

CHAPTER 3 THE INDUSTRY AND CONSUMPTION CHARACTERISTICS OF THAI COFFEE

3.1 The Production and Consumption Characteristics of the Coffee in the World

There are more than 80 countries and regions planting coffee. The production areas are Brazil, Columbia, Mexico, etc. in Latin America, accounting for 52% of the world coffee planting area; the next are Cote d'Ivoire, Ethiopia, etc. in Africa, accounting for 33% of the total area; Asia and Oceania accounts for 15% of the total area, with coffee mostly produced in Indonesia and Vietnam. By the end of 2010, the total planting area of the coffee in the world has been 13 million hm² with an annual output of 8.4 million tons. The international coffee industry features highly-scattered coffee planting and highly-concentrated deep processing. The major giants of coffee industry are from the traditional consumer countries in Europe and America. Coffee planting strongly depends on its region and is distributed in a few countries in South America, Central America, Africa and Asia.

Currently, there are two varieties of coffee beans being produced and consumed in the world, i.e. Arabica and Robusta. Arabica makes up a larger proportion with 80% of the total output, while Robusta only 20%. The largest coffee producer of the world, Brazil, produces 2.96 million tons of coffee, comprising 32.3% of the world gross coffee output. The second is Vietnam also in Southeast Asia which produces 1.74 million tons, accounting for 18.9% of the world total output. (Gu & Sun, 2014)

Now, over 1.6 billion people in the world drink coffee, accounting for one-quarter of the total population. They annually consume more than 8 million tons of coffee beans. The global supply and demand for the coffee basically keep balanced. According to the guiding price in 2008 issued by International Coffee Organization, the total world trade of coffee annually amounted to 70 billion dollars. The data analysis form Italy shows that the international retail trade of coffee is 140 billion dollars. Due to the great demand of rigid consumption of coffee, the coffee beans price of the international market has been fluctuating upward since 2005.

3.1.1 The Characteristics of Thai Coffee Production

Coffee has existed for several centuries, originated from the Middle East. In the 1970s, King Bhumibol Adulyadej introduced a series of coffee projects to help the

local community plant cash crops in the north of Thailand, like coffee, used as substitute of opium poppy. Thailand has planted coffee as long as one century, yet, it was not until 1976 that Thailand became a coffee exporter. In July, 1989, the collapse of International Coffee Agreement and the declining global price bring the farmers great difficulties. To change the oversupply situation, the Thai government initiated a five-year project in 1992 to encourage the farmers to change their crops.

Generally, Arabica grows well in the area of rainstorms and high altitude, so, the mountainous area in Thailand is perfect. Arabica is usually planted in Chiang Mai, north of Thailand, while another kind of coffee beans, Robusta, is planted in the south.

Robusta is mainly planted in provinces like Chumphon, Surat Thani, Nakhon Si Thammarat, Krabi, Phangnga, Ranong, etc. The planting area of coffee is 67,832 hectares. The Robusta output in the southern area of Thailand is 80,000 tons. 25% of the Robusta is used for domestic consumption of soluble coffee, roasting, powder and canned coffee.

There is a planting area of 500 tons of Arabica in the north of Thailand. Together with Burma and the northern border area of Laos, the area is called golden triangle. Taking Chiang Mai as an example, with a location of 700 km north of Bangkok, the soil is suitable for planting coffee thanks to environmental factors. Although in the tropical zone, compared with other countries, its climate is milder. The mountains in Chiang Mai develop a microclimate with a low humidity, short monsoon season and low average annual temperature. The rain percolates through the soil, thus endowing the coffee with abundant minerals. Arabica is a good species because it is suitable for all farmers to grow, including the ones who live in the mountains. The organic coffee is considered to be suitable to be planted in the highland rising from 800 meters (2,600 feet) to 1200 meters (3,900 feet) above the sea level. Coffee grows in shady and all-weather open areas and is inter-cropped with fruit trees in mountain areas.

In brief, Arabica is the first choice for its high price and quality, while Robusta produces more low-quality coffee beans made into the cheap instant coffee. On the other hand, the higher price of Arabica results from the scarce supply of the coffee cherries. Coffee beans with higher quality delight the coffee lovers. In the past years, Robusta has been the main coffee beans, but now Arabica is more popular due to the sweeter and smoother taste, thus making it more common in the cafes.

