



Marketing potential of Lao Forest Honey: Prospects for a “healthy” future



Authors:

Emmanuelle Andaya, Soutsada Chanthasiri, Manivanh Aliyavong

MAIN MESSAGES

- **The perceived health benefits and natural quality of Lao Forest Honey provide a marketing advantage over other competitors in the country and the region, where honey is predominantly used for health.** Strengthen Lao Honey’s image and brand as pure forest honey in the domestic and export markets through (1) a national standard, (2) quality and traceability systems, (3) hygiene and safety certification, (3) improved packaging, branding and (4) communication.
- **Focus on niche markets, competing on quality and value instead of quantity and price.** Instead of the international bulk and traditional markets, the Lao Forest honey sector should focus on creating its own niche and capturing a share of the middle to high-end honey markets in the domestic and neighboring countries, then expand to other high-value importing countries.
- **Increase domestic consumption of Lao honey through accessibility and information dissemination.** Improve distribution systems and increase consumer awareness on the health benefits of honey in general, and the availability and quality of Lao honey to strengthen the domestic market.
- **For a more competitive Lao Forest Honey Sector, upgrade the production and marketing capacity of the value chain actors, invest in research and development and promote innovation.** Combining traditional knowledge with new technology and techniques offers potential to increase productivity and to create unique honey products for health and other niche markets.
- **Link up with entrepreneurs and other sectors.** Make use of the tourism sector as a promotional platform and engage social entrepreneurs to further promote the Lao Honey Sector.
- **A strong Country of Origin (COO) image will benefit the Lao Honey and other Lao natural products.** Laos can develop its image as a country where safe and clean products are produced. This will require cooperation among different ministries and sectors and a national strategy that promotes and protects the image of Lao products.

Introduction

There is a tradition of wild honey collection and management of native bees by communities in Lao PDR. While honey is collected all throughout the country, known main sources include northern provinces, Phongsaly, Oudomxay, Samneua, Xiengkhouang and Luang Namtha and from the south, Champasak Province, Luang Prabang and Vientiane Prefecture and some honey trade in Huapanh and from the South particularly in Champassak where there are Malva nuts but forests (Sengnam and Vandome 2007; Vandome 2006). Many villagers have knowledge and experience in forest bee keeping. They have traditionally raised honeybees in hives made of hollow tree trunks, sealed at the both ends. Honey provides supplementary income to farmers and is used in local medicine

and food. Honey is also an important indicator species for agro-biodiversity health.

Two main honey bee species in Laos are the giant bee *Apis dorsata*, which builds a single comb hung on the branches of trees and *Apis Cerena* that is found in cavities in the wild or kept in traditional hives nearby forests. Both the species, whether found in the wild or kept in boxes by the farmers, gather their food directly from nature, unlike those kept in some large-scale bee farms, where periodical sugar feeding is usually done. The honey from *Apis cerana* is considered by some Asian consumers as better for health and better tasting.

Human and Environmental Health

In Asia, there is a tradition of honey consumption mainly for health. Even in darker color or crystallized form, forest honey is a good source of energy. It is the best form of sugar for people who wanted to lose weight. Forest honey is especially good for the digestive track (Lixandru, 2017).

Where there are wild honey bees, there is often a healthy and diverse agriculture and forest biodiversity. Wild bees and honey are considered to be indicators of environmental health. Bees help to ensure pollination of vegetation, crops and wild plants. Pollination is one of 17 recognized ecosystem services. The production of over 75% of the world's most important crops and 35% of the food produced is dependent upon animal pollination. Pesticides and chemicals are known to have caused mass die-offs in bees in many countries of the world. Given the rise of pesticide use throughout Laos, it will be important to monitor the impacts on bee population.

Study Overview and Methodology

As a step towards a more sustainable support, The Agro-Biodiversity Initiative (TABI) commissioned market study 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. This learning brief is based on the full study carried out in 2017.

The study focuses on the potential market for forest honey, whether from natural hives or boxes placed in the forest by villagers. Research was done mainly in Vientiane and in Xiengkhouang Province, where TABI community partners are located. The study provides an overview of trends, issues and opportunities for marketing Lao Forest Honey. There were a number of limitation to the study since it was the first one undertaken including lack of secondary information, national data on forest honey and lack of technical researchers working on honey.



