

# 國立交通大學

## 企業管理碩士學程

### 碩士論文

越南咖啡業的發展

THE DEVELOPMENT OF VIET NAM COFFEE INDUSTRY

研究生：范玉妝

指導教授：唐瓊璋 教授

中華民國九十九年六月

**National Chiao Tung University**  
**College of Management**

**Global Master of Business Administration**

**Thesis**

**THE DEVELOPMENT OF VIET NAM COFFEE  
INDUSTRY**



**Student: Pham Ngoc Trang**

**Advisor: Professor Tang Ying Chan**

June 2010

Hsinchu, Taiwan, Republic of China

# The Development of Viet Nam Coffee Industry

研究生: 范玉妝

Student: Tara Pham

指導教授: 唐瓊璋教授

Advisor: Professor Tang Ying Chan

國立交通大學  
企業管理碩士學程  
碩士論文



June 2010

Hsinchu, Taiwan, Republic of China

# **The Development of Viet Nam Coffee Industry**

Student: Pham Ngoc Trang

Advisor: Professor Tang Ying Chan

College of Management - Global MBA

National Chiao Tung University

## **ABSTRACT**

The coffee tree was introduced into Viet Nam by French in the 1850s. However, coffee only began to play a really important role in the economic after the Economic Revolution in 1975. Since 1986, the production of coffee, like that of rice, has grown dramatically, making Viet Nam the fourth largest exporter of coffee in the world in 1998 and maintain the second position in the world since 2000 until now.

Coffee growth has had very important contribution to the economy: high export value, decrease in the poverty rate in Central Highland ... However, during the world coffee price crisis, Viet Nam coffee commodity chain was one of the most negatively affected in the world. Living standards of coffee growers were reduced. Poverty rate, coffee agents' bankruptcy increased. But in consuming countries, coffee sellers still earned a lot of money.

This fact shows us that Viet Nam coffee industry is very vulnerable and has a lot of troubles which need to be solved. One of the main issues is so called "coffee paradox" that not only Viet Nam encounters but also other producing countries do. In addition to the orthodox coffee paradox, the paper will also mention low domestic consumption in Viet Nam and in producing countries.

The paper is going to discuss about the coffee paradox, how to improve the consumption situation in producing countries including Viet Nam, and some suggestions will be given for Viet Nam coffee industry's stable development in the future.

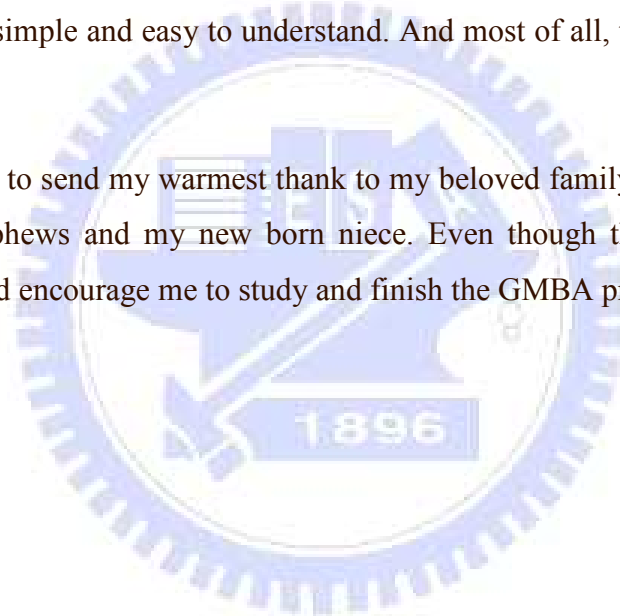
## **Acknowledgement**

First of all, I would like to acknowledge my advisor Professor Tang Ying Chan for his great efforts during teaching me some courses, and for his fruitful cooperation, precious comments as well as suggestions concerning about this paper.

Second, I would like to send my gratefulness to GMBA friends. All of us are a happy family. We always support each other and complement for each other. I studied a lot from all of you, which help me grow up a lot.

Special thank to my dear husband. Thank you for always being together with me, making me happy, always accompanying me in all difficulties. In your explanation, regression model becomes much more simple and easy to understand. And most of all, thanks to you that I feel this life is beautiful.

Above all, I want to send my warmest thank to my beloved family: my parent, my sisters and brothers, my nephews and my new born niece. Even though they are far away, they always support me and encourage me to study and finish the GMBA program.



# Table of Contents

	Page
English abstract .....	i
Acknowledgement .....	ii
Table of content .....	iii
Chapter 1: Issues of Viet Nam coffee industry .....	1
1. Government management and policy .....	1
1.1. Ministry for Agricultural and Rural Development .....	1
1.2. VINACAFE .....	2
1.3. Vietnamese Bank of Agriculture and Rural Development .....	2
1.4. Viet Nam Coffee and Cocoa Association .....	2
2. Structure of coffee industry .....	2
3. Coffee export with low quality.....	3
4. Insufficient supply chain .....	4
5. Low quality production, process .....	5
6. Coffee paradox.....	6
Chapter 2: Introduction of Viet Nam coffee industry .....	9
1. Development stages .....	9
2. Influential factors on the growth of coffee industry .....	10
2.1. Nature condition for coffee growing.....	10
2.2. Mass migration .....	11
2.3. Government policy.....	11
2.4. Crop selection .....	13
2.5. Market signal .....	14
3. Role of coffee in National Economy .....	14
3.1. Export market .....	14

3.2.	Economic value .....	14
4.	Fluctuation in price and production .....	15
Chapter 3:	Literature Review .....	18
1.	Coffee paradox .....	18
2.	Coffee commodity value chain .....	18
3.	Global Value Chain .....	19
4.	Value added Agriculture .....	22
Chapter 4:	Methodology and findings .....	24
Chapter 5:	Recommendations for stable development of Viet Nam's	
	Coffee industry .....	40
1.	Quality improvement .....	40
2.	Sustainable coffee structure in producing .....	40
3.	Domestic consumption and marketing effort .....	42
4.	Co-operative organization .....	43
Reference	.....	45



# Chapter 1: Issues of Viet Nam coffee industry

## 1. Government management and policy

The production base of coffee in Viet Nam is now approximately 95 percent private run farms with the remaining 5 percent being state farms, which are also being gradually redistributed to small farmers. However, many of the collection, processing and export roles are still performed by State Owned Enterprises (SOEs). State owned companies make up 76% total market. Joint companies make up for only 14% and 10% are others.

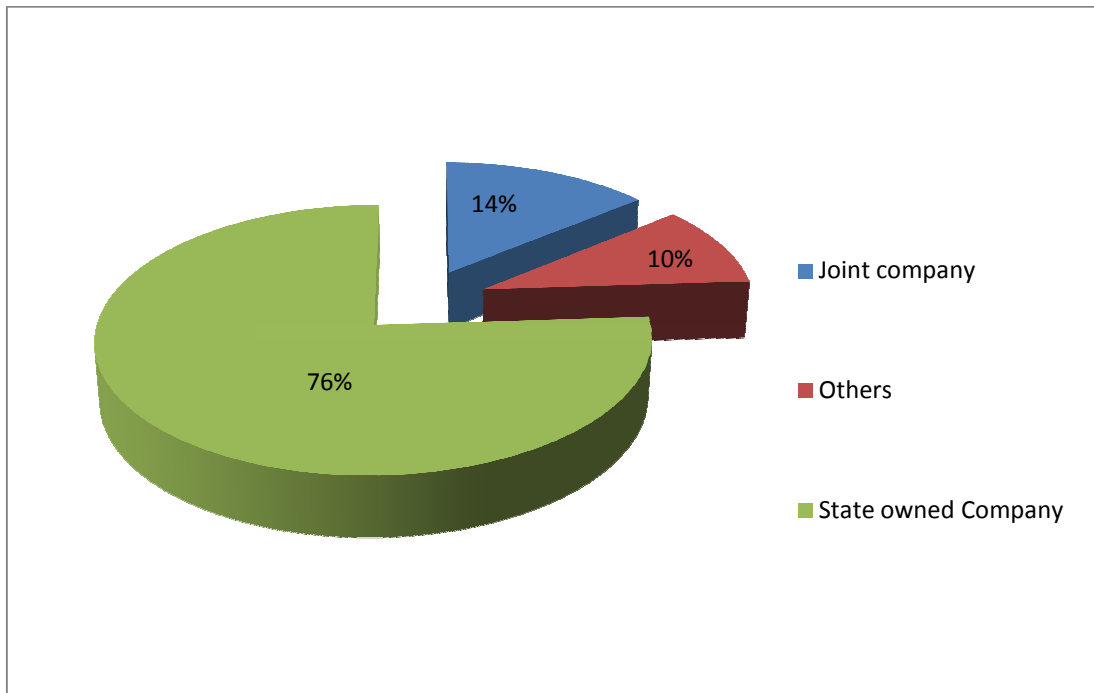


Figure 1.1: Coffee Organizational structure

Source: IPSARD, 2008

There are a number of key stakeholders in the Viet Nam coffee industry. A brief description of these is provided below:

### *1.1.MARD: Ministry for Agricultural and Rural Development*

MARD is the key ministry for coffee. There are a number of research and development institutions under MARD such as:

- IPSARD: Institute of Policy and Strategy for Agriculture and Rural Development,
- Dak Lak agricultural extension centre.
- WASI: Western Agroforestry and Scientific Institute in Dak Lak.
- BRC: Bavi Research Centre, specifically set up for Arabica research in North Viet Nam.



### *1.2. VINACAFE: Vinacafé Bien Hoa JSC*

The Viet Nam Coffee Corporation is the SOE umbrella company under MARD that manages 59 SOEs that cover a range of industries including 40 state farms totaling 27 000 ha of coffee. These state farms work with 27 SOEs, including processors, traders, and service providers providing credit, fertilizer, irrigation, research and roasting. VINACAFE took over the supervision of the SOEs from MARD in 1995. It is now in a process of liberalizing and privatizing these enterprises. At present the government controls only 5 percent of the coffee production area in Viet Nam in the form of state farms.

### *1.3. VBARD: Vietnamese Bank of Agriculture and Rural Development*

The Vietnamese Bank of Agriculture and Rural Development is the main form of credit for coffee farmers, which is a government institution and has 1 600 branches in rural areas. VBARD estimates that it has 75 percent share of the credit market for coffee growers. In 2002 this market exceeded USD270 million.

### *1.4. VICOFA: The Viet Nam Coffee and Cocoa Association (110 members which include 90 SOEs, 18 private companies and 2 scientific institutes).*

VICOFA was formed in the late 1980s to help organize the coffee sector and help government develop coffee policy. It is presented as an independent business association, but is in reality more of a government affiliated organization representing Viet Nam in overseas forums and is financed through its members and by government. These institutions belong to the government. This is the remains of the centralized economy under the communist regime. These institutions still control and play the main role in the coffee industry. These organizations did not perform very well. However, with the government subsidy, these state owned companies still exist and keep the market power. Government need to have some actions to reform companies like privatizing state owned companies or allowing more and more foreign companies to invest in this field.

During the transition time after the liberalization, SOEs played a leading role in the economy and they had a lot of contribution to the economy. However, because of the support from the government, these SOEs became less competitive and lost the leading role in the economy. The change in the economy institution requires more contribution from private companies. As a result, the process of SOEs coffee company privatization is indispensability.