According to the statistics issued by FAO in 2013, the output of coffee was 50,000 tons and the planting area reached 51,000 hectares. Each hectare could yield 980 kilograms, ranking 18th in the world. In 2015, two kinds of coffee, i.e. Doi Tung

and Doi Chang, obtained the title of “protected designation origin (POD)”, which is equal to “Champagne” “Parma ham” or “Bordeaux”.

The domestic consumption of coffee in Thailand keeps rising. In the past few years, the demands of the processing factories in Thailand for coffee beans has been increasing year by year, but the output of the Coffee Arabica and the Coffee Canephora began to decrease.(Wen, Bi, &Lu. 2018)Coffee planted in Thailand was dominated by the Coffee Arabica and Coffee Canephora with a total planting area of 250,000 rai. The Coffee Arabica is mainly planted in the north, Chiang Rai and Chiang Mai, with a planting area of 60,400 Rai and 9,336 tons Coffee Arabica annually. As for Coffee Canephora, the main production areas are Chumphon and Ranong with a planting area of 190,600 Rai and an annual output of Coffee Canephora of 20,100 tons. It can be found that based on the statistics, the output of Coffee Arabica is continuously increasing while that of Coffee Canephora is continuously decreasing.

The special demand for the fragrance and taste of coffee boosts the planting area and production capacity of Coffee Arabica in recent years. Five years ago, its annual production capacity was only 4,000 to 5,000 tons, but that of Coffee Canephora was up to 500,000 tons. In this year, however, the output of Coffee Canephora reduced to 20,000 tons. (Jon,2012)13 years ago, that is, in 2002, in the coffee bean market, the Coffee Canephora was 26 baht/kg. The prices of rubber and oil palm fruit soared; therefore, lots of coffee growers turned to rubber and oil palm with higher economic value. But coffee has gradually become a popular beverage, with which the price of coffee beans continues growing. Currently, the average price of Coffee Canephora is 70-80 baht/kg, the Coffee Arabica 105-120 baht/kg. In this year, the demand of coffee beans in Thailand is estimated to be 800,000 tons, of which Nestle Thailand accounts for 500,000 tons, khaoyai coffee 20,000 tons and other small businesses 10,000, while the domestic output of the coffee beans in Thailand is only 29,000 tons, which is far from satisfying the market demand.

Because the domestic production cannot meet the demand, the enterprises began to import from neighboring countries to fill up to the gap of 58,000 tons. In ASEAN countries, Vietnam has the largest output of Coffee Canephora, up to 1.7 million tons per year. The second is Indonesia with an annual output of 470,000 tons, while it has the largest output of Coffee Arabica of 99,000 tons. Vietnam ranked the second with 71,000 tons. Thailand even lagged behind its neighbor Laos. In the past five years ago, the output of coffee beans has dropped from 50,000 to 2,900 tons, while that of Laos has increased to 60,000 tons from over 20,000 tons.

In recent years, the domestic coffee market and consumption of Thailand continue growing. Based on the estimation of Department of Internal Trade in Thailand, the coffee production would reach 6,7620 tons in 2012, increasing by 9.99% compared with last year. The annual domestic consumption is expected to be 70,000 tons, increasing by 10% every year. The main coffee product in Thailand is instant coffee with 12 billion baht of sales. The market value of Thai coffee is approximately 30 billion baht, with mainly instant coffee and three-in-one package.

Under this condition, some old brands of bottled coffee have begun to produce three-in-one hybrid products. However, in the past years, these products only made up 4.0% of the instant coffee market. The Thai coffee market still depends on import of 25,000 tons or so. In recent years, with the improvement of living standards and transformation of the consumption concepts, fine cafes have been mushrooming in Thai coffee market. The increasing rate of the enterprises is up to 15-20%, injecting energy into the Thai coffee market.

