Lao Forest Honey Market Study
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1. Introduction

The Agro-Biodiversity Initiative (TABI), a joint program of the Ministry of Agriculture and Forestry of the Government of Lao PDR and the Swiss Agency for Development and Cooperation (SDC), has been working with farmers in various villages in Xiengkhouang and Luang Prabang Province on beekeeping of native bees for sustainable livelihoods. Beekeeping is promoted as an alternative livelihood to slash and burn practice in villages. TABI has been providing technical support on production and marketing support.

As a step towards a more sustainable marketing support, TABI commissioned this market research to determine market potentials and identify actors that can continue to provide marketing support to the village beekeepers beyond project support. Up to now, no known market research for Lao Honey has been done, except for a consumer survey done in 2003.

1.1. Overall Goals

This study aims to contribute towards:

- The sustainable development of the Lao honey industry
- Sustainable marketing of Lao Forest Honey
- Expanded markets for community produced Lao honey and viable honey livelihoods for community producers
- Development of appropriate marketing strategies (including positioning) for community produced Lao Honey in the domestic and international markets

1.2. Specific objectives of the Market Survey

The study's main objectives are the following:

- To know current situation of Lao honey market specifically in Xiengkhouang and Vientiane
- To Identify market opportunities and barriers to market access in both domestic and export markets.
- To understand consumer demands / buyer perception of Lao honey
- To assess appropriateness of certification
- To have an overview of competition in the domestic and international markets.

1.3. Methodology

The study is a collaborative research of a local team of TABI staff, partner organizations volunteer students and the international consultant. The local team members covered the domestic market while the international consultant covered the export market. The Domestic research team underwent a 3-day workshop for data collection. Data collection included semi-structured interviews of different value chain actors, organizations, support service providers (49 interviews) and desk research (online research and secondary data review, reports). For consumer analysis, 4 volunteer university students, supervised by a professor, carried out 130 surveys. Interviews were done in places where honey was sold. Sample selection was by convenience sampling.

1.4. Scope and Limitation of the Study

The study focuses on the potential market for forest honey, whether from natural hives or boxes placed in the forest by villagers. Research is done mainly in Vientiane and in Xiengkhouang Province, where TABI community partners are located. Being the first of its kind, there was limited information, making it difficult to get information on honey trade in the whole country. While the report doesn't claim to provide the general condition of Lao Honey trade in the country, through interviews in Vientiane and XKH, the team was able to offer the current trend in the honey trade.

2. Production

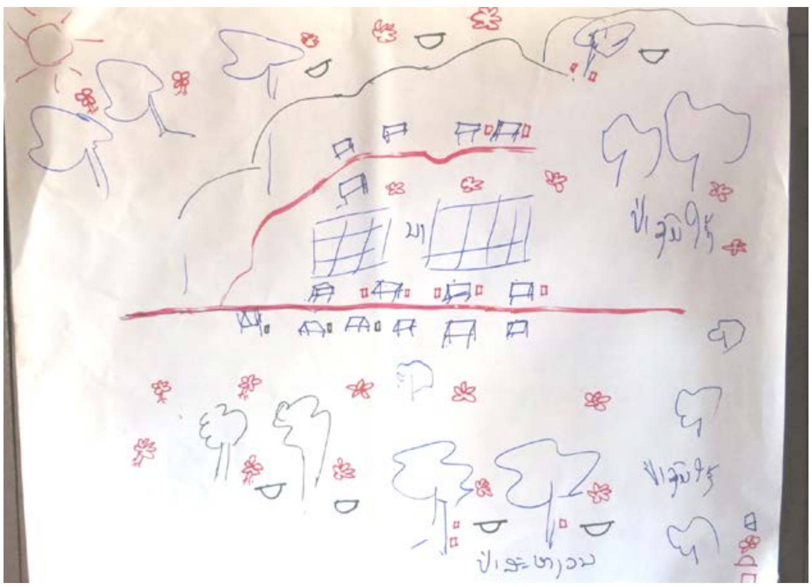


Photo: 1 One TABI partner group harvests honey from boxes (red squares) placed in the forest and in their villages.

A definition of forest honey still needs to be agreed on by the stakeholders. For the purpose of this study, Forest honey is defined as honey that is harvested from the natural forests, also referred to as wild honey, whether it is from natural hives or from boxes permanently located in the forest and is without human interference except during swarming and harvesting.

There is a tradition of wild honey collection and management of native bees in Lao PDR. Known main sources of Lao honey are villages in the northern provinces, Phongsaly, Oudomxay, Samneua, Xiengkhouang and Luang Namtha and from the south, Champasak Province. There are also some beekeeping activities in Luang Prabang and Vientiane Prefecture and some honey trade in Huapanh. Collected honey is both for family consumption and for sale, usually at local markets. [1] [2]

There is no information on the total forest honey production in the country. To have a working number, the researcher estimates the production of forest honey based on the potential available and accessible production area of forest honey. Available and accessible refers to areas that have natural forest forage and where villagers have legal rights to collect forest products, in this case, protected forests.

[1] Development of beekeeping in LAOS: Various strategic choices, Bounpheng SENGNGAM, Jérôme VANDAME

[2] Conservation and Management of Pollinators For Sustainable Agriculture through an Ecosystem Approach An in-depth review of existing information in Lao PDR and neighbouring countries, Jérome Vandame March 2006

It is estimated that at least one thousand two hundred (1,200) tons of forest honey can be produced in protected forests of Lao PDR, valued at 5.19 Million USD at local level. The actual number can be more as this only covers *Apis cerana* production and does not count production of *Apis dorsata* bees. Due to absence on information on the densities of beehives in Lao forests, the researcher refers to a study of *Apis cerana* nest density in Sumatra, Indonesia. According to the study, density of *Apis cerana* nests reach up to 22 hives per Km^2.[3] If we consider only half of the protected forest area, equivalent to approximately 41,000 Km^2[4], and conservatively use only half of the said density, 10 hives per Km^2, we can estimate about 410,000 hives in this given area. If each *Apis cerana* hive produces between 2 – 5 Kg of honey, using 3 Kg as average, we can estimate a total of 1,230,000 Kg or 1,230 Tons of forest honey. It should be noted that nest density and production per hive may be affected by topographical variations and the availability of forage. With 35,000 Kip per Kg, this is at a minimum a 43 billion kip or 5.19 Million contribution to households at local level.

It is safe to say that potential production is higher than the given figure considering other potential forest and agricultural areas, other indigenous bee species and the actual carrying capacity of the said areas. There are still other types of forests where honey may be available. Going beyond forest honey, honey production can be augmented through production in agricultural areas that require bee pollination. Given 80,000 Ha of agricultural crops pollinated by bees, with 4 hives each hectare, and 3 Kg honey per hive, an additional of at least 800 Tons can be produced.

For TABI partners, with 9 villages in XKH, total production is 2 to 3 Tons a year. As association in Oudomxay, established in 2012, with support from German NGO Agro Action, produced 2.8 Tons in 2012. A small-scale beekeeper family manages about 200 beehives.[5]

3. Value Chain Map

3.1. Actors and Activities

The value chain map provides an idea of the Lao Honey supply chain, specifically in Vientiane and in Xiengkhouang. The main activities are collection, processing, aggregation or wholesale, retail, and some exports. The main actors are the collectors and beekeepers, village and provincial traders, provincial and capital traditional market retailers, re-packers and wholesalers, supermarkets and mini-marts, and cross border traders.

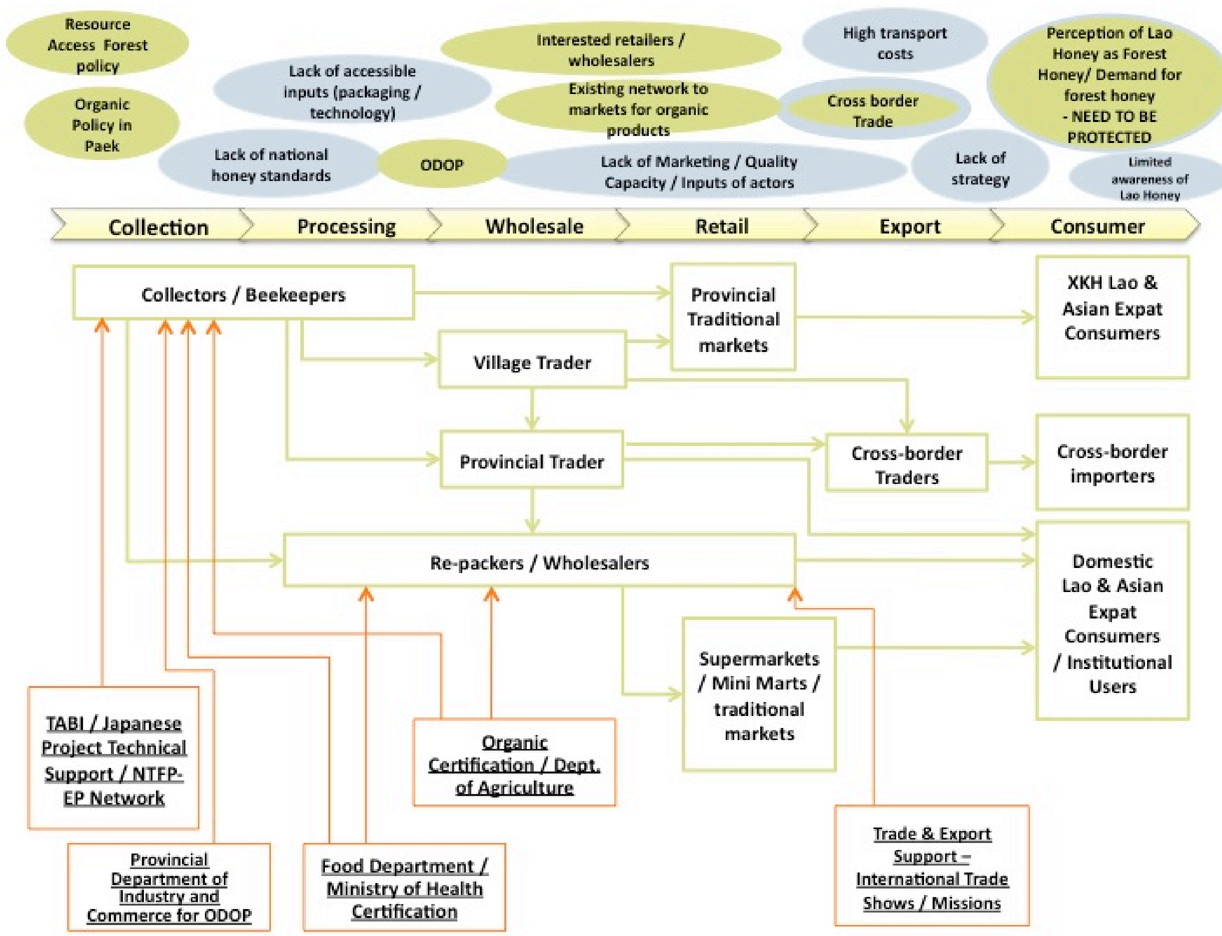
Majority of the beekeepers are passive beekeepers, where farmers place boxes in forests or near their houses, and only open them up for harvest. Farmers see beekeeping as a complementary livelihood that does not require too much labor or inputs. There is no information in the total number of beekeepers in the country. In Xiengkhouang, the partners of TABI numbers 137 household members in 9 villages in the districts of Pek, Phoukut, and Kout (23% of the total households). There had been some projects to promote beekeeping in various provinces in the previous years.

Processing is very simple and rudimentary, usually carried out by the collectors and the beekeepers themselves. Combs are squeezed and filtered through ordinary cloth and are packed in recycled 1.5 L soda plastic bottles. These are then sold to village traders or to retailers in the traditional market. The villagers supported by TABI sell honey directly to the staff of TABI who package them into jars and sell

[3] H. R. Hepburn et al. (2014) Honeybee Nests, DOI: 10.1007/978-3-642-54328-9_2, 17 Ó Springer-Verlag Berlin Heidelberg
[4] Decree on the Protection Forest
[5] Honey producers hope for sweet success Monday, 27/01/2014 | 09:26 *VIENTIANE TIMES*

them in Vientiane. The TABI project and subsequently a project supported by a Japanese organization provide technical support to upgrade honey processing. TABI XKH Office reported to have had food safety certification in 2015.

Figure 1 Lao Honey Value Chain Map



Wholesaling is carried out by village traders and provincial traders. Based on an interview with a village trader, there are a number of local traders in a village. Collectors and beekeepers from about 7 villages bring the honey to her already processed and packed in bottles. The volume of purchase is usually dependent on the available capital of the trader. This particular trader can purchase between 200-300 Kg per year. Village traders aggregate at the village level and sell them to a provincial or a bigger trader who picks up the honey. Other collectors sell directly to the provincial trader.

Provincial traders transport honey to other provinces or the capital or across borders. These traders deliver to packers and wholesalers who in turn sell to retailers or retail the products in their own shops. Transport is done through motorbikes or trucks. There are about 3 provincial traders found in the traditional market in XKH.

Packers in the capital or wholesalers are mainly small entrepreneurs. They provide the capital and the link to the market. There are already some marketing skills but they need to be strengthened and need to be connected to a bigger market. Technical knowledge on honey quality also need to be strengthened and standardized. One re-packer purchases from a single beekeeper to ensure quality. He sells about 400 Kg of honey per year. At least 10 Lao brands were identified available in the market. They are Vieng Thong Herb Wild Honey, Xao Ban Forest Honey, Bolaven Highland Honey, BBL Lao Agriculture Co. Ltd Wild Honey, Lao Farmer's Wild Honey, Dok Sa Po Pin Wild Honey, Xiengkhouang Honey (TABI), Airport Honey (Brand in Lao text), Lao Artisans Honey, and Lao's Best.

Photo: 2 Different Lao Honey Brands in the market

Main retailers of honey are stalls in traditional markets, minimarts and supermarkets. Some honey are also sold in some tourist shops and organic shops.