## **2. Structure of coffee industry**

Currently, the coffee structure in Viet Nam is: Robusta 95% and 5% of Arabica. The reason why Robusta dominates coffee structure is because: Robusta is a farmer friendly friend. Viet Nam Government's choice to grow Robusta is a wise strategy because Robusta is very resistant to diseases, time to bear fruit is short; no requirement for high technology.

AREA	ARABICA	ROBUSTA
Percentage	5%	95%
Economic value	High	Low

Now, total area of coffee planting in Viet Nam is 506.000 hectare. Robusta makes up 95% and is widely planted in Dak Lak, Lam Dong, Gia Nai, Kon Tum, Dong Nai with total area of 480.000 hectare. Arabica is grown in a wide area from North to South part with cold weather but the total area is only 26.500 hectare.

However, from the world coffee market, it is easy to be seen: the economic value of Arabica is double compared with Robusta. For example, the price of Columbia Arabica is 100 cent/lb in 2007, which is double the price of Viet Nam Robusta at 55.8 cent/lb. Meanwhile the price of Robusta has been sinking much faster than of Arabica. Vietnamese coffee industry is therefore facing a bigger loss and finds itself in need of making some changes to be adapted with this ever-changing international market. And we need to put more effort in balancing coffee structure between Robusta and Arabica.

### **3. Coffee export with low quality**

According to the report of International Coffee Organization (ICO), 88% of the rejected coffee in the world from September 2006 to March 2007 came from Viet Nam, which represented an increase of 19% in the quantity of Vietnam coffee rejected compared to the previous 6 months.

Actually, the new standard for coffee, TCVN 4193 – 2005 (Tieu chuan Viet Nam 4193 - 2005) was issued in 2005 in order to minimize the ratio of rejected coffee and proves to fit ICO's standards. However, this new standard is not a must in Viet Nam. So it has been applied but only by 10% of enterprises or equal to 1 ~ 1.5% of coffee export

every year. The quality of Vietnam's raw Robusta coffee is not as bad as people think. If farmers do not pick unripe beans and follow regulations in collecting and processing, Vietnam's coffee would have a low ratio of bad beans. Coffee is divided into 5 grades with different ratio of defects in 300 grams. Currently, Viet Nam coffee is grade 4 with 60-70 bad beans for every 300 gram. This bad quality causes the low price of the coffee export these years.

The failure of applying new standard is due to cost that enterprises have to face. The application of TCVN 4193-2005 means that enterprises will have to change all the machines and the production process (purchasing, preliminary treatment and packaging), which will take time and money.

#### 4. Insufficient supply chain

This is the coffee supply chain in Viet Nam. So from the coffee supply chain, it is easy to see there are many steps from coffee growing until coffee exporting. So the process is decentralized with the anticipation of many players in the supply chain. There is no commitment among the players. The linkages among these tiers are very loose. And this will have bad impact on the overall quality of export coffee.

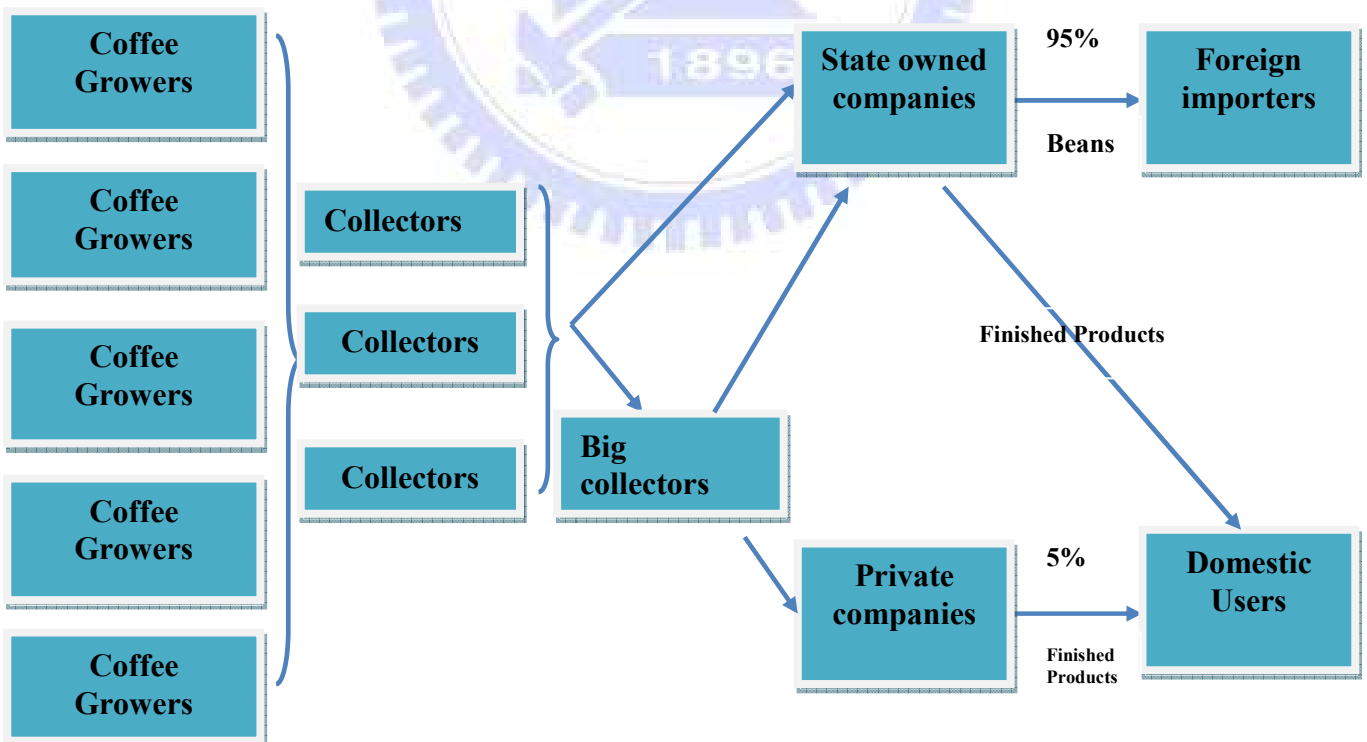


Figure 1.2: Coffee supply chain in Viet Nam

Source: Ministry of Agriculture and Rural Development, Vietnam, 2007

Coffee is grown mainly by the private household (about 95%) and only 5% is grown in state owned plantation. So when the harvest time comes, coffee cherry will be collected by household coffee growers. The problem here is that coffee cherry is ripe at different time. When the farmers pick up coffee cherry, they will pick up both red and green cherry. Coffee growers do not pay much attention the step of sorting. So the ripe and unripe coffee will be mixed together. That decrease the quality of coffee a lot and the price will be pressed down a lot by the buyers.

Coffee collectors will collect coffee from the coffee growers or small collectors. Then they will sort and dry coffee. Part of coffee will be sold to state owned companies and part of coffee will be transported to big collectors. Big collectors will process coffee simply and then partly will be sold to private roasting companies or households. Coffee will be ground or processed into different kind of products and then sold to domestic customers. At state owned companies, coffee will be bought from small collectors. Coffee will be graded again into type I, II .... 95% of coffee will be exported under the form of beans to foreign importers. And small part will be processed into finished products like ground coffee, instant coffee, milk coffee and consumed in domestic market.

Deeper looking into the supply chain in the other producing countries, the coffee supply chain in other countries also has a lot of problems. However, big and developed coffee countries like Brazil, Indonesia or Mexico; they already developed a very sufficient coffee supply chain. Vertical integration is one of the models that work very well in Indonesia. To have a better control of coffee quality, Indonesia applies the vertical integration in coffee planting and producing. A set of uniform methods is used to reduce as much “waste” in coffee supply chain as possible. This model is being researched and considered to be applied in Vietnam.

## **5. Low quality production, process**

The main technology used was dry processing. Most farmers dry coffee outdoor by themselves and then sell to the collectors. Dry method is the most traditional method and used broadly because this method does not need a lot of machinery investment. Level of mechanization in the farmers is very low. Very few farmers can dry coffee by using drying machine. The advantage of this method is cheap. However, the quality of coffee product is very low.

Recently, domestic companies began to use wet technology. However, the scope is still very limited. One of the reasons that limit the using and applying wet technology is that this technology needs a huge investment. Meanwhile, most of the coffee producers in Viet Nam are small household.

After being dried, coffee will be graded according to size, weight and color of different types of R1, R2 and R3. Mostly, coffee will be exported to foreign importers under the form of green beans. About 5% will be processed and consumed in the domestic market. Some roasting companies even still use processing technology from France colony period. However, there are some companies also start to apply new processing technology imported from developed countries. However, the price of these technologies is very high. So companies have to consider a lot before importing these technologies.

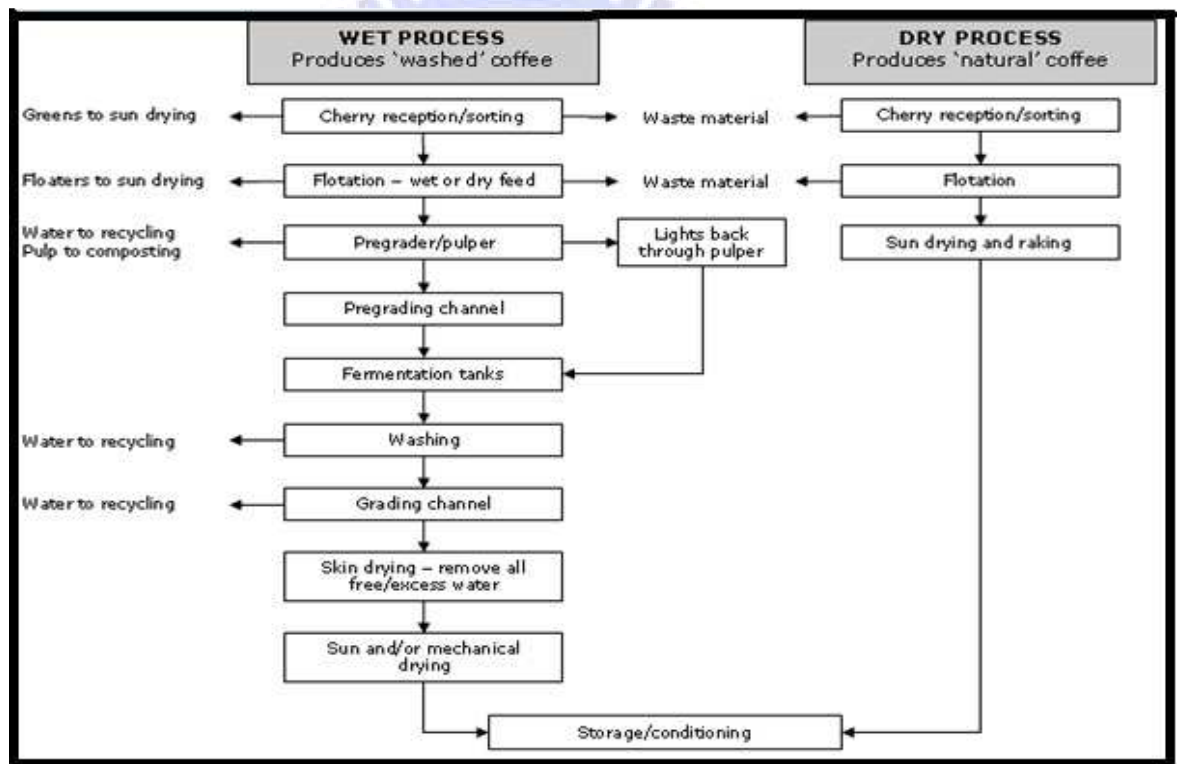


Figure 1.3: Coffee processing flow

Source: International Trade Centre, UNCTAD & WTO, 2002

After the coffee goes through first process, coffee beans will be packed and stored in warehouse. Warehouse in Viet Nam has not been paid enough attention. The unstable in temperature easily leads to fungi appearance. The taste and smell of coffee will decrease when coffee is not kept in good condition.