3.2 Analysis of Thai Coffee Market

3.2.1 SWOT Analysis on Thai Coffee Market

Analysis of the Advantages of Thai Coffee

Outstanding natural conditions

Located in the tropics of Southeast Asia, Thailand is endowed with rich agricultural resources thanks to the climate condition of south central Asia. The resources are mainly distributed at the southern peninsula and coastal areas, central plain, northeastern plateau and northern mountains. In Thailand, coffee planting constitutes an important part of agriculture. With the national economy of Thailand booming, the industry and agriculture level up continuously; the tertiary industry, especially the tourism, sees a fast development; agriculture, as a traditional economic sector in Thailand, constitutes a significant part in Thai economy. With a territorial area of 514,000 km², Thailand has a land area of 51.08 million hm², boasting an outstanding natural condition. (Wang, Li, Yong, Wang, & L.2017)

The widest east-west distance of Thailand is 780 km, with the terrain rising in the north and lowering in the south while the plain covering the main part. The agricultural land totals 19.75 million hm², of which the arable land accounts for 15.2 million hm², the permanent pasture 800,000 hm², and the forest land 14.4 million hm². Furthermore, the total drinkable water resources stand at 410 billion m³ a with the per capita water use of 6,462 m³ a. The annual water use for agriculture is 82.8 billion m³

accounting for 95% of the total water consumption.(Jiao & Guo & Yao. 2010) The rich natural resources lay a vital foundation for agricultural production.

Planting technology

Thailand boasts a time-honored history of coffee planting. Experience such as the choice of satisfactory land, robust sprouts nurturing, properly close planting, balanced fertilizing, timely irrigation, branch pruning, pest control and timely fruit-picking has been accumulated through the exploration of coffee planting for many years. The coffee currently generalized across Thailand are strong anti-attractant properties with high level of output, basically reaching the planting level of international standard. As the government carrying out the Royal Project, the technique training for farmers has been enhanced and their planting techniques has been promoted so that the farmers' coffee production management and processing have become more regulated and standardized.

Driving effect from consumption in other industries

As the center of Southeast Asia, Thailand has seen a remarkable development in its tourism in the past decade, which plays a positive role in energizing economy, promoting employment, regulating income distribution and investment, increasing national affluence as well as improving people's living standard. The number of tourists enjoying a prolonged visit in Thailand is increasing year by year, which means more national revenue. At present, in addition to the famous scenic plots, more and more coffee farms and cafes have become tourists' destinations. A growing number of cafes garnering much attention on the Internet have been the attractions for young people during their trips to Thailand.

Analysis of the Weaknesses of Thai Coffee

Immature economic management ability of Thailand

From the perspective of the state, over the past thirty years, the political situation in Thailand has been suffering from turbulence and chaos, which throws Thailand into an unstable governmental administration. Furthermore, the frequent replacement of leaders has caused disrupted and ineffective policies, which can be explained by the significantly different economic policies proposed by each administration. The newly established government disagrees with the policies proposed by the last one. Enterprises and farmers have to accordingly adjust to the new policies while the last

ones have just been adapted to, thus causing a long-standing halt in Thai coffee industry and avoiding its consistent development.

In Thailand, what plays a decisive role in proposing economic policies during trade development is not the government but some private sectors. The relatively loose and unbinding trade policies in Thailand caused the absence of nationally representative coffee brands, the uneven performance of coffee products and the weak competitiveness in the international market. These issues have posed a series of problems to Thai coffee industry, such as the backward techniques and enterprises' inadequate brand awareness towards products.

The unreasonable regulation by the government is also a major problem. For instance, though the government has established the Office of the National Economic and Social Development Board, reasonable control and effective budget management cannot be achieved; (Wang, 2014) there is no coordinative work between governmental institutions and the officials, which leads to the unsatisfactory economy.

The three aforementioned reasons caused the lack of the propulsion by effective economic policies in the development of Thai coffee industry. Because of the inadequate production technology, the promotion of coffee quality has met a long-standing setback, which causes the failure of substantially enhancing the development of the coffee industry and seeking a place in the international market. Therefore, to promote the international competitiveness of Thai coffee industry, the government has to strengthen its ability to manage the economy and map out a series of effective policies to optimize the quality of the coffee industry so as to boost Thai coffee's productivity and international competitiveness.