Cross-border exports are done by small expat entrepreneurs. In Xiengkhouang, a Chinese entrepreneur buys all NTFPs, including all honey and transports them to China by truck. In Vientiane, a Vietnamese trader purchases honey from village traders all over the country and consolidates them in Vientiane before transporting them by truck to Vietnam. The trader sells to re-packers and exporters of honey in Vietnam. She estimates having transported 10 Tons in 2016. Lao Bao Gate in Quang Tri Province in Vietnam is a place where some Lao Honey enters. There are also some in Ha Noi and Ho Chi Minh but in smaller quantities. Currently, there is no quality and documentation requirements, except for the quality set by the buyer. Import is minor and in small containers (20L containers). This is currently mainly done by micro or small businesses. There are also other border provinces on the Vietnam side that buy and sell Lao Honey.[6]

One Lao company has been identified to export honey to the USA. The honey however is from european bees (*Apis mellifera)* placed in coffee farms. The entrepreneur has had experience in

[6] Interview Dr. Chinh (Vietnam) November 2017

beekeeping in Thailand. He exported 20 Tons of honey to the USA in 2016 through Thai ports.[7] Reported export value was at 1.75 USD per Kg.[8]

It is not uncommon that some actors fulfill a variety of the activities. Some retailers in the traditional markets are also provincial traders that transport honey to Vientiane. Some re-packers and wholesalers also have their own retail shops.

3.2. **Price**

There is a price difference between wild honey, which may be Apis dorsata honey, and boxed honey, which is mainly Apis cerana honey. Honey from boxes are purchased by village traders at 25 – 35,000 Kip per Kg, and the trader marks up by 5,000 Kip per Kg, while wild honey is purchased at 70 – 80,000 Kip per Kg and the trader marks up by 10 – 15,000 Kip per Kg. Provincial trader sells to packers and wholesalers in Vientiane at 45 - 50,000 Kip per Kg. At the traditional market in XKH, a 1.8 Kg bottle of honey retails at 100,000 Kip. In a supermarket in Vientiane, a 1L bottle of wild honey is priced from 110,000 to 300,000 Kip. TABI purchases from community partners at 50,000 Kip per Kg.

Table 1 Price of honey at each level of the chain

Location	Beekeeper / Honey Collector	Trader	Provincial Trader	Wholesaler / Packer	Retailer in XKH	Retailer in Vientiane
Xiengkhouang						
Forest Honey	70 – 80,000 K/ container (1.8 Kg)	90,000 K / container			100,000 Kip /1.8 Kg	300,000 Kip
Box Honey	30 – 35,000 K / container	35 – 40,000 K/container	45 – 50,000 K / Kg			100,000 Kip / Kg
Vientiane						
TABI	50,000 K / Kg					30 – 40,000 Kip / 250g

From one interview, cross-border trade in Vietnam, wholesale price of 1 Kg of Lao honey is 55,000 to 60,000 Kip but they are retailed in Vietnam at 15 to 20 USD (125 – 166,000 Kip) per liter.[9]

Table 2 Retail prices of some Lao Honey

Brand	Size	Price in Kip	Place
Dok Sa Pan Pi	500g	50,000	Organic Shop
Xao Ban Forest Honey	1000g	95,000	Xao Ban Shop
Xao Ban Forest Honey	500g	48,000	Xao Ban Shop
Lao's Best	100g	50,000	Department Store
Vieng Thong Wild Honey with comb	1000ml	200,000	Trade & Promotions Showroom
Vieng Thong Wild Honey	450 ml	100,000	Trade & Promotions Showroom
Vieng Thong Wild Honey (Farmed Honey)	330cc	50,000	Trade & Promotions Showroom
Vieng Thong Wild Honey	160ml	50,000	Trade & Promotions Showroom

[7] Interview with Company November 2017
[8] ITC Trade Map Website Accessed November 2017
[9] Interview Dr. Chinh, November 2017

Airport honey	250 ml	41,550	Airport Duty Free Shop
Lao Farmers	1000ml	100,000	Vientiane Center
Lao Farmers	450g	55,000	Vientiane Center
Bolaven Highland	1.5 L	170,000	Vientiane Center
BBL	125ml	66,000	Vientiane Center
No Brand	1000g	300,000	Vientiane Center

3.3. **Support Services**

Relevant support service providers include:

- NGO provided technical support
- Food Department under the Ministry of Health for food and health safety certification
- Department of Agriculture under the Ministry of Forestry and Agriculture for 3rd party organic certification and Participatory Guarantee System (PGS) accreditation
- Department of Trade and Promotions under the Ministry of Commerce for trade fairs and access to domestic and international markets.
- Provincial Department of Industry and Commerce of XKH for ODOP promotion support

Technical knowledge, technology acquisition and market support are mainly project-based. NGO supported projects are the only source of technical knowledge and support to beekeepers. Currently, there is no specific institution that provides technical support for training, bee management and bee product development.

The Department of Trade and Promotions organizes trade fairs in the capital and abroad. The office can provide free space to companies or groups with potential. They also have a showroom where they promote One District One Product (ODOP) Products. The office indicated strong interest in supporting the promotion of Lao or Xiengkhouang Honey.

The One District One Product (ODOP) can provide a platform to promote Xiengkhouang (XKH) Honey. The government supports the promotion and development of ODOP Products. Honey is already being considered as one of the potential ODOP of Xiengkhouang. However, it needs to pass product quality and food safety standards and application of ODOP need to be processed.

3.4. Enabling Environment / Constraints and Opportunities

Relevant government agencies have indicated interest and support for the development and promotions of the honey sector. According to the Department of Forestry, there is forestry policy that supports the use of forest resources for poverty alleviation of rural villages. Farmers are allowed to place bee boxes in the forest as long as there is no harm done to forest resources.[10] The Department of Agriculture also indicated support for the honey sector, seeing it as complementary to agricultural development.[11] However, honey from forests and agriculture are treated differently. For example, products harvested from the forest for trade are taxed. This therefore should be considered when developing a strategy for the honey sector development.

[10] Interview at the Department of Forestry November 2017
[11] Interview at the Department of Agriculture November 2017

There are established networks to access the organic / health food markets – Lao Farmer's network in Vientiane and XKH. This network is the Lao's Farmers Network in Vientiane and Organic Farmers' Association in Xiengkhouang. They have established markets for organic food both in Vientiane Capital and Xiengkhouang Province. There is low barrier to become a member of these networks and participate in the market. This should be explored as a channel to reach consumers.

The organic movement is well established in Vientiane and XKH. The Department of Agriculture has their own organic label, Lao Organic. The government also recognizes the Participatory Guarantee System (PGS) for organic certification. There are also some organizations that support farmers to access organic certification and organic markets. In Paek District, where TABI partners are located, the governor has policies to promote organic farming in the district, which includes the ban on use of pesticides, and envisions to make the district an organic district.

Lao products are perceived by neighboring countries as natural products.[12] Neighboring countries like Lao products as they have the impression that products are more natural and there is less use of chemicals. There is also preference for Lao honey because it is known as forest honey.

Interviewed retailers and entrepreneurs are interested in Lao Honey. Based on initial interviews with retailers and entrepreneurs, there is interest to access more Lao Honey and promote it. Retailers would like to promote local products.

For exports, Vietnam, China and Thailand are already trading partners of Lao PDR. There are also bilateral agreements with Japan and Korea, which can promote exports.[13] Explore how these agreements can support the development of the Lao Honey sector as well as how to access the markets in these countries. For bordering countries, there are already cross-border trade of honey. On one hand, this is positive as markets are easily accessible to small businesses along the borders. On the other hand, it is difficult to measure how much honey trade is going on. The opportunity to develop the image and brand of Lao Honey is also lost.

Constraints

High transportation costs, non-compliance to export requirements and weak marketing capacity are some of the barriers to exports. Lao products in general incur high transportation costs and go through lengthy procedures for exports beyond borders. Without its own ports, export shipment need to be transported through neighboring countries either through Thailand and Viet Nam. In a study of other exported Lao products, high transportation costs lower competitiveness of Lao products.[14] Marketing capacity seems not yet enough to allow them to compete in the international market. They are also not yet able to comply with the international production standards and export requirements (i.e. documentation).[15]

There are no clear quality standards for Lao forest honey or Lao honey in general. Each buyer has his own bases of what is good honey or not. They then pass on this information to consumers, which results in misinformation among consumers, which then affects demand and pricing of honey. For example,

[12] Interview at the Department of Agriculture November 2017, Interview of cross-border trader November 2017, Interview Helvetas November 2017, Interview Vietnamese Informant 2017

[13] Assessment the Effect of Free Trade Agreements on Exports of Lao PDR Bounlert Vanhnalat, Phouphet Kyophilavong, Alay Phonvisay, Bouason Sengsourivong International Journal of Economics and Financial Issues, 2015, 5(2), 365-376.

[14] Analysis of Trade procedures for coffee exports by the Lao PDR (No date)

[15] Interview with Helvetas Project Manager November 2017

crystallization is a natural occurrence in honey, however traders and consumers see this as a sign of fake honey.

Production and processing of Forest Honey is currently limited and not controlled. Technical capacity of beekeepers is still very basic. Production is limited to one season per year. While there is interest among farmers to put more boxes in the forest area, theft of bee boxes prevents them from doing so. There is also the issue of low quantity production this year and the absconding of bees. There are also some use of chemicals and pesticides in farm areas where bees forage. This will affect the quality and the eventually the general image of Lao honey. Beekeeping is also seen by farmers as a supplementary source of income and a low-labor and low-input type of livelihood.

Weak technical knowledge of value chain actors on honey. The whole process from harvest to processing, to transport, to packing and storage all have an impact on the quality of honey. However, capacity and practice of honey processing and quality control is weak among the value chain actors.

The domestic market has low awareness of Lao honey. Many of the retailers interviewed were not aware of availability of Lao Honey. They are also not aware where they can source them.

Limited availability and accessibility of inputs. Most packaging and processing equipment have to be imported from Thailand or Vietnam, which increases costs for local entrepreneurs. It also limits to packaging options for the products.

Finally, there is no strategy yet for the development, marketing and promotion of Lao Honey. Development activities are still small-scale and are fragmented. There is limited coordination among the actors of the value chain as well as among the different organizations working on beekeeping and honey in the country. Given the condition of the honey sector in Lao PDR, there is a need to develop a strategy that can make Lao honey competitive in the domestic, regional and international markets.

4. Overview of Markets

4.1. Domestic Market

Identified domestic consumers of honey are Lao and Asian immigrants, and institutional users with an estimated consumption of at least 300 Tons. Lao consumers mainly use honey for medicinal purpose. It is common for Lao households to keep a jar of honey at home and use it only when somebody is sick in the family. A teaspoon of honey is usually mixed with medicinal herbs. Asian expats, Chinese and Vietnamese also use honey for health purposes but use it more often. Institutional users include traditional medicine companies and hotels/guesthouses.

Lao consumers estimated consumption is at least 296 Tons per year. If we base the estimation on the traditional practice that a Lao household usually keeps a jar of honey (500g – 1000g) for medicinal purpose, and to be on the conservative side, only take half of the total number of households, and take the smaller size of honey jar, 500g, a minimum consumption can be close to 300 Tons per year. At maximum, consumption can be up to 1,183 Tons.

Table 3 Calculation of Lao Honey Consumption

	Minimum	Maximum

Total Households	1,183,386[16]	1,183,386
50% of Households	591,693	
Amount consumed / year	500g	1000g
Total Consumption / year	295.85 Tons	1,183 Tons

Asian immigrants, specifically the Vietnamese and Chinese, estimated consumption is at least 3 Tons. Vietnamese and Chinese expats are said to consume honey at a higher rate than Lao consumers.[17] There also seems to be preference for forest honey among Asian expats. [18] If we estimate that at least 65% of the Asian expats households consume honey at 750g per year, total consumption can at least be 3 tons.

Table 4 Calculation of Asian Expat Honey Consumption

	Minimum
Expat Population (Vietnamese & Chinese)	32,338[19]
Estimate No. of Households (5 Pax / HH)	6468
65% of Households	4204
Amount consumed / year	750g
Total Consumption / year	3.15 Tons

Photo: 3 Mulberry leaf Tea with Lao Honey for breakfast

Potential consumption of the hotel and restaurant industry in the country can be at 12 Tons. Honey is used for breakfast in many countries usually spread on toast or waffles, mixed with yogurt or in some countries, is used as a healthier option as sweetener for tea. Some hotels serve honey during breakfast. One hotel interviewed requires 60 Kg per year. If all hotels, guesthouses and restaurants offer Lao honey, even at minimal amounts, then it can generate a domestic demand of at least 12 tons.

Table 5 Calculation of Hotels / Guesthouses Potential Consumption

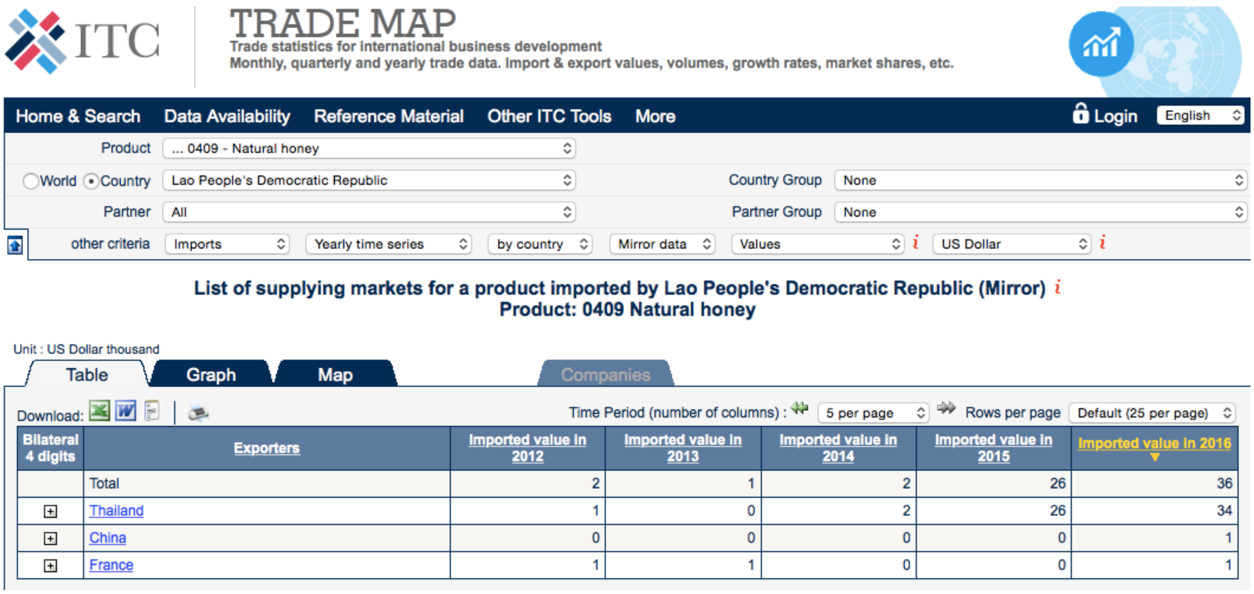
	Hotels	**Guesthouses / Resorts**	**Restaurants**
Total Number[20]	545	2,452	2959
Potential consumption per year (Kg)	6	3	0.5
Total (Kg)	3,270	7,356	1,479.5
Industry total	12,105.5 (12 Tons)		

Traditional medicine Companies is another institutional user of forest honey. They specify that they require wild honey, which they mix with medicine. There are at least 4 national clinics and 6 private

[16] 2016 Census
[17] Interview of honey retailers in the market, November 2017
[18] Interview of honey retailers in the market, November 2017
[19] 2016 Census
[20] 2016 Census

traditional medicine companies identified. Interviewed companies' needs range from 250 to 500 Kg per year. One company interviewed reported to require 5 Tons a year.

