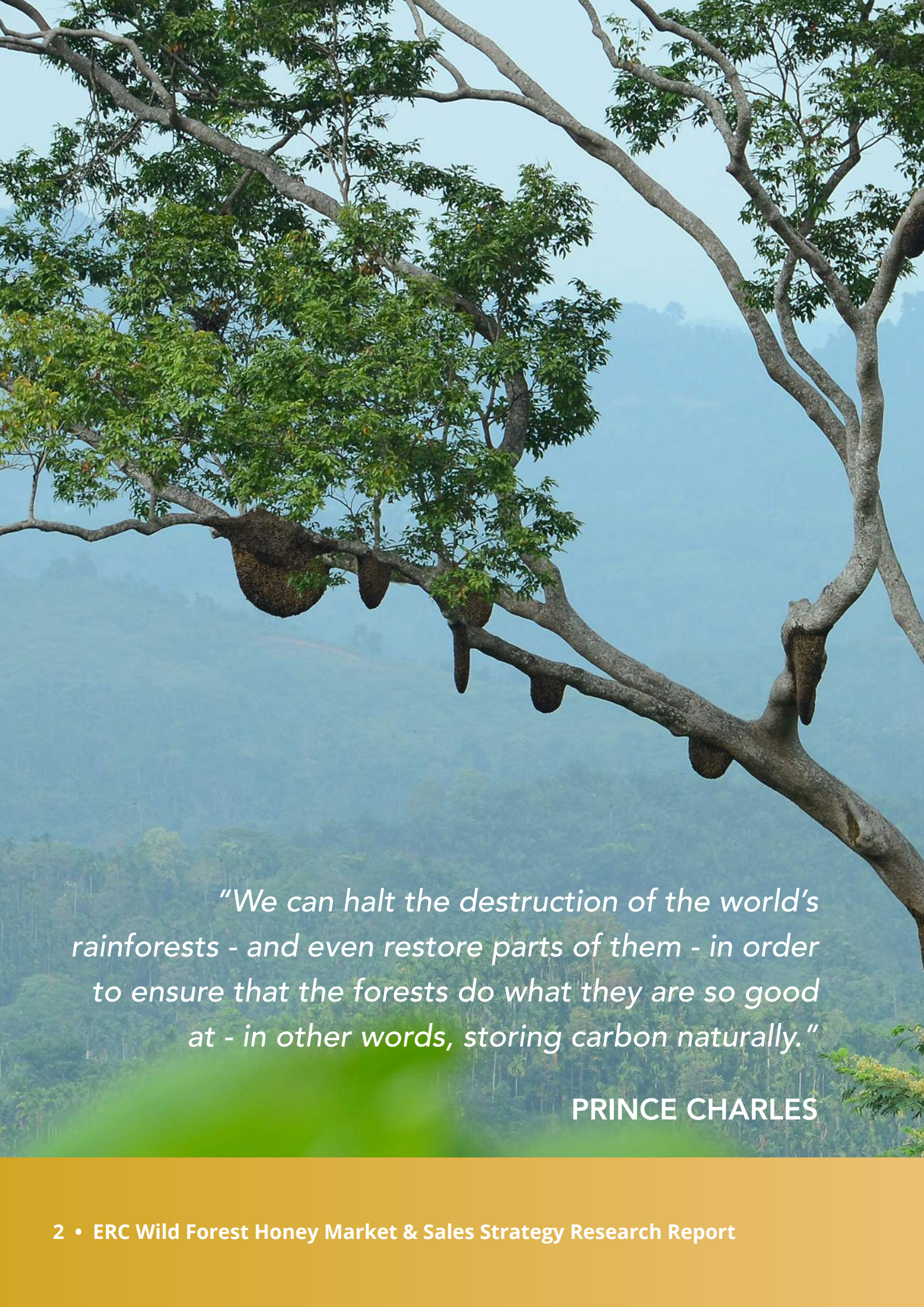
Prepared by

PT Alam Santi • Sustainable Living Design

Dated October 22, 2019

For the Partnerships for Forests (P4F) P4F0389 ERC Wild Forest Honey





"We can halt the destruction of the world's rainforests - and even restore parts of them - in order to ensure that the forests do what they are so good at - in other words, storing carbon naturally."

PRINCE CHARLES



BACKGROUND



BACKGROUND

About Honey

Honey is being produced in almost every country in the world. The color, flavor, and composition of a particular variety can differ depending on climatic conditions and the flora of the area. Even though there are many varieties of honey, all honey types can be divided into the following three general groups:

1. **Polyfloral honeys** (when bees use nectar from many different flower sources);
2. **Monofloral honeys** (when bees use nectar mostly from the nectar of one flower species);
3. **Honeydew honeys** (when a sugary liquid secreted by insects such as aphids while sucking the plant sap is collected by honeybees and converted into strong dark colored honeydew honey, also known as forest honey).

About Wild Forest Honey in Indonesia

Several organizations in Indonesia are involved in Wild Forest Honey farming and harvesting, including: The Indonesian Forest Honey Network (JMHI), Reko Sialang Forest Honey, Health Harvest Tualang Honey, and Rumadu Indonesian Forest Honey.

Considering the favorable conditions for wild production in the country's vast tropical forested areas, Indonesia could, with the proper assistance, be one of the foremost suppliers in the world of this high-value commodity.

The above be said, locations in Indonesia where Wild Forest Honey can be harvested are dispersed and disconnected across the archipelago. They generally have poor road access and limited or no telecommunication network. Due to this, Wild Forest Honey farmers and their cooperatives often struggle to access information, reach premium buyers, or value-add their products to gain value from their labors.

Across Indonesia's tropical rainforests, Wild Forest Honey farming is potentially a great contributor to the preservation of these delicate ecosystems, as it offers an alternative livelihood to destructive forest practices such as logging and palm oil plantations. Preserving bee populations is also vital to these habitats as they play an important role as pollinators.

The Wild Forest Honey industry is still very undeveloped but shows huge promise but the clock is ticking to cultivate these commodities, as prime areas to cultivate such high-value honey are quickly dwindling and at risk of ecosystem collapse due to continual deforestation.



About Malaysia's Notable Tualang Honey

'Tualang Honey' is the Malaysian name for Wild Forest Honey produced by *Apis dorsata* bees in the rainforests of Malaysia. It has many similarities to Sumatran Wild Forest Honey, called Sialang Honey, also produced by *Apis dorsata*. Some Tualang Honey brands are in fact sourcing their honey from Sumatran rainforests and re-branding the honey as Tualang Honey, driving up the price point of their sold products.

Tualang Honey is generally priced significantly higher than Sialang Honey, for example, Javara sells Sialang Honey for USD 66.10/kg, whereas [Health Harvest Foods](#) sells their Tualang Honey products for upwards of USD 740/kg. Tualang Honey has seen a substantial international media buzz in the last few years due to the numerous studies which show that Tualang Honey has antimicrobial, anti-inflammatory, antioxidant, anti-mutagenic, anti-tumor, and anti-diabetic properties. The wound-healing attributes which rival Manuka Honey properties.¹

Such studies, commissioned by the Malaysian government as well as honey producers/sellers, have allowed honey brands to make evidence-based claims about the notable health benefits of Tualang Honey. Such studies, used in both the case of Manuka Honey and Malaysian Tualang Honey have helped propel these products to a high premium-price point.

Alam Santi recommends that Indonesia's Wild Forest Honey producers, and this project may choose to commission such studies as a strategy to adding substantial perceived value. For further details and articles related to Tualang Honey see the Annexes of this report.

¹ [Review of the Medicinal Effects of Tualang Honey and a Comparison with Manuka Honey.](#)



COMPETITIVE LANDSCAPE ANALYSIS

COMPETITIVE LANDSCAPE ANALYSIS

During market observation, Alam Santi found certain strategies being prominently used to demonstrate added value for the premium-priced brands of honey.

Key points that were showcased across top performing competitors included:

1. Information about
 - a. Where the honey comes from
 - b. Vegetation the bees pollinate (affects taste and aroma)
 - c. The type of bee that makes the honey (affects enzymatic content)
 - d. How is the honey harvested and processed
2. Value is increased if
 - a. The honey is raw, unfiltered, and unpasteurized
 - b. Production is perceived as "small-scale" (i.e. limited production)
 - c. Environmental conditions are untainted by contaminants
 - d. Proven antibacterial and wellness related qualities
3. The 'compelling story behind the product'
 - a. Who harvests it (community co-operatives, indigenous people etc)
 - b. Interconnection with conservation
4. Certification (Fair Trade, Organic, Halal etc) labeling

Aside from the above, some well-developed brands show increased value by offering ranges of products, including multiple pack sizes of pure honey as well a range of honey derivative products. Items can include flavored honeys, honey based sauces, honey comb and others. Other brands focused on either single products, or product ranges such as those targeting consumers seeking medicinal values. There are only a few officially registered businesses in Indonesia's Wild Forest Honey production sector that are visible on the market place, including Odeng Honey, Tesso Nilo Honey, East Java Co and Javara.

Taking into consideration the likes and dislikes of different sales channels, we separated the 50 brands that were benchmarked for competitive analysis into the following groups:

1. 28 Domestic Brands
 - a. 21 of which are Forest Honey Products
 - b. 10 of which are known to be exported
2. 10 Imported Brands
3. 12 High-Value International Brands



Notable Indonesian Wild Forest Honey Products

Indonesia's honey market includes a wide selection of wild forest and forest honey products. The majority of which are home-industry products, that do not demonstrate certification, and have very basic branding, and minimal, if any, marketing campaigns. These types of local products are primarily sold on peer to peer e-commerce platforms or in person in traditional shops 'warungs' throughout Indonesian cities and villages.

In Indonesia and abroad, well defined Wild Forest Honey products show promise as a premium-priced consumer item. A few of the more well established Wild Forest Honey players on the domestic market are highlighted below. These brands use social media, websites and direct marketing as part of their sales strategies.