Deficiency of standard management

The current coffee planting mode taken in Thailand remains in line with a traditional and natural manner, which is outdated, extremely time-consuming and labor-consuming. The lack of innovation in technology in producing and processing coffee beans has caused low output in some production areas, except for the Northern high-producing areas. Besides, the absence of a strict processing standard for harvested coffee beans has caused no assurance for the quality of the coffee entering into markets. Therefore, an effective management system and relevant standards for the coffee industry are desirable.

The settlement of the deficiency of the management standardization in Thai coffee industry can be achieved by learning other coffee-farming countries'

experience. For instance, in Brazil, the coffee producer, the government grasps tightly its coffee industry and proposes price protection policies. Vietnam, also in Southeast Asia, its aviation industry develops rapidly over the past two years, Vietnam Coffee Quality Standard Commission has formulated relevant standards to judge the quality of coffee products. Thus through the examination of departments involved and the judgment by strict standards, the quality of the coffee products produced in Vietnam has been promoted effectively. Furthermore, both Vietnam and China have taken a state-enterprise cooperative mode, by which both sides jointly strive to develop their own coffee industry. The coordinative development of both sides has brought the further improvement of the standard system involving factors from production technologies to products as well as enterprises' strict obedience to the state-set standards in terms of their own standard system. Therefore, under these two standards, the coffee output and quality have been promoted effectively so that the coffee exports and its competitiveness have been improved.

Mismatching of the technology and the developing speed

In Thailand, the coffee industry falls into the category of labor-intensive industries, whose common problems lie in the backward production technologies, unadvanced processing, the failure of increasing products' added values, the large amount of financial and material consumption during the production and operating process as well as difficulties in seeking for proper ways to reduce costs.

Such problems like backward production and processing technologies and high costs in Thai coffee industry have caused the low product quality and cost-efficiency, thus in some degree setting obstacles for the development of Thai coffee industry. (Wang, 2005) Competing with other countries, Thailand is in a very unfavorable situation. Besides, Thai coffee products account for a small ratio in the world trade volume, somewhat lacking international influences.

Opportunities in Thai Coffee Industry

Government's political support on alternative crops

In the early 1980s, to get rid of the notorious Golden Triangle for drug trade at the border of Thailand, Laos, and Vietnam, the Thai government encouraged people to grow coffee and invested some money. With the government as a supporting role, the Thai Royal Family played the main role in seeking the alternative crop that benefits farmers economically, coffee. Growing poppies is not a profitable work, but is a stable income source, thus the farmers were unwilling to give up growing poppies. Such being the case, the government led farmers to grow coffee as the substitute of

fruits, successfully replacing the drug trade at the border with the flourishing coffee plantations. Furthermore, the government established royal research institutes and government departments in mountainous and agricultural areas so as to work closely with producers, guide farmers with effective coffee planting techniques and producers with efficient processing technologies, hoping to help producers gain effective profits via processing technologies. Thus, the royal research institutes absorbed and learned the internationally innovative technologies in an effective and scientific manner, hoping to make Thailand a leading coffee-planting country of origin in the professional field.

Increasingly improved infrastructure

The sound infrastructure plays a key role in the flourishing development of coffee industry. (Meza, 2016) In Thailand, more and more infrastructure are under constant improvement. For instance, Chiang Mai, a northern city in Thailand, serves as both a tourism center and a coffee market with Thai characteristics, which not only reduces the costs for transporting coffee beans but also makes it easier for buyers, roasters, baristas, and farmers to cooperate.

In the 2018 Thailand Coffee Celebration held in Bangkok this year, many coffee farmers say they not only sell coffee beans but also provide tourists with coffee-themed trips, by which they can enjoy the complete process – from harvesting, roasting to tasting.

At present, Thailand has been seeing an annual increase in the number of cafes, thus people can easily find cafes or various stalls selling fresh coffee.