Lao PDR was reported to have imported 36,000 USD worth of honey in 2016.[21] 13 Tons of honey with the value of 2610 USD / Ton was imported from Thailand, and the rest were from China and France. [22]


ITC TRADE MAP
Trade statistics for international business development
Monthly, quarterly and yearly trade data. Import & export values, volumes, growth rates, market shares, etc.

Home & Search | Data Availability | Reference Material | Other ITC Tools | More | Login | English

Product: ... 0409 - Natural honey
World / Country: Lao People's Democratic Republic — Country Group: None
Partner: All — Partner Group: None
other criteria: Imports | Yearly time series | by country | Mirror data | Values | US Dollar

List of supplying markets for a product imported by Lao People's Democratic Republic (Mirror)
Product: 0409 Natural honey

Unit : US Dollar thousand

Table | Graph | Map | Companies

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Bilateral 4 digits	Exporters	Imported value in 2012	Imported value in 2013	Imported value in 2014	Imported value in 2015	Imported value in 2016
	Total	2	1	2	26	36
⊞	Thailand	1	0	2	26	34
⊞	China	0	0	0	0	1
⊞	France	1	1	0	0	1

Figure 1 Lao Imports of Honey from 2012- 2016

There is a wide variety of honey offered in the capital. From forest honey, wild honey to ginseng infused honey to manuka honey, coffee flower honey, among others. Honeys are mainly from Lao, Thai, New Zealand and China. Lao honey are mainly found in traditional markets and some in supermarkets while Thai honeys are found in most supermarkets and minimarts. Chinese honey is the cheapest available while New Zealand honey is the most expensive at 300,000 Kip for 400g. Thai honey is equally or lower priced than Lao Honey.

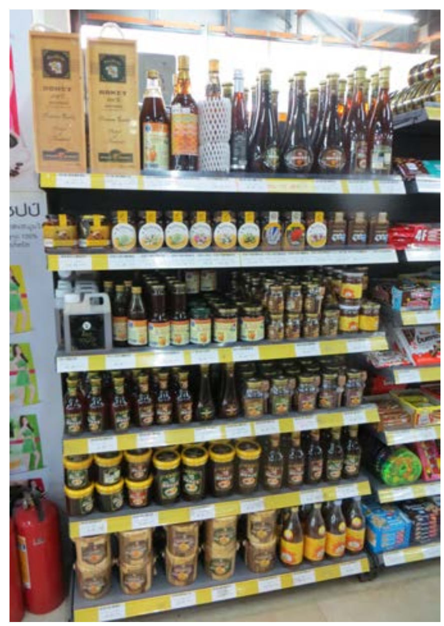

Photo: 1 Lao, Thai and New Zealand Honey in the Vientiane Center

4.1.A. Rapid Consumer Analysis

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[21] International Trade Center Trademap Website Accessed November 2017
[22] International Trade Center Trademap Website Accessed November 2017

A survey was carried out among the different target segments for Lao honey. The result of the survey does not claim to provide general description of the target consumers. However, it does provide a trend of consumption behavior and preferences. The results of the survey were also compared to another existing consumer survey, which echoed some behavior and preferences.

Survey Respondents:

Segments	# of Respondents	Description
Lao consumers	71	Students, retirees, businessmen, executives, middleclass 1 – 3.5 Million Kip / month salary (salary level of government employees
Asian expats	30	Teachers, Officers, Businessmen, students higher income Asian expats, with higher education, 3 – 5 Million monthly salary urban dwellers
Tourists	31	Mostly western tourists

Lao Consumers

- Consumer believe that honey is a healthy / non-toxic food.
- Top reason for not consuming honey is that “it is hard to find,” “it is sweet”
- Main reason for consumption is for health and for food.
- Frequency of use is occasional, less than once a month
- Frequency of purchase is rarely, less than once a year
- Purchase size is 250 – 300g or 400 – 500g / purchase
- Purchase price is 50 – 100,000 Kip or less than 50,000 Kip
- Source of information is through recommendation / word of mouth
- Place of purchase is the local / traditional market as it is convenient, they go more often to the local / traditional market
- Perception is that honey from the traditional market is real honey.
- Buying from the local market is also considered cheaper
- Factors considered are (1) Taste, the most important (2) Appearance (color of honey) (3) Price
- There is preference for forest honey
- Forest honey is considered to taste better, and have better quality
- Preference for domestic or Lao honey. Lao honey is considered more natural. There is a desire to support local products
- Preference for sweet over bitter or sour honey
- Glass bottle is preferred over plastic packaging
- Some are willing to pay more for Lao Honey, while some are willing to pay more for Thai Honey
- For interviewed consumers, “Good quality honey” means that honey is real honey, has food safety certification, appearance is not so yellow, taste and smell is natural, sweet and sticky, pure
- Willingness to pay from 50 – 80,000 Kip per 250g bottle
- Preference for certification. The certification increases confidence on the product, supports health benefit of the product and guarantees safety
- Perceived value of Lao honey are “Natural”, “healthy,” “Pure”
- Perception of XKH Honey are “Natural,” “Pure,” “Good taste,” “Unknown”
- Price for good quality honey 250g is between 30 – 50,000 Kip

Asian Expats

- Consumes honey for health, as food, as sweetener or for cosmetics use
- Frequency of use is weekly / occasionally, more often than Lao people

- Frequency of purchase is monthly and yearly
- Size purchased is 400-500g and 1 Kg bottles
- Place of purchase are the local market and the supermarket for convenience
- Source of information are word of mouth and the internet
- conscious of price, prefer, not higher than 100,000 Kip per Kg
- Factors that affect purchase decision are: Source, Taste and Price
- Preference is for sweet honey, some prefer bitter
- Preference for glass containers for packaging
- No preference for a specific brand
- Some prefer organic certification, others do not require it
- Definition of good quality honey is pure, taste
- Perception of Lao Honey are "Pure," "Natural," "Healthy"
- Perception of XKH honey are "Natural," "Pure," and "Organic"
- Preference for Lao Honey

Tourists

- Those who have tried Lao Honey liked it and will recommend, some said they would like to try
- Perception of Lao honey is organic, good taste, good smell and pure
- Those who answered that they will not buy was because of weight and availability of better quality honey in their home countries
- Forest honey is associated with organic honey, pure honey
- Positive response of honey in Thailand and in Vietnam
- There is some indication of interest in tour of Bee farm but for those who have done it, there is no more interest.
- Price for a 250g of honey is not more than 50,000 Kip

A consumer survey carried out by Khon Kaen University (Thailand) in 2014 on Lao consumers of 400 respondents show some common results.[23] 27% of interviewees earned less than 1.3 Million Kip / month, 36% earned between 1.3 Million to 2.6 Million Kip / month, 13% earned between 2.6 Million to 6.6 Million Kip / month, 8% earned between 6.6 Million to 9.2 Million, 2% earned up to 11.9 Million and 3% earned above this.

Indicated behavior in the survey match some of the results of the survey:

- Top factors that influence purchasing decision are the product quality mark or certification such as ISO or HACCP, good for health and organic and lastly the brand, or the product is well known, detailed labels and price while factors that have less impact on the purchasing decisions are "imported products", since many of the products are imported, commercial or ads, and premiums.
- Place of preferred purchase is the local / traditional markets because of convenience. It is nearer homes, and they go there on a daily and weekly basis. However behavior is slowly changing as more and more people are finding it more convenient to go to supermarkets, retail or department stores where there are more choices. Prices are also seen as standard and quality, high.
- Interviewed consumers like to purchase imported products, especially Thai products, which are perceived to be of high quality.

[23] CLMV Pulse: The Heartbeat of Southeast Asia's Consumer LAOS 2014 E-saan Center for Business and Economic Research Khon Kaen University

- Lao people do not like bitter food and only moderately likes sweet food

Other consumption behavior provided in the study relevant to potential consumption of honey are summarized below:

- Lao people consume healthy/non-toxic foods once a week (40%), next is daily and next is at least once a month. Females have more frequency in consuming healthy foods than males. While those aged between 50-60 years old consume health foods daily and almost daily. Younger generations and high-income people have more and more interest to consume healthy food. At least 70% of consumers, in all income levels, consume healthy food.
- Lao people also perceive their own food as healthy food.
- Attitude in eating is changing towards healthier options. Lao consumers are more aware of health, sanitation and safety of food.
- Reasons for non-consumption of health foods are inconvenience to find them, higher prices, and taste may not be to their liking.
- Reasons for consuming healthy food are (1) to be healthy (67%) (2) to prevent sickness (17%) and to have / maintain good appearance (7%)
- Health foods that are consumed more are organic food and vegetables (84%), next are vitamins and supplementary foods (46%) and herbal drinks (37%).
- Majority are willing to pay more for healthy food, 40% are willing to pay 5% more than non-health foods, and 20% are willing to pay 10% more. 23% are not willing to pay more.
- Breakfast habit has changed for some consumers. 14% of sample eats bread, ham and sausages for breakfast, while 2% of sample eats cereals for breakfast.
- Women respondents are found to take care of their appearance, specifically their skin. Having beautiful skin is important for Lao women (60% of respondents).
- For Lao consumers, using good products with high quality is important. In general, they buy the best product they can find. They carefully and take time to look for the high quality and best product.
- Sources of information are the TV, the Internet and radio.

20% of Lao people are connected online. There are 1,400,000 people connected to the internet (19.9%) and the same number of people is connected to Facebook.[24] In an interview of adult educators, 57% of respondents use Social Media to find information for work and learning. Facebook is considered as a source of information based on opinions and experiences. Google and Facebook are used to find relevant information. YouTube is also an important source for work.[25]

4.1.B. Competition

Thai honey is far more available and accessible than Lao honey. Vandame reported that a visit of 25 retailers in Luang Prabang and Vientiane, 5 out of 7 outlets that sell honey carry Thai honey. Only 2 of the 7 shops had Lao honey.

The logistics or distribution system of groceries and supermarkets facilitates accessibility of Thai honey. Minimarts and supermarkets are serviced by multi-product distributors and importers and many

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[24] www.internetworldstats.com/asia.htm

[25] Lifelong Learning and Non-formal Educaiton in Lao PDR and Southeast Asia vhs DVV International Newsletter No. 3-2017 Special Issue: Digital Learning

of these products either come from Thailand and Vietnam. Honey is delivered together with other grocery products. On the other hand, many of the retailers do not know where they can source Lao honey. Distribution of Lao honey need to be improved.

Lao consumers perceive Thai honey as high quality and value for money.[26] Thai products are generally perceived by Lao people as high quality products.[27] Good packaging, the perception of high quality and affordable prices make Thai honey attractive to Lao consumers and institutional users such as hotels and restaurants.[28]

Thai honey mostly carries quality guarantee seals. Lao consumers and retailers are conscious of and look for quality guarantee seals. Not all Lao honey has food safety certification, which has an impact on the confidence of consumers and retailers on the product.

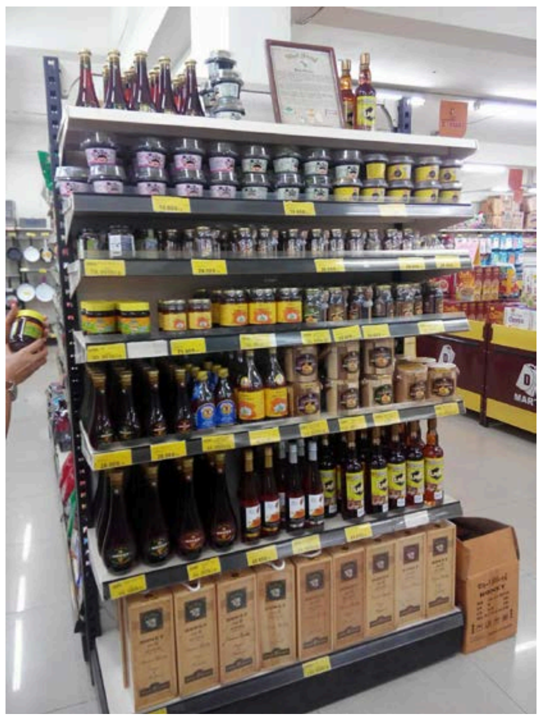

Photo: 2 All imported honey in D-Mart in Vientiane

4.2. Export Market

Top honey importing countries in the international market by quantity are the EU, USA and Japan, however, they may not be the best markets for Lao Honey under current conditions. Top exporters to the international market are China, Argentinta, Ukraine, Viet Nam and India. Mexico and Brazil follow closely. Bulk prices of exports are from 1.80 to 3.80 USD per Kg. Given the consideration of limited production of Lao honey, higher prices of Lao Honey (3-4 USD per Kg at farm gate) and high

[26] Consumer Survey November 2017, 71, 17

[27] Perceptions of Thai, Lao and Cambodian Consumers toward Country of Origin of Food Products on ASEAN Consumers' Decisions Kanokkan Vichasilp, Chudchai Rattanaphunt and Chaluntorn Vichasilp *International Proceedings of Chemical, Biological and Environmental Engineering, Vol. 92 (2016) DOI: 10.7763/IPCBEE. 2016. V92. 15*

[28] Interview of honey retailers 2017

transportation costs for low volume products beyond bordering countries, these may not be the appropriate markets under the current conditions.

It should be noted however that there is already an existing export of Lao Honey to the USA. This honey is however not forest honey but is from a beekeeping company that place their bee boxes in coffee farms in the Bolaven Plateau. 20 Tons at 1.75 USD/Kg were reported to have been exported in 2016 by the Lao Honey Sole Co. Ltd. The owner is said to have had some experience from Thailand.