Currently, the main problem of coffee production and processing is decentralization. Coffee growers, collectors and companies more or less take part in producing and processing with many kinds of technologies, which makes the coffee not uniform, low quality and low price. Meanwhile, in other countries like Indonesia, processing steps only happen in big companies.

## 6. Coffee paradox

### 6.1. Domestic consumption, product diversification

According to a researched by IPSARD, domestic consumption in Viet Nam is 2007 is only 0.5kg/person/year. Compared with the other countries, this number is too small. And the paradox that we need to address here is: Viet Nam ranks 2<sup>nd</sup> on the coffee producing and exporting market. However, the domestic consumption is too low compared with the production amount.

Table 6.1: Coffee consumption amount per person per year in Viet Nam and EU countries 2007

Area	Coffee consumption amount per person per year
Viet Nam	0.5kg
North Europe	10Kg
West Europe	5-6Kg

Source: IPSARD, 2007

Product variety is another side of the problem. Currently, only 5% of coffee produced is consumed in domestic market. However, the number of product is very poor.

- Ground coffee occupies 2/3 total market
- Instant coffee occupies 1/3 total market

And Viet Nam does not have any national coffee brand.

### 6.2. Low income for coffee growers

The income distributed for coffee growers fluctuates together with the global coffee price. However, the issue that must be addressed here is the gap of income distribution between coffee growers and Viet Nameese exporters. Coffee growers receive so few from what they input in the coffee crop. But because they cannot get access to information of price directly, so they are always at the disadvantageous position in bargaining with traders.

This situation happens not only in Viet Nam but also in other coffee producing countries. So in the next part, more time and effort will be put in this paradox under the global point of view.

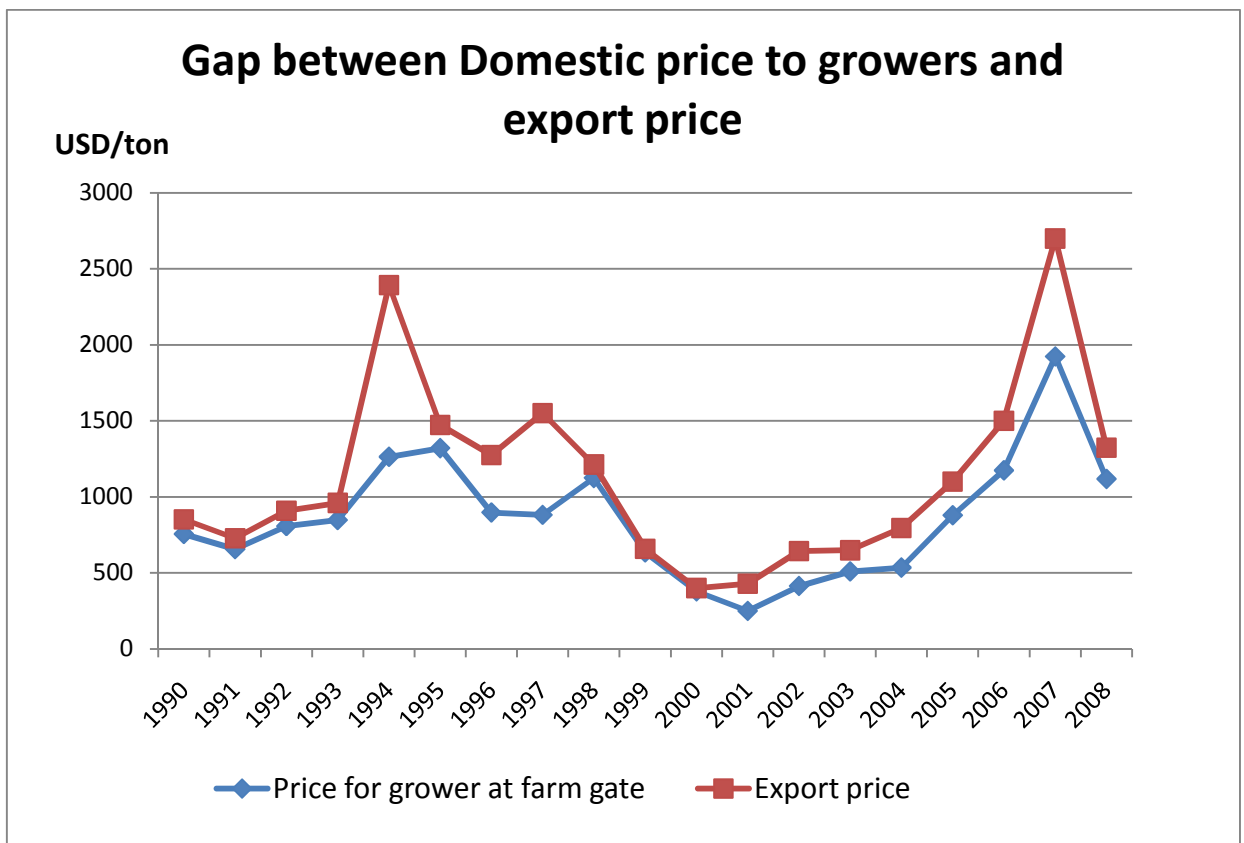


Figure 1.4: Price to growers and export price gap

## Chapter 2: Introduction of Viet Nam coffee industry

### 1. Development stages

Viet Nam's coffee industry's development process is marked by important time points. 1857 is the year that Coffee was first introduced to Viet Nam by French. But until 1888, coffee was official planted in Viet Nam. French brought coffee tree Arabica from Bourbon Island to plant in the Northern Viet Nam and then expanded to other area. At that time, coffee was exported under the trademark: Arabica du Tonkin.



Early in the 20<sup>th</sup> century, coffee was grown in plantations in Nghe An and High land with the total area no more than 7000 hectare. In 1975, Viet Nam was unified. With the policy of redistribution of population, labor force at highland area was supported with the stream of migrant residents. Total coffee area in 1975 is 19.000 hectare.

1994 is the time when coffee price set up the record at 135 cent/lb. The price escalated from 62 cent to 135 cent due to the drop in production and export in Brazil. 1994 coffee crop in Brazil was hit badly by the frost. The total export from Brazil decreased from 19 million bags in 1993 to 13 million bags in 1995/1996. Price increasing encouraged Viet Nameese farmers to expand coffee area and the total of coffee reached 517.000 hectare in 2000.

With the expansion in producing, export quantity also set up the record in 2000. It is the first time Viet Nam occupied the second position in coffee exporting market, second to Brazil with total amount of 11 million bags. Viet Nam has remained this position until now.

However, the over expansion in coffee producing in Viet Nam was also one of the reason leading to coffee crisis in 2002-2003. The price dropped down to 45 cents/lb. Coffee area decreased 70.000 hectare in the time of price crisis.



## 2. Influential factors on the growth of coffee industry

### 2.1. Nature condition for coffee growing

Vietnam has a fascinating topography. The location of the mountainous regions traverses the area in roughly the same direction as the prevailing winds. There are north-facing slopes that are entirely different in climate than south-facing slopes, and wide regions with altitudes that are right for different species of coffee. In the north of Viet Nam, typical weather condition is cold and humidity high on the high mountainous area, which is very suitable to grow Arabica. The main areas growing Arabica are Son La, Lai Chau, Ha Giang. In the south part of Viet Nam, climate is different, especially the highland area, coffee factory of Viet Nam. Temperature at about 25°C, fertility basalt soil, and average height over 800m sea-level help these areas become the leading coffee production area in Viet Nam. 92% of total coffee production is from this area.

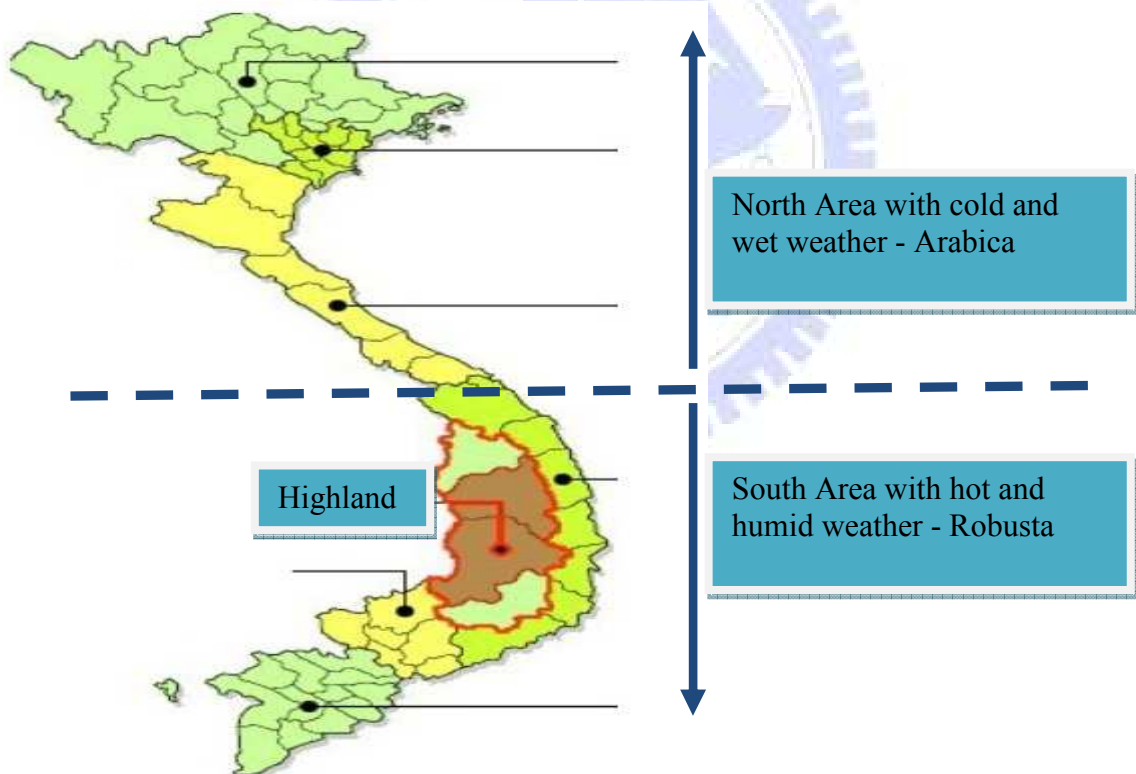


Figure 2.1: Viet Nam natural condition map

Source: Ministry of Agriculture, 2006

Five provinces including Dong Nai, Dac Lac, Lam Dong, Kon Tum, Gia Lai are leading in coffee production annually. Because of this, almost any species of coffee can be grown in what would be considered its ideal or "native" climate.

2.1.1. Soils: The central highlands are fertile and are well suited for Robusta coffee. Dak Lak has two main types of soils. These are deep, weathered soils derived from Basalt origins described as Rhodic-Humic Ferralsols and Acric Ferralsols. These kinds of land have a very low bulk-density and allow good water penetration.