Strengthened research fields

The Thailand Royal Project has brought the effective support to the coffee industry. At present, a total of 22 regions are under the coverage of the Project and produce coffee in the brand of the Royal Project with an output of about 500 tons. These coffee beans will be bought from farmers and then sold to roasting firms. Except for providing planting guidance to farmers, the Project also encourages the farmers living in mountains and rural areas to plant coffee beans for profits. Besides, the Project offers marketing lessons to farmers to teach them how to grow and sell their own coffee beans, making them thoroughly handle the whole process from producing to marketing. However, the research in the past was created for producing the coffee of resistance to leaf rust and high yields. For instance, the Catimor coffee with large output was found to adapt to the local conditions by Thai researchers in the past, which is a product of genetic engineering, with resistance to leaf rust and high

yields. The researchers found that customers' needs for High-Cupping coffee are changing the production quality of this kind of Thai coffee. During this process, the Thai government and farmers have a lot of work to do.

Over the past three years, researchers found the coffee mostly cultivated by most farms, especially those being operated for more than ten years, were as follows: Typica, Bourbon, Caturra, and Catuai. This means Catimor coffee is not accepted by Thai coffee industry as fast as the experts expected. Of course, in recent years, new brands such as Geisha, Java and SL28 have begun to grow in their coffee farms.

Threats on Thai Coffee Industry

High tariffs on foreign countries

One of the threats in Thai coffee industry is the high tariffs on imported coffee products charged by the Thai government. Ranked after India, Thailand has the world's second highest tariffs on imported coffee products, reaching 90% tariff-quota. Although the sustainable prices can protect farmers from suffering from external competition, difficulties in promoting coffee quality makes it hard for Thai coffee industry to join in the international market. Therefore, for Thai coffee market, such protectionism is a double-edged sword.

This means Thailand-featured coffee can only be sold to Thai customers, which limits the coffee industry's information exchanges with outside world and the exposure to new trends. Though such situation does not mean the absence of professionals' attention to Thai coffee brands, it does mean the low presence of Thailand in the international coffee market. The challenge faced by Thai coffee industry is how to perfect the established protectionism, retain the potential international buyers and maintain the consistent relations between roasters and customers.

Promoted competitiveness by the international market

When it comes to other competitors in Southeast Asia, such as Vietnam, Indonesia, India, etc., their coffee industries also have an early start. Furthermore, they were once colonies under the control of developed countries which brought them the advanced planting techniques, the expanded needs for coffee and the influence on local knowledge about coffee and living habits. Therefore, for the locals, coffee is an indispensable part of life, which boosts the coffee production and research in these countries. On one hand, demands mean progress, thus when the domestic demand for coffee is huge, the government and enterprises will inject more energy into the research and development of new products and technologies as well as

promote the export. Although these countries are now independent, they remain as coffee exporters to many European and American countries. This accordingly has enlarged these countries' markets both at home and abroad and gradually enhanced their competitiveness in the international coffee market.

Lack of labor in Thailand

As the World Bank predicted, Thailand, by 2040, would have had up to 17 million people aged over 65, exceeding 1/4 of the total population, while the working-age population would have decreased by 11%, thus Thailand would become the most aged country among the ASEAN countries. Thailand is the world's second fast-aging country, only second to Singapore. In fact, it was in 2005 that Thailand entered the primary stage of an aging population and it was predicted that till 2021 Thailand would enter an overall aging stage. The main reason why the aging in Thailand is fastening because of its current economic phase, continuously increasing living costs and education expenditure, and the inevitable trend of late marriage. According to statistics, from 2010 to 2015, the fertility rate of Thailand is about 1.4%, with a population growth rate of only 0.3%, listing at the bottom among Asian countries. To encourage childbirth, the Thai government carried out such policies as encouraging childbirth, granting tax preferences and offering child-related welfare.

The aging trend means the number of labor entering markets is smaller than that of the retired population, which will intensify the lack of labor, in terms of agriculture, industry, service sector and architectural industry. The current labor shortage will pose a more grave challenge to the coffee industry in the future. Although at present the problem still does not go virus and can be relieved by the input of labor from neighboring countries, the labor shortage in Thailand will be aggravated when the labor-exporting countries need labor themselves thus they will no longer take risks working in Thailand because of the developed countries' increasing demand for labor in the future.