It is therefore recommended to consider top importers by value, many of which are within the region. These are China, Hong Kong, Singapore, South Korea to name a few. Top exporters by value are New Zealand, France, Switzerland, Saudi Arabia and the UK, all countries known for their high quality standards. New Zealand and Saudi Arabia are also known for their specialty honeys. Values per Kg of honey range from 6 USD to 12 USD.

Figure 2 Summary of Honey Imports/Exports from ITC Website

Honey World Imports/Exports

- **World Import:** 640,569 T in 2016 @ 3.17 USD/Kg
- **Top importers in Quantity:**
  - USA (166,477 T),
  - Germany (81,959 T),
  - Japan (48,445 T),
  - UK (41,135 T)
  - France (35,433 T)
- **Top importers by Value:**
  - China (6,000 T @ 12USD/Kg)
  - Hong Kong (4,000 T @9USD/Kg)
  - Singapore (3,000 T @7.8USD/Kg),
  - South Korea (843 Tons @ 9.4 USD/Kg),
  - Qatar (856 T @6.4 USD/Kg)
  - Bahrain (479 T @ 6 USD/Kg)
  - Macao (74 T @ 14USD/Kg),

Top Exporters by quantity:

- China: 128,330 T @ 2 USD/Kg
- Argentina: 81,183 T @ 2 USD/Kg
- Ukraine: 54,442 T @ 1.99 USD/Kg
- Viet Nam: 42,224 T @ 1.80 USD/Kg
- India: 35,793 T @1.99/Kg
- Mexico: 29,098 T @3.22
- Brazil 24,203 T @3.8

Top Exporters by Value:

- New Zealand: 9626 T @ 21 USD/Kg
- France 5,079 T @ 6.79 USD/Kg
- Switzerland :
- Saudi Arabia: 3,334 T @7.75 USD/Kg
- UK: 2,734 T @8.44 USD/Kg

Taking into consideration the accessibility of markets and the indication of existing trade, the neighboring countries, China, Vietnam and Thailand are further explored. These countries imported a total of 8,000 tons of honey in 2016, with China up to 6,000 Tons (average of 12 USD/Kg), Thailand at 1,600 Tons (180 Tons for honey above 4 USD/Kg) and Vietnam at 500 Tons (value at 4 USD/Kg). It was reported that 40 Tons of Lao honey at 2.20 USD/Kg was exported to Thailand in 2016. Based on accounts of interviewees, Lao honey is transported to China and Vietnam.

4.2.A. Bordering Countries

4.2.A.1. China

China is one of the top importers of honey in quantity and in value, importing 6,032 Tons of honey in 2016 with average value of 12 USD/Kg. Per capita consumption is 260g in 2014. [29] From 2012 to 2015, China's imports of New Zealand honey increased from 1,188 MTs to 2,039 MTs. Top exporters to China by value are New Zealand 1696 Tons @ 26.24 USD/Kg, Australia 621 Tons @ 12.22 USD/Kg, Thailand 587 Tons @ 5.43 USD/Kg, Germany 258 Tons @ 8.023 USD/Kg, Russian Federation 488 Tons x 3.39 USD/Kg, Canada 211 Tons x 7.54 USD/kg., Malaysia 340 Tons at 2.59 USD/Kg and Taipei 81 Tons x 5.89 USD/Kg.[30]

Bee products are considered as healthy food and widely used in Chinese Medicine. Honey in traditional China was more medicinal because of its high cost. It served as a cleansing agent, but more importantly, it was especially regarded for its ability to enhance longevity. It was an important ingredient in the elixirs of the Taoists.[31] Honey is also used in food (i.e. roasted duck) and in beverages (health drinks, carbonated drink).

Increasing need to be healthy is driving the demand for health foods, including raw honey. Chinese consumers are increasingly striving for healthier lifestyles, which is reflected on the decreasing trend in spending on unhealthy foods and beverages, and the willingness to pay a premium for healthier options. For Chinese consumers, health foods should be fresh, natural, and organic, with no additives.

Growing concerns over food safety in recent years has also acted as a catalyst for increasing demand for imported products and demand for products with quality certification. Because of some fake honey products in China, some Chinese people prefer to buy imported honey, and those imported honey are more and more popular and are easy to sell in China.[32] Pure honey is a highly sought after product in China. [33]

Drivers of honey consumption are increased awareness of potential health benefits of honey, increased disposable incomes, and healthier choices of Chinese consumers. The elderly consumers are also an important segment of honey consumers. The ageing population of China offers significant growth potential. The growing affluence of Chinese consumers also allows them to choose premium products.[34]

Information from credible sources, word of mouth and product reputation are important for Chinese consumers. Quality product, brand and production identification are important to succeed in China. It is also recommended to register a Chinese language name for products that complement the product and brand message.

Gifting is an important industry in China that is also an opportunity for honey products. Food and Beverage make up a significant part of the industry. Food and beverages are frequently given as gifts during Chinese holidays and on other important occasions with preference for imported products. Packaging and branding of products therefore are especially important when targeting this market.

Chinese regions bordering Laos are emerging economies and offer opportunities for Lao products. Chengdu is the most prosperous and affluent city in Southwest China, the capital city of Sichuan Province, and an emerging city in China with high living standards. The city of Kunming is another

[29] http://www.chinaag.org/2015/07/21/chinas-honey-industry-in-need-of-trained-beekeepers/
[30] ITC Trademap Website Accessed November 2017
[31] Food in China: A Cultural and Historical Inquiry Frederick J. Simoons CRC Press, 12 Nov 1990
[32] Ministry of Agriculture PRC2017 World Honey Bee Show Website
[33] Ministry of Agriculture PRC2017 World Honey Bee Show Website
[34] The Food and Beverage Market Entry Handbook:The PRC: a Practical Guide to the Market in The PRC for European Agri-food Products 2017

emerging market in Southwest China, and is the largest city and capital of Yunnan province. The mild climate of Kunming makes it a popular area for both tourists and expatriates.[35] Improved roads to Yunnan offer opportunity for Lao agricultural products in demand in China.

Growing importance of the Imported honey sector has led the Chinese government to strengthen its regulations on imported honey products. From April 2016, imports of honey have been limited to a list of countries/regions approved by the government. Currently, 15 countries are included in the list.[36] To export honey to the PRC, the country must have a Bilateral Agreement in place with the PRC. The country should be also able to provide have Sanitary Certificates agreed to by PRC. If a country is not listed in the Catalogue, the relevant authority in the exporting country in charge of honey products administration, for example, agriculture department or food department should send a letter through the Embassy in China to the Bureau under the AQSIQ[37], expressing interest to export honey to China.

4.2.A.2. Vietnam

Despite being one of the top honey producers in the world, Vietnam is also an importer of honey albeit at lower volumes. Vietnam imported a total of 585 Tons in 2016 valued at 2.3 Million USD, average cost is 4 USD/Kg. It is not clear from which countries come 75% of the imports.[38]

At least 50 Tons of honey valued above 6 USD/Kg were imported. While volume has only increased by 1%, imported value grew by 17%. High value exporters include Australia (22 Tons at 10.40 USD/Kg), New Zealand (7 Tons at 22 USD/Kg), France (5 Tons x 11.6 USD/Kg), Spain (6 Tons x 8.83 USD/kg), Germany (2 Tons x 13.5 USD/kg), Thailand (3 Tons x 6.67 USD/kg, Japan (14,000 USD value), Malaysia (2 Tons x 6.5 USD/Kg), Greece (1 Ton x 13.00 USD/Kg), Austria (1 Ton x 11 USD/Kg) and Portugal (1 Ton x 7 USD/Kg). Other exporters, at lower values, include USA (79 Tons at 2.66 USD/Kg) and Singapore (14 Tons x 2.64 USD/Kg). [39]

Increased health consciousness and affluence among Vietnamese consumers have increased demand and willingness to spend on high quality healthy foods. Vietnamese consumers have become more and more aware of healthy products, which increased demand for natural products, including honey, which is considered as “Gift of Nature.” [40] A survey of Vietnamese consumers showed that 54% of sample eat healthy / non-toxic food. 13% eat it everyday. Reasons for eating healthy food are (1) Good health (2) protection from disease.[41] The survey also showed that higher income consumers purchase more health foods.

There is preference for wildflower honey in Vietnam. This kind of honey is perceived to be “more pure,” more natural and of limited availability by consumers. It is also favored for its unique and complex combination of flavors produced by the mix of different nectars.[42]

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[35] https://www.gokunming.com/en/blog/item/982/interview_yunnans_organic_food_industry
[36] China Strengthens Regulations on Imported Honey Products http://www.eusmecentre.org.cn/article/china-strengthens-regulations-imported-honey-products
[37] General Administration of Quality Supervisions, Inspection and Quarantine of the People’s Republic of China (“AQSIQ”).
[38] ITC Trademap Website www.trademap.org Accessed November 2017
[39] ibid.
[40] The Food and Beverage Market Entry Handbook: Viet Nam: a Practical Guide to the Market in Vietnam for European Agri-food Products 2017
[41] CLMV Pulse: The Heartbeat of Southeast Asia’s Consumer Vietnam 2014 E-saan Center for Business and Economic Research Khon Kaen University
[42] The Food and Beverage Market Entry Handbook: Viet Nam: a Practical Guide to the Market in Vietnam for European Agri-food Products 2017

From medicinal purpose, honey has become an important part of daily life of a Vietnamese consumer. It is used in cosmetics skincare (cleaning, moisturizing), antibacterial and antiseptic products for healthcare. It is also used in cuisine (preferred seasoning). [43] The increased demand for is reflected in the increasing honey-based products offered in the market as well as the distribution channels of honey. Besides the small retail stores and wet markets, honey can also be purchased in bigger supermarkets and hypermarkets nationwide.

Vietnamese correlate quality to the price of the product. [44] Vietnamese consumers focus on high quality and value for money, when making a purchase. For Vietnamese consumers, higher price mean better food quality. Factors that affect purchasing decisions are (1) Good for health / organic (2) Clear label (3) Popular Brand (4) Appropriate price (5) Trustable store (i.e. grocery). Secondary factors include certification or marks of quality, packaging and design, and discount.[45]

Cross border trade by micro and small businesses do not require documentations. However, to enter the market legally and promote a brand the following steps are recommended:[46]

1. Appoint a local importer
2. Observe importation procedures as described in the Food Safety Law.
3. Provide importer with manufacturing license issued by the relevant authority in the country
4. List of ingredients and substance additive and a certificate of no residue chloramphenicol by the competent authority of the exporting country.

4.2.A.3. Thailand

Thailand Imported 1640 Tons in 2016 with average unit value of 2.5 USD/Kg, total value of 4.1 Million USD. 9.5% of imports are valued at >/=5.50 USD per kg. Top three exporters to Thailand are China (49%), Myanmar (32%) and Australia (4%). Top exporters by value are Australia (5.9 USD x 66 Tons), Germany (9.2 USD x 37 Tons), New Zealand (28 USD x 6 Tons), and France (8.7 USD x 19 Tons).

More uses for honey has increased frequency of use among Thai consumers. Before, honey was only used with herbal medicine. However, with increased awareness of health benefits from honey, frequency of consumption has increased.[47] 21% of the population use honey as a sweetener.[48] It is also now consumed as food, usually with pancake, waffle, tea and toast respectively. It is also used as an ingredient; mixed with tea, honey baked meat, crepe and yogurt.[49]

[43] ibid.

[44] The Impact of Marketing Mix Elements on Food Buying Behavior: A Study of Supermarket Consumers in Vietnam The Ninh Nguyen, Thi Thu Hoai Phan & Phuong Anh Vu International Journal of Business and Management; Vol. 10, No. 10; 2015 ISSN 1833-3850 E-ISSN 1833-8119 Published by Canadian Center of Science and Education

[45] CLMV Pulse: The Heartbeat of Southeast Asia's Consumer Vietnam 2014 E-saan Center for Business and Economic Research Khon Kaen University

[46] ibid.

[47] Organic Honey of Thailand Siriwat Wongsiri, Chanpen Chanchoa, Pichai Kongpitak The Journal of the Royal Institute of Thailand Volume IV - 2012

[48] **Consumption and sources of added sugar in Thailand: a review Running title:** Sugar intake Thailand W Kriengsinyos PhD, P Chan MS, Maria Sofia V Amarra PhD Published online: April 2017

[49] Consumer Behavior and Acceptance Towards Different Unifloral Honey Aussama Soontrunnarudrungsri 19th Food Innovation Asia Conference 2017 (FIAC 2017)

Thai Industrial Standards Institute (TISI), Ministry of Industry has already launched standards for honey sold in Thailand. As an assurance that the consumed products are genuine, consumers should only purchase honey with labels of TISI trademark or buy honey from trustworthy sources.

Thai people believe that honey produced by Asian Honeybee (*Apis cerana indica F.*) **is the best quality of honey.** 10,000 colonies of this bee spp. are harvested only once a year in April, and each colony produces only up to 3 liters a year, totaling approximately 42 Tons a year. [50] Locally-produced honey is heavily promoted for its medicinal and nutritional values, and consumers believe it to be the best honey. Also, in the Buddhist religion, it is a remedy for different human disorders, so honey is highly regarded in the culture. Its scarcity also makes it more valuable. [51] Preference for wild honey is also noted. While most honey in Thailand are from domesticated bees, most of the honey sold in the urban market are from hives of wild bees.[52]

In a survey of 120 consumers in Thailand, 86% consumes honey. 50.8 % of interviewed consumers consume hone 1-2 times/month. 18.3% consumed honey 1-2x/ per week, 11% consumed honey 3-4x/week, and 6% consume honey / day and the rest consumed <1x/month or occasionally. 45% were aware of the floral type of the honey they consumed. Forest honey is one of the floral types that most Thai consumers are aware of. 42.71% know of Forest honey while 29.17 know of Longgan. 70% of consumers purchase honey from supermarkets or hypermarts. About 10% purchase directly from beekeepers. The most known Thai honey brand in Thailand are : Chitralada (39.5%), Doi Kham (18.5%) , Vejchapong (10.2). About 17.6 of interviewees were not aware of the brand of the honey they consumed.

Safety, origin of honey and sensory qualities are the top 3 factors influencing purchase of honey. Safety is a concern as a result of news of artificial honey, while origin of honey / source concerns with the authenticity of honey, and sensory quality (taste, flavor, aroma), is related to the perception of consumers, their preferences on the characteristics of honey that are based on floral type or environment.