2.1.2. Water resources have been essential for the high yields obtained by coffee farmers in Viet Nam. The basaltic soils of the Central Highlands have provided this with their large stores of underground water which are replenished annually by the monsoon rains.

2.1.3. Climate is ideal for both Arabica and Robusta growing. In the highland area, warm tropical climate, influenced by the south Asian monsoon with distinct dry and rainy seasons enable Robusta to develop very well. Cold, humid weather on high mountainous area in the north is suitable for Arabica growth.

## 2.2. *Mass migration*

The corner stone of the development of coffee in Viet Nam has been the mass migration program undertaken by the GOV after reunification in the late 1970s and early 1980s to solve unemployment and social unrest. New Economic Zones (NEZs) were established and people were encouraged to move from populated areas in the Mekong Delta in the south, the Red River Delta in the north and the major cities, particularly Ho Chi Minh City. Sparsely populated areas like the Central Highlands province provided the location. Planned migration also provided the benefit of 'stabilizing' these upland areas dominated by ethnic minorities, as many settlers were demobilized soldiers from the north. The population of the Central Highlands (5 provinces) increased from 1.5 million in 1975 to 4.2 million in 2000. This is a big contribution to the labor force in this area.

## 2.3. *Government policy*

The key to successful policies have been the willingness of the GOV to change and adapt to market forces. Throughout the development of the coffee industry the

GOV provided the key ingredients for the growth of the coffee industry, these being:

2.3.1. Agricultural incentives: A move from a collective farming model to a market economy allowing profits earned to flow to farmers.

AREA	ARABICA	ROBUSTA
Preferred Growing Altitude	Grows best at high altitudes from 1000m to 2500m	Prosperes in lowlands such as rainforests and grows quickly in altitudes up to 600 meters
Prefers Climate	Seasonal climate of 15 - 24 deg C.	Seasonal climate of 24 - 30 deg C.
Production Costs	High due to labor insensitivity and difficult access high slopes.	Less expensive to maintain so lower production costs. Some mechanical harvesting.
Handling	Extremely vulnerable to cold, drought, frost – need careful handling.	Hardier plants, easier to grow, capable of rough handling.
Plant Yield	Plant yields only 1 to 1.5 pounds of green coffee per year or 1500 -3000 (kg beans/ha)	Plant yields 2 to 3 pounds of green coffee a year, so more pounds of finished goods per acre. Typically 2,300-4,000 (kg beans/ha)
Resistant to disease & pest.	No.	Yes.
Time to bear fruit	7 years	3-5 years
Hemileia vastatrix - Fungal – attack of the Leaf	Susceptible	Resistant
Nematodes - Worms attack roots	Susceptible	Resistant
Coffee berry disease - Fungal	Susceptible	Resistant

- 2.3.2. Access to capital: Land reforms provided an asset base for individual farmers to access finance to fund further coffee expansion. A comprehensive rural banking system helped with this as much of the lending was made by state owned banks. The GOV has shown a willingness to ensure its banks froze loans or extended the lending periods in times of hardship and lower coffee prices.
- 2.3.3. Agricultural inputs: Key agricultural inputs were provided, initially from locally produced fertilizers, but increased to large-scale importation at critical times to aid the industry's growth.
- 2.3.4. Market access: Marketing channels were developed by the state farms and SOEs involved in exporting coffee. Gradually the private sector has taken them over.

2.4. *Crop selection: Robusta Coffee, a "farmer friendly" crop*

Robusta is a flexible and forgiving crop. Yield can be controlled by varying the water and fertilizer inputs and farm management inputs like pruning. The Vietnamese farmers have adopted many successful strategies in order to maximize profits from Robusta. Viet Nam Robusta flowers in the dry season, so irrigation is required to break the flower bud dormancy and induce flowering and then fruit set. The level of flowering depends largely on the volume and number of heavy watering applied during the dry season from January to April. Vietnamese farmers use this strategy well. After the harvest in December and January they also prune to allow light into the Robusta bush, hence developing new bearing sites.

The amount of water and fertilizer used will also depend on the farmers' finances and the likely price for coffee. Farmers use these strategies to manage inputs and to maximize yields when Robusta prices are profitable. They are able to reduce inputs without any major problems for the Robusta bush (unlike Arabica coffee which has major issues if the management system is changed). To rejuvenate Robusta, the plant is simply cut off at knee level and this allows it to re-grow with vigor when water and fertilizer are applied. Robusta coffee has few pest and disease problems, hence the name 'Robusta'. Robusta coffee is very simple to process; it is storable, tradable, transportable and mostly non-perishable.

### 2.5. Market signal: Coffee price boom

High coffee market prices during the 1990s gave very strong market signals to farmers. Viet Nam's annual average export price jumped from USD800/ton in the late 1980s to reach USD2393/ton in 1994. These prices slowly declined to USD1200/ton in 1999.

## 3. Role of coffee in National Economy

### 3.1. Export market

During the last 20 years, coffee export has increased stably. Viet Nam coffee is exported to more than 60 countries in the world. The main import market of Viet Nam coffee are EU (Germany, United Kingdom, Spain, Belgium, Italia...) with 49%; United States with 13.8% and Asia (Japan, Philippines, Malaysia, China, Singapore...) with 37.2%.

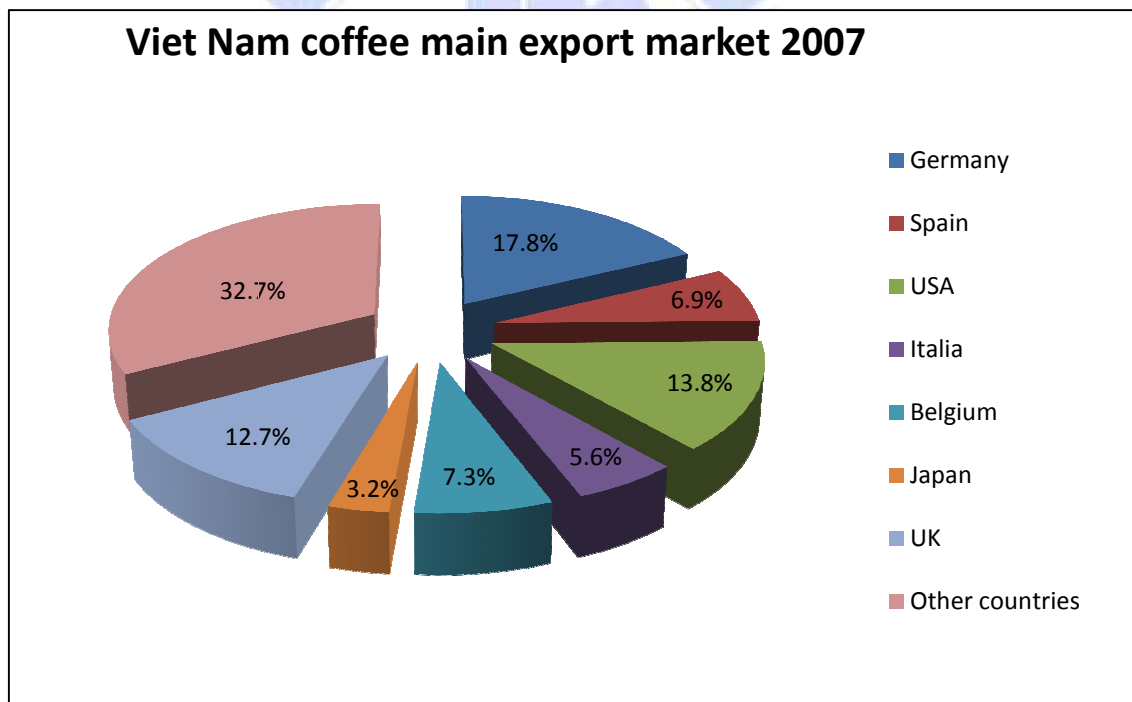


Figure 2.2.: Viet Nam coffee main export market

Source : Viet Nam General statistic Division, 2007

### 3.2. Economic value (Million USD)

During the last 20 years, Viet Nam coffee exports both in quantity and value has increased stably.



Figure 2.3: Coffee export value from 1991 to 2008

Source: Ministry of Agriculture

Coffee price in the world market has increased to 1.873 USD/ton in 1994 and 2.411USD/ton in 1995 because of the reduction in producing and exporting in Brazil. This market signal encouraged Viet Nam coffee growers to expand the production area. Gradually, coffee becomes one of the most important agriculture export products in 1990s and until now. Export value stably fluctuated between 400 and 600 million USD, contributed from 6% to 10% to the national total export value. In a short time, Viet Nam became the world second biggest export country in the world, after Brazil. In 2001, Viet Nam ranked number 1 in the world in exporting Robusta coffee with 41.3% of total market share. The export value also went up with the increase in production and export.

#### 4. Fluctuation in price and production

The most striking feature of Viet Nam coffee industry is the fluctuation in production and price. The fluctuation in production and price is together with the global trend. When the production decreases, price will go up. And the highest price is in 1994/1995 and 2007/2008. And the lowest price is during price crisis 2001-2002. Price dropped down to around 0.4USD/kg.

Table 2.1: Viet Nam Export Price and production from 1989 to 2009

<b>Year</b>	<b>Export Price (USD/ton)</b>	<b>Production (Thousand bags)</b>
1989/90	861	1390
1990/91	852	1308
1991/92	727	2340
1992/93	909	3020
1993/94	960	3532
1994/95	2393	3938
1995/96	1473	5705
1996/97	1275	6915
1997/98	1551	6970
1998/99	1213	11631
1999/2000	658	14940
2000/01	400	13132
2001/02	428	11555
2002/03	644	15231
2003/04	649	14174
2004/05	795	13542
2005/06	1100	19340
2006/07	1500	16467
2007/08	2700	16000
2008/09	1324	21500