Some of these brands also have their products featured in retail shops, supermarkets, and offer volume products for HORECA. Most are sold on the main domestic e-commerce websites such as Tokopedia, Shopee, Blibli, etc. These brands are the closest related competitors in the Indonesian marketplace for PT ABT's Wild Forest Honey.

Of the 21 notable Indonesian Forest Honey Brands evaluated, the following top items were selected due to their premium price point, the quality of branding, and/or the brands connection to conservation or social impact initiatives.

East Java Co



This honey is offered in one format, glass jars of 250g, with an equivalent retail value of **USD 42.39/kg**. The product is sold online via their website, off-line at 20 outlets in Bali and Java, and through 12 hospitality partners. The products are certified organic by EU, Japanese and US certification bodies. The brand focuses on 'good honest food', natural ingredients, sustainable farming, supporting local farmers and 'respect for the produce'. The product is exported to Singapore, Malaysia and Japan.

Javara 30 Hills Sialang Honey

This honey is packed in glass jars of 130g with an equivalent retail value of **USD 66.10/kg**. Javara products are sold in specific retail shops and online. The products are certified under the EU, US, NOP and JAS standards. The brand is promoted as ethical trade, and sustainable harvesting to preserve Indonesia's food biodiversity heritage, and 'to meet Indonesia's explorative culinary experience'. Javara products are exported to 22 countries in 4 continents.



Health Harvest Tualang Honey



This honey is packed in glass jars of 50g, 250g, 280g and 375g. The average equivalent retail value is **USD 740/kg**. It can be found at the Health Harvest Online Store and on Amazon and is exported to over 43 countries. The product is certified USDA Organic, USA NOP Organic, FSSC 22000, ISO 14001 and ISO 9001 and Halal MUI. This product's high price relates to Tualang Honey being presented as a wild honey species with unique healthy properties. Further details about Tualang Honey are available in the Annex of the report.

Leven's Best Wild Honey Borneo

This honey is packed in glass bottles of 500g with an equivalent retail value of **USD 53.26/kg**. It can be found online at Best Wild Honey, Dinasou, Carousell and iHerb. The product is certified by MOODY's HACCP and Halal. According to the Borneo Rainforest Honey Website the honey originates from Borneo and boasts a unique taste due to being harvested from an area with a high level of oxygen and unique plants that go into its natural formation. It is exported to 6 countries.



Madu Hutan Tesso Nilo, Madu Odeng and Madu Hutan Flores



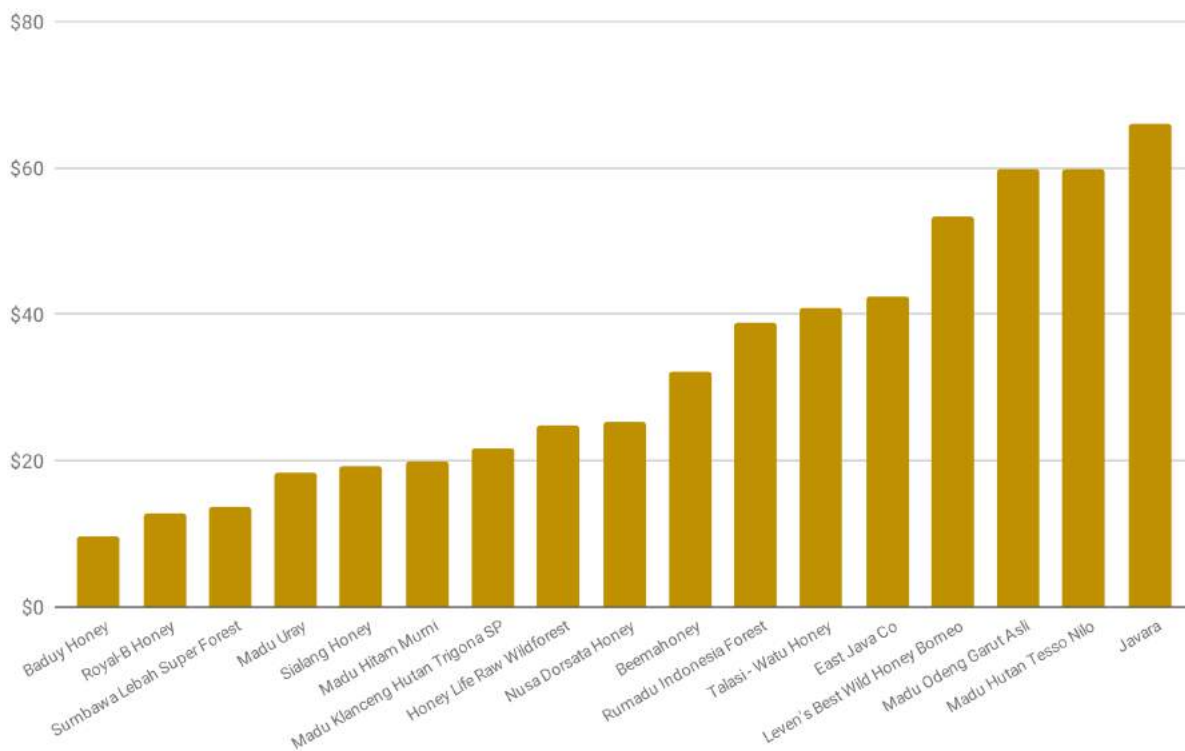
These three honeys are offered in 250g with an equivalent retail value of **USD 59.86/kg**. They are sold through direct sales marketers such as Oriflame and through Shopee, Bukalapak and Tokopedia. The products are referred to as green and fair products. The brand focuses on organic processing and the message "by purchasing this product consumers are supporting the conservation of the forest through green and fair products."

Rumadu Indonesia Forest Honey

This honey is packed in 250g bottles with an equivalent retail value of **USD 38.95/kg** online at Shopee. The honey originates from the East Nusa Tenggara Province and is a product of a social enterprise. Rumadu serves as the marketing and distribution channel of the SENOESA Forest Honey Production Cooperative in East Flores District.



Retail Value of Studied Domestic Wild Forest Honey Brands



Other Domestic (Indonesian) Brands

Of the 28 domestic brands evaluated, the following were shortlisted for in-depth review considering higher price points, for notable branding and marketing tools and strategies that can be benchmarked in developing PT ABT’s Wild Forest Honey’s upcoming branding.

EZ Premium Trigona Honey



This honey is packed in glass jars of 140g and 350g with an equivalent retail value of **USD 69.15/kg**. They are sold online at Lemonilo, Little Bije and instore at Toko Organic Bandung and Namaste Organic. The brand is backed by its commitment to an ‘organic culture’ with limited production and natural harvesting. It is also ‘inspired by the Trigona Bees to create natural resources for life support’.

Honey Lane

This honey is packed in glass jars of 50g, 150g, 250g and 300g. The average equivalent retail value is **USD 22.91/kg**. It can be found at 13 online platforms and 15 outlets in Java. There are a wide variety of products that make their brand stand out compared to other Indonesian brands. The company is branded as high quality artisan honey, they are the only Indonesian brand that offers 'whipped honey' and they target fine food and beverage connoisseurs.

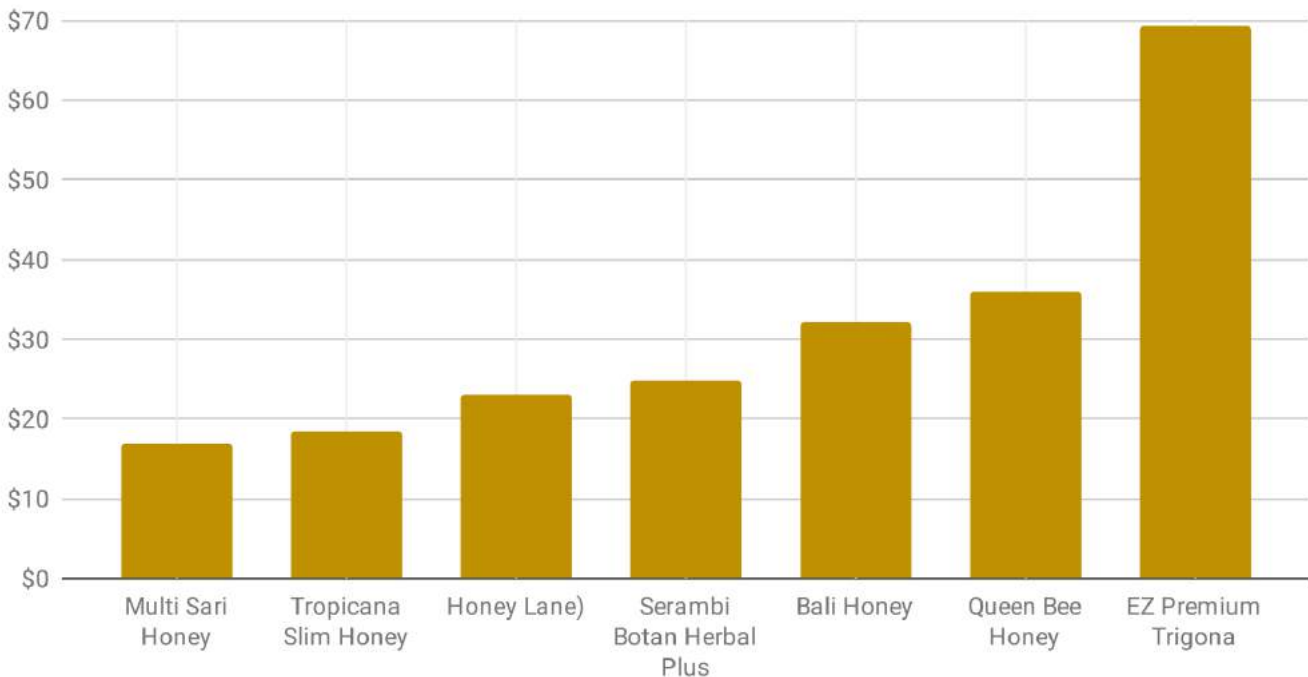


Talasi Honey



This honey is packed in glass jars of 400g with an equivalent retail value of **USD 40.82/kg**. The product is sold online via the Talasi website and various online platforms like Tokopedia. This product has been re-branded from its former name 'Onest Bee Calliandra Honey.' This product is registered as BPOM RI MD: 152128003380. The re-brand situates Watu as part of Talasi, a company focused on 'elevating the livelihood of locals to create a better future by running an ecologically-conscious business and creating jobs for local people'.