3.2.2 Analysis of the Five Forces of Thai Coffee Market

Competitions among Existing Enterprises

Under the background of booming tourism in Thailand, the coffee industry sees a fierce competition. Although various chain cafes like Starbucks and Amazon Coffee enjoy a large share of the market, some Thai coffee brands are also rising day by day. The large chain cafes in some degree bring impact to the new entrants' profits, but competitors of Thai coffee industry has also noticed the competitive advantages of

various famous brands, found out their own business features and created a marketing environment with their own characteristics, thus effectively promoting the development of the industry.

Suppliers' Power

The cafes not only buy coffee beans from dealers but also keep sound cooperative relations with coffee farmers. In Thailand, the coffee farmers provide the one-package service from beans picking to roasting to their regular dealers.

For instance, when the Starbucks is buying coffee beans from dealers, it is also investing coffee farmers or organizations, by which it can gain enough dealers to stabilize its bargaining power through a series of operating methods.

Once the coffee planting starts, the investment in required agricultural equipment for planting, roasting equipment, and electrical equipment is unavoidable. Different from the investment in ingredients, such as coffee beans, such investment is most of the time a one-time investment. Therefore, the bargaining power of these suppliers only has a limited influence on coffee retailers. Besides, that the suppliers provide a large number of products with the same quality has relatively weakened their bargaining power.

The Bargaining Power of Buyers

Coffee buyers can be classified as ordinary customers and high-end customers. The "ordinary customers" refer to those who have no special requirements for coffee. They can be easily satisfied with common coffee such as instant coffee and cheap coffee since they drink coffee just for some basic needs, not for pursuing the extraordinary tastes or rosy atmosphere at cafes. This means coffee for them is not a necessity and can be replaced by many alternatives, such as milk tea and other beverages. Thus, the customers of this kind boast strong bargaining power. However, it is unarguable that the ordinary customers representing a large group have formed an indispensable market filled with business opportunities, thus worthy of being seriously treated by these coffee suppliers.

In addition, among the ordinary customers also brew some potential "high-end customers"; therefore, it is also a great potential opportunity to develop these ordinary customers into high-end ones who prefer exquisite coffee made by hand or drip-style coffee machines rather than the pipeline products, such as instant coffee and the like. This means they pay more attention to the quality of coffee beans and the atmosphere enjoyment brought by coffee. (Li.2011) At present, the high-end customers are gradually getting rid of the mass trend of coffee and prefer to have an in-depth

knowledge of coffee. Furthermore, the coffee lovers in Thailand now including those from abroad has changed their consumption view of material to that of taste, indicating an evolution of consumption view. The high-end customers are willing to pay for premiums to gain a better taste and experience. In other words, the cafes can provide them not only with the first-class coffee but also with the irreplaceable and relaxing atmosphere.

Threat of Substitutes

The special functions of coffee partly explain its irreplaceability. After the research on 25,000 subjects, Korean researchers found that people who drink 3 to 5 cups of coffee (each cup approximately with a capacity of 200ml) per day will suffer from a lower cardiovascular risk. Besides, according to a Japanese research, people who drink a cup of coffee per day suffer from a lower risk of brain death than those who do not' in addition, coffee can also prevent gastric cancer, colorectal cancer, and Parkinson's disease, reduce gallstone morbidity, refresh mind, help losing weight as well as strengthen cardiovascular functions.

There are many similar beverages in the market, such as milk tea, coke, juice, etc. – all can be choices for customers. There are many similar beverages to coffee in the market; however, customers have different consumption orientation and product preference, for instance, some like juice, some like milk tea, and others like coffee. Coffee retains a group of loyal customers thanks to its unique flavor. Although tea and other energy drinks can refresh mind as coffee does, they cannot replace other functions and the unique flavor of coffee. (Jiang & Long & Shi. (2014)

New Potential Partners

The potential new entrants may not enter the market because of the relatively high fixed expenditure on the production equipment and the relevant technical investment, which raises the threshold to the coffee industry. In addition, the high market share of the companies in a dominant position in some degree set up a market barrier. KFC, McDonald's, Pizza Hut are good examples. (Wei.2017) Although these companies cannot rival the coffee-branded competitors in terms of coffee sales, they boast well-known brands, various foods and good services. This means the good-timing entry of these companies to the coffee retail industry will undoubtedly impact the coffee-branded companies to some degree.