Source: International Coffee Organization, 2009

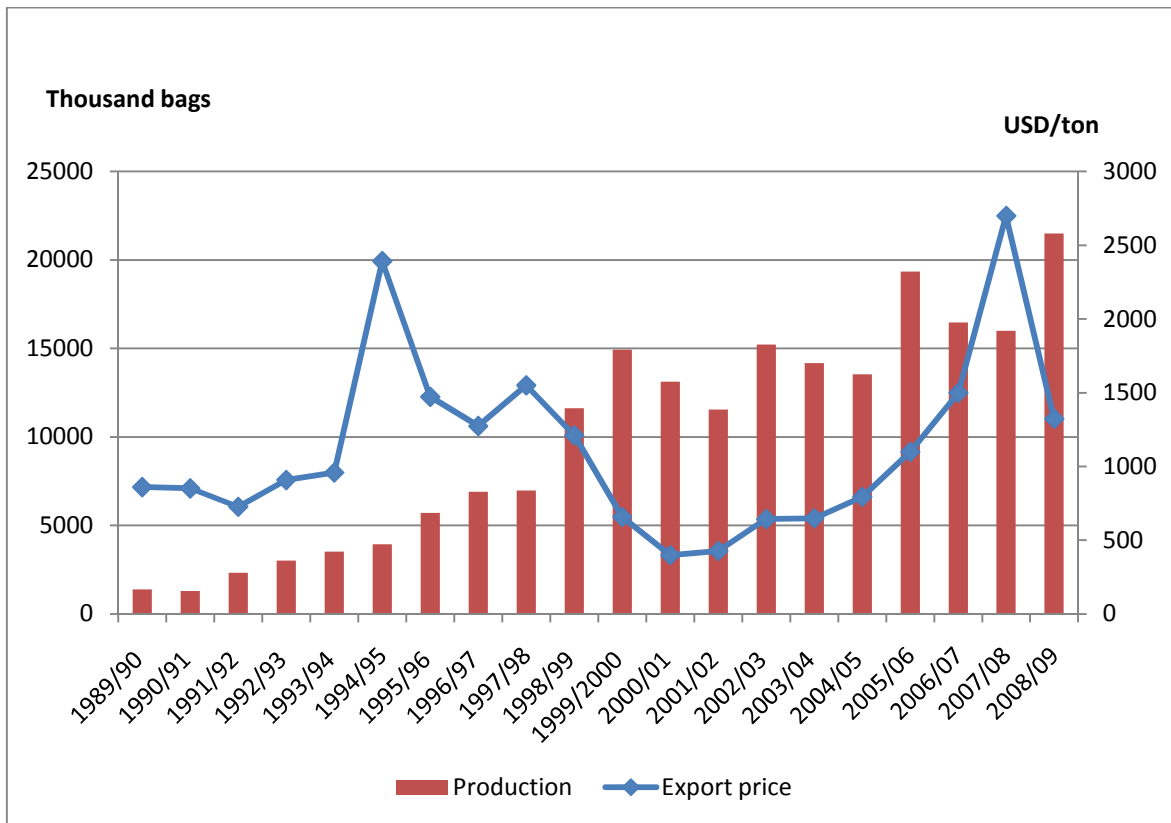
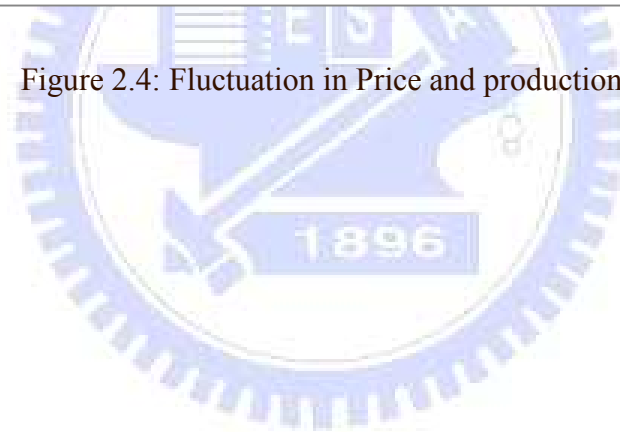


Figure 2.4: Fluctuation in Price and production





## Chapter 3: Literature Review

### 1. Coffee paradox

According to Benoit Daviron, Stefano Ponte, 2004, “coffee paradox is the coexistence of a ‘coffee boom’ in consuming countries and of a ‘coffee crisis’ in producing countries”. In their research, they raise the question: “Can developing countries trade their way out of poverty? International trade has grown dramatically in the last two decades in the global economy; and trade is an important source of revenue in developing countries. Yet, many low-income countries have been producing and exporting tropical commodities for a long time. They are still poor. The research is a major analytical contribution to understanding commodity production and trade, as well as putting forward policy-relevant suggestions for ‘solving’ the commodity problem.”

Through the study of the global value chain for coffee, the authors recast the ‘development problem’ for countries relying on commodity exports in entirely new ways. They do so by analyzing the so-called coffee paradox – the coexistence of a ‘coffee boom’ in consuming countries and of a ‘coffee crisis’ in producing countries. New consumption patterns have emerged with the growing importance of specialty, fair trade and other ‘sustainable’ coffees. In consuming countries, coffee has become a fashionable drink and coffee bar chains have expanded rapidly. At the same time, international coffee prices have fallen dramatically and producers receive the lowest prices in decades.

The coffee paradox exists because what farmers sell and what consumers buy are becoming increasingly ‘different’ coffees. It is not material quality that contemporary coffee consumers pay for, but mostly symbolic quality and in-person services. As long as coffee farmers and their organizations do not control at least parts of this ‘immaterial’ production, they will keep receiving low prices. *The Coffee Paradox* seeks ways out from this situation by addressing some key questions: What kinds of quality attributes are combined in a coffee cup or coffee package? Who is producing these attributes? How can part of these attributes be produced by developing country farmers? To what extent are specialty and sustainable coffees achieving these objectives?

### 2. Coffee commodity value chain

This article analyzes the division of the total income and surplus generated along the coffee commodity chain. Until the late 1980s, coffee growers and producing states

retained over a third of the total income and about half of the total surplus that was available. This was due in part to the collective actions of coffee-producing states, which led to the imposition of a regulatory regime involving export quotas, creating rents for the producing countries. By the late 1980s, coffee TNCs had consolidated their control over core markets, and began to use their market power to increase their shares of both income and surplus. This shift was greatly accelerated by the breakdown of the export quota regime in 1989. The article concludes that these results necessitate a reformulation of commodity chain analysis

### **3. Global Value Chain**

Central to the development challenge is the search for sustainable growth, for without this, there is little prospect of meeting the physical, social and emotional needs of the population. But growth in itself is not a sufficient – if it is unevenly distributed, and then there may be little increase in welfare.

Recent experience in the global economy highlights the importance of these growth and distributional issues. On the back of high growth rates associated with globalization, 670m people around the world moved out of conditions of “absolute poverty” between 1990 and 1998. That is, their incomes exceeded \$1 per day (measured in 1985 purchasing power parity consumption standards, which take account of living costs in different countries). In historical terms this represents a major advance in human welfare. But there has also been a downside to globalization. Despite the rise in living standards of many, the numbers continuing to live in absolute poverty remain stubbornly large and unchanged, at something over 1.2 billion. Moreover, there is overwhelming evidence that patterns of income distribution within and between countries have become significantly more unequal.

There are essentially two (non-contradictory) ways of meeting these poverty-related concerns. The first is through redistribution, intra-nationally and inter-nationally. Recent experience in Europe illustrates how important this can be, since this is one of the few regions where the distribution of consumption standards has not become markedly more unequal in recent decades despite a worsening in the patterns with which incomes have been distributed. This follows directly from social welfare programs introduced by European governments (Förster and Pearson, 2000). The second path is more direct, and involves enhancing the incomes earned by the poor.

From the perspective of poor countries, there is little evidence that the redistributive path has been pursued successfully. In terms of the inter-national redistribution of income, the last two decades have seen a weakening of income transfers. And very few developing countries have the political and fiscal capacity to introduce structured programs of intra-national income transfer. Hence, the key challenge is to take steps to directly enhance the income-earning capacities of poor countries and poor groups in poor countries.

Globalization and integration into global product markets have become major elements in this poverty-focused growth agenda. The East Asian economies and China have illustrated how international specialization can provide for scale economies and help producers and economies enter a virtuous circle of capability building. It has largely been through this that so many people have been lifted out of absolute poverty. If the “losers” in the globalization era had been confined to those who have been excluded from global processes, then the policy conclusions would have been clear – enter the global economy as rapidly as possible and take advantage of these economies of specialization. However, the “losers” in recent decades include those producers who have participated in the global economy, but who have done so in ineffective ways. The key challenge thus confronting policy design and implementation is not whether to participate in global processes, but how to do so in ways which provide for sustainable income growth.

This is of course not a new agenda. The way in which developing countries and poor producers have entered the global economy, and the pattern of their global insertion, have long been a focus of concern. It has now been conclusively shown that their adopted paths of specialization in primary materials have been a major cause (and perhaps even a consequence) of their low levels of income. This is because the terms of trade of these primary products – the prices which they realize compared to the prices paid for developing country manufactured imports – have systematically declined.

The observation of declining terms of trade and the recognition of what this implied for developing economies goes back to the 1950s (Prebisch, 1950; Singer, 1950). From this it was concluded that poor countries and poor producers should shift out of the production of primary materials, industrialize and move into the production of manufactures. Manufactures had characteristically been produced by high-income countries and were the flip side of the declining terms of trade of primary product producers. From this it was widely concluded that developing countries should industrialize and become producers and exporters of manufactures.

For early entrant, this strategy proved to be highly successful. The newly industrializing economies of East Asia began their transition during the 1960s, and by the turn of the millennium had achieved high standards of living on the back of a sustained push towards industrial development. But by the early 1990s, it was beginning to become evident that this path was not without its dangers. In the same way that primary producers had suffered from low barriers to entry, global overproduction and declining terms of trade. So, similar trends were beginning to become evident in many manufacturing sectors. The entry of China into global markets – particularly in the manufacturing sector - was particularly important here. Between 1985, when China first became a major exporter, and 1995, the terms of trade of developing country exports of manufactures declined by 20 percent (Wood, 1997). So, even manufacturing is no longer a protected domain – indeed the speed of their declining terms of trade is rapid by comparative standards.

Two major linked conclusions can be drawn from this. The first is fairly obvious and arises directly from the observation of the declining terms of trade of manufactures. It is that the concept of a “commodity” applies to a factor or a product (both goods and services) where there are low barriers to entry, which is subject to intense competition, and hence to declining terms of trade. Because these characteristics were in the past associated uniquely with primary products, they were often characterized as “commodities”. Yet unskilled labor and many manufactures now exhibit the same tendencies and hence can also be seen as commodities (Kaplinsky, 1993). The development challenge is thus not to move out of “commodities” defined as primary products, but out of all activities which are subject to sustained falls in their terms of trade. The second relates to the nature and importance of barriers to entry as a factor protecting producers and products from “commoditization”. These can be created by attempts to “fix the market” (for example, through producer or buyer cartels). But barriers can also be created through a process of upgrading. This occurs routinely in high-tech sectors, but there is no intrinsic reason why upgrading cannot also apply in sectors historically characterized by low barriers to entry, including in the agricultural sector? The attempt to reposition Kiwi fruit by New Zealand producers suggests the possibilities which are open in the primary products sector. But what of other primary products?

Drawing on some of the insights offered by value chain analysis, we consider the prospects for decommodifying segments of the coffee market. Coffee is an important emphasizing case in point for two reasons. First, it has a large “footprint” in poor countries, and amongst poor producers in these countries; indeed, it is the second most

important traded commodity. And, secondly, it is a product which has long been seen as an undifferentiated “commodity”. Yet, as the Nestles Vice President for International Relations points out, “the degree of variety of coffee and the variation in taste is at least as great as that of wine”. Thus, coffee is a product with enormous potential for differentiation. Some decades back substitute products such as wine and mineral water were also marketed as relatively undifferentiated products, but are now sold as highly differentiated lines, with significant premiums for specific products. Are we going to see the same pattern emerging in the case of coffee? And, if so, who will reap the rewards of price differentiation? Will it be the global branders (such as Krafts, Nescafe, Doewe Egberts, Tchibo and Lavazza), global traders (such as Rothfos, E. D. and F. Mann, Volcafe and Cargill), producer governments using export taxes, or will it be the growers? And is it possible to identify policies which might help to ensure that some or all of these decommodifying gains are reaped directly by poor producers rather than large TNCs?

Three elements of value chain analysis are relevant to this study of the coffee value chain. The first is the mapping of inter-country input-output relations. The second is the analysis of inter-country distributional outcomes, and the third is the role which value chain analysis plays in highlighting the power and governance relations which explain these distributional outcomes. These are complex issues and can only be considered in outline within the confines of this paper Sections 3 and 4 cover respectively the historic commodification and emerging decommodification of the coffee value chain.