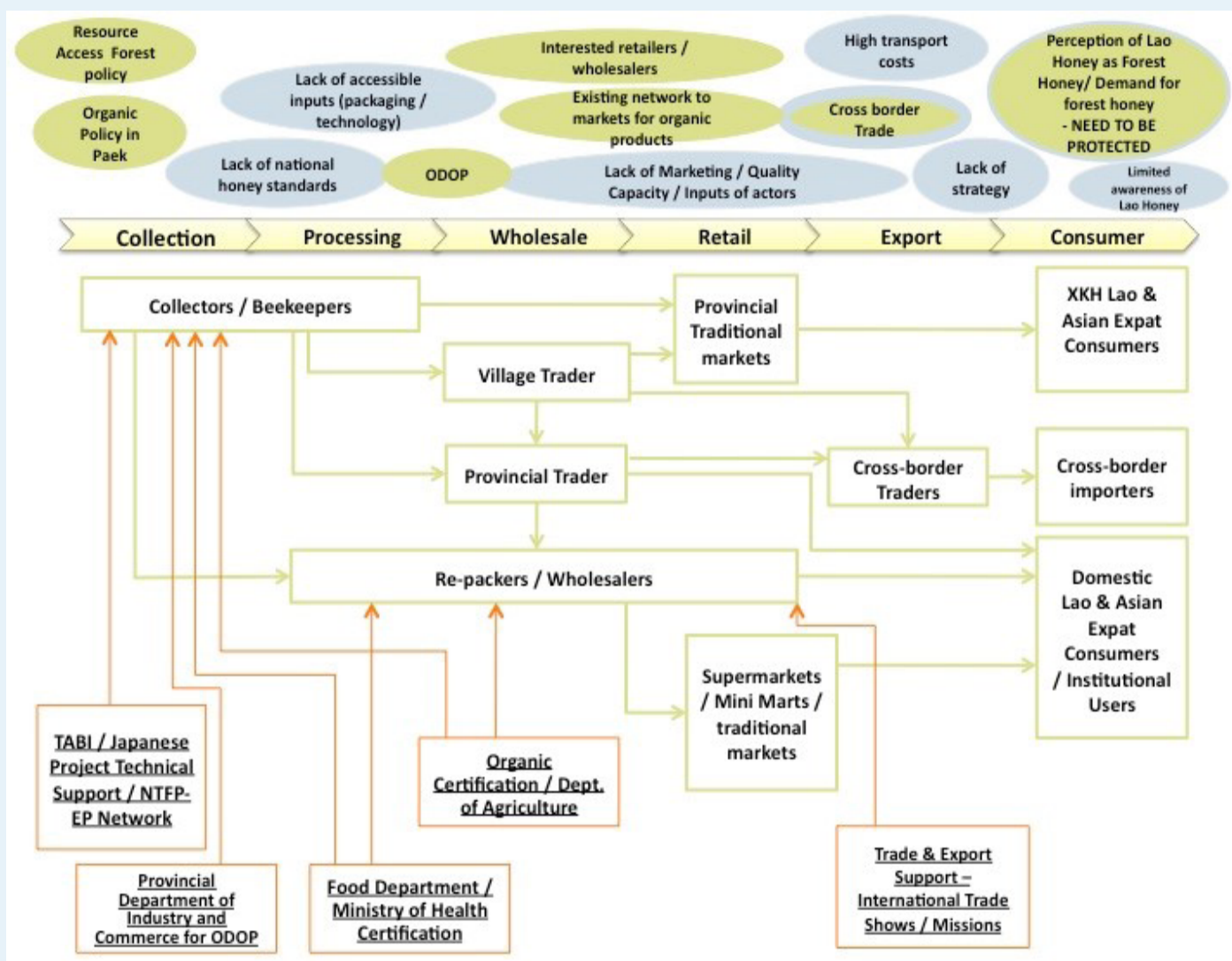


Figure1: Value chain of Forest Honey

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.

Production

It is estimated that at least 1,200 tons of forest honey can be produced in national forests of Lao PDR, valued at 5.19 Million USD at local level¹. Due to limited information, this projection is based on the area that have natural forest area and where villagers have legal rights to collect forest products, in this case, protected forests², and the average production and number of *Apis cerana* nests per Km² (Hephburn 20014). It is safe to say that potential production of honey is higher than the given figure considering other potential forest areas, other indigenous bee species and actual carrying capacity of the said areas.