There is preference for honey with thick texture and dark golden color. Based on a tasting survey, where 50 consumers participated, Thai consumers prefer less sweetness, sourness, and bitterness, included mild flavor and thick texture (sunflower and longgan honey) [53]

Reliability or trustworthiness of the source of honey or shop and product certification are important to Thai honey consumers. Use, packaging and price are of the same importance. Glass container is considered to be the most desirable and attractive to consumers. SIze, uniqueness, and brand are the factors of lesser importance to Thai consumers. Brand is less important specifically for less frequent users (1-2x/month). 17% of interviewees do not remember the brand they used. For non-consumers of honey, the attractiveness and utility of the packaging is a consideration.

Based on review of consumption studies in Thailand, more and more consumers have become health conscious. This consciousness has established a market for organic food. 77 percent of Thai consumers

[50] ibid.
[51] APICULTURE AND POLLINATOR INDUSTRY SURVEY IN THAILAND Chama Phankaew Int. J. Agr. Ext. 04 (02) 2016. 95-103 International Journal of Agricultural Extension
[52] Urban Demand for Wild Foods in Northeast Thailand:A survey of edible wild species sold in the Khon Kaen municipal market Yuko Shirai and A. Terry Rambo 2014
[53] Consumer Behavior and Acceptance Towards Different Unifloral Honey Aussama Soontrunnarudrungsri 19th Food Innovation Asia Conference 2017 (FIAC 2017)

have been more health conscious since 2009. Thai consumers are spending more time to learn about healthy food as one of the top activities of moving towards health conscious behavior.[54]

Food safety and health reasons are the main and common factors that influence the two types of consumers in Thailand. There are two type of consumers in Thailand: (1) Specialized shop consumer or green consumers, and (2) Conventional consumer.

> (1) Specialized shop clients, Green and health-conscious consumers are older, have high-level of education and high-income levels. Food safety is their first priority. Factors considered are freshness, health, taste, environment, organic and price. Health is the main reason for eating sustainable food. Environmental and sustainable factors are less important considerations. These consumers recognize and take note of labels, certifications and standards. Information on health and the environment are the main factors that convince this group to purchase sustainable food.
>
> (2) Conventional consumers prioritize price. They also pay attention to freshness, safety and health. They are concerned with taste, calories and appearance of products. They have limited knowledge on sustainable food. More information and competitive prices may influence them to purchase sustainable food.

Sustainable products is associated with health and safety, therefore information provided should focus on health benefits of sustainable food. Information on production process (e.g. non-use of pesticides or chemical substances) If there is certification, this should be explained to consumers through an information posters directly beside the shelf.[55] It is also suggested to provide additional information to honey on the display.

There is an established niche for green products in Bangkok. Specialized shops in Bangkok are well established in promoting a green profile and selling green products to a specific group of consumers. High-end retailers and supermarkets already provide sustainable foods as green alternatives for their consumers.[56]

Online shopping and marketing plays a significant role in Thailand's retail market. 41 Million or 60% of Thailand's population is connected to the internet, with most of them logging in via mobile devices. The same number is connected to Facebook. Besides Facebook, other Social media platforms such as Twitter and YouTube have also emerged as important advertising tools for retailers. Apart from social media, more retailers are setting up their own websites for online promotion and shopping.[57]

North and Northeastern regions of Thailand demonstrate a strong emerging consumer market that may be of interest to Lao enterprises. [58] The region that connects Thailand with Laos is home to half of Thailand's 68 Million population and is considered the fastest growing consumer markets in the country.

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[54] The Relationship of Thai Consumers' Health Consciousness and Perceived Value Teerasak Jindabot, *Proceedings of the Second Middle East Conference on Global Business, Economics, Finance and Banking (ME15Dubai Conference) ISBN: 978-1-941505-26-7 Dubai-UAE, 22-24 May, 2015 Paper ID: D525*

[55] SUSTAINABLE FOOD CONSUMPTION IN URBAN THAILAND: an emerging market? Kanang Kantamaturapoj Wageningen University21 May 2012

[56] SUSTAINABLE FOOD CONSUMPTION IN URBAN THAILAND: an emerging market? Kanang Kantamaturapoj Wageningen University21 May 2012

[57] http://economists-pick-research.hktdc.com/business-news/article/Research-Articles/New-Trends-in-Thailand-s-Retail-Market/rp/en/1/1X000000/1X0A2CDN.htm

[58] http://economists-pick-research.hktdc.com/business-news/article/Research-Articles/New-Trends-in-Thailand-s-Retail-Market/rp/en/1/1X000000/1X0A2CDN.htm

The region has become a base for manufacturing activities such as food processing, electronics and rubber products. Udon Thani and Nong Khai have become popular transit hubs and tourist destinations for Thai visitors, as well as for foreign visitors who travel between Thailand and Laos. Consumers in this region are considered as more conservative, with lower brand-awareness than consumers from Greater Bangkok.

4.2.B. Regional Markets

4.2.B.1. Korea

The Minimum Market Access (MMA) quota program, established in 1995 under the Uruguay Round/WTO agreement imposes high import tariff on honey in South Korea. The MMA quota was set at 420 metric tons a year in 2014. Products imported within the quota are subject to a 20 percent import tariff, while imports outside the quota are subject to a prohibitive 243 percent tariff (or 1,864 won/kg, whichever higher is applied). Countries need to bid for a part of the quota. Besides other requirements, to export within the quota tariff rate of 20%, exporters need to meet the 40 Tons minimum quantity.[59] Exports below this are subject to the 243% tax rate. The USA and the EU already have signed Free Trade Agreements with South Korea.

Despite high trade barriers for honey, South Korea has a high demand for imported honey for quality, value and diversity. South Korea imported 843 Tons in 2016 valued at almost 8 Million USD, 36% of which was imported from the USA. With, 55.5% of the imports valued at higher than 5.5 USD/Kg, South Korea is one of the top importers by value.[60] Drivers of increased importation of honey include increased health consciousness of Korean consumers, more affordable prices of honey, use of honey as food (westernized use of honey) therefore increased frequency of use, and low domestic supply relative to demand (0.45 Kg per capita consumption).[61] Also, the variety of honey produced in Korea is limited. Two thirds of the local honey production is based on Acacia flowers.

Korean consumer's demand for imported honey has shifted to higher quality products. Country of Origin is also important for Korean honey consumers. Important exporters to Korea, like New Zealand, have focused more on marketing premium quality products by promoting nutritional and health benefit of their specialty honey, Manuka Honey.[62]

In Korea, honey from indigenous native bees is considered to produce premium quality honey. Local honey is generally retailed as specialty food at premium prices. However, farms that keep such bees have sharply declined in number as they have switched to foreign variety bees for higher production.

Laos benefits from the comprehensive *ASEAN-Korea Free Trade Agreement (AKFTA).*[63] The AKFTA allows, in the case of Laos, customs duties on the 90% of tariff lines listed in the normal track are gradually being eliminated by 2018. Customs duties on the remaining 10% of tariff lines are being lowered to 0%-5% by 2024. The Agreement also eliminates non-tariff barriers to trade like customs surcharges and import licensing; it facilitates trade in services, particularly communications and shipping between Korea and Laos. Korea is one of the top 10 export destinations of Lao PDR. Honey was identified as one of the emerging exports to South Korea. But this needs to be studied further.

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59 Processed Foods and Beverages: A Description of Tariff and Non-Tariff Barriers for Major Products and Their Impact on Trade, Volume 1: Executive Summary and Chapters 1-15, Volume 2: Appendices A-R, Inv. 332-421
60 ITC Trademap Website www.trademap.org
61 USDA Honey Market Brief Republic of Korea –Sangyong Oh, Marketing Specialist 2014
62 Marketing Case Study Analysis_CAMTU
63 Lao PDR Market Access Guide: Trading with ASEAN Dialogue Partners – Republic of Korea, Montague Lord 1 March 2013

4.2.B.2. Japan

Japan is one of the top importers of honey but is a difficult market to access. Japan imported 48,445 Tons of honey in 2016, with a total value of 157 Million USD. 73% of its honey imports are from China whose production resembles that of Japan in honey type. Average price is at 2.29 USD/Kg. 7% of its imports (3598 Tons) were of 5.50 USD/Kg and above values, with highest at 34 USD / Kg from New Zealand and lowest of the higher values at 5.61 USD/Kg from India.[64] The Japanese honey market is difficult to access due to the strict import controls as well as due to the high quality expectations of the Japanese consumers. They have preference for high-quality food products and are willing to pay a premium price if the quality exceeds their expectations.[65]

Japanese consumers, especially the older generation, are willing to pay for high-quality honey with health benefits. Honey is used for health and medicinal purposes in Japan. It is known to have anti-bacterial properties, reduce throat irritation and help prevent heart diseases. Japanese consumers are willing to pay a higher price for high-quality products with health benefits, such as honey. The trend towards healthier lifestyles is expected to continue in the coming years.[66]

Opportunities for honey products in the Japanese market are in the sectors of health food and gift giving. The ageing population create demand for food and beverages that address age-related health conditions, such as organic and health foods. Policy of Ministry of Health requires the Japanese people to take care of their health, which has increased demand for organic food, nutritional supplements, functional foods and health-oriented foods. The Japanese, especially the elderly consumers, despite the higher costs, are increasingly interested in food products that address health concerns such as weight gain, fatigue, diabetes, high cholesterol, etc. Besides food, honey is also purchasesd as a gift. Therefore attractive packaging and presentations, stories are very important to the Japanese market. Smaller sizes are also more preferred in this market.[67]

The premium and safe food market also offer opportunities for honey. The Japanese consumer has a strong demand for high quality imported food and beverages and are willing to pay a higher price for unique, safe and high-quality products. Gourmet specialty stores have turned their attention to premium “tailored” products, focusing on regional specialty, imported premium products. Products with Geographical Indications (GIs), indicating the authenticity, variety, quality, tradition and heritage of the produce, are therefore well positioned to capitalize on market trends in Japan.[68] “Safe” food products is another interesting segment, which resulted from the Fukushima disaster in 2011. The concern on antibiotic residues found in some Chinese honey in the past years also opened up opportunities for “safe honey.” [69]

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[64] ITC Trademap Website Accessed November 2017
[65] The Food and Beverage Market Entry Handbook: Japan: a Practical Guide to the Market in Japan for European Agri-food Products 2017
[66] ibid.
[67] Andaya, E. 2014, Honey Standards and Certification Study, NTFP-EP Asia
[68] ibid.
[69] ibid.

"Country of Origin," product freshness, high quality and packaging are important factors for Japanese consumers. Japanese consumers associate quality with well-known brands. But there is a demand for new experiences through food presentation, packaging experience and taste profiles, which can open up opportunities for new brands. Stories are also important.

Having a Japanese business is a factor to succeed in exporting to Japan. Quality management is also a key factor in establishing and maintaining long-term business relationships. Small-scale producers that offer products with social and environmental benefits are also recommended to explore alternative trade channels (i.e. Kokusai Sanchoku or International Teikei (Alter Trade Japan) to enter the market. These channels are also based on establish direct and trust-based relationships between business partners and suppliers.[70] However, it should be noted that fair trade markets are also sensitive to prices.

4.2.3. Competition

Lao PDR is surrounded by the top honey exporters in the region. In addition to that, there are more established honey exporters around the world supplying to the international bulk honey market. Lao PDR is not currently in the position to compete in this same market segment. However, Lao PDR can create its own niche in the honey market and explore the higher end of the market, among consumers who value high-quality honey.

Neighboring countries are also working to take a part of this higher-value market segment. While Thailand's exports of close to 11,000 Tons averaged at 2.45 USD/Kg, 7% (818 Tons its exported in 2106 were valued above 5 USD/Kg. This was exported to Asian and middle eastern countries, China, Hong Kong, Singapore, Pakistan, UAE and Kuwait. Based on Thai reports, higher value honeys (>5USD/Kg) also went to India, Macao, Viet Nam, and the Philippines.[71] China was reported to have exported 1945 Tons of honey with value of 6.3 USD/Kg to Hong Kong.

Thailand, Vietnam and China offer a variety of bee products, including monofloral honey, pollen, royal jelly, beeswax and brood. In Thailand, coffee honey is among the higher priced honeys (100 baht /Kg) at farmgate but supplies is only at 270 Kg.

China is producing for the organic market honey from *Apis cerana*. China has more than one million colonies of Asian honey bee, *Apis cerana* in the forest to produce organic honey, free from pesticides and antibiotics. The prices of these honeys vary from USD 5 to USD 10 per/kg. Strong technical capacity, where there is breed selection procedure, Chinese eastern hive bees are able to generate as much honey as 25-30 Kg per comb and absconding behavior has been reduced. [72]

Vietnamese small-scale honey producers are now branding their honey products and focusing marketing strategies on the product's health benefits. While the Vietnamese honey industry has been export oriented, there is now a trend to increase internal distribution of honey products, improving production line, packaging and design, product diversification and efficient marketing strategies. There are now brands targeted to the domestic market. Honey products found in the supermarkets are

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[70] The Japanese Market for Environmentally and Socially Certified Agricultural Products from Central America IFOAM Japan with the collaboration of RUTA 2004
[71] ITC Trademap Website
[72] Organic Honey of Thailand Siriwat Wongsiri, Chanpen Chanchoa, Pichai Kongpitak The Journal of the Royal Institute of Thailand Volume IV - 2012

relatively new, not surpassing 10 years. However, there is still no dominant brand. There is also no standard for prices and quality yet.[73]

Viet Nam is expanding market share in the international market through product diversification and differentiation. Honey has become one of the priority export products of Vietnam. They are offering different kinds of tropical fruit in honey. They also started to develop and promote honey brands to increase the value added content of products, instead of just entering the bulk honey market.[74] Some honey producing areas are also promoting tourism. In the Son Dong District where there are over 16,000 beekeeping households, the Son Dong Organic Honey Cooperative has applied for a collective brand name, “Son Dong Forest Honey.”[75] Another collective brand, U Minh Ha Forest Honey of Ca Mau Province has become more available in the domestic and international market.[76]

Food sources for wild flowers is one of Thailand’s big problems. As forest areas are being reduced, wild forage for bees has become scarce too. Beekeepers have to depend more on agricultural crops. Other problems in the Thai apiculture industry are food sources, mites and pesticides.[77] This therefore has an impact on the capacity of Thailand to produce forest or wild flower honey, which is highly valued in the country or in the neighboring countries.

Colony collapse disorder (CCD), loss of bee population, quality issues due to use of antibiotics, adulteration with sugar syrups, honey laundering are still some of the problems of the international honey sector.[78] These are problems that many of the industrialized honey producers are facing. These issues drive consumers to look for suppliers that they can trust that can provide natural, pure and safe honey.