Retail Value of Other Notable Domestic Honey Brands



A Selection of High Value Brands Imported into Indonesia

Of the 10 imported brands which were evaluated, the following items were shortlisted to consider what values are placed on these imported honeys, which are purchased at a premium price even when Indonesia already offers so many local options.



Manuka Honey

This honey is packed in jars of 250g and 500g with an equivalent retail value of **USD 123.17/kg**. The product is imported from New Zealand and sold on all standard online platforms as well as at Hillary Farm's outlet store in Jakarta. The brand stands out because of its UMF 20+ grading on the UMF Grading System, and it is sold as a medicinal solution.

Airborne Honey Ltd

This honey is packed in glass jars of 500g with an equivalent retail value of **USD 97.96/kg**. The product is sold online via the standard online platforms and through direct marketing channels. This product is imported from New Zealand and is branded as the 'honey guardians.' There are various product lines and sizes available, however only one product is currently sold in Indonesia.



Nectafloz Indonesia

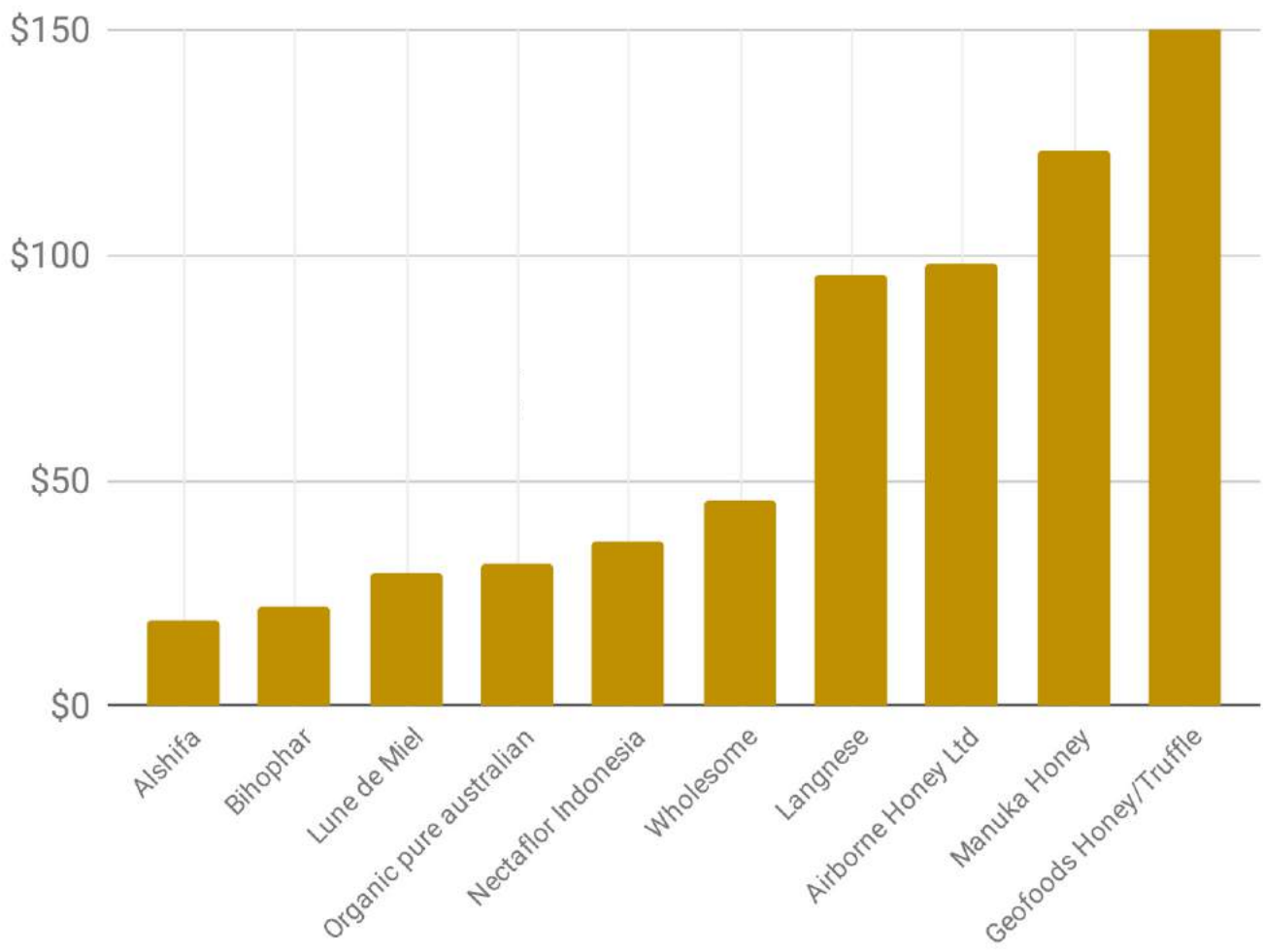
This honey is packed in squeezable plastic bottles of 250g and 500g with an equivalent retail value of **USD 36.66/kg**. The product is sold online platforms, including the company's website. This product is imported from Switzerland and is well known in Indonesia due to the 'Swiss quality natural honey' branding.

Wholesome Organic Raw Filtered Honey

This Fair Trade certified Mexican honey is packed in 454g with an average relative retail value of **USD 45.74/kg**. The product can be found online at iHerb and via the Honest Grocer retail and online shop. This product has multiple certifications: Fairtrade certified, Non GMO Project verified, USDA Organic, Kosher certified and Canada organic certified, making this product relevant for educated ethical buyers.



Retail Value of a Selection of Notable Imported Honey Brands



High-Value & Notable International Brands

Of the 12 high-value international brands which were evaluated, the following items were shortlisted based on the perceived value demonstrated in high-value pricing, some unique presentation methods, and also in consideration of how certifications may influence consumer choices.



Glory Bee Organic Fair Trade Honey

This honey is packed in jars of 510g and 1360g with an equivalent retail value of **USD 22.73/kg**. The brand is from Oregon USA and is one of the few Fair Trade certified honeys that is visibly available on the market.

Product marketing discusses careful handling process resulting in improved quality as it retains the bee pollen, enzymes, and other micro-nutrients normally lost during processing. The product is also are certified kosher, gluten-free and non-GMO project verified.

Wiidly - Wild Dark Red Tualang Rainforest Honey

This honey is packed in glass jars of 50g and 280g with an equivalent retail value of **USD 175/kg**. The honey is from the tropical rainforest of Taman Negara, Malaysia.

The stated value of this product is the higher concentration of nectar, pollen, bio-active enzymes and antioxidants compared to regular Tualang Honey. Dark Tualang Honey is harvested from unusually large and dense hives found only in the most secluded corners of the rainforest, hence a limited production and increased value.



Beesponsible Bee Harmony

This Californian honey is packed in glass jars of 85g and 340g with an equivalent retail value of **USD 29.38/kg**.

This product is U.S. Grade A Strained, and True Source Certified® and targets the Jewish market and it is promoted as being Kosher for Passover. The tagline is 'We need the bees and the bees need our help, so let's all be beesponsible.'

Honey Be Clever Flower Honey

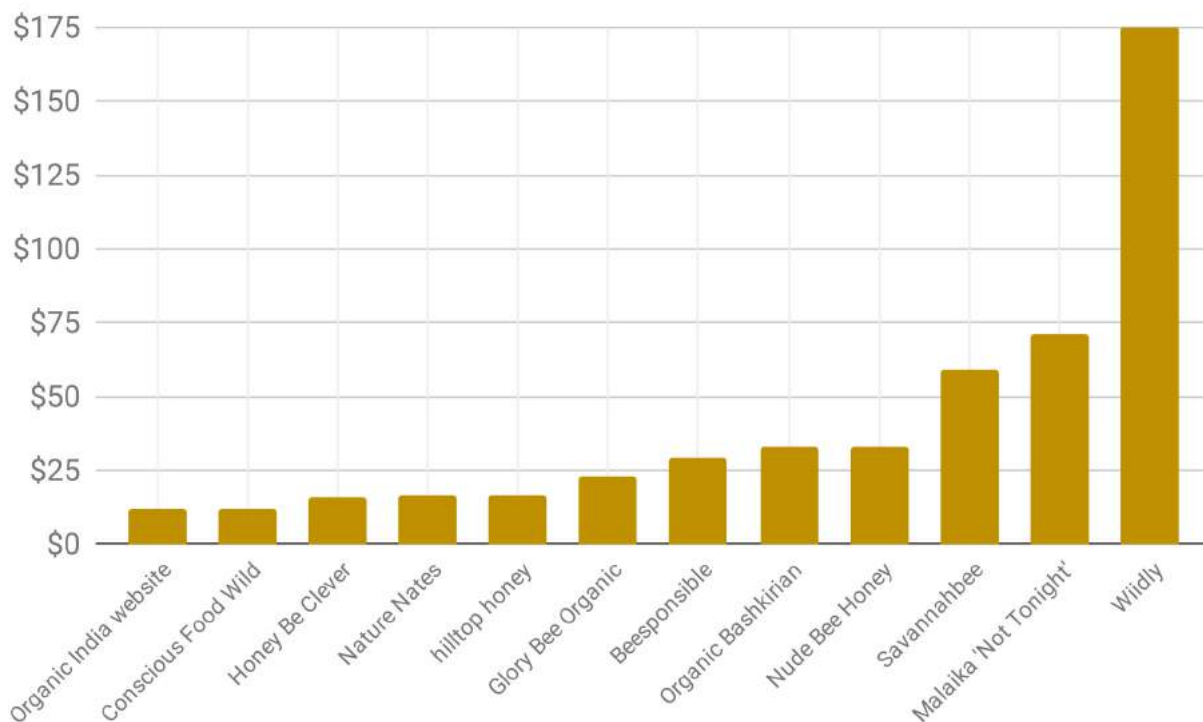
This Turkish honey is packed in 250g and 500g with an equivalent retail value of **USD 15.90/kg**. This brand uses several 'out of the box' strategies to add value to their products, including the unique, eye catching shape of the packaging and also inclusion of 'honey product accessories' such as honey dippers. The marketing tools are bold and slick and cater to an upper echelon buyer.