Value Chain Map

The main activities in the Lao forest honey sector are collection, processing, aggregation or wholesale, retail, and some exports. Majority of the beekeepers are passive beekeepers, who place boxes in forests or near their houses, and only open them up for harvest. Processing is very simple and rudimentary, usually carried out by the collectors and the beekeepers themselves. Wholesaling is carried out by village and provincial traders. Packing and distribution are done by small-scale enterprises. There are currently at least 10 Lao brands identified in the market. Main retailers of honey are stalls in traditional markets, minimarts and supermarkets. Reports show that Lao honey was exported to Thailand, China, Vietnam and the USA. Cross-border exports are done mainly by small expat entrepreneurs.

There is a perceived difference between wild honey, which may be *Apis dorsata* honey, and boxed honey, which is mainly *Apis cerana* honey, given their prices. Farm gate price of honey from managed boxes range from 35,000 to 50,000 Kip per Kg, while wild honey price, honey is at 70,000 – 80,000 Kip per Kg.

Enabling Factors:

- Interest among relevant government agencies to support the development and promotion of the honey sector.
- Government sponsored trade promotion platforms (i.e. Trade Missions, One District One Product (ODOP) Program)
- Lao products, including honey, are perceived by neighboring countries as natural products³
- Well established organic networks and health food markets in Vientiane and XKH
- For exports, Vietnam, China and Thailand are already trading partners of Lao PDR.

Main constraints:

- High transportation costs, weak capacity for compliance to export requirements and marketing are some of the barriers to exports.
- Limited capacity and standards for production and processing of Forest Honey. Technical knowledge, technology acquisition and market link support are mainly project-based.
- No defined quality standards for Lao forest honey or Lao honey in general.
- Weak technical knowledge on honey quality of value chain actors
- Limited availability and accessibility of inputs (i.e. packaging, equipment)
- Lack of national strategy for the development, marketing and promotion of Lao Honey.

Domestic and Export Markets

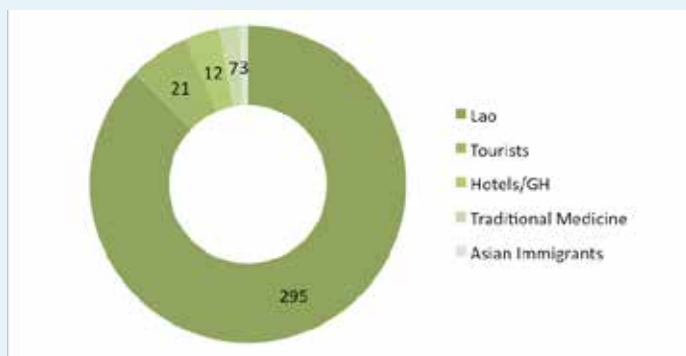


Figure 2 Estimated potential domestic market in tons. Total of 338 Tons Vietnam and China. Other main tourists are from Korea, Japan and the USA.

Identified domestic consumers of honey are Lao, Asian immigrants, and institutional users, with an estimated consumption of at least 300 Tons per year. Lao households often keep a jar of honey at home and use it only for medicinal purposes. Asian expats, mainly Vietnamese and Chinese, who have preference for forest honey, are said to consume honey at a high rate (Ediriweera and Premaratna 2012). Institutional users include traditional medicine companies and hotels.

For exports, high-value importing countries may offer more market opportunities for Lao Honey Sector. Top honey importing regions/countries by the international market in quantity are the EU, USA and Japan. However, given the Lao's limited honey production, higher prices (3-4 USD per Kg at farm gate) and high transportation costs for low volume products, these may not be the appropriate markets. Instead, opportunities may be found in top importers by value, many of which are in the region. China, Hong Kong, Singapore, South Korea, to name a few, import values per Kg of honey range from 6 USD to 12 USD. Bordering countries imported a total of 8,000 tons of honey in 2016: China - 6,000 Tons (average of 12 USD/Kg), Thailand - 1,600 Tons (180 Tons for honey above 4 USD/Kg) and Vietnam - 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.

Source, food safety and Country of Origin are important factors in the purchase of honey in the potential target markets. There is preference for forest honey among Asian consumers, who see it as more potent and more natural⁵. Due to food and honey scandals in some countries, consumers have become conscious of the source, safety and country of origin of food, including honey.