#### **4. Value added Agriculture**

According to the research by MICHIGAN STATE UNIVERSITY, value added agriculture is a process of increasing the economic value and consumer appeal of an agricultural commodity. It is an alternative production and marketing strategy that requires a better understanding of the rapidly changing food industry and food safety issues, consumer preferences, business savvy, and team work.

In another research about “Adding value to Agriculture products”, David P. Anderson and Charles R. Hall, The Texas A&M University, Texas Agrilife Extension say that “Value added” means adding value to a raw product by taking it to, at least, the next stage of production. This can be as simple as retaining ownership of your calves and wintering them on wheat pasture or placing them in a feedlot. Value can be added through membership in a cooperative that processes your products, such as a cooperative cotton

gin. Or, adding value may be as elaborate as going all the way to the consumer with a “case-ready” food product. In the paper, they discuss about the definition of Value added, customer value, which elements create value, steps to success in value added, ect...



## Chapter 4: Methodology

In chapter one, the paper mentioned several issues of Viet Nam coffee industry. However, in this chapter, the paper will focus and clarify the coffee paradox and coffee chain in Viet Nam. From that we can have deeper discussion about what the problems that our coffee industry is encountering, how to solve these problems.

In the paper, the data used are secondary data source from official websites. The content of the data is about coffee production, export price, retail price, farm gate price, consumption... These data are collected directly from the official websites as following:

ICO: ICO is the abbreviation of International Coffee Organization. The International Coffee Organization's comprehensive historical statistical data on coffee comprises annual, quarterly, monthly and daily data from as far back as 1964 on exports, imports, market prices, prices to growers, production, stocks and inventories. The value of its unique database is recognized by market analysts, researchers and academics from around the world, who frequently consult these data to formulate their technical papers, econometric models and studies of the coffee market. In addition, coffee authorities make particular use of ICO group indicator prices for payments to farmers in coffee producing countries and the ICO data series is widely used by commodity experts in government trade departments around the world to prepare their coffee statistical reports. From ICO, data about production, export, retail price, domestic consumption, consumption in developed countries are collected.

IPSARD is the abbreviation of Institute of Policy and Strategy for Agriculture and Rural Development. IPSARD was established to improve quality of research and information activities. IPSARD's mission is providing the analysis and results supporting strategy and policy formulation process in agriculture and rural development. IPSARD provides the consumption per person/year.

VICOFA stands for VIETNAM COFFEE AND COCOA ASSOCIATION. VICOFA provides the data about Farm gate and export price, production in Viet Nam.

General statistic division provides total export value from 2000 to 2008.

Based on the data collected from the above official websites, different methods are used to analyze data to get the result. The main purpose of this part is to show the value distribution along the value chain and value added activities. From that, coffee paradox in coffee value chain can be observed better and direction for better development of Vietnam coffee industry will be discussed.

The flow of data collection and analysis are illustrated in the figure 4.1.

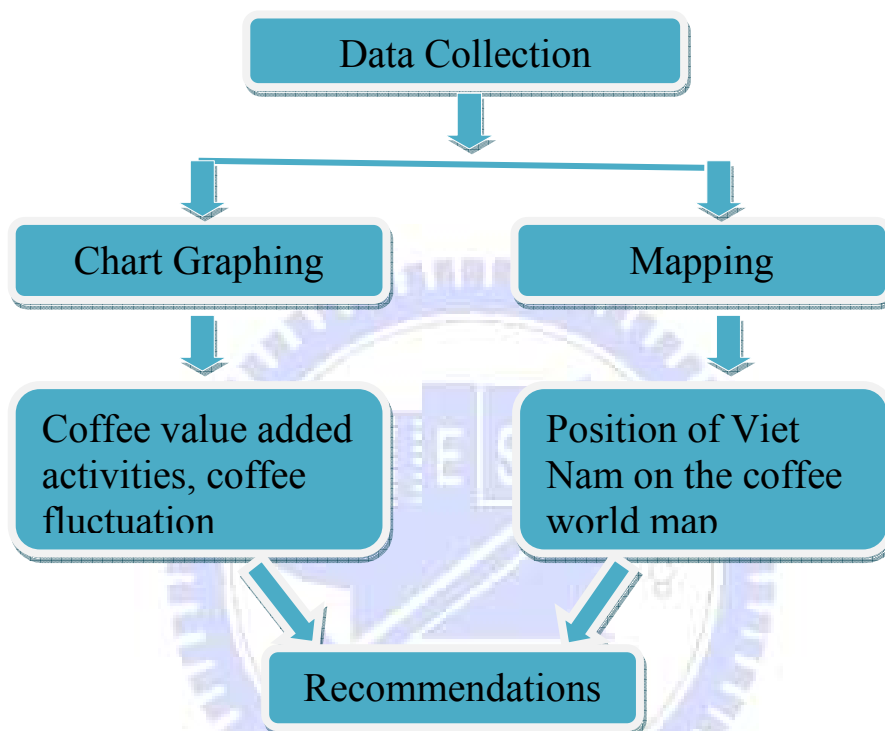


Figure 4.1: Data analysis structure

The first process is the data collections. As I already mentioned above, secondary data about production, export price, farm gate price, export value, consumption... were collected. After collecting, I separated and analyzed the data with three methods.

First is graph and chart. This method is used to analyze the Viet Nam coffee value chain and open to global point of view. This method is quite simple but used widely. This method was used by Kaplinsky, R., Morris, 2001 in their book "*A handbook for value chain research*". In this book, the authors mentioned the value chain of different kinds of agricultural product including coffee. So, in this paper, I use the same method applied to Viet Nam to bring out a general idea about the income distribution along coffee chain in Viet Nam open to global point of view. From the full picture of coffee value chain, the so called coffee



paradox will be observed more clearly: price booming in consuming countries and price crisis in producing countries. What are the reasons for this situation?

The second method is mapping global coffee world. Coffee is grown in more than 50 countries in the world. Where is the position of Viet Nam in the coffee world map? Which position Viet Nam wants to move to? With different data, different map can be drawn and give different pictures of coffee world. However, in this paper, consumption will be the focal point. High coffee consumption in developed countries and low domestic consumption will be the second aspect of coffee paradox.

After finishing, I will analyze my data and further discussion and necessary recommendation will be offered.

The first one is graphing and charting method. To have a deeper view about the coffee paradox, one of the best approaches is to analyze the value distribution along coffee chain. From the empirical evidence, coffee crisis has afflicted producing countries in the late 1990s and 2000s, with farmers facing among the lowest prices in the century. This paradox already existed before the coffee crisis. However, during the coffee crisis, it becomes more obvious. The coffee crisis in producing countries has coexisted with a coffee revival in consuming countries. The farmers are getting a decreasing share of final price paid by consumers for coffee. This means that the value added along the chain takes place increasingly in consuming countries. Consumers pay proportionally less for the material attributes of coffee quality and more for their symbolic and in – person service attributes – including branding, packaging, consumption ambience and sustainability content.

Viet Nam is not an exception in this paradox. USA is one of the biggest customers of Viet Nam coffee industry. The import share of USA in Viet Nam Coffee Industry is about 13.8% of total coffee export. USA is very big market for high quality coffee, instant coffee, ground coffee, bar like Starbuck, M’cafe... However, in USA market, Viet Nam coffee is considered as low quality coffee. It is blended with the better quality Robusta or Arabica coffee, processed into different kinds of coffee and sold to market.

Table 4.1: US – Viet Nam coffee value chain

Value chain	Details	Cent/lb	Proportion of retail price (%)
Farm gate	Selling price to local trader	3.9	6.2

Export harbor	FOB	4.4	7
Import harbor	CIF	4.6	7.3
Roaster	Selling price to the supermarket chain	29	45.5
Retail	Consumer price at supermarket	63	100

Source: VICOFA, 2009

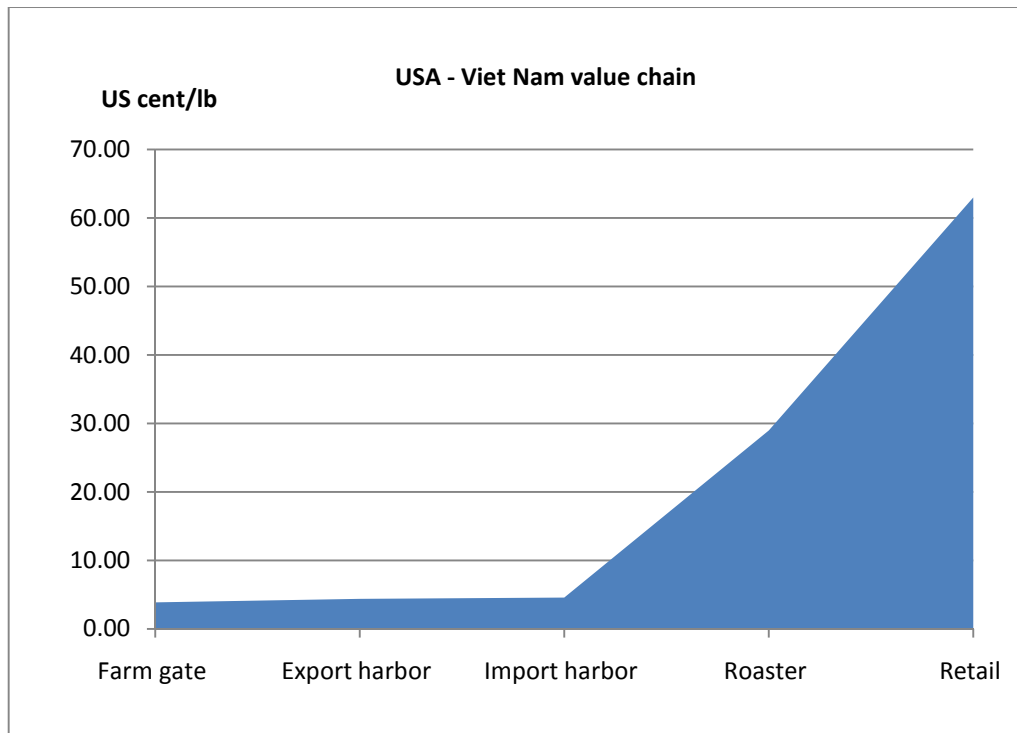


Figure 4.2: Income distribution along USA and Viet Nam coffee value chain 2009

Table 4.1 and figure 4.2 present the income distribution along the coffee value chain between Viet Nam and USA. The percentage calculated here show the percentage income of different nodes over the retail price. Farm gate price represents only 6.2 percent of retail price. Even at the CIF price, the proportion is also lower than 10%. What is presented here is just a simplified picture of a complex series of transformations and passages. Between the farm gate and the import point, Robusta coffee goes through the hands of various layers of traders, processors and exporters. Coffee get hulled, transported, dried, sorted and prepared for export. What we can see from the domestic market is that there is extreme competition at all level of value chain and that net margin is very small. That shows in the relative small difference between farm level and export price. More information is revealed in table 4.2 and figure 4.3.