Nude Bee Wildforest Honey

This Canadian honey is packed in 250g with an equivalent retail value of **USD 33/kg**. The value of this product relates to its commitment to ethical approaches and protection of bee populations around the world. It also offers a well presented line-up of six varieties of honeys and a marketing strategy that encourages customers to create 'variety packs' therefore increasing the per visitor sale rate on the website.

Retail Value of a Selection of Notable International Honey Brands



For further details see the List of +50 benchmarked Honey Brands reviewed that can be found in the Annex of this report.

Competitive Pricing Consideration

While above common processed honeys, the price of high-value honeys (with the exception of Tualang Honey) are interestingly, highly variable, ranging from USD 12.71 to USD 66.10 per relative kilogram. Price positioning seems to be associated with **product presentation**, as well as perceived value generated by associated marketing materials.

In the case of Manuka Honey, the level of methylglyoxal (MGO) is factored in the product's price as it is associated with the potency of the honey and therefore its curative values, which have been ratified by the FDA & EU¹. In the case of Tualang Honey evidence-based proof of medicinal properties seems to be the determining factor for this 'extreme value' honey's success. Tualang Honey is being sold at prices as high as USD 740/kg.

The retail price range of brands being sold domestically through retail outlets & on-line marketing channels ranges between USD 9.72 - USD 66.10 per equivalent value of 1kg placing the average price at USD 32.47.

It is notable that brands which were the most prominent on the marketplace at premium prices were brands with attractive packaging, robust marketing campaigns, quality websites, a strong social media presence, certifications, lab testing and clear high value premium positioning.



¹ [PMC: Medical Honey for Wound Care—Still the 'Latest Resort'?](#)



CONSUMER TESTING & ANALYSIS

*“The bee is
an exquisite
chemist.”*

ROYAL BEEKEEPER

TO CHARLES II

CONSUMER TESTING & ANALYSIS

To determine public interest in the Wild Forest Honey and gain direct inputs from potential users of the honey, Alam Santi conducted surveys with 207 consumers and 20 potential volume buyers. The lists of volume buyer interviewees are available in the Annex of this report.

A preliminary marketing mock-up was developed as part of this assignment and used to introduce the basic values and information related to the product to the survey respondents. This mock-up were used to ascertain preliminary feedback on the various value propositions that can be tied to the product.



wild forest honey supports...

- wildlife conservation
- rainforests restoration
- indigenous peoples

This project is developing sustainable, forest-friendly livelihood solutions that are designed to support wildlife conservation and habitat restoration in the 38,655Ha Bukit Tigapuluh National Park of Tebo Regency, Jambi Province of Sumatra.

The project works with local indigenous tribes (the Suku Anak Dalam, Talang Mamak, and Melayu Kuno), supporting them to continue traditional, sustainable practices of harvesting wild forest honey as a means of financial sustainability and rain forest ecosystem conservation.

SUMATRA **INDONESIA**

Bukit Tigapuluh includes the unique habitat of endangered:

- Sumatran Tigers (30-40)
- Sumatran Orangutans (150)
- Sumatran Elephants (150-160)

The area is also used as a safe zone for reintroducing Sumatran Orangutans back into the wild.

want to help by ordering this honey?

wildhoney@alamsantidesign.com

+62 812-3988-6661

Please note that all of the in-person interviews conducted occurred within Indonesia, as the scope of this assignment did not include the budget to conduct international marketing surveys. Non-Indonesian interviewees were however solicited for feedback to gain insight into both the tourism marketplace in Indonesia as well as gain feedback from representatives from the broader international marketplace.

Results of the Testing

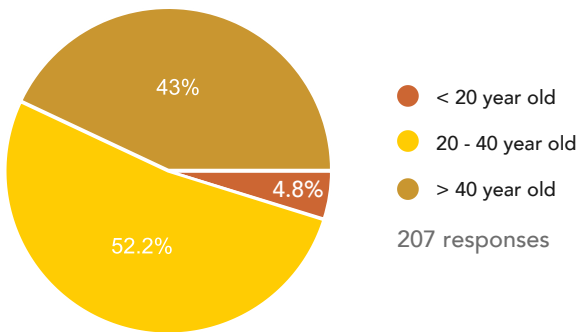
Consumer Surveys

Consumer survey were conducted at retail outlets, a few offices and mix frequency restaurants, as well as through a short selection of local and international online sampling. Though only representing a sampling of 207 respondents, the survey showed strong enthusiasm for the Wild Forest Honey, and provided useful feedback on how best to bring the PT ABT honey to market.

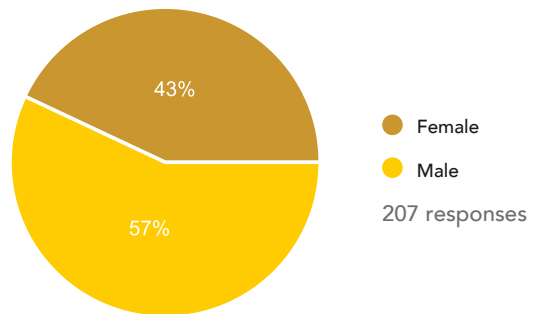


The demographics of the consumer interviewees were as follows:

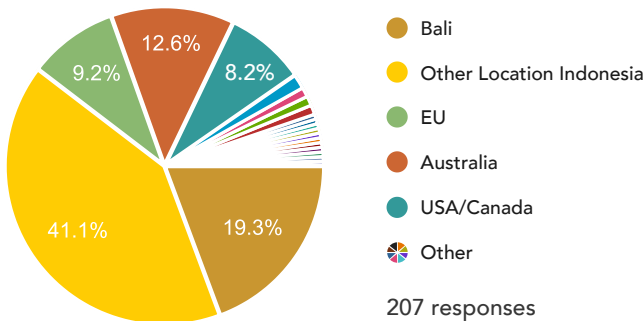
Age of Respondents



Gender of Respondents

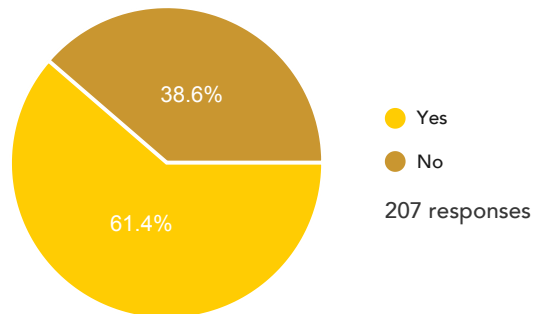


Origin of Respondents



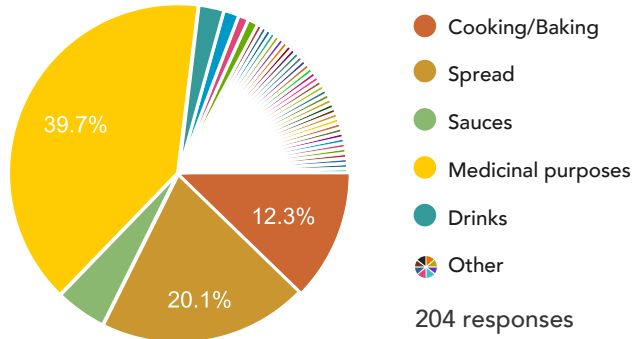
Economic Bracket of Respondents

Question asked: Do you earn more than IDR 84million/year (USD6000/year)?



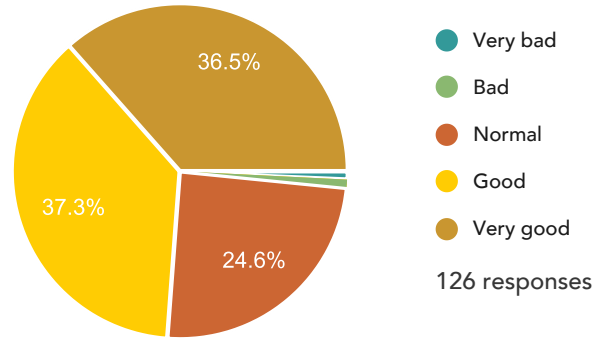
Of the 207 consumers surveyed, 59.4% use honey regularly with the following uses being the most common:

What do you use honey for?



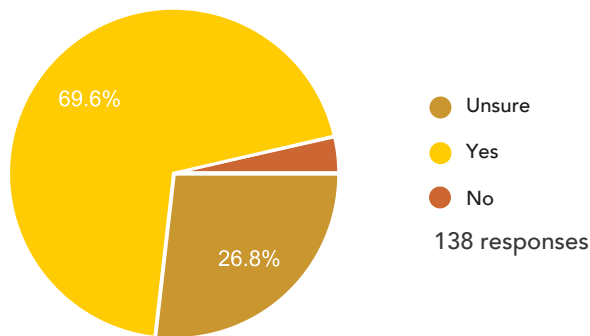
Of the 126 people that taste-test trialed the honey, 36.5% felt it was very good and less than 2% did not like it.

What do you think about this honey?



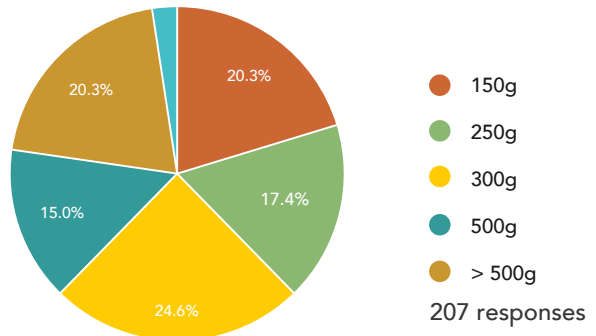
Of the 138 able to respond to whether or not they would buy the honey, 69.6% said they would buy the Wild Forest Honey.