The Tourism sector is a potential market segment as well as a platform to promote Lao Honey in the target export markets. If promoted well, tourism sector can absorb at

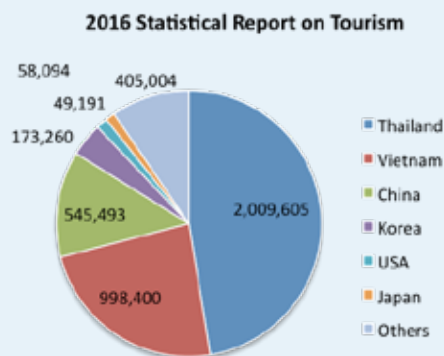


Figure 3 Tourists in Lao PDR are potential target market for Lao Honey

least 21 to 32 Tons of honey per year domestically⁶ Tourists also provide a link to the potential target export markets. 92.47% of the tourists in Laos came from the Asia Pacific. Top tourists are from neighboring countries, Thailand, Vietnam and China. Other main tourists are from Korea, Japan and the USA.

Niche Markets – Opportunities for Product Development

Demand for honey extends beyond consumption to other non-food uses such as cosmetics, gifts, traditional Chinese medicine, which opens up opportunities for value-added products from honey and offer alternative markets.



Figure 4 Potential niche markets for honey and bee products

- **Forest Honey as a specialty honey type.** Forest honey offers a more natural and healthier options to honey consumers. In neighboring countries, there is preference for Forest Honey, which is seen as more potent and more natural.
- **Honey is used in cosmetics, such as facial washes, skin moisturizers, hair conditioners and in treatment of acne.** The interest for honey in cosmetics is driven by the demand for natural ingredients and the trend of food-based ingredients.
- **Honey, including Infused honey, is considered as a “superfood,”** which is considered to provide health and wellness benefits beyond basic nutrition. The sector is said to be the fastest growing segment in Asia’s organic food market. For example, Garlic-infused honey may be a potential product from Xiengkhouang, which is known for its honey and garlic.
- **Food gifting is a niche opportunity for honey.** Gifting, a part of social and business life, is the most important purchase motivator for Asians (Barris-Hill 2017). Pleasing gift packaging is an important factor when purchasing food for gifting (Menayang, A. 2016).

- **Beeswax and other bee products are missed opportunities.** 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.

- **Traditional Medicine is a niche market that highly values forest honey.**

Key Findings

As a new entrant to the honey market, Lao PDR needs to differentiate itself from other honey suppliers and compete on value instead of quantity and price. Lao PDR is surrounded by the top honey exporters in the region and competition from other established honey exporters around the world supplying to the international bulk honey market is high. It is not currently in the position to compete in this same market segment. Instead, it should capitalize on the 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.

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. Traditional consumption of honey among Lao/Asian Expats is for health / medicinal purpose. Thus, it is taken only occasionally, leading to low consumption rate. Lao consumers are increasingly consuming health food, which can be the platform to promote the increased use of honey.

Lack of quality 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 and border country users. Lao consumers, Asian expat and key neighboring country consumers perceive Lao honey as from the forest, healthy, natural, and organic. However, trust, information and access to Lao honey is lacking. There is also misconception on what is “real/pure” honey. Lao Honey sector actors need to work together to ensure and communicate quality and reputation.

Health, food safety and authenticity of honey are the main concerns of consumers in the target markets. Lao PDR has the conditions to supply pure, authentic, forest honey. However, value chain actors, from producer groups to retailers, need to improve its capacity in production of forest honey, quality control and in marketing.

Identity (brand), unique characteristics, Country of Origin (COO) reputation and marketing strategy are important factors to succeed. Lao honey needs to define a differentiating factor that consumers value and are willing to pay for. Moreover, with higher costs of export, smaller production capacity, Lao PDR needs to set a strategy that will build up the Country of Origin reputation. There is already an established perception among neighboring countries that products from Lao PDR are natural and make less use of chemicals. What is important now is to protect and strengthen that perception. The sector needs to work with the government to strengthen its COO image for honey as well as other products. The geographical indication market can be explored.

Lao honey sector needs to explore tapping new channels, exporting and diversifying its honey and bee products to expand the market for Lao honey, both domestically and internationally. Lao PDR is in the middle of the fastest growing market for honey, a market that values the health benefits of honey as well as for functional foods and cosmetics. The tourist market and gift giving are also untapped channels. Investments in R&D should be made to take advantage of these opportunities.