Countries with strong Country of Origin (COO) reputation such as New Zealand, Australia and the USA are top competition for honey in target markets. Manuka honey from New Zealand is a top honey import for Asian countries that use honey for health purposes. Besides the unique product, the perceived high-quality image of products from these countries is a driver of demand.

4.3. Tourist Market

The tourist market is given a separate chapter to highlight its potential not just as a consumer but also as a platform to promote Lao Honey in the target markets. Tourists provide a link to the outside market. 92.47% (3,919,665) of the tourists came from the Asia Pacific. Top tourists in Lao are from the neighboring countries, Thailand, Vietnam and China, which are also the main potential target market for Lao honey. Other main tourists are also from countries that are interesting markets for honey, Korea, Japan and the USA.

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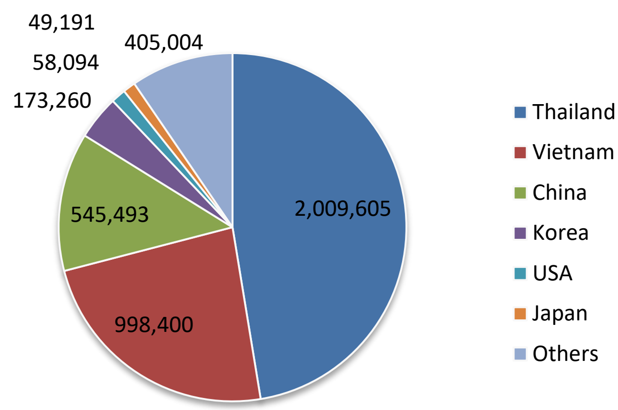
[73] The Food and Beverage Market Entry Handbook: Japan: a Practical Guide to the Market in Vietnam for European Agri-food Products 2017
[74] Honey won significantly at Vietnam Foodexpo 2016
[75] Building brand name for Son Dong forest honey 24/07/2017 20:20 GMT+7 Bac Giang Online
[76] Beekeeping to get rich and respond to climate change in Mekong Delta Thanh Tung, VOV's Mekong Delta Bureau - Thursday, September 08, 2016 | 14:41:27
[77] APICULTURE AND POLLINATOR INDUSTRY SURVEY IN THAILAND Chama Phankaew Int. J. Agr. Ext. 04 (02) 2016. 95-103 International Journal of Agricultural Extension
[78] http://www.strategyr.com/pressMCP-6010.asp

Tourism can drive exports of the country.[79,80] The face to face connection offered by travel deepen business relationships which can open up doors to new markets. Tourism is one of the priority sectors of Lao PDR that Lao Honey can ride on. The product can be a souvenir or as a local product that is combined with other tourism services such as food, drinks, spa treatments, eco-tours (bee farm tours), and the like.[81] Tourism can be a good opportunity to introduce the taste, features and quality of Lao forest honey among the tourists who value this kind of honey.

If promoted well, tourism sector can absorb at least 21 to 32 Tons of honey per year domestically. 4.2 Million tourists visited Lao PDR in 2016, down by 10% from previous year. If at least 5% of these tourists purchase at least 1 jar of 100g-150g of honey, this amounts to 21 – 32 Tons per year. Retailed at 15,000 to 20,000 Kip per jar totals about 3.2 Billion Kip (383,000 USD) to local economies.

Figure 3 Tourists in Lao PDR in 2016



78% are first time travelers. 77% of tourists visited Vientiane Capital. 73.6% of tourists visited Luang Prabang. 7.1% of tourists visited Xieng Khouang Province

Sources of information of tourists are the following:
Internet 64%
Friends 28%
Guide book 22%,
Book or magazine 16%
Travel agent 16%

Main Interests of tourists are:
67% - nature
70% - culture
36.4% - food

79 https://www2.deloitte.com/ca/en/pages/press-releases/articles/canada-unexpected-export-driver-tourism.html
80 Interview with retailer in Vientiane November 2017
81 Andaya, E. 2014, Honey Standards and Certification Study, NTFP-EP Asia

Source: Statistical Report on Tourism in Laos 2016

4.3.2. Behavior of Key Tourists

4.3.2.1. Chinese Tourists

Chinese tourists tend to have high purchasing power in the world of tourism and have a strong need to purchase souvenirs. They spend most of their money shopping, which is an important part of their travel to other countries. Purpose of buying souvenirs is to gift them to family members, friends, or co-workers.[82] Three factors are important in the purchasing decision: they have to be authentic and quintessential products of the place, value for money, and convenient to purchase. Chinese tourists look for quality in products, and increasingly are able to pay accordingly.

Specialty foods are popular gift souvenirs among Chinese tourists, and food has abundant meaning in Chinese gift-giving culture.[83] The symbolic aspects of the food are the most important attributes to be considered.[84] Information, communication and promotions have an impact on the behavioral intention and purchasing decision of Chinese tourists. It is therefore important that sales persons have good knowledge of the product and are able to communicate it to the tourists. They should also have good customer service. [85]

Promotional materials and information given in advance can also be helpful to help Chinese tourists make purchase decisions. Chinese tourists are more and more informed through the use of the internet. Convenience is also a consideration. For example, will it be easy to carry around, or can the products be delivered to the hotel, etc. Or can the products be purchased online or at the airport.[86]

4.3.2.2. Thai Tourists

Thai tourists spend 24.5% of their traveling budget on souvenirs.[87] The majority of Thai tourists' purchase is souvenirs, local handicraft, clothing, cotton, and any others. The main reasons of buying are for gifts and for own use. Factors that influence purchase are: low price (56.1%), good quality (47.8%) and others (42.9%).[88]

Information is important for Thai tourists to decide on what to purchase. Price is a factor for Thai tourists but not the main one. The marketing mix, product, price, place and promotion play an important part in attracting Thai tourists to purchase souvenirs.

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[82] http://www.journal.su.ac.th/index.php/suij/article/viewFile/690/705 Marketing Mix Approaches in Behavioural Intention to Souvenir-purchase: A Comparative Study between Thai and Chinese Tourists Nimit Soonsan and Pattarin Makka

[83] http://www.tandfonline.com/doi/abs/10.1080/14766825.2016.1170841?src=recsys&journalCode=rtcc20

[84] Food souvenirs as gifts: tourist perspectives and their motivational basis in Chinese culture Lin LinPages 439-454 | Received 05 Nov 2015, Accepted 17 Mar 2016, Published online: 19 Apr 2016 Journal of Tourism and Cultural Change Volume 15, 2017 - Issue 5

[85] http://www.tandfonline.com/doi/abs/10.1080/14766825.2016.1170841?src=recsys&journalCode=rtcc20

[86] Chinese Tourists and Souvenir Shopping in New Zealand Chris Ryan, Sun Minghui and Zhang Xiaoyu The China-New Zealand Tourism Research Centre Department of Tourism and Hospitality Management The University of Waikato Management School June 2013

[87] http://www.journal.su.ac.th/index.php/suij/article/viewFile/690/705 Marketing Mix Approaches in Behavioural Intention to Souvenir-purchase: A Comparative Study between Thai and Chinese Tourists Nimit Soonsan and Pattarin Makka

[88] THAI TOURIST BEHAVIOR IN NIGHT MARKET IN LUANG PRABANG LAO DR. NITIPON PUTACHOTE *Asia Pacific Journal of Marketing & Management Review* Vol.2 (5), May (2013)

4.3.2.4. Koreans and Japanese Tourists

Koreans and Japanese attach importance to the activity of choosing souvenirs. Souvenirs are purchased mainly for gift giving as part of maintaining social relations. Japanese and Koreans look for souvenirs that represent the country or region visited. Japanese often buy Food as souvenirs for friends. Japanese also look for something that is not bulky. The value of the product is also important as it reflects the value that the giver gives to the recipient.[89] In a study of South Korean tourists in Singapore, while shopping was not their top activities, when they did shop, they spent most on 'Fashion and Accessories', followed by 'Food and Confectionery', 'Wellness and Beauty' and 'Gifts and Souvenirs.[90]

Japanese visitors like to buy gifts and souvenirs. They look for attractive or interesting packaging that is characteristic of the destination in the souvenirs and gifts. For food items, which are a popular choice, intended for gifting or for "omiyage," they prefer individually wrapped food items. They also prefer small items for souvenirs or gifts. Japanese tourists search for good value, which doesn't mean lower priced items but premium for quality and good service.[91]

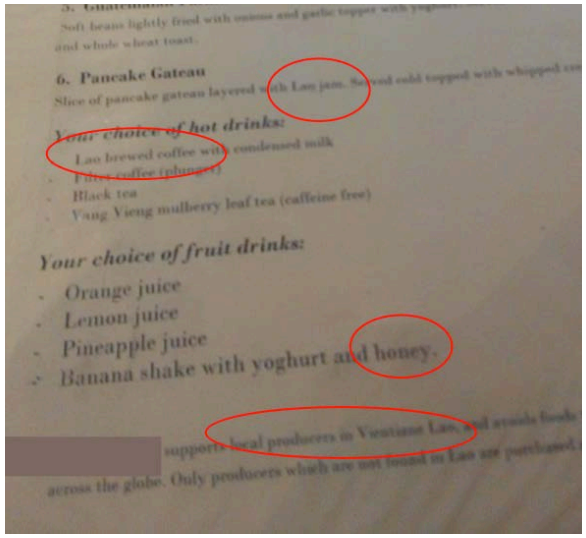
4.3.3. Food as a Souvenir

An important element of a trip of a tourist is bringing home local food and beverages.[92] Tourists increasingly see gastronomy as a means to learn about the culture of the place.[93] Food and beverage souvenirs are perceived to represent meanings linked to the touristic destination, bearing attributes capable of generating sensations and extending the experience of the trip. Food souvenirs evoke a taste memory and a sharing of different experiences. [94] The following factors however are important in souvenirs: identification; packaging; identity; and transportability. The souvenir should be tied to the cultural identity of the place.[95]

Photo: 3 Traditional medicine made with honey sold in a souvenir shop in Plain of Jars, XKH

[89] Japanese Tourists: Socio-economic, Marketing and Psychological Analysis, K. S. Chon, Tsutomu Inagaki Psychology Press, 2000
[90] www.stb.gov.sg
[91] https://www.stb.gov.sg/statistics-and-market-insights/marketinsights/stb_market_insights_-_issue_1__japan_.pdf
[92] Buczkowska, K. Poznan, A. (2014) Local Food and Beverage Products as Important Tourist Souvenir. Turystyka Kulturowa Nr 1/2014, Poland.
[93] I Oenogastronimic Tourism Conference 2012
[94] http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1982-61252017000200347
[95] http://viatourismreview.com/2014/12/varia2014-art5/

Photo: 4 First contact with local products are breakfast in hotels or guesthouses and resorts



4.4. Niche Honey Markets

Demand for honey extends beyond food to other non-food uses such as cosmetics, gift, traditional Chinese medicine, which increases its potential markets and values. This opens up opportunities for value-added products from honey and offer alternative markets.

Honey is used cosmetics, such as facial washes, skin moisturizers, hair conditioners and in treatment of pimples.[96] According to Mintel, a global research company, 76% of consumers are keen to use skin-care products with honey. Other food-based ingredients that are of interest to consumers are vitamin c, fruit-based ingredients, oatmeal and probiotics.[97] The interest for honey in cosmetics is driven by the demand for natural ingredients and the trend of food-based ingredients in the cosmetics industry. The perception is that "If it is good to eat, then it must be good for the skin too." A small Japanese company sells their own blend of honey for skin care for 50 USD for a jar of 250g. Another examples is a partnership between Nestle and L'Oreal, Inneov, sold under the byline of "Beauty from the inside" features cocoa-based skin treatments, promoting its antioxidants properties that are said to help delay signs of aging, activate fat-burn and have psychological stimulating effects.[98] Natural products, Asian skincare inspired products are also drawing interest in the market.[99]

Honey is considered as a functional food and a "superfood." Food or food components that provide health and wellness benefits beyond basic nutrition, such as minimizing risk of certain diseases and other health conditions, are referred to as functional food. The Functional foods sector is said to be the fastest growing segment in Asia's organic food market, with China and India as key markets due to their population size.[100] Most important target market for functional foods are women and elders.[101] Honey is

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[96] Medicinal and cosmetic uses of Bee's Honey – A review E. R. H. S. S. Ediriweera and N. Y. S. Premarathna
[97] https://www.cosmeticsdesign.com/Article/2016/06/22/Natural-skin-care-and-anti-aging-beauty-products-still-gaining-popularity
[98] Andaya, E. 2014 Honey Standards and Certification Study NTFP-EP
[99] http://academic.mintel.com/display/747775/#
[100] https://www.futuremarketinsights.com/blogs/details/functional-foods-market

a prebiotic and a source of probiatics,[102] which supports maintenance of digestive health and supports calcium absorption. [103] According to an interview of a honey packer and retailer, there was an inquiry on honey with garlic that may have potential for the Korean market. As a functional food, this is consumed on a daily basis, which increases frequency of use. It may also be a product interesting to other Asian markets.

Photo: 5 Forest Honey and Ginseng Honey are examples of niche honey products

Forest Honey as a honey type. A Thai company has labeled one of its honeys as “Forest Honey.” It is sold at double the price of other honey types in Lao. With demand for more natural, honey free from antibiotics and chemicals, the forest honey offers a more natural and healthier options to honey consumers. Forest honey is also the honey type that 42.7% of Thai consumers are aware of.[104] In Europe, forest honey are more expensive than acacia and flower honey.[105]

Food gifting is a niche opportunity for honey. Gifting is the most important purchase motivator for Asians.[106] Gifting is important both for social and for business life. Pleasing gift packaging is an important factor when purchasing food for gifting.[107]

Traditional Chinese Medicine (TCM) is a growing sector where natural, forest honey may be important. TCM is practiced in 45% of all countries in the world, with global trade reaching 40 billion USD a year, and increasing rate of 10% per year. China exported 25% of global demand. In TCM, Honey is known as Feng Mi and has the ability to nourish yin energy and strengthen the spleen. Apart from its widely recognized nutritional value, honey is also the Chinese people's favorite as a "neutral" food with

[101] Bee Products as Functional Food By Banu Yucel, Erkan Topal and Mustafa Kosoglu "Superfood and Functional Food - An Overview of Their Processing and Utilization", book edited by Viduranga Waisundara and Naofumi Shiomi, ISBN 978-953-51-2920-2, Print ISBN 978-953-51-2919-6, Published: March 1, 2017
[102] Honey as a Functional Food By Rosa Helena Luchese, Edlene Ribeiro Prudêncio and André Fioravante Guerra Agricultural and Biological Sciences » "Honey Analysis", book edited by Vagner de Alencar Arnaut de Toledo, ISBN 978-953-51-2880-9, Print ISBN 978-953-51-2879-3, Published: March 15, 2017
[103] https://www.foodinsight.org/Content/3842/Final%20Functional%20Foods%20Backgrounder.pdf
[104] Consumer Behavior and Acceptance Towards Different Unifloral Honey Aussama Soontrunnarudrungsri 19th Food Innovation Asia Conference 2017 (FIAC 2017)
[105] International Honey Market Assessment 2013
[106] https://www.trbusiness.com/regional-news/asia-pacific/lindt-sets-its-sights-on-asian-gifting-market/119401
[107] https://www.foodnavigator-usa.com/Article/2016/08/15/Food-gifting-will-approach-18-billion-in-2016-says-Packaged-Facts

medicinal properties.[108] Honey is combined with herb tonics or extracts to enhance their effects. China exports 40,000 tons of medicines annually, excluding raw herbs (200,000 tons).