Table 4.2: Retail price and price to grower in Viet Nam from 1990 to 2008

Year	Retail price (cent/lb)	Price to grower
1990	374.22	50.42
1991	359.47	49.92
1992	361.45	43.14
1993	341.11	46.76
1994	353.25	80.01
1995	509.47	89.08
1996	435.5	75.61
1997	412.56	90.9
1998	415.34	80.09
1999	400.62	64.04
2000	434.6	51.01
2001	386.3	37.45
2002	381.5	36.02
2003	435	38.47
2004	468.9	45.07
2005	485.4	64.06
2006	501.9	69.35
2007	557.2	80
2008	618.7	97.67

Source : VICOFA, 2009

At the import level, even if coffee goes through intermediaries such as international traders, their margin is also very small. In other words, it is not the local traders, exporters and international traders/ importers handling the material coffee. It is branded roasters and to a lesser extent, retailers.

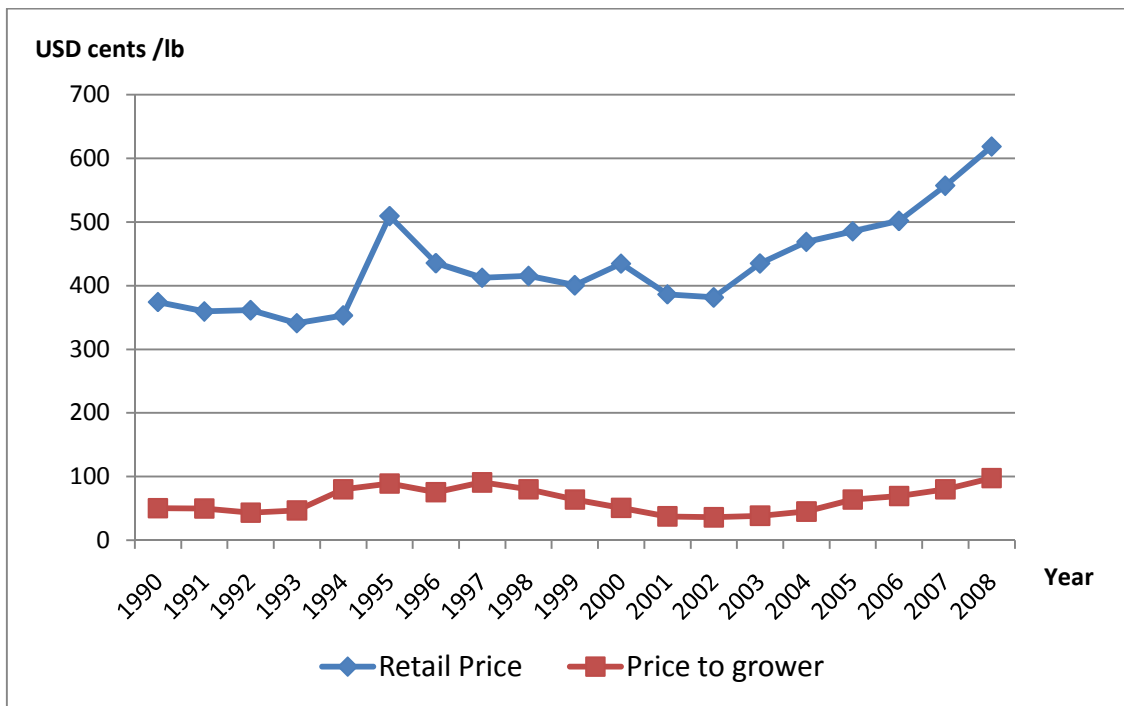


Figure 4.3: Where does the money go?

Figure 4.4 below maps the major inter-country input-output relations in the coffee value chain. The whole picture can be divided into two areas: producing countries where material quality attributes are created and consuming countries where symbolic and in-person quality attributes are important.

First, farmers pick and either dry process or wet process coffee cherries, receiving a farm gate price. Cherries are then processed with wet or dry process and then go to an intermediary for an export. At this level, we get FOB price. This period is “coffee material” process and the price that the farmers, exporters get is very low. During these processes, the coffee quality is evaluated through official grade standards. These standards are different from country to country, but generally describe what the industry calls ‘objective’ physical parameters (color, size, defect...). Normally, Viet Nam coffee is always graded very low because of the old processing technology in factory or simple method of coffee growers. Coffee quality is not managed and controlled at each step. Thus, the shortage of uniformity in the whole chain cause the low quality of the coffee exported. Low grade also means low price. Coffee is just simply processed and packed for export.

Another reason that makes the price of coffee to growers so low is the interaction between the exporter and grower. Coffee growing in Viet Nam is decentralized. The information link is weak. The feedback from the importers about the quality, price... cannot

reach the growers. Thus, the growers have no concept of quality improvement or struggling for higher price.

They are shipped to importing countries (landed at *CIF prices*). Importers then pass the beans on at the wholesale price and roasters process the beans and sell them at the factory door cost. In fact, the relation among these actors is much more complicated. But basically, coffee goes through these steps. The final price is decided when coffee is sold to retail shop, supermarket or goes to coffee bar. The price here is different.

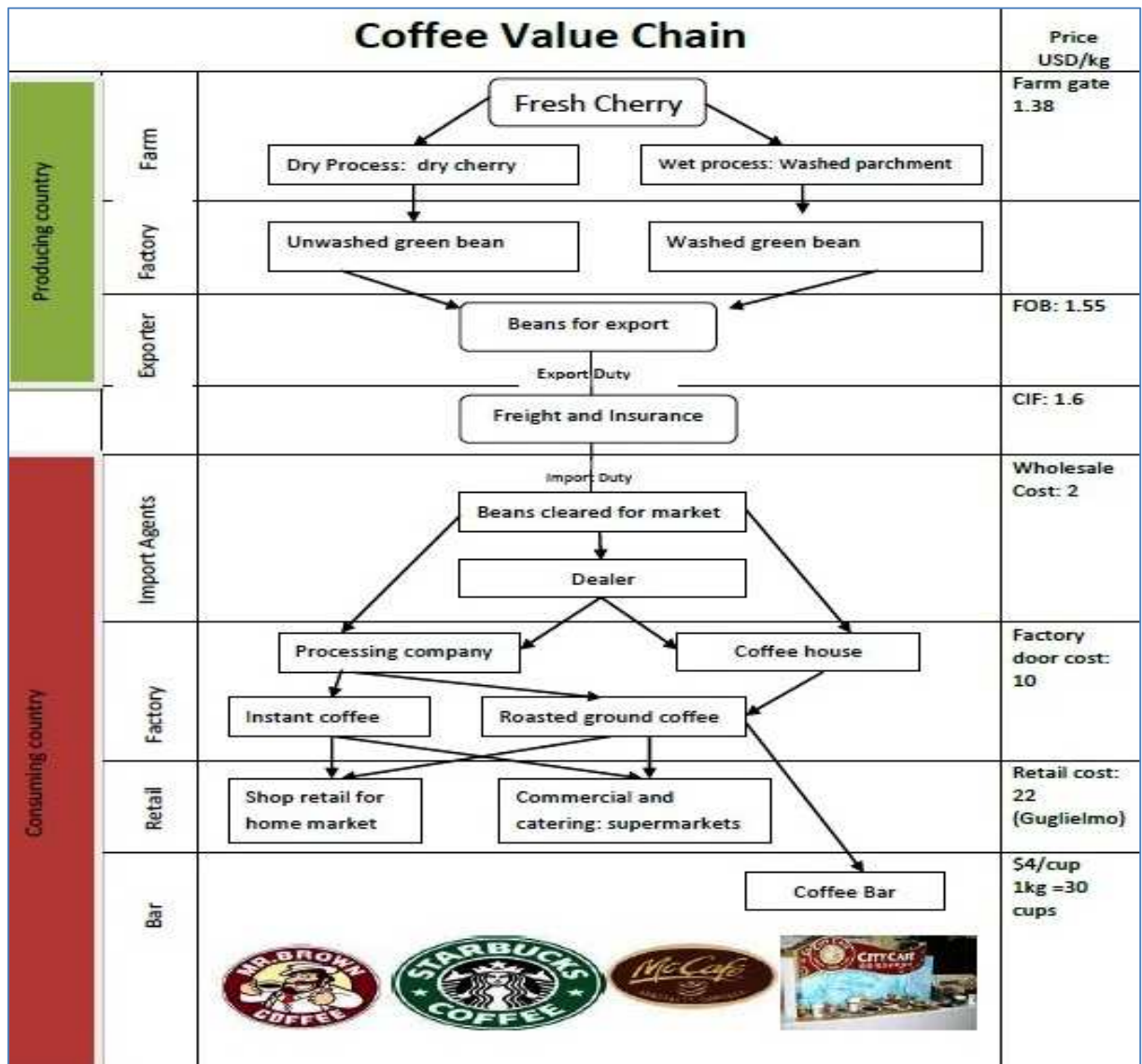


Figure 4.4: Viet Nam and Global coffee value chain

Source : ICO and VICOFA, 2009

From the map, it is clear that most of the value added is generated by roasters. In coffee processing, the process of roasting, blending, grinding and vacuum packing is relatively low tech- operations. Thus, most value is generated in symbolic production. At the low end of the

market, symbolic production is mostly generated through branding and associated promotional and advertising cost. In the bar consumption segment of the market, farmers fare is even worse. In this segment, most of the value is added at the bar through brewing and the offering of in – person services.

The value added along the coffee value chain plays a very important role in deciding the price of coffee. In producing countries, coffee is traded and priced mainly in relation to its material quality attributes. The evaluation of some of these attributes can only be carried out in a rough manner of at the farm level.

Table 4.3: Production and consumption in developed and producing countries

Year	Production	Consumption in producing countries ( Thousand of bags )	Consumption in developed countries ( Thousand of bags )
1990/91	93253	19697	70388
1991/92	101562	20413	74600
1992/93	97392	20938	74534
1993/94	91998	21595	78169
1994/95	93881	21801	72569
1995/96	86979	22757	74002
1996/97	103136	23501	76665
1997/98	99695	24327	76419
1998/99	108143	24540	78082
1999/00	130005	24695	80343
2000/01	113033	26375	79120
2001/02	107360	27559	81897
2002/03	122148	27758	82857
2003/04	103982	28650	84526
2004/05	115628	29999	88953
2005/06	110181	31468	88104
2006/07	127908	33337	90083
2007/08	118086	35320	92555
2008/09	128790	35074	

Source : ICO, 2009

And the lack of information from the final consumption market makes it is difficult for them to generate and control the value added activities like symbolic and in-person service

attributes. This partly explains the existence of coffee paradox in the coffee value chain in Viet Nam. In consuming countries, coffee is sold packaged with symbolic and in person service components, which value is firmly controlled by roasters, retailers and coffee bar owners.

The second emphasis in coffee paradox is consumption. Viet Nam has been the second largest export countries for more than 10 years. Every year Vietnamese coffee is imported by over 40 countries and territories all over the world, including big markets as the USA, Germany and EU member countries...However, with such a big annual production of over 10 million bags, much more attention should be paid to the issue of market expanding, both domestically and in other potential markets.

Table 4.3 and figure 4.6 shows the production, domestic consumption in producing countries and consumption in consuming countries. All of the indicators go up. But the most obvious thing we can see is the gap of consumption between producing and consuming countries.

