INDUSTRY PROFILE

The Tea Sector in Lao PDR

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Contents

Summary

The tea sector in Laos still is a small industry. Tea is mostly grown in the Northern Provinces. A substantial part is exported to Yunnan, China. Besides, tea is grown in the Southern Province of Champasack. There is little specialization on tea; mostly farmers have additional small tea gardens to their crops. Most of the tea is processed by farmers in the villages on a very small scale. Also some tea processing and exporting companies exist. Generally, the Lao tea is said to be of high quality. International interest may be aroused with expansion. The major challenge for the Lao tea sector to develop is the improvement of processing practices to improve the quality of the processed tea and also improvements in farm management.

Sector in General

Overview

A specialty of Laos is the Ancient Tree Tea. ***Ancient Tree Tea*** is tea produced from leaves of tea trees that were planted in tea gardens more than 100 years ago. In general these tea trees have matured to heights of at least 2 meters or much more. Because of the height picking is difficult and results in low yields. The fresh leaf prices are double the price of modern cultivated teas. Processors pay premiums only for leaf from ancient trees.[1]
Cultivated tea is planted in organized plantations and generally kept pruned and managed to facilitate plucking and increase yields.
Wild tea tree is produced from leaves of old tea trees growing naturally in a forest environment. Deforestation and over-exploitation have meant that the area of truly wild tea decreased markedly in the last 50 years. Laos may well be home to one of the largest areas of naturally growing wild tea trees.[2]

Recent development

Especially for Northern Provinces of Laos, the export of tea to China is substantial. From the early 2000s, strong promotion by the Yunnan government and speculative buying of ***Pu'er tea*** as an investment resulted in an increase in demand for Pu'er tea and consequently resulted in an increase in the prices of Pu'er tea as well as for the raw materials. Pu'er tea is compressed tea made in Yunnan utilizing Shaiqing Maocha (sun dried rough green tea) as base material. At the peak of the boom between 2006 and early 2008, Laos emerged as supplier of Shaiqing Maocha for the Yunnan Pu'er tea industry. The high margins to be made in trading combined with relatively high quality of Lao tea and the fact that Lao tea is largely produced organically sparked significant interest from Yunnan and sourcing Maocha in Laos decreased. Still, Yunnan is by far the major export market for tea from northern Lao.[3]

Current Situation and Challenges

Lao tea is considered to be of high quality and the Chinese market is very interested in importing Lao tea. Prices are currently at a medium level. The values are lower than their Chinese equivalents because of the lower quality of processing, also due to increased transaction costs in cross-border trade and the existence of a protected geographic indication for Pu'er tea. Due to the introduction of the geographic Indication in 2008 for Pu'er tea, Laos is officially not allowed anymore to be utilized in Pu'er tea produced in Yunnan. This policy is not likely to change in short or medium term. But increasing domestic tea demand and limited production in Yunnan leads to

[1] (Dr Boupha et al., 2010, p. 6)
[2] (Dr Smith, et al., 2011, p. 1)
[3] (Dr Smith, et al., 2001, p. 2f.)

interest in Laos, both as supplier of materials and also as a location for investment. Chinese research organizations are interested in research in Lao teas, especially in northern Laos.[4]

So far, the processing of the Lao tea is a major obstacle to keep its high quality. Besides poor quality processing, smoke contamination, food smell contamination and also the presence of foreign matter are not uncommon. This leads to sales value about 50% lower for the farmers. Additionally, trade barriers exist. Tea is not tax-free and a lot semi-official border trade transactions occur. This incurs high transaction costs, fees and charges and lack of economies of scale in transportation and sales volumes.