5. Overview of Honey Certification[109]

Certification is a marketing tool. In choosing whether to adopt a certification or not, it is important to know if there is a need for it based on the requirements of the target market. Certification also allows products to enter market niches, where there are expected higher returns for the producers. They also allow some small-scale producers to enter country markets whose mainstream markets are highly competitive. Organic and Fair trade certifications are the most popular examples of this kind of certification.

5.1. Organic Certification

Organic Certification guarantees that the origin, production, processing, quality of honey adhere to organic standards. It covers the origin of the bees, the location of the hives, the feeding, husbandry management, materials used, transport and the process of control, ensuring traceability and documentations. Many countries have set their own honey organic standards. Some well-established 3rd party certification companies have their own standards that are accepted by some of the biggest honey markets.

EcoCert is a French company that provides services in over 80 countries worldwide through international, regional and local inspectors. It is widely recognized and accepted in the major markets of honey (i.e. Europe, Japan, USA). It provides certification for organic and fairtrade products according to the EU and the USA standards. It also certifies products according to the JAS standards. EcoCert develops standards and conducts inspections.

The EcoCert Organic Standard includes requirements for wild collection and beekeeping.

A copy can be accessed here:
http://www.ecocert.com/sites/default/files/u3/Ecocert-Organic-Standard.pdf

Organic labeling specifications for different countries can be found here:

https://www.ccof.org/sites/default/files/media_files/documents/International_Labeling_Guide_11_17.pdf

Certification of wild honey and honey from kept bees are different and should be clarified with certifying body.

5.1.2. Organic Certification and Target Market : China and Thailand

Country – of – Origin (COO) is important to consumers of organic food in both Thailand and China. Country of origin is considered when evaluating the quality and safety of a product. It influences the trust they give to the organic certification, that it is correct and meets the stated standard. Preference, therefore are given to organic products coming from mature markets, like Australia and Europe, where organic production is considered to be better established and controls are in place, than in Thailand and

[108] https://www.naturalnews.com/031574_honey_healing.html
[109] This does not refer to food quality certification such as GMP, ISO, HACCP.

China. In general, there is more trust in products labeled with international certifications, such as USDA. Thai participants preferred organic products from Japan, Australia and New Zealand due to food safety and quality control. Chinese consumers prefer organic products from Australia, New Zealand and Europe. However, price, brands and familiarity with the product can also influence purchase decisions.[110]

Promoting organic products should focus on the message of food safety and reliable and high quality control of certification.[111] General reason for consumption of organic products is the increasing awareness and concern for health, food safety and environmental problems in Thailand. In China, food safety and quality control are the main reasons for choosing organic products. Organic consumers purchase often purchase at natural/health food stores. Highly educated, high-income level, middle-aged female are more likely to be organic consumers.

There is awareness on organic products but less knowledge about it in Thailand. The Organic Thailand label under the Thai Royal Project is the most seen and reliable among various organic labels. Thai organic consumers purchase organic products mainly at the supermarket and green shop (55.4%), one to two times per month, and with a total expenditure of about 200 to 400 baht each time. For Thai consumers, international organic products certification standard seals are reliable. Main products bought are rice, vegetables and fruits. Purchase of processed organic products was less frequent. Consumers in the Bangkok metropolis and vicinity buy organic products from three marketing channels, (1) modern trade outlets (supermarket), (2) green shops, or (3) directly from the producer/market.[112]

Two main motivations for purchasing organic foods in Thailand are (1) health and safety benefits and (2) the perceived higher nutritional value of organic foods. Factors that are considered when purchasing organic product selection are (1) price (29.5%), (2) convenience (22.4%), and (3) a reliable certification system (21.3%). 44.3% of respondents find that organic price is appropriate, and 37% of respondents prefer to buy organic products despite their higher price. In a survey in Guangzhou (South China Agricultural University, it was found that 70 percent of its residents would be willing to pay double for safer foods.[113] In some regions of China, like Kunming, terms like “green food,” “ecological food,” “no-harm food” are more commonly used and acceptable than the term ”organic.”

Food Safety and Gift giving are the main reasons for purchasing organic food in China. Corporations purchase organic products to give as gifts to show their appreciation to their customer. Middle to high income consumers purchase organic food for household consumption or for gift giving. Gift giving of organic food, especially during traditional holidays such as the Chinese New Year has become a practice. Another reason for purchasing organic food is for safety and health, specifically for children. Following a series of food scandals in China, consumers pay more attention to food safety. Consumers believe that organic food is safer than conventional food. Parents and grandparents are known to purchase organic food for the children, while the rest of the family may still eat conventional food. Purchasers of organic food are educated females, expatriates and Chinese who have lived abroad. Prices are generally higher than

stract_IFMRS_2017_Final.pdf Consumer evaluation of imported organic food products in emerging economies in Asia

111 ibid

112 Consumer Behavior and Knowledge on Organic Products in Thailand Warunpun Kongsom, Chaiwat Kongsom World Academy of Science, Engineering and Technology International Journal of Economics and Management Engineering Vol:10, No:8, 2016

113 Organics Report: China – People’s Republic of Joshua E. Lagos, Ryan R. S GAIN Report Number: 10/26/2010 10046

conventional food. Non-food organic items are priced 6x higher than conventional products. Organic products sold in the Chinese market need to carry the Chinese Organic Logos or Conversion to Organic.[114]

5.2. Fair Trade

Fair Trade certification guarantees the ethical aspect of its production and trade. The certification covers the type of organization and its members, sourcing, contracts, labor conditions, environmental impacts and management of production processes.

Fair Trade standards require that honey to be sourced from small-scale producers and organized groups. Standards require that profits must be equally distributed among the producers and each member has a voice and a vote in the decision making process of the organization. It requires that the fairtrade price and premium are paid directly to producer cooperatives, no more than 30 days after documents and payments are received. It also covers environmental standards that restrict the use of agrochemicals, ban genetically modified plants and encourage sustainability. Cooperatives can also request up to 60% of the purchase price as a pre-harvest line of credit. It also specifies no forced or child labor.

Figure 4 Fair Trade Minimum Price as of January 2018

Status: 29. Jan 2018							
Product (specific product standard)	Product variety	Price applies to	Currency / Quantity x Unit	Price level / *special price conditions	Fairtrade minimum price	Fairtrade premium	Valid from
Honey (Honey)	Organic, A Quality	worldwide (SPO)	USD / 1 kg	FOB	2.95	0.20	01. Jan 2011
Honey (Honey)	Organic, B Quality	worldwide (SPO)	USD / 1 kg	FOB	2.66	0.20	01. Jan 2011
Honey (Honey)	Conventional, A Quality	worldwide (SPO)	USD / 1 kg	FOB	2.55	0.20	01. Jan 2011
Honey (Honey)	Conventional, B Quality	worldwide (SPO)	USD / 1 kg	FOB	2.30	0.20	01. Jan 2011

Fair Trade Standards need to be complied with by fair trade companies regardless of the products they trade. A copy of these standards are found here:

http://www.fairtrade.net/fileadmin/user_upload/content/2009/standards/documents/2014-07-16_SPO_EN.pdf

The Fair Trade International reviewed the standards in 2015. The result of the review can be found here:

https://www.fairtrade.net/fileadmin/user_upload/content/2009/standards/documents/2015-12-16_Honey_Standard_consultation_results_synopsis.pdf

5.2.1. Fair Trade and Target Markets

114 ibid.

Fair trade is not a concern of consumers in bordering countries. Also, the minimum FOB (2.95 USD / Kg) and premium prices (0.20 USD/Kg) set by the fair trade organizations are below the farm gate prices in Lao PDR. Prices in conventional honey markets are also in some cases higher than fair trade prices. There may also be competition from other fair trade honey suppliers from all over the world whose prices are more competitive than that of Lao honey.

Germany and UK are important markets for Fair trade honey. Germany imported 1,244 tons of honey in 2016, down from 1,388 tons in 2015. [115] UK imported 262 Tons in 2013.[116]

Supply of fairtrade honey may be more than current demand. 10,700 tons of fair trade honey was reported to be the production capacity from 2013 – 2014[117] and 7,644 Tons in 2015. Reported sales volume or honey by producer organization was at 3,000 Tons 2014 and 3,254 Tons in 2015[118]. Sales income is reported at 7.6 Million Euros in 2014. [119]

Fair trade certification does allow access into a niche market, however there is no facilitation support to enter the market. This will be up to the enterprise itself, as well as to maintain and cover all the costs of maintaining the certification.[120] Within the fair trade market, there is also competition among the suppliers. A study found that despite some benefits from collective action and market access, the Fair Trade and Fair Trade Organic chains did not provide substantial premiums to cover small beekeepers' compliance, transaction and marketing costs.[121]

Table 6 Overview of Certification

Certification	Description	Costs	Market	Constraints
Organic	The organic certification focuses on the production and processing of honey. Countries have specific standards or have specific preferences for certification labels. Organic certification is different for wild honey and honey from kept bees	International Certifier: 3000 – 5000 USD/ year[122] Lao PDR: 5 Million Kip for 1st year 3 Million Kip / year for succeeding years for a group of farmers with 200+ members[123] Costs of setting up and monitoring the process should	There is a market for organic food in the domestic and in the target countries. Highly preferred in markets where there have been problems of food safety and food scandals. (i.e. China) There is preference for certification from mature markets. COO is important factor even in organic markets	Requires a lot of time from farmers who see beekeeping as a supplementary source of income and appreciates that it is a low-input / low-maintenance activity. Not sure if sustainable without external financial support from organizations

[115] https://www.statista.com/statistics/517018/fair-trade-honey-sales-germany/
[116] CBI Product Fact Sheet: Fairtrade Honey in the UK November 2015
[117] Fairtrade International, Scope and Benefits of Fairtrade Seventh Edition 2015
[118] https://monitoringreport2016.fairtrade.net/en/fairtrade-production-sales/
[119] Fairtrade International, Scope and Benefits of Fairtrade Seventh Edition 2015
[120] Interview Fairtrade Company in Vientiane November 2017
[121] Nervi, A. The Fair Trade and Fair Trade Organic Chains for Small Honey RPoduers in the Tucuman and Santiago del Estero Provinces of Northwest Argentina, Lincoln University 2016
[122] Andaya 2014
[123] Example of Organic Association in XKH / Interview of Association President in November 2017

		also be included		
Fair Trade	• Certifies the compliance to fair social, labor and environmental practices	FLOCERT: 4,500 Euros (1st year) – 3,100 Euros for 137 members with 3 processing sites, 3 employees per site, 137 subcontractors.[124]	Main markets are EU countries Not a concern of neighboring countries of Lao PDR May have markets in Japan and Korea	Demand may not be enough to cover the costs and certification and compliance Supply is more than demand No market access facilitation support. Within the fair trade market niche, there is also competition among the different fairtrade honey suppliers form all over the world May limit target markets for suppliers

6. Findings & Conclusion

- **Current domestic consumption is small but there is opportunity to expand the market through increased information on honey as health food and improved accessibility and promotion of Lao honey.**

Lao consumers are increasingly consuming health food, which can be the platform to promote the increased use of honey. Lao and Asian consumers recognize the health property of honey as they use it for medicinal purposes. Honey is considered as a functional and superfood all over the world. However, awareness of Lao consumers on health benefits of honey consumption, beyond medicinal use, is low. If more information on the health benefit of honey is provided, quality of Lao honey is promoted, and accessibility of the Lao honey is improved, this could contribute to increasing honey consumption and frequency of use of honey among Lao consumers.

Improving distribution of Lao honey to retailers and institutional users may also increase demand for Lao Honey. Many of the retailers and institutional users interviewed stated interest in Lao honey however they were not aware where they can find a stable and high quality supply of Lao honey.

- **The potential production of Forest honey is beyond the potential domestic demand, therefore it needs to explore tapping new channels, exporting and diversifying its honey and bee products to expand the market for Lao honey.**

[124] https://www.flocert.net/solutions/fairtrade-resources/cost-calculator/

Lao PDR is in the middle of the fastest growing market for honey, a market that values the health benefits of honey and should focus on getting a market share in this region. Asia Pacific is considered as the largest and fastest growing market for honey, taking up 41.2% of global consumption.[125] This market already has a traditional knowledge of the medicinal benefit of honey, which is enhanced by the increasing awareness on health beneficial properties of honey, increasing honey-based diet, interest in preventive healthcare, and demand for natural, high quality honey. This is an opportunity that Lao honey producers and entrepreneurs can capitalize on.

The tourist market and gift giving are untapped channels. This should be explored not just as a market for souvenirs but also a platform to establish the Lao honey brand in the international market. Honey can be a product offered to tourists, just like Lao coffee. In a menu in a hotel, jams and coffee are promoted as Lao but Lao honey does not yet enjoy this kind of promotion although some hotels already offer it for breakfast. There should be opportunities for tourists to taste honey or have an experience related to honey. Breakfast in the hotel or sweetener in restaurants can be some of the opportunities. There are some initiatives by some souvenir shops to offer Lao honey but they need support to improve their products and build their capacity in marketing to Asian tourists. Gift giving is also a tradition that is taken seriously by Asians and specialty, health, and organic foods are becoming important choices for gifts. This sector should also be considered and product positioning and packaging should be improved.

Niche products like infused honey, cosmetic use honey and other value added products should be explored. There was an inquiry on garlic infused honey from a Korean company. This product has potential among Koreans and potentially other Asian countries as a functional or superfood. Xiengkhouang is also known for its special garlic. Combining the two into one finished product may be a potentially interesting new product for the market.