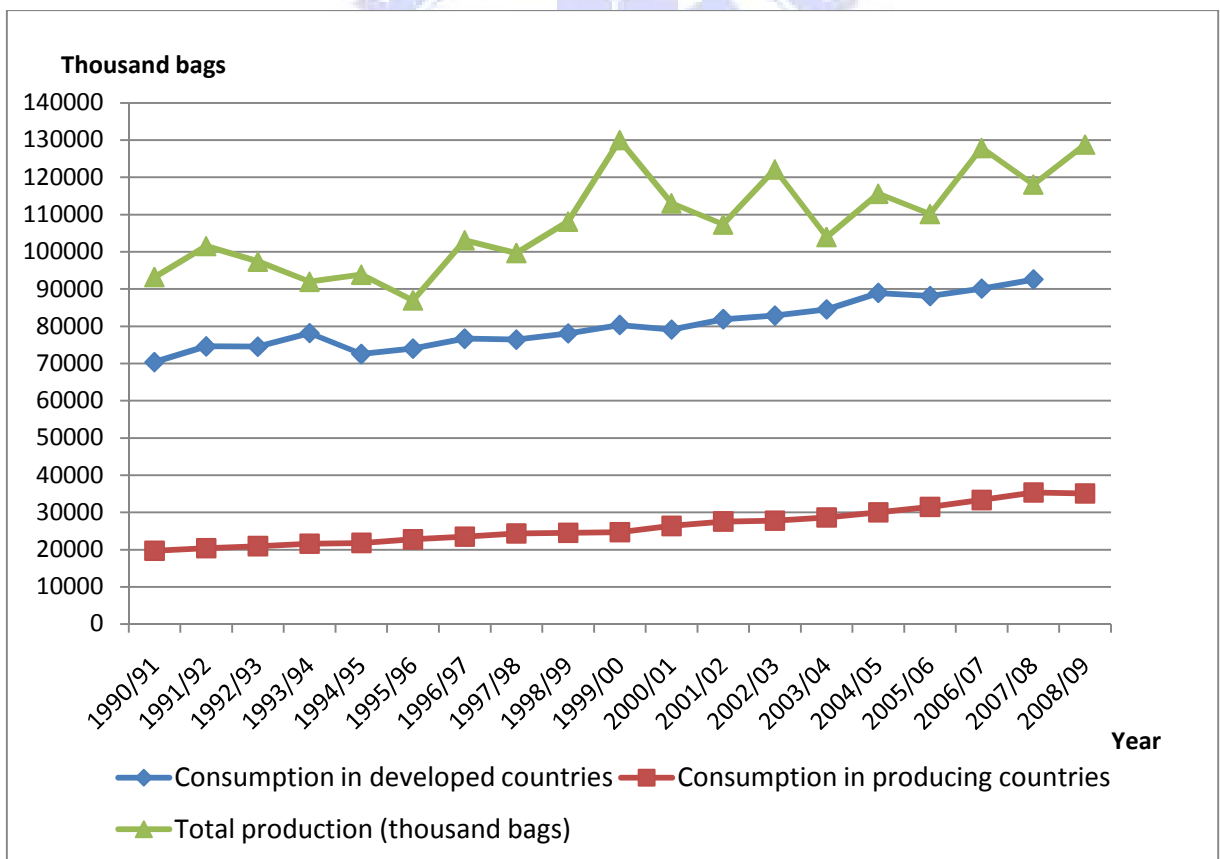


Figure 4.5: Production and consumption in developed and producing countries

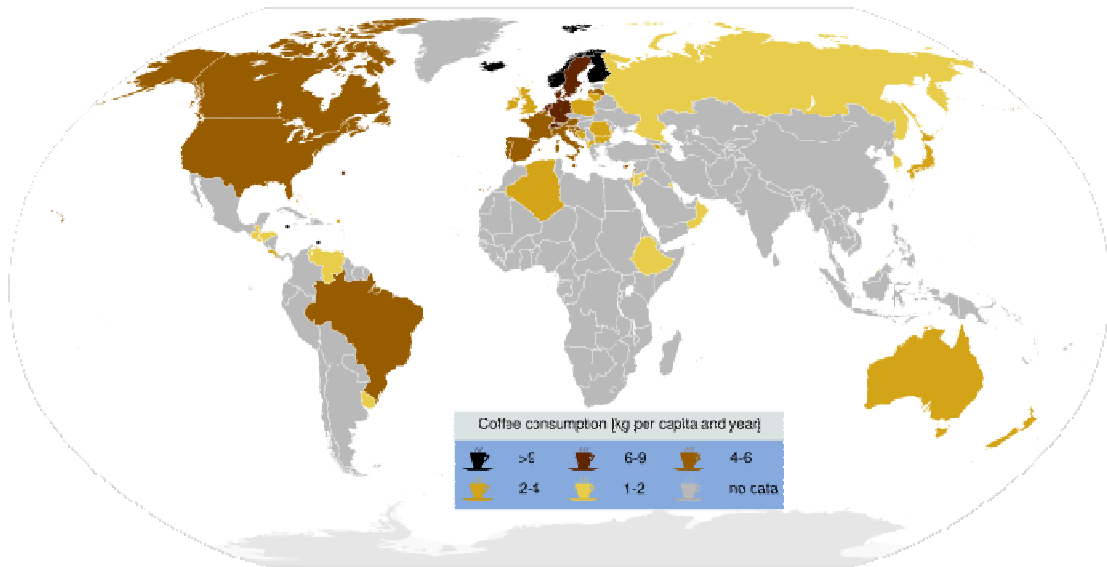


Figure 4.6: World map of coffee consumption per capita and year

Source:UNCTAD, 2009

Coming back to the case of Viet Nam, every year, Viet Nam produces more than 10 million bags of coffee and at the same time exports more than 10 million bags of coffee. In recent year, coffee has been one of the most important export commodities in Viet Nam export goods. The value that coffee export brings back to the economy is not small. However, the coffee exported is raw material. From the analysis of coffee value chain, the value added is created mostly with symbolic and in-person service at the roaster or ground step. However, in Viet Nam case, most of coffee exported in the form of raw material. The value added here almost equals to zero. And the amount of coffee kept for domestic consumption is too small compared with the amount of coffee exported.

What is the rank of Viet Nam domestic coffee consumption in the world map? The table 4.3 shows the whole picture of domestic coffee consumption. Second largest exporter of coffee Viet Nam ranks 92 in the whole world. In case of Brazil, the annual consumption of over 5 kg per capita in Brazil is exceptionally high among the over 60 coffee-producing countries. Brazil's annual production of around 2.4 million tons (40 million 60-kg bags) makes up a third of the world production of just over 7 million tons. It ranks 17 in the world for consumption with 5.81 kg/person. To have this result, Brazil put a lot of efforts for promoting consumption in domestic market. The other smaller producers have higher rank than Viet Nam.



This is the fact that all the coffee planners and specialists have discussed for many years. It is true that Viet Nam culture is tea culture. It is true that coffee is considered as a high class or luxury drink. But the situation changed now. Compared with the living standard 5 years ago, there is much improvement. Income increased from \$200 to \$800 and the percentage of city dweller also goes up. Viet Nam population is 86 million and half of the population is labor force. These elements are necessary for the domestic coffee consumption. What is the cause of low domestic consumption in Viet Nam? The reasons can be chased back to the issue part of Viet Nam coffee industry.

Table 4.3: Coffee domestic consumption among producing countries:

Country	coffee consumption per capita (kg)	World rank
Brazil	5.81	17
Honduras	3.9	32
Costa Rica	3.8	33
Dominican Republic	2.3	51
Nicaragua	2.0	54
El Salvador	1.9	55
Columbia	1.8	58
Guatemala	1.3	68
Ethiopia	1.3	69
Mexico	1.2	72
Gambia	1.1	77
Viet Nam	0.7	92
Philippines	0.7	92
Indonesia	0.5	104

Source : Wikipedia 2009

Viet Nam coffee domestic market can be divided into two parts: Home market and shop or restaurant market. In home market section, as the paper already mentioned above, coffee is considered as high class or luxury drink in Viet Nam. The culture of tea has existed in Viet Nam for thousands of years. So it is impossible to change this habit in a short time. Furthermore, the types of coffee in Viet Nam market are very poor. Ground coffee occupies 2/3 market and 1/3 left is instant coffee. Ground market is not convenient to make at home. That's why ground coffee is not very welcome by households. Instant coffee is more suitable

for household. However, people do not have many choices. The reason of this situation is investment in coffee processing is still very humble and the price of coffee machine is too high to equip at home.

In shop or restaurant (in-person service) market section, coffee consumption has some achievements. The appearance of some big companies with some coffee chain store is a big step in coffee industry. The target customers of these shops are the young generation with high income and open mind. The good sign we can see here is drinking coffee is becoming a fashion trend among youth. However, what is achieved in this section is still not adequate to the industry's potential. Even though the coffee shops appear more and more and more, the variety of coffee products is still limited. Coffee types just limit at coffee with fresh milk, condensed milk, iced coffee... Until now, we still do not have the take away coffee service. This market section still waits for domestic investors to explore.

In the above part, we already discussed about the domestic consumption. In this part, the paper will go into detail about the consumption again but in relation with the production. In the interrelation with coffee production, where is the position of Viet Nam on the world map? The table 4.4 shows the coffee indicators in producing countries. Among more than 50 coffee producing countries, 25 countries' coffee data is collected.

Table 4.4: Countries' coffee indicators in 2008

Country	Production ( thousand bags)	Domestic consumption (DC) (Thousand bags)	DC/Production (%)
Angola	36	30	83.3
Brazil	36070	17125	47.5
Cameroon	795	69	8.7
Central African Republic	53	19	35.8
Columbia	12515	958	7.7
Congo, Dem. Rep. of	416	200	48.1
Costa Rica	1791	274	15.3
Dominican Republic	465	378	81.3
Côte d'Ivoire	2150	317	14.7
Ecuador	1110	150	13.5
Ethiopia	4906	2100	42.8

Guatemala	4100	278	6.8
Ghana	30	1	3.3
India	4148	1430	34.5
Indonesia	7777	3333	42.9
Madagascar	615	459	74.6
Mexico	4150	1595	38.4
Papua New Guinea	972	2	0.2
Philippines	431	1060	245.9
Tanzania	810	47	5.8
Thailand	653	500	76.6
Togo	125	2	1.6
Uganda	3250	140	4.3
Vietnam	16467	1000	6.1
Zambia	61	1	1.6
Average	4150		37.7

Source: ICO, 2009

The average of production and consumption over production are calculated. Based on the coffee data, a map of producing countries is drawn. And the result we get is the figure 4.7: Viet Nam position in the coffee world consuming map.

The map is conducted with two dimensions: Production and consumption over production. The average of these indicators divides the map into 4 parts. The purpose of conducting this map is to locate position of Viet Nam in coffee world map in comparison with other countries. The map will answer the question: where is the position of Viet Nam and where Viet Nam wants to move to? To move to the wanting part, what Viet Nam needs to do? Why are some countries such as Brazil so successful in coffee consumption? Some lessons can be withdrawn and applied to Viet Nam case.

Part I is high production and high consumption. It is obvious that not many countries belong to this part except for Brazil, Indonesia and Ethiopia. Part II is high production and low consumption ratio. Viet Nam and Columbia stay in this part. But Columbia still exceeds Viet Nam in consumption ratio. Actually, Brazil, Indonesia, Columbia and India are famous among producing countries because of their success in promoting domestic coffee consumption. Low domestic consumption is not a new topic among producing countries. But to answer the question how to increase it, the most successful case is Brazil. Part III is low

production and low consumption. Most of small producing countries drop in this section. And the last part IV is high consumption rate and low production. The most outstanding country is Philippines. The reason of this situation is the influence of long time USA colony system in Philippines.