The current and potential size of the Lao tea industry in general is relatively small compared to tea industries in China or Vietnam. Laos cannot compete in terms of quantity of production but has to focus on high quality production. The current organic status of Lao tea is a unique comparative advantage. Organic production should be continued, with potential future international certification.[5]

Professional knowledge is lacking in the local tea economy, tea cultivation science, tea ecological environment and tea culture. The tea industry in Laos is a new business, which needs more investment, while local government does not have sufficient investment funds. The domestic tea techniques application in Laos is still in its infancy stage. This cannot guarantee the quality of tea, but also makes the production efficiency very low.[6]

Regional Studies

A couple of special studies were undertaken in 2010 and 2011 in some regions of Laos, where the suitability of tea cultivation was found to be very high. The tea crop suitability was evaluated for northern and southern provinces of Laos based on the FAO approach using the model “automation land evaluation system” (ALES) in determining suitability classes.[7]+

Table 1: Potential tea growing areas in Laos (ha)

Province	***Very suitable***	***Suitable***	***Marginally suitable***
Bokeo	0	21,250	688,319
Xieng Khuang	159,894	468,875	538,988
Xayabouli	0	8,494	1,061,338
Xaysombon	0	196,575	185,950
Oudomxay	0	152,969	977,406
Luang Namtha	0	167,675	618,425
Phongsaly	0	430,269	955,625
Houaphan	0	555,100	574,025
Luang Prabang	0	99,663	1,294,369
Champasack	48,556	75,431	243,681
Total	208,450	2,176,300	7,138,125

Source: (Dr Inthavong, Dr Boupha, 2011, p. 3)

[4] (Dr Smith et al., 2011, p. 3)
[5] (Dr Smith et al., 2011, p. 4)
[6] (Yuzhe et al., 2010, p. 4336)
[7] (Dr Inthavong, Dr Boupha, 2011, p. 2)

Regional Study Report 1: Phongsaly

Overview

Phongsaly is located in far northern Laos and possesses the most developed and intensive tea production in Laos with some 1,362 ha currently under cultivation, to be increased to 1,862 by 2014. Phongsaly is contributing to some 60% to the total national tea production. In Phongsaly both ancient varietals and modern varietals are cultivated. Modern style production commenced in 1997 as a result of Chinese investment and grew rapidly over the next decade. Tea cultivation has been strongly promoted locally both as an opium substitute and as a means of poverty eradication. There are 3 major tea processing factories in Phongsaly, which operate a form of contract farming providing farmers with tea seedlings in exchange for exclusive purchase rights.[8]

Tea farmers and processors were heavily impacted as a result of the Pu'er tea market price correction in 2008. Farmer incomes from tea are now at subsistence levels. Many farmers have ceased tea picking and overall production volumes are now significantly lower than at the price peak in 2007/2008.[9] Picking is now less attractive, production declined by 38%.[10] The price declines also have generated a clear need to improve tea garden productivity that have to date been substantially lower than Chinese equivalents. In large part this is due to local cultivation practices like planting on often steep slopes without actions to prevent top soil loss or improve water retention, to replace nitrogen losses or planting shade tea trees or effective bush shaping and pruning.[11]

Based on the available data and cross checked through farmer interviews it is estimated that average yields in Phongsaly for modern cultivated teas at around 20,000 plants/ha plant density. In China and Vietnam the plant density is about 40.000 plants/ha based on intensive production systems. These rely on the use of agro-chemical inputs and high quality farm management that farmers were unable to adopt in Phongsaly. Despite the organic reputation of Phongsaly's tea production no formal certification is in place as this is not required by major Yunnan buyers.[12]

Challenges

While organic production is the only suitable one, there has been little promotion of organic production methods such as cultivation of shade trees, natural fertilizer application or use of legume ground covers. As a result, fresh leaf yields are lower and leaf quality has also suffered. Low yields results in low average picking rates. The picking rate is the key to commercial viability

[8] (Dr Boupha et al., 2010, p. 2)
[9] (Dr Boupha et al., 2010, p. 2)
[10] (Dr Boupha et al., 2010, p. 5)
[11] (Dr Boupha et al., 2010, p. 2)
[12] (Dr Boupha et al., 2010, p. 5)

of tea cultivation with picking costs comprising the bulk of total production costs. The picking rates estimated by the farmers is roughly half that of reported picking rates in Yunnan.[13]
The home processed Maocha in Phongsaly is generally poor with high levels of smoke contamination and due to poor drying. This reduces the value of the teas by an estimated 50%.[14]
Some other challenges are the poor on-farm management resulting in low yields and leaf quality, difficulties in importing tea processing equipment, poor road access to some areas in the wet season and the Export tax of kip 500,000/ton. Additionally, processors criticize the time taken in obtaining required export permissions and documentation.[15]