Research team

Research Team: Emmanuelle Andaya, Soutsada Chanthasiri, Manivanh Aliyavong, Dr. Pakaiphone Syphoxay, Amphone Vananamahaxay, Somphan Soukvongsak, Soukhhikham, Lakue Vansy, Sackxay Boubphakaisone, Somphouthong Ounphachanh, Duangnapha, Student Volunteers: Thanongsine Xayavong, Laddaphone Chalounphounh, Souliyan Simphavong, Yuri Yayongkai

Acknowledgements:

The study is a collaborative research of a local team of TABI staff, partner organizations, volunteer students and an international consultant. The local team members covered the domestic market while the international consultant covered the export market. We thank our partners who sent representatives to participate in the research



including: Green Community Development Association (GCDA), Development Environment and Community Association (DECA), The National Agriculture and Forestry Research Institute, Department of Forestry, Department of Agriculture, National University and Xiengkhouang Provincial and District Authorities. We also acknowledge the strong support from Ms. Crissy Guererro, from Non-Timber Forest Products - Exchange Programme Asia.

References

Barris-Hill, Lukas. 2017. Lindt prioritises Asian gifting market with new SKUs. TR Business website. <https://www.trbusiness.com/regional-news/asia-pacific/lindt-sets-its-sights-on-asian-gifting-market/119401>. Accessed January 2018

Ediriweera, E. R. H. S. S., and N. Y. S. Premarathna. "Medicinal and Cosmetic Uses of Bee's Honey – A Review." *Ayu* 33.2 (2012): 178–182. PMC. Web. 5 May 2018.

H. R. Hepburn et al. (2014) *Honeybee Nests*, DOI: 10.1007/978-3-642-54328-9_2, 17 Ó Springer-Verlag Berlin Heidelberg

Lixandru, M. 2017. Properties and Benefits of Forest Honey. Natureword website. <https://www.natureword.com/properties-and-benefits-of-forest-honey/>. Accessed January 2018

Menayang, A. 2016. Food gifting market will approach \$18 billion in 2016, says Packaged Facts. Food Navigator. <https://www.foodnavigator-usa.com/Article/2016/08/15/Food-gifting-will-approach-18-billion-in-2016-says-Packaged-Facts>

Sengngam, B and J. Vandame. 2007. Development of Beekeeping in Laos: Strategic Choices http://www.apiflordev.org/documents/development_of_beekeeping_in_Laos.pdf

Vandame, J. 2006. 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.

Vandame, J. 2017. Beekeeping in Laos. Review of Bee Raising in TABI Sub-project. TABI Report. https://www.dropbox.com/s/971wlytx5e5r59u/1701_Beekeeping_Jerome2017.pdf?dl=0

Woodcock, BA, J. M. Bullock, R. F. Shore, M. S. Heard, M. G. Pereira, J. Redhead, L. Ridding, H. Dean, D. Sleep, P. Henrys, J. Peyton, S. Hulmes, L. Hulmes, M. Sárospataki, C. Saure, M. Edwards, E. Genersch, S. Knäbe, R. F. Pywell. 2017. Country-specific effects of neonicotinoid pesticides on honey bees and wild bees. In *Science*. 30 Jun 2017 : 1393-1395

End Notes

1. Due to absence on information on the densities of bee-hives 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 Km². Half of the protected forest area, equivalent to approximately 41,000 Km², and conservatively use only half of the said density, 10 hives per Km², 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.

2. Decree on the Protection Forest

3. Interview at the Department of Agriculture November 2017, Interview of cross-border trader November 2017, Interview Helvetas November 2017, Interview Vietnamese Informant 2017

4. 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.

5. Interview of honey retailers in the market, November 2017

6. 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.



About TABI

The Agro-biodiversity Initiative develops and facilitates opportunities to protect and enhance agro-biodiversity (ABD) in Lao PDR. Its overall goal is to improve the livelihoods and incomes of local upland land users in the northern Laos. The initiative pursues this goal through local interventions to conserve, enhance, manage and sustainably use ABD of upland cultural landscapes, while also fostering an enabling environment for enhancing these values across Lao PDR through mainstreaming ABD within national policies and planning processes.

TABI is a joint program of the Ministry of Agriculture and Forestry (MAF) of the Government of Lao PDR and the Swiss Agency for Development and Cooperation (SDC), with the support of NIRAS and the Center for Development and Environment (CDE) of the University of Bern. It was started in 2009 and is currently in its third and last phase (from 2017 until 2020).



For more information contact

Dr. Chanhsamone Phongoudome

Deputy Director General, National Program Director TABI
National Agriculture and Forestry Research Institute (NAFRI)
Ministry of Agriculture and Forestry/Lao PDR
Email: chanhsamone_phong@tabi.la