Would you buy this honey?



There was a relatively even distribution on commonly purchased packed sizes, ranging from 150gr to over 500gr.

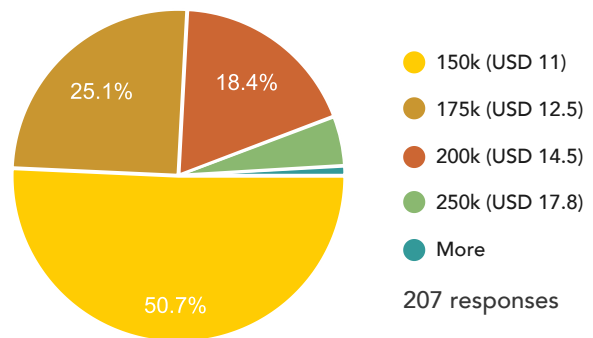
What size do you usually buy honey in?



How much would you be willing to pay for 250g of Wild Forest Honey?

Respondents suggested pricing as follows:

- 105 people (50.7%) said 150k (USD 11)
- 52 people (25.1%) said 175k (USD 12.5)
- 38 people (18.4%) said 200k (USD 14.5)



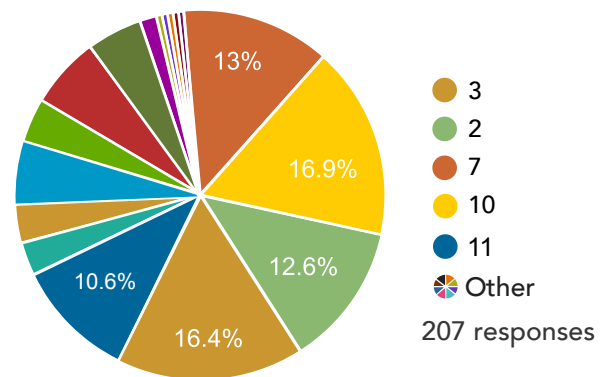
PACKAGING

Retail Packaging Preferences

As part of the consumer survey conducted, 12 different types of packaging options were presented to the 207 participating consumers.



Preferred Packaging Styles for Consumers



While there was a variety of preferences 3 of the 4 preferred style had the commonality of being transparent with “sleek” modern styling.



SURVEY OPTION 10



SURVEY OPTION 3



SURVEY OPTION 7



SURVEY OPTION 2

Volume Order Packaging Preferences

For volume buyers, the following styles were presented, and the notable feedback was that many of the environmentally conscious specialty buyers expressed a preference for the glass option over plastic, even though this would of course result in additional costs and distribution challenges.



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2



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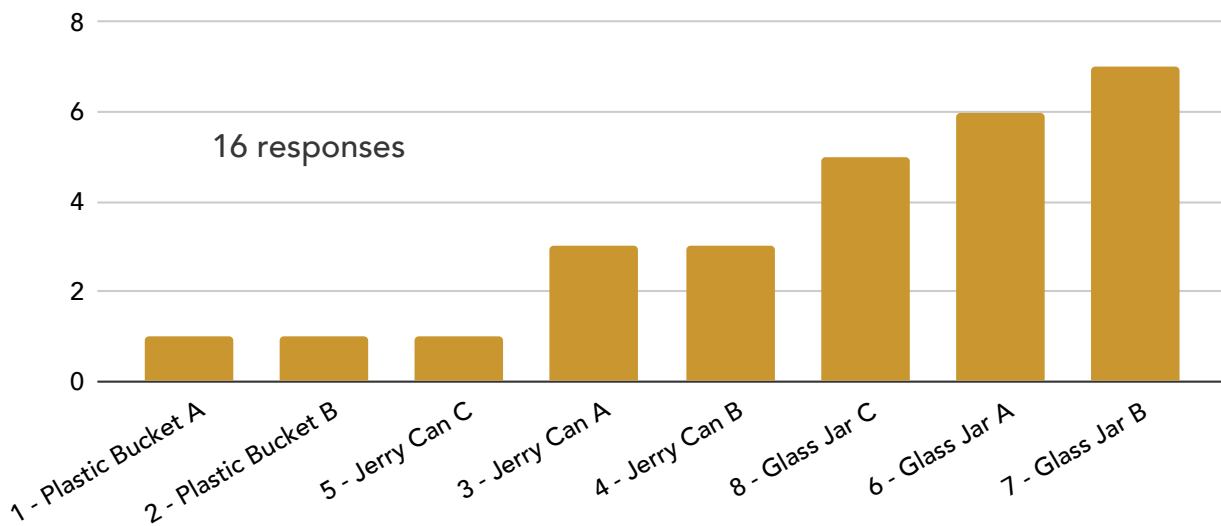


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Packaging styles preferred by Volume Buyers



Phase II of this assignment will go into more depth on the styles of packaging that will suit the marketing strategy as well as types of packaging materials that are available locally, their associated costs and consistency in supply.

Labeling

The label content requirements will be variable depending on factors including: target sales location, type of product; degree of use instruction required for proper usage; whether the package type is intended for bulk delivery and will be repacked at a further step in the value chain. With consideration to the labeling regulations explained further in this section, the following information should be at minimum included on labels, depending on the target market and product:

INFO ON LABEL	TARGET MARKET PRODUCT GROUP			
	Retail	Wholesale	Wellness	Other Use
Brand logo & Strapline	✓	✓	✓	✓
Origin	✓	✓	✓	✓
Best-before date	✓	✓	✓	✓
Weight	✓	✓	✓	✓
Name of Producer	✓	✓	✓	✓
Contact of producer		✓		
Water content	✓	✓		variable
DEPKES (Dept. of Health) No	✓	✓	✓	✓
Barcode / QR Code	✓	✓	✓	✓
Organic Certified (if available)	✓	✓	✓	✓
Fair Trade Certified (if available)	✓	✓	✓	✓
Instructions for use	✓		✓	✓
Nutritional properties	✓			variable
Wellness benefits			✓	variable
Information about ERC	✓		✓	✓
Information about farmers	✓		✓	✓

Labeling Requirements for Indonesian Food Products

The following are excerpts from Government of Indonesia (GoI) food labeling provisions, per Food Law No 18/2012, Chapter VIII, Articles 96 – 103. The label for retail food must contain information concerning:

- A. Name of the product
- B. Ingredients list
- C. List of material used
- D. Net weight or net volume/contents
- E. The name and address of manufacturer or importer
- F. Halal logo (if applicable)
- G. Date and / or production codes
- H. The expiry date, month and year (best before)
- I. Registration Number (MD for domestic produced food products)
- J. The source of certain foodstuffs
- K. If the product is intended for business sale and to be processed as other food, the label must contain at least point A, C, D, F, and G on the above requirements.
- L. The information on the labels shall be printed in the Indonesian language, Arabic numeric and Roman text. Use of foreign terms may be if there is no Bahasa Indonesia equivalent.
- M. Use of backgrounds, in the form of pictures and colors and other decoration, which can obscure the writing in the main part of label, is prohibited.
- N. U.S. labeling standards are not considered false or misleading by Indonesian standards, although they are different. For example, Indonesia maintains its own Acceptable Daily Intake (ADI) or Maximum Tolerable Daily Intake (MTDI) levels through BPOM regulation No 9/2016. The standard U.S. nutritional fact panel format is acceptable.
- O. Food labels must state nutrient fact, food irradiation, organic food, GMO, food made from natural raw material, preparation instructions, storage instruction, serving suggestion, intended for, as well as any warnings.
- P. Domestic and imported organic food must have an organic certificate issued by an Indonesian Organic Certifier or Foreign Organic Certifier domiciled in Indonesia and accredited by National Accredited Committee (KAN).
- Q. Labeling for foods made from natural raw materials can include information that the food derived from the natural ingredients if the relevant natural raw material content is not less than the minimum content set forth in the Indonesian National Standard (SNI).¹

¹ Indonesia: Food and Agricultural Import Regulations and Standards Report; Academia: Indonesia Natural Honey Market Review.

Examples of Information on Labeling & Associated Requirements



Nutrition Facts	
16 servings per container	
Serving size	1 Tbsp. (21g)
Amount per serving	
Calories	60
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 17g	6%
Dietary Fiber 0g	0%
Total Sugars 17g	34%
Protein 0g	
Vitamin D 0mcg	0%
Calcium 0mg	0%
Iron 0mg	0%
Potassium 0mg	0%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Example Honey Label that meets full labeling requirements

Example Nutritional Facts
US-FDA Honey Labels

Standard Honey Packaging Size Considerations

Profit margins may be increased for the Wild Forest Honey with small quantity honey packaged products as the price of the honey itself can outweigh the cost of packaging.

Particularly for the tourism sector, honey can be packed as handy last-minute gifts, in point of sale display racks and exclusive gift sets that include booklets with photo studies explaining the value of the honey in conservation, preservation of the habitats of endangered species, and preservation of traditional, indigenous cultural practices.

The majority of specialty, upmarket honeys marketed for household or personal consumption are offered in either glass jars or plastic bottles of between 130gr and 500gr, with associated unit prices (in the domestic market) of USD 5.96 to USD 26.63 per bottle.

So long as proper filtering and processing is used, due to the high value, and current low production volumes of PT ABT's honey, it is recommended to defer from primary focus on large volume packaging sizes at this point in the project's development.