Chances

Assuming that organic cultivation practices are maintained, the provision of technical support in improved organic cultivation is required.[16] It is widely acknowledged by Chinese tea specialists that even maintaining organic production methods, yields in Phongsaly could be increased by at least 50% through improved farm management. [17]
However, the demand for fresh leafs is very high and tea processing companies state the challenge of sourcing fresh leaf especially during the spring pick when competition between buyers is highest.[18] But given current prices farmer interest in expanding cultivation is clearly limited.[19]

Regional Study Report 2: Viengxai

Overview

Viengxai district is situated within Houaphan Province in Northeastern Laos. The tea produced in this area is recognized by international tea companies as good quality and has potential to enter international tea markets. But so far there are only 8 ha tea gardens harvested. The total processed tea production is estimated at 700-800 kg. All tea is processed at household level to black tea using traditional techniques that rely on sun drying. Because the picking occurs in wet season, sun drying generates risks and is a disincentive to expand production. Current production volumes are 30-40% below what is possible. Market demand for tea from the district is high. Sales have also

[13] (Dr Boupha et al., 2010, p. 6f.)
[14] (Dr Boupha et al., 2010, p. 5)
[15] (Dr Boupha et al., 2010, p. 12)
[16] (Dr Boupha et al., 2010, p. 2)
[17] (Dr Boupha et al., 2010, p. 6)
[18] (Dr Boupha et al., 2010, p. 12)
[19] (Dr Boupha et al., 2010, p. 5)

been made to France but due to volume limitations and strong domestic demand, all sales are domestic now.[20]
70% of the produced black tea is sold to a big company; the rest is sold to visitors passing. The company has no formal contracts with the farmers. The tea is collected from all producing villages in the area and bulked together as a single product. As such both well processed and poorly processed teas will enter the same bulk batch.[21]

Challenges

Yields are low and competition with other agricultural activities is limiting farmer interest in expansion. Cultivation methods are traditional, resulting in low yields per ha and make picking overly time-consuming. The very low volumes of produced tea represent an obstacle to sector development, with existing and new buyers wishing to purchase greater volumes. Farmer's interest in expanding tea cultivation appears to be limited by the requirement to engage in labor intensive home processing.[22] Households report that even with current tea gardens, production volumes could be increased by some 40% through more regular picking. There is currently no market for fresh, unprocessed tea leaf with all production being home processed.[23]

Chances

The establishment of a small scale centralized processing unit able to purchase fresh leaf from farmers and process prior to sale to buyers could increase farmer interest in cultivation and stimulate greater farmer investment in such. Also the provision of financial incentives to stimulate tea garden establishment appears warranted and could be combined with good practice cultivation measures to better position farmers for future tea sales.[24]
Significant potential for further development exists, provided the rise of prices, improvement of productivity and machinery like tea rollers and convection dryers. The processing company is reported to be seeking an investor to assist expand its work in the tea sector.[25]

Stakeholder Perspectives

According to the farmers, tea cultivation is a good option, as demand is always high and tea grows in soil that is otherwise unfertile. On the other hand, it is very time intense and the low prices

[20] (Dr Boupha et al., 2011a, p. 1)
[21] (Dr. Boupha et al., 2011a, p. 6)
[22] (Dr. Boupha et al., 2011a, p. 1)
[23] (Dr Boupha et al., 2011a, p. 5)
[24] (Dr Boupha et al., 2011a, p. 1)
[25] (Dr Boupha et al., 2011a, p. 8)

cannot be influenced. As the farmers don't build fences, some crop is always destroyed by animals. Technical Advise especially for the drying is needed.
As the buyers report, the key challenge is to be seen in the low level of production and the very small size of tea gardens which discourage farmer specialization. Besides, low picking rates and the highly variable processing quality are major obstacles.[26]