Beeswax and other bee products are missed opportunities. Beeswax is not just a by-product of beekeeping but an equally important and high value product. Natural and organic beeswax is highly in demand in the cosmetics and food industries. It is also an important product in Buddhism practicing countries, where natural beeswax is given more value.

- **As a new entrant to the honey market, Lao PDR need to differentiate itself from other honey suppliers and compete on value instead of quantity and price. It should capitalize on the current appreciation for Lao Forest honey in both domestic and cross-border markets and position itself as a source of safe, high quality and pure forest honey in the region.**

Lao PDR is surrounded by some of the top honey producing and exporting countries in the world, China, Viet Nam and Thailand. Honeys from these countries are also some of the cheapest available in the world. With higher costs of transportation beyond these bordering countries, it may be difficult for Lao PDR to compete with these countries in the same market segment of bulk honey market in the international and regional markets.

Lao PDR produces Forest Honey that is most appreciated and valued in the domestic and neighboring countries. There is appreciation and preference for multi-floral, wild flower or forest honey and honeys produced by indigenous bees in the country and neighboring countries, where there is also the tradition of using honey for health and medicinal purpose**.** Knowing that honey production in their countries have become industrialized, consumers are more conscious of the quality of honey and are always looking for more natural and authentic honey. Due to food scandals these countries, including fake honey and

[125] http://www.strategyr.com/MarketResearch/Honey_Market_Trends.asp

honey with antibiotic residues, there is a growing demand for safe food and safe and authentic honey. These concerns and combined with the growing affluence and disposable income of consumers in the region, there is high willingness to pay for premium quality and safe products.

- **Lao PDR has the conditions to supply pure, authentic, forest honey and has the potential to create its own niche in the honey market. However value chain actors, from producer groups to retailers, need to improve its capacity in production of forest honey, quality control and in marketing.**

Lao PDR's products already have a reputation of being natural and healthy among neighboring countries, especially honey. This should be protected and built on by the Lao honey sector. However, there is no strategy and control over the production, processing and marketing of Lao honey. Furthermore, farmers only see beekeeping as a low-maintenance, supplementary source of income. But production is a key part of marketing. If the positioning is safe, pure forest honey, then production and control of products should ensure that honey that is produced is safe, pure forest honey. This means location of the bee houses will be chosen carefully and traceability of the honey is guaranteed and processing and distribution ensure that high quality is maintained.

Besides community producers, support should also be extended to other value chain actors who link the producers to the market. Apart from the country of origin, price, brands and familiarity with the product can also influence purchase decisions. This means that there has to be a suitable marketing mix. In order to do this, Lao honey producers and companies need to strengthen their marketing capacity in order to compete in the market, both domestically and internationally, starting from the correct, high quality product to communication and post sales services.

- **Lao Honey sector actors need to work together to establish and strengthen Lao honey image and reputation through quality and traceability systems, hygiene and safety certifications trusted by target markets, improved packaging, branding and communication.**

Lack of standards and consumer information on Lao honey are two of the factors that hinder the growth of the sector. There is appreciation for Lao honey among domestic users however trust in and information about Lao honey is lacking. There is a market segment that believes that the honey packed in recycled soda bottles are the real honey compared to the ones found in nicer jars in the supermarket. On the other hand, there are consumers who are looking for authentic and pure honey, but are not sure of the sanitation and safety of the honeys found in the recycled packaging. Wholesalers and retailers also have their own bases of quality and purity. All these different beliefs on honey quality and purity raise misconceptions and affect the perception of health benefits of honey in general and quality of Lao honey.

Health, food safety and authenticity of honey are the main concerns of consumers in the target markets. This should be the focus of marketing and communication of Lao honey. Therefore, before organic or fair trade certification, local producers and enterprises should be able to secure quality and food safety standards certification such as Good Hygienic Practice or Good manufacturing practice (GMP) and HACCP (Hazard Analysis and Critical Control Point) or ISO certifications that mature markets look for in products to be imported in their countries. Traceability systems should also be developed and strengthened to guarantee the source of the Lao forest honey. There also has to be strong coordination among all the actors in the value chain to produce high quality forest honey.

- **Organic certification will be an additional guarantee and can offer an opportunity to enter niche markets in the region however certification is not enough to succeed in the honey market. It has to be combined with strong brand and Country of Origin (COO) reputation and marketing strategy to succeed.**

Organic certification maybe be useful to enter a market but it is not enough to succeed in the honey market. While these certifications are supposed to differentiate products from mainstream products, there are also other producer groups from all over the world that are adopting the same strategy. Affordable fair trade and organic honey options are also provided by African and South American countries. Mostly working with A. mellifera bees, these suppliers are able to provide bigger volumes and unifloral honeys. With higher prices and smaller volume, it will be difficult to compete even in the organic niche market.

Identity, specific characteristics will be the main selling point of honey and should be the initial priority. It is the unique value that will provide higher values and secure market share. A well-positioned and managed brand that has a differentiated quality or feature can allow entry to the high-end niche that can guarantee premium prices. So, to add value, Lao honey needs a differentiating factor that consumers value and are willing to pay for, besides organic or fair trade that many other producers from developing and developed countries can provide.

Country of Origin (COO) is an important factor when purchasing honey and organic products in the target markets. For a country like Lao PDR to compete with other countries, with higher costs of exportation, smaller production capacity, it needs to set a strategy that will build up the reputation. There is already an established perception among neighboring countries that products from Lao PDR are natural and use less chemicals. What is important now is to protect and strengthen that image and perception. It is also important to strengthen good image of the food processing industry, which is still seen as weak in the country. It is not clear yet if there is any national strategy and action to protect and promote the image of "Natural" of Lao Products. The sector needs to work with the government to strengthen its COO image for honey products and organic products.

Promoting organic products should also focus on the message of food safety and reliable and high quality control of certification.[126] In order to do this, Lao honey sector goes back to prioritizing its quality control from honey source to processing to storage. It will be important for the actors to understand the unique quality of honey and set protocols and practices that maintain the highest quality possible of honey from Lao. Should actors choose to invest in certification, the certification should be well recognized and trusted in the target markets.

Table No. SWOT

STRENGTHS	OPPORTUNITIES
• Honey production is mainly from from forest and native bees (*Apis cerana)* • Available natural resource for forest honey production	• No leading brands yet in the domestic market • Interest of retailers, traditional medicine companies and some hotels in Lao honey • Traditional use of honey for health and medicine in neighboring countries • Lao honey is perceived as natural and forest honey in neighboring countries

[126] ibid

	• Demand for safe, natural high quality honey in bordering countries • Increasing consumption and demand for health products in bordering countries • Paek District policy as organic District • ODOP • Markets for other bee by products like beeswax, pollen • Untapped channels to promote Lao honey like Tourism and Gifting Sector • NGO support
WEAKNESS	**THREATS**
• Fragmented sector, lack o coordination and cooperation among value chain actors • Lack of knowledge of the intrinsic qualities of Lao honey • Lack of marketing capacity of value chain actors • Weak quality control of production and processing • Lack of product quality certification • Lack of strategy to tap untapped channels like tourism / gifting sector	• Lack of awareness about Lao honey in the domestic market • Thai honey is easily more accessible and affordable than Lao honey. • Absence of honey standards that result in different standards of buyers which can propagate misinformation among consumers • Use of pesticides and chemicals in nearby farms • Degradation of forests due use conversion • Lack of national strategy to strengthen the Country of Origin (COO) reputation and image of Lao PDR

7. Recommendations and Next Steps for TABI

The honey sector, though small offers opportunities for rural livelihood development. It complements forest and agricultural priorities. Forest honey production promotes the protection of forests and reforestation as they supply the forage for the bees. In agriculture, beekeeping of native bees also contribute to the increase of yields through pollination of key crops such as coffee, spices, fruits and vegetables. The Lao honey sector has the potential to contribute a minimum of 5 Million USD at the village level.

The sector is still in the very early stage of development. On one hand, the sector is still fragmented and lacks coordination and cooperation among the few actors, and there is no strategy to guide its development. On the other hand, it provides an opportunity to start and develop a strategy with sustainability and appropriate markets already in mind.

Based on the findings, recommendations are proposed to TABI for the next two years, as follows:

	Overall Recommendation	**6 Months**	**Year 1**	**Year 2**
	Focus	**Internal Strengthening** (In	**Network & Market Build Up**	**Preparation for Next Phase and**

<table>
<tr><td rowspan="2">Findings</td><td></td><td>time for next harvest season)</td><td></td><td>Expansion</td></tr>
<tr><td>Target Outputs</td><td>- XKH Forest Honey Standards
- Food & Drug GMP Certification for product and processing center
- Village Group Strengthening</td><td>- XKH Honey as ODOP
- XKH Honey Brand
- XKH Honey Association and Network
- Support Commitment from / Partnership with Provincial Government</td><td>- Xieng Khouang Honey Road Map
- Expanded Market
- Value Added Honey Products
- Proposal for next project phase</td></tr>
<tr><td rowspan="8">Consumption and Perception
• Lao consumers, Asian expat and key neighboring country consumers perceive Lao honey as honey from the forest, healthy, natural, and organic honey.
o However, there is current lack in trust in honey available in the market and lack of information on and access to XKH/Lao honey by consumers.
o There is misconception on “real/pure” honey / lack of national quality standards.
• Traditional consumption of honey among Lao/Asian Expats is for health / medicinal purpose. Thus, it is taken only occasionally, leading to low consumption rate.
o However, there is growing interest among Lao People on health and</td><td rowspan="8">Strengthen Lao Honey image through quality and traceability systems, hygiene and safety certification, improved packaging, branding and communication.</td><td colspan="2">XKH Forest Honey Standards and Handling, Storage Protocols (Healthy forest honey standards) Development / Development of Reference guides to be distributed to farmers / traders / packers</td><td></td></tr>
<tr><td></td><td colspan="2">Xieng Khouang Honey Road Map / Honey Sector Development</td></tr>
<tr><td rowspan="2">Planning / Preparation for Increased production of “Pure, Clean, Hygienic Forest Honey”</td><td>Establish Xieng Khouang Network of producers / partner enterprises / Support Services</td><td rowspan="4">Initiate cooperation with Technology-advanced and potential market countries for (1) Honey Processing Center Upgrade / Expansion
(2) technology acquisition (3) new product development (Infused Honey for health. E.g. garlic honey / cardamom honey) (4) Market Links (Korea / Japan / USA) / Increase Production – Vietnam</td></tr>
<tr><td>Prepare and fulfill ODOP requirements</td></tr>
<tr><td>Upgrade/Improve Processing Center to be GMP Certified</td><td rowspan="4">XKH Honey Brand development and promotion</td></tr>
<tr><td>Develop / implement Coding System for Jar/Lot Traceability – Proof of pure, forest honey</td></tr>
<tr><td>Quality-based Price Grading</td><td rowspan="2">Preparation for next project phase focused on honey value chain strengthening (strengthening honey producers and entrepreneurs, support services) Entrepreneurship, and Marketing</td></tr>
<tr><td>GMP & Honey Quality Training for producer groups and key trader partners
- Get hygiene and safety food certification from the Food and Drug</td></tr>
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<td rowspan="5">safety of food products, which can be an opportunity to increase honey consumption.
o Traditional Medicine is a niche market that requires only forest honey.
• Current consumption can absorb the current production of Xieng Khouang Target communities.
o However, Thai honey’s perceived high quality, good packaging and safety certification, easily available, attract honey buyers in Lao.
o Lao imported 13 Tons of honey in 2016</td>
<td rowspan="2"></td>
<td>Department of Ministry of Health.</td>
<td rowspan="2"></td>
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<tr>
<td>XKH honey characterization – Pollen, Physico-Chemical, Sensory Analysis</td>
</tr>
<tr>
<td>Increase consumption of Lao Honey by making it easily available and accessible through distribution.</td>
<td></td>
<td>Increase distribution and market access through partnership with existing marketing networks (XKH Organic Association, Lao Farmers’ Network – Vientiane, Organic Market Network – Vientiane, Identified entrepreneurs)</td>
<td></td>
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<tr>
<td>Promotion of honey as a preventive health food through information dissemination</td>
<td></td>
<td colspan="2">XKH / Lao Honey Information Campaign</td>
</tr>
<tr>
<td>Engage social / green entrepreneurs to promote the development of the XKH / Lao Honey Sector</td>
<td></td>
<td></td>
<td>Future Social Forestry / Lao Forest Honey Entrepreneurs – partner with Vocational schools and Agriculture Universities in Luang Prabang / Vientiane for curriculum development / Planning for Business Incubation in the next phase.</td>
</tr>
<tr>
<td rowspan="3">Export & Tourism
• Tourism is on-site export. Majority of tourists are potential target export market for Lao Honey. Potential</td>
<td rowspan="2">Use Tourism as a promotional platform for XKH / Lao Honey</td>
<td></td>
<td colspan="2">Partnership with XKH Tourism Office for Strategy Development and for XKH Honey Festival</td>
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<td></td>
<td colspan="2">Partnership with Vientiane / Luang Prabang Hotels for Lao Honey Festival</td>
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<tr>
<td>Promote, strengthen image and brand of Lao</td>
<td></td>
<td></td>
<td>Support community enterprise or key entrepreneur</td>
</tr>
</table>

consumption can be 21 Tons. • There is already existing trade of Lao Honey with neighboring countries' (China, Vietnam and Thailand), where there is a demand for forest honey. • Traditional use of honey for health purposes in neighboring countries. • Neighboring countries imported higher value honey: •China: 6,032 T @$12/KG/Vietnam: 585 T @ $4/Kg/Thailand: 1,640 T @ $2.5/KG (179 T @ >$4/Kg) • Growing concern for food safety and health drive honey importation in neighboring countries. • Growing affluence and increased disposable income drive capacity and willingness to pay more for food products perceived as healthier and safer among neighboring countries. • There is one exporter with experience in exporting Lao Honey to USA.	honey as Forest /Natural / Organich Honey in neighboring countries / Trade partner			partners to participate in international trade-shows organized by the Department of Trade and Exports
				Lao Honey Information Campaign targeted to export markets / Development of Packaging / Promotional Materials for Export Market
				Identify cross-border trade partners to distribute branded XKH/ Lao Honey in target countries
				Explore organic certification for Lao Honey targeted for export markets.
				Engage existing exporter to USA to export Value-added Lao Honey products targeted to Asian Immigrants and specialty honey in USA.