Considerations Related to Bulk Exporting

Bulk exporting of the Wild Forest Honey was taken into consideration, but the conclusion is that it is not yet necessary, nor appropriate to aim for bulk export markets as:

1. Margins would be much lower than what could be ascertained with a predetermined specialty, upmarket branded product; and
2. The size of standard honey bulk export orders are beyond capacity (62 x 295kg drums)
3. The benefit of value-adding would be given to the importer as opposed to being gained at the point of origin

Should the project achieve a condition of over supply, PT ABT may choose to offer the product to the European Fair Trade market and would likely obtain a reasonable price per kilogram which could increase the scope of the livelihood opportunities and associated conservation

For this to happen, supporting circumstances would need to ensure:

1. Identification of appropriate buyers, and confirmation of price point for bulk order
2. Establishment of clear mechanisms for collecting, processing and transporting large volumes of quality controlled honey that consistently meets international standards
3. Establishment of a Residue Monitoring Scheme, which is necessary for Indonesian honey to enter into most first world markets¹
4. Application for Organic and Fair Trade Certification - an investment which would facilitate entry into the higher value niche markets (see further information on this topic in related sections of this report)
5. HAACP - an international food security assurance certificate required for exporting to the European Union and the United States

¹ Bees for Development: residue monitoring plans.



Standard Bulk Export Volume is shipped in shipping containers with (62 x 295kg drums)

*“Global sustainability
is the only avenue
to progress that can
deliver the Sustainable
Development Goals
and the Paris climate
agreement.”*

JOHAN ROCKSTROM



SALES OUTLETS

SALES OUTLETS

Depending on the final strategy or strategies that are selected by the client for marketing this versatile, potentially high value product, there are a number of potential online and retail outlets for the sale of Wild Forest Honey. The list of preliminary recommendations for pilot outlets can be found in the Annex of this report.

Domestic Markets

The current population in Indonesia is estimated at 261,115,456 people,¹ and many Indonesians consumes honey regularly. Should the project have access to the volume of product to warrant addressing this potentially very high volume market - targeted presentation should be developed that will perform well for this specific target audience. A majority of these consumers are likely to access the product through local supermarket and convenience store chains, as well as through national e-commerce channels.

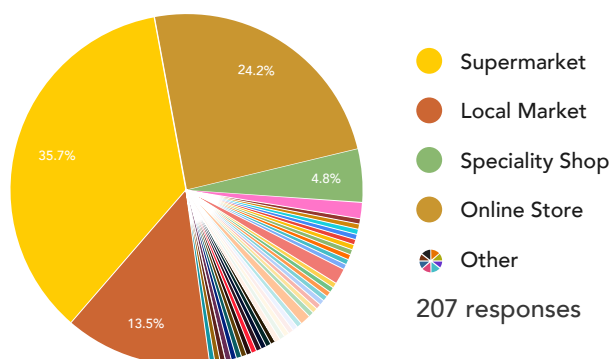
In Jakarta, Surabaya and Bali, as well as on local e-commerce sites, retail prices as high as USD 69.15/kg can be earned for well-marketed, notable, specialty honey brands, although it was not possible to determine the exact size of the market and its purchasing power. Direct Marketing of forest honey is a strategy that is being successfully employed by Oriflame, and other similar companies who sell products in small 250g sized containers, for an equivalent of USD 59.86/kg.

At the very local level, Wild Forest Honey in Bukit Tiga Puluh is sold in local markets at a price of USD 10/kg. Two interesting market approaches and market indicators are that: Indonesia's primarily Muslim population highly values honey (the Koran instructs followers to consume honey) and Wild Forest Honey is highly valued within the Indonesian population for its healing properties and is used in a variety of health treatments, such as commonly used 'Jamu' (tonic drinks).

Consumer survey respondents stated they normally purchase their honey as shown below.



Where Consumers Buy Honey



¹ List of countries by population (United Nations).

E-commerce

According to the Indonesian E-Commerce Association (IDeA), the contribution of e-commerce to Gross Domestic Product (GDP) reached 2% (National Daily, 9/8). The Indonesian government also estimates that e-commerce contribution to Gross Domestic Product (GDP) will be 10% in 2020 positioning Indonesia as an e-commerce center in ASEAN.

Inn Indonesia, most people who shop using e-commerce in Indonesia have a monthly income of at least 3 million rupiah, and are working and married. The five most visited e-commerce sites are Tokopedia (49%) followed by Shopee (45%), Lazada (39%), Bukalapak (38%) and Blibli (17%).¹

Hotel Restaurant & Cafe (HORECA) Suppliers & Chef

The environmentally-conscious and high end hospitality sector in Indonesia is highly receptive to Wild Forest Honey. Increasingly high profile chefs (primarily in Jakarta and Bali) are hosting food events that highlight and showcase local produce of cultural and environmental value, and Wild Forest Honey would certainly fit the bill.

All of the HORECA survey respondents confirmed they would be interested in buying the honey. For this target market direct relationships with procurement departments and managers should be established and maintained through direct marketing. An engaging, clear website that caters information to volume buyers needs should also be a key components of the strategy.

Retail Trade Points

The retail trade points for the high value Wild Forest Honey that showed the most promise in the preliminary market research were specialty shops of which there are more and more in Indonesia. A detailed list of preliminary recommended outlets is included in the Annex of this report.



¹ E-commerce outlook 2018.

Retail Outlets that Cater to Tourists

Combined with an engaging story about the unique taste, traditional harvesting methods and rainforest conservation that is interconnected with the product, the wild rainforest honey should see good performance as a point of sale product in dedicated tourism retail outlets (i.e. duty free gift shops, hotel gift shops). Handy last-minute gifts displayed in an eye-catching and informative point of sale display rack, and exclusive gift sets that include booklets with photo studies that explain the value of the honey in conservation, preservation of the habitats of endangered species, and preservation of traditional, indigenous cultural practices should be used for this sector.

Spa Product & Beauty Care Suppliers

Natural beauty treatment is not only an age-old tradition in Indonesia, these traditions have translated into a thriving modern-day industry servicing those that understand the importance of treating their skin as well as they would the rest of their bodies. A wide variety of wellness and beauty treatments use honey and beeswax bases and therefore many spas and natural spa product / beauty care suppliers in Indonesia (and globally) are in need of steady supplies of quality honey and beeswax based products.



International & Export Markets

Combined with associated high-impact marketing tools and strategies, PT ABT's Wild Forest Honey will perform well on the international market. This is particularly true if the product can be delivered as a value added Fair Trade and organic certified specialty honey.

Assuming that certification and licensing for export are yet to be ascertained, Alam Santi recommends conducting a stand-alone project to further explore the associated procedures and costs for opening up this potential market once production volumes exceed the local market's ability to absorb the product. Preliminary guidance on requirements and associated considerations are included in the 'Requirements for the Export Market' section of this report.

The most promising export markets for Wild Forest Honey and related products from PT ABT are likely to be countries/regions with high awareness of environmental and conservation issues and places where high value honey is well-established.

While PT ABT's Wild Forest Honey product has high potential to perform in international specialty markets, at this early stage of the project, export volumes will likely be low due as producers do not have enough quantities to be interesting for international bulk buyers.

The most likely export market for Wild Forest Honey are Japan, U.S. and EU markets and Australia (due to proximity and recently established free trade agreements that may be applicable). Honey Suppliers Wholesale Prices & Global Market Information can be found on Tridge.¹

Why the EU Likely Offers the Best Opportunity for Wild Forest Honey

The EU is the second largest global producer of honey. However, it is not self-sufficient and is dependent on honey imports from other countries. In fact, around 40% of Europe's consumption needs are met through honey imports.

Below are some trends of the European honey market, which lead us to consider that the EU market is the best opportunity for exports of Indonesia's Wild Forest Honey.

1. Honey imports are expected to increase to compensate for the continuing decline in European production, creating opportunities for honey exporters in developing countries
2. Consumers in the EU are increasingly concerned about suppliers at the other end of the production chain. Consumers' purchasing behavior is increasingly influenced by social factors, such as the working conditions of Wild Forest Honey farmers
3. Many consumers have become aware of their responsibility to help make the trade in honey fairer for Wild Forest Honey farmers in developing parts of the world

¹ Tridge: Honey

4. The most popular certification related to working conditions of Wild Forest Honey farmers is currently Fair Trade. Following the Fair Trade Labeling Organization (FLO) standards, this certification scheme aims to improve trade conditions for developing country suppliers through to the international market. Indonesia is included in the list of countries allowed to apply for Fair Trade certification.
5. European consumers are increasingly concerned with the impact of agricultural activities on the environment, and are willing to pay more for products that have a lower environmental impact. This trend has boosted the market for organic products. The organic market in Europe is becoming increasingly mainstream and is highly developed in Western European countries such as Germany, France and the UK. The EU has been actively promoting organic production by establishing a legal framework (Council Regulation (EC) No 834/2007) which improves access to the organic market and supports the promotion of organic products.
6. Mono-floral varieties are gaining popularity, especially in the leading EU honey markets. The consumption of these products is expected to grow, relative to blended honeys. These varieties are mainly sold in specialty shops, health stores and delicatessens. However, there are differences between consumer preferences in different EU countries. For example, the European honey markets with the highest interest in mono-floral honeys are those in the United Kingdom, Germany and France. In these countries, even supermarket chains focusing on mainstream products offer a range of mono-floral honeys.

For more information on EU market, refer to the Buckwheat Honey Market Study in the Annex.

Fair Trade certified companies in Europe that purchase honey¹

Organization	Country	Quality	URL & Activity
Lemberona Handels GmbH	Austria	A	www.lemberona.com Wholesaler agricultural products
PEZ International GmbH	Austria	A	www.pez.com Candy manufacturer
COMPAGNIE APICOLE	France	A	www.compagnieapicole.com Honey producer and processor
F. W. Praum GmbH & Co. KG	Germany	A	www.praum-zwieback.de Bakery
Fürsten-Reform GmbH & Co KG	Germany	A	www.fuersten-reform.de Honey producer and processor
Ludwig Weinrich GmbH & Co. KG	Germany	A	Chocolate manufacturer

¹ [Buckwheat Honey Market Study](#).



MARKETING

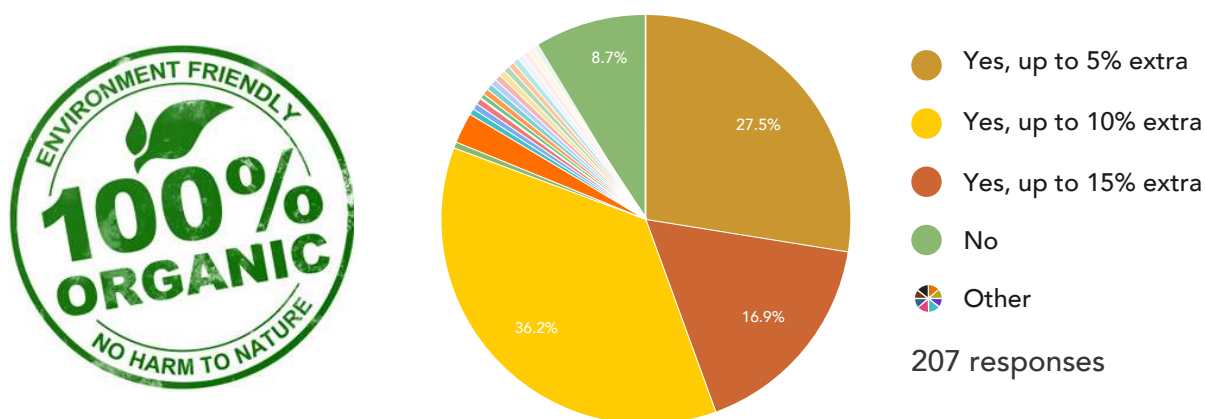


Organic Certified Honey with Notes on Certification Procedures

Organic certification provides access to organic marketplaces, builds consumer confidence, and premium price positioning. Ascertaining organic certification can be an involved and costly process, but the value of this labeling is great and, likely outweighs the effort.

Of the 207 consumer survey respondents, 91.3% said that they would pay more for organic certified honey as shown in the following summary of results.

Would Consumers Pay More for Organic Honey?



The organic market is showing ongoing yearly gains, with sales in 2018 reaching 52.5 billion USD in the U.S. alone, an increase of 6.3% (organic food and other organic products) from 2017.¹ The U.S. organic market growth is significant, especially when compared to non-organic food goods, with organic food goods in 2018 rising by 5.9% as opposed to non-organic food goods which only increased by 2.3%.²

Organic certification can be applied for through Certification Bodies called LSO - Lembaga Sertifikasi Organik (Indonesian Organic Certification Agencies) in Indonesia, which have received accreditation from the Komite Akreditasi Nasional (National Accreditation Committee). Sucofindo and BioCert are the two most well known LSO, of which there are less than 10 in Indonesia.

Through discussion with BioCert Alam Santi found that the best process for PT ABT to gain organic certification is to work towards meeting all of the standard requirements prior to applying.³ BioCert only provides SNI certifications for organic honey certificates recognized in Indonesia. The cost of the certification process is IDR 20 million (approx. USD 1,420), which is exclusive of 10% tax and the cost for an expert from BioCert to come to the field to assess if the honey collection and processing meets the required organic standards. Applicants with operations spread over expansive land areas and with multiple honey collectors as in the case of PT ABT, will incur higher assessment costs due to the surveys needed for the product to be approved.

¹ Organic Trade Organisation: Organic Market Analysis.

² Organic Trade Organisation: Organic Industry Survey.

³ BioCert Certification.

For International organic certification, BioCert suggested we contact the UK company, EcoCert. Please see [the website](#) and Annex for further information.

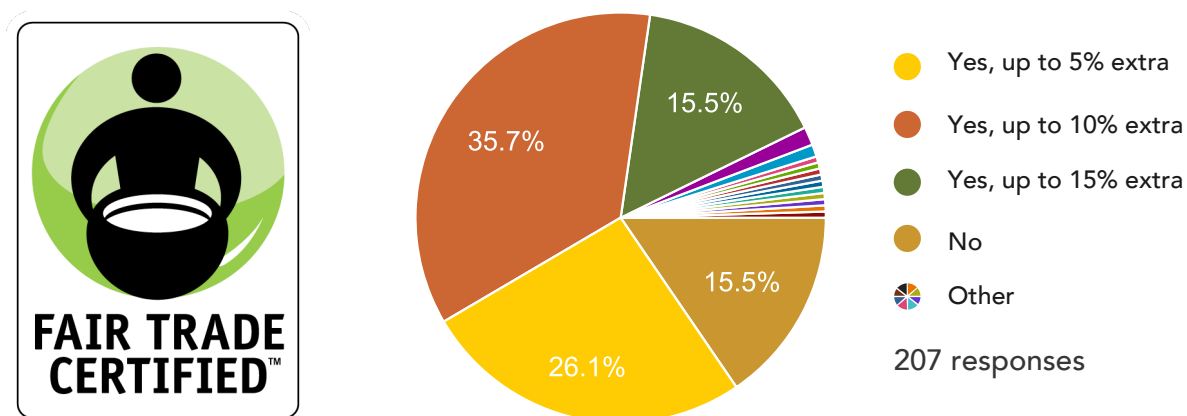
The average length of time for this certification is 60-90 days from the last field inspection being closed. For wild honey, the scope of certification is Collection of Wild Products (D). For complete quotations detailed information including: location, area, scope of certification, number, etc. is required. The starting price for SNI Organic Certification is around 20 million rupiah.

Fair Trade Honey with Notes of Certification Procedure

“Fairtrade is about better prices, decent working conditions, local sustainability, and fair terms of trade for farmers and workers in the developing world.”¹

Of the 207 consumer survey respondents 84.5% said that they would pay more for fair-trade certified honey as shown in the following summary of results.

Would Consumers Pay More for Fair Trade Certified Honey?



There are many studies which add weight to the impact of using Fair Trade, and which show that consumers care that the products they purchase don't use child labor, are produced by farmers who are paid fair wages, and are not detrimental to the environment.

A study by Hainmueller, Hiscox, and Sequeirra², offers observation on the effects that Fair Trade labeling has on consumer behavior. The data was ascertained by a number of experiments performed in 26 different major U.S. grocery stores. These experiments included randomly placing Fair Trade labels on bulk coffee bins and a second experiment where the prices of the coffee was varied. The evidence revealed that there is a stronger consumer demand for Fair Trade coffee compared to non Fair Trade, with sales increasing by up to 10% when the coffee was labeled as Fair Trade.

¹ [What is Fairtrade?](#)

² [SSRN: Consumer Demand for the Fair Trade Label: Evidence from a Multi-Store Field Experiment.](#)

An excerpt from the study says: “We find that sales of the two most popular coffees rose by almost 10% when they carried a Fair Trade label as compared to a generic placebo label. Demand for the higher priced coffee remained steady when its price was raised by 8%, but demand for the lower priced coffee was elastic, a 9% price increase led to a 30% decline in sales. While consumers attach value to ethical sourcing, there is significant heterogeneity in willingness to pay for it.” This study shows that consumers value ethically produced products and that the Fair Trade label was able to convey information that affected consumer demand.

To market the PT ABT Wild Forest Honey as Fair Trade (including use of the Fair Trade logo on packaging and marketing materials) the honey must be sold as, or through, organization(s) that are members of the World Fair Trade Organization (WFTO). WFTO certified companies are spread over 76 countries worldwide,¹ though within Indonesia there are very few organizations that have become members, which would make attaining certification even more valuable, making PT ABT’s Wild Forest Honey stand out from the competition.

Organizations that wish to become members conduct a self assessment of adherence to the principles, and then request to be verified by an external verification body. Once certified, the organization will need to pay membership fees. Further information can be found at wfto-asia.com

To become certified : www.flocert.net/solutions/fairtrade-resources/how-it-works

Cost Calculator www.flocert.net/solutions/fairtrade-resources/cost-calculator

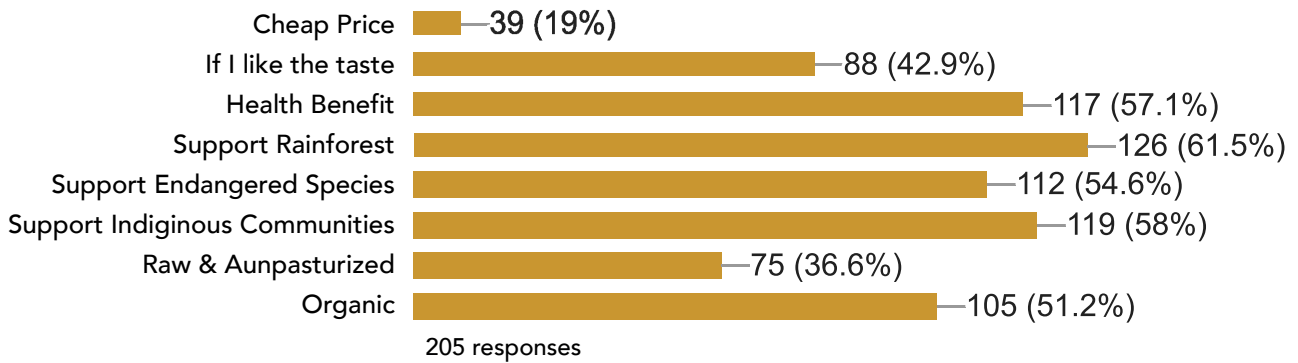
Fair Trade Honey producers are required to comply with both Fair Trade Small Producer Organization and Fair Trade Honey Standards. The Fair Trade Standard for Honey covers the purchase and sale of honey as well as secondary products and their derivatives. A secondary product can be a byproduct, a co-product or a residue produced in the country of origin, for example propolis, beeswax etc.

¹ World Fair Trade Organisation: Who we are.



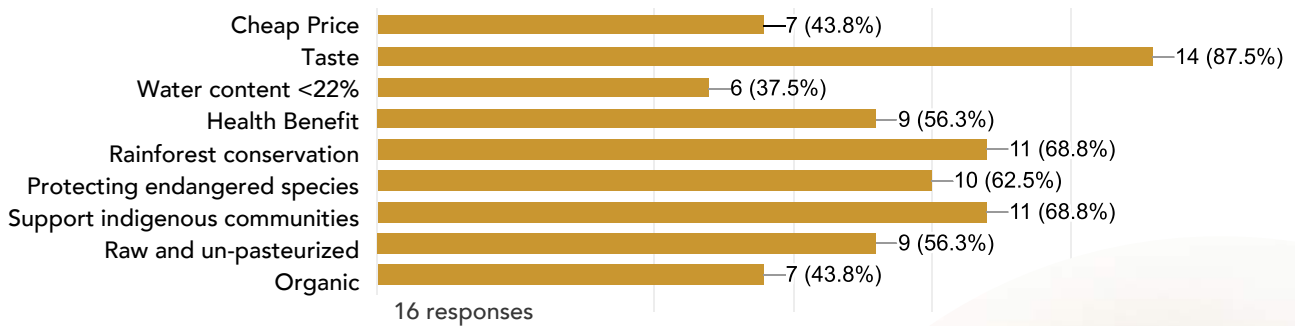
Key Marketing Points for consumers

Consumer respondents were asked "Would any of the following encourage you to buy this honey?"



Key Marketing Points for volume buyers

Volume buyers placed more emphasis of the taste of the honey, but also responded to conservation related messages as shown in the following results:



At the consumer level, environmental conservation and sustainability messaging was shown to be a major driver for consumer choices, with health benefits being a close second runner.

Volume buyers leaned more towards taste, and pricing was a higher consideration than for direct consumers

Based on the survey results, Alam Santi has prepared a list of recommendations on the key messaging to bring the Wild Forest Honey to market. These are included in the final recommendation section of the report.





LICENSING

LICENSING

PT ABT can add strength to their brand, ascertain higher prices, and differentiate themselves from other domestic brands through certifications such as Organic and Fair Trade discussed earlier in this report.

Certifications and proof of authenticity are especially important for honey products, as there is a low-level of consumer confidence in honey products due to bad press related to numerous brands selling 'fake' and/or watered down honey.

Requirements for Domestic Sales

Surat Ijin Usaha Dagang (SIUP) (Trading Business Permit) is issued by the Dinas Perindustrian dan Perdagangan (Office of Trade) or Kantor Pelayanan Terpadu (Integrated Services Office) at the district or municipal level.

As honey is a food product, processing needs to meet food safety assurance standards relevant for domestic consumption. 'Izin Depkes' licences are issued by the Bupati (Regency Head) through the Dinas Kesehatan (Health Department). The renewable permit is valid for 5 years. It is free of charge but applicants need to pay for associated laboratory testing requirement.



Requirements for the Export Market

The required certificates for international markets is HACCP, an international food security assurance certificate for exporting to the European Union and the United States.

PT Sucofindo and similar certification agencies in Indonesia that have KAN (Komite Akreditasi Nasional) accreditation can conduct the testing that is required to be eligible for this permit.

Food product marketing for export has different requirements depending on the target market locations. There are various certificates required for exporting to specific countries, including: Kosher, Halal, FDA, Good Manufacturing Practices (GMP), Hazard Analysis Critical Control Point (HACCP) and Honey from industrial/manufacturing process using ISO 9001 for Quality Management System and ISO 22000 for Food Security Management System certificates.

EU Export Market Considerations

For the EU there are some restrictions to consider when considering export markets:

1. The EU has established food hygiene and safety regulations that are stricter than in other regions. Moreover, European buyers often apply even stricter requirements of their own. These can vary from composition specifications to color and taste preferences and organic or Fair Trade certifications. Exporters who only comply with EU legal requirements may find it difficult to enter the market and target specific buyers. In addition to a HACCP-based food safety risks management system, buyers often require a certificate for a more stringent food safety management system, such as ISO 22000, BRC and IFS.
2. EU requirements for European retailers in matters of transparency and accountability place a huge administrative burden on honey importers. To minimize this burden, European importers increasingly require suppliers to provide detailed information on their products. These administrative costs make the import of small quantities of honey less attractive, thus making it more difficult for smaller exporters to enter this market.
3. Fair Trade certified honey is classified into two categories, depending on quality, which is defined by Hydroxymethylfurfural (HMF) and the water content. Minimum scores are given to products, which meet minimum legal requirements. More points are given to products, which meet higher requirements.



“The bee collects honey from flowers in such a way as to do the least damage or destruction to them, and he leaves them whole, undamaged and fresh, just as he found them.”

SAINT FRANCIS DE SALES



BEE PRODUCT DERIVATIVES





BEE PRODUCT DERIVATIVES

Alam Santi was requested to provide an additional, very preliminary, recommendation regarding potential bee product derivative items that may be worthy for further study and consideration as a means of building even further benefit into the program. Further, more in depth study of any short listed items from the following lists should be undertaken to determine:

1. Market viability
2. Production viability
3. Producer capacity
4. Value of investment and anticipated return on that investment




During preliminary observation the Alam Santi team ascertained that value added and secondary products are undeveloped in the Indonesian market, with little to no visibility on main honey marketplaces (supermarkets, e-commerce, and direct marketing).

Indonesia's Wild Forest Honey farmers and producers are not fully aware of the many potential value-added and secondary products that could be developed to increase their profit margins, nor how to extract, produce, conserve and market them.

Several items can be produced from bee products including:

1. Higher-valued, specially packaged items targeted for use in both consumption and wellness oriented products
2. Propolis cream and pollen based products (often conserved in honey), which can be marketed to health-conscious consumers and natural treatment specialists.
3. Beeswax
 - a. Cosmetics containing beeswax include: skin creams, emulsions, make-up foundations, face powders, cheek pomades, hair creams/pomades, lipsticks and eye make-ups
 - b. In the pharmaceutical industry beeswax is used as an ingredient in certain ointments, for coating pills, and in some manufacturing processes
 - c. Candles
 - d. Other uses include furniture, wood and leather, rexine, wood and paper lithographic and engraving materials, castings, dental equipment, and ornament polishes

Value Added Honey Food Products

Product	Ingredient	Target to	Difficulty
	Honey	Both local & international: target hotels & restaurants	Assumed Simple
	Honey	Both local & international: target as healthy snack	Assumed Simple
	Honey	Both local & international primarily international	Unknown requires further research & consultation
	Honey	Both local & international	Assumed Simple
	Honey	Both local & international	Unknown requires further research & consultation
	Honey	Both local & international, primarily international	Unknown requires further research & consultation



Honey Creme

Honey

Both local & international, primarily international

Unknown requires further research & consultation



Infused Honey, note listed as one of Oprah's favorite foods

Honey

Both local & international

Assumed Simple



Honey Sodas

Honey

Primarily local considering logistics?

Unknown requires further research & consultation



Honey mead & Honey beer

Honey

Primarily local considering logistics?

Unknown requires further research & consultation








Honey Wine & Liquors

Honey

Primarily local considering logistics?

Unknown requires further research & consultation






Health & Wellness Related Products

Product	Ingredient	Target to	Difficulty
 <p>Honey as a topical medicinal product (combine with spatula for application on burns, wounds etc)</p>	Honey	Both local & international	Assumed Simple, but need to check regulations
 <p>Propolis cream / pomade: can be used as a natural baby care product</p>	Propolis	Both local & international	Unknown requires further research & consultation
 <p>Raw Honey Cough Syrup</p>	Honey	Both local & international	Unknown requires further research & consultation
 <p>Chew-able propolis</p>	Propolis	Both local & international	Unknown requires further research & consultation
 <p>Pure Pollen</p>	Pollen	Both local & international	Assumed Simple

Spa / Salon & Body Care Products

Product	Ingredient	Target to	Difficulty
	Beeswax & Honey	Both local & international: target spas, salons & their suppliers	Unknown requires further research & consultation
	Beeswax & Honey	Both local & international	Unknown requires further research & consultation
	Beeswax & Honey	Both local & international	Unknown requires further research & consultation
	Honey	Both local & international: target spas, salons & their suppliers	Unknown requires further research & consultation
	Beeswax & Honey	Both local & international: target spas, salons & their suppliers	Unknown requires further research & consultation
	Beeswax & Honey	Both local & international: target spas, salons & their suppliers	Unknown requires further research & consultation

Beeswax-based Products

Product	Ingredient	Target to	Difficulty
 <p>Block of wax</p>	Beeswax	Both local & international: run campaign / competition for innovations	Assumed Simple
 <p>Candles</p>	Beeswax	Both local & international	Medium requires specialist trainer & equipment
 <p>Natural Birthday Candles</p>	Beeswax	Both local & international	Medium requires specialist trainer & equipment
 <p>Soap</p>	Beeswax & Honey	Both local & international	Unknown requires further research & consultation
 <p>Reusable Food Wraps</p>	Beeswax	Both local & international	Unknown requires further research & consultation
 <p>Surf Wax</p>	Beeswax	Both local & international	Assumed Simple



Wood Polish

Beeswax

Both local & international, primarily international?

Unknown requires further research & consultation



Leather / Vinyl Polish

Beeswax

Both local & international, primarily international?

Unknown requires further research & consultation

A Note about the Export Market for Beeswax

Should beeswax be deemed accessible in volumes that allow consideration on export potential, local sales of beeswax could be supplemented with export providing a 'quick win' for suppliers if they are not in a position to do more sophisticated value adding.

As a benchmark for this consideration, on the world market, African beeswax is bought for approximately 3,000 Euro per metric tonne.

On the world market wild beeswax has a substantially higher value than cultured wax, such as Chinese wax.

The main countries buying beeswax are E.U. Countries, in particular Germany, France, Italy and the U.K.¹



¹ [http://www.intracen.org/uploadedFiles/Zambia%20Honey%20roadmap_final\(1\).pdf](http://www.intracen.org/uploadedFiles/Zambia%20Honey%20roadmap_final(1).pdf)

*“Social entrepreneurship
is like a bee, sucking
honey from a flower,
but the flower won’t
die. They’re helping
the flower to make
pollination.”*

ARUNACHALAM MURUGANANTHAM