Regional Study Report 3: Hongsa

Overview

There is currently almost no commercial activity associated with tea in Hongsa, located in the western Province of Sayabouri. Tea is wild within village forest areas and is used to a limited extent for the production of Mieng, a chewing tea. The tea resources within this area are hardly utilized with significant potential for expanded collection and cultivation possible.[27]
There is no official data on tea resources in Hongsa. Resources present are wild without any pruning or management being found in forest and upland field areas.[28] There is potential to increase production significantly if markets were present. Villagers are interested to learn how to process fresh leaf into tea for local market sales and in expanding tea cultivation if support was provided. The current absence of a clear market for processed tea being the primary reason why farmers have not increased tea domestication.[29]

SWOT Analysis

Strengths:

- Local variety has on some occasions produced interest in unusual and good quality teas. The area has high levels of biodiversity and natural forest, some knowledge on tea domestication exists. Forest tea is widely distributed but found mainly in protected watershed areas.

Weaknesses:

- No local buyer or processor, results of processing trials are mixed and have not been able to reproduce the high quality shade dried samples initially gathered. Volumes of wild collected tea is very limited and currently insufficient to warrant sector investment.

Opportunities:

[26] (Dr Boupha et al., 2011a, p. 7f.)
[27] (Dr Boupha et al., 2011b, p. 2)
[28] Dr Boupha et al., 2011b, p. 4)
[29] (Dr Boupha et al., 2011b, p. 8)

- Substantial areas for cultivation exist, wild tea has a strong niche within the Maocha sector, financial support could enable large scale domestication. Farmers have limited livelihood options.

Threats:

- Increasing population density as result of Hongsa lignite mine resettlement could affect wild tea resources.[30]

Regional Study Report 4: Phousan

Overview

Phousan district is located in Xieng Khouang Province in Northeastern Laos. In recent years, ancient/wild tea in upland fields have formed the basis for stabilized agriculture with tea gardens being allocated to individual households. Cultivation methods are generally traditional resulting in low yields per ha and low picking rates. Major market channels are Lao Farmers Products, local traders and a Chinese tea trader. It's a minor supplemental income source but expected to increase significantly as newly planted areas are able to be harvested. Market demand and resource quality are the potential to develop a much more substantial tea industry in Xieng Khouang. The tea from this area is widely believed as of good quality tea due to the suitability of soils, evaluation and weather.[31] Typically, the farmers process their own tea. So far, Tea cultivation and processing remains underdeveloped but is showing signs of strong growth.[32]

Challenges

Local capacity on tea is very limited, to cope with the emerging potential there is an urgent need to develop local tea researchers who could understand and facilitate the tea sub sector development in the area.[33] The road access is difficult, especially in the wet season.[34]

Chances:

Opportunities to increase yields and reduce labor demands associated with both picking and processing are evident.[35] Fresh leaf picking standard is reported as good. The tea quality is good and market demand is high. Farmers report that the areas under tea cultivation are expanding.[36]

[30] (Dr Boupha et al., 2011b, p. 8)
[31] (Phouyyavong et al., 2011, p. 2ff.)
[32] (Phouyyavong et al., 2011, p. 9)
[33] (Phouyyavong et al., 2011, p. 2)
[34] (Phouyyavong et al., 2011, p. 8)
[35] (Phouyyavong et al., 2011, p. 2)
[36] (Phouyyavong et al., 2011, p. 7f.)

Actions to encourage the entry of other tea buyers/processors into the area should be considered to reduce the risks associated with reliance upon a small number of buyers.[37]

Stakeholder Perspective

Farmers report, that tea seems to be the only and good replacement crop to opium. The region has limited upland fields not suitable for other crops. On the other hand, tea production is very labor intensive which results in conflicting labor demands with other agricultural activities. There is no formal group production and as such tea processing quality may vary between farmers. Farmers consider the current price paid for the tea as low. According to buyers, the land is highly suitable for tea cultivation and Xieng Khouang might be a key tea production province. In the district of the study, 78% of the land is (very) suitable for tea cultivation, which is the highest proportion in Laos.[38]

[37] (Phouyyavong et al., 2011, p. 10)
[38] (Phouyyavong et al., 2011, p. 8f.)

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See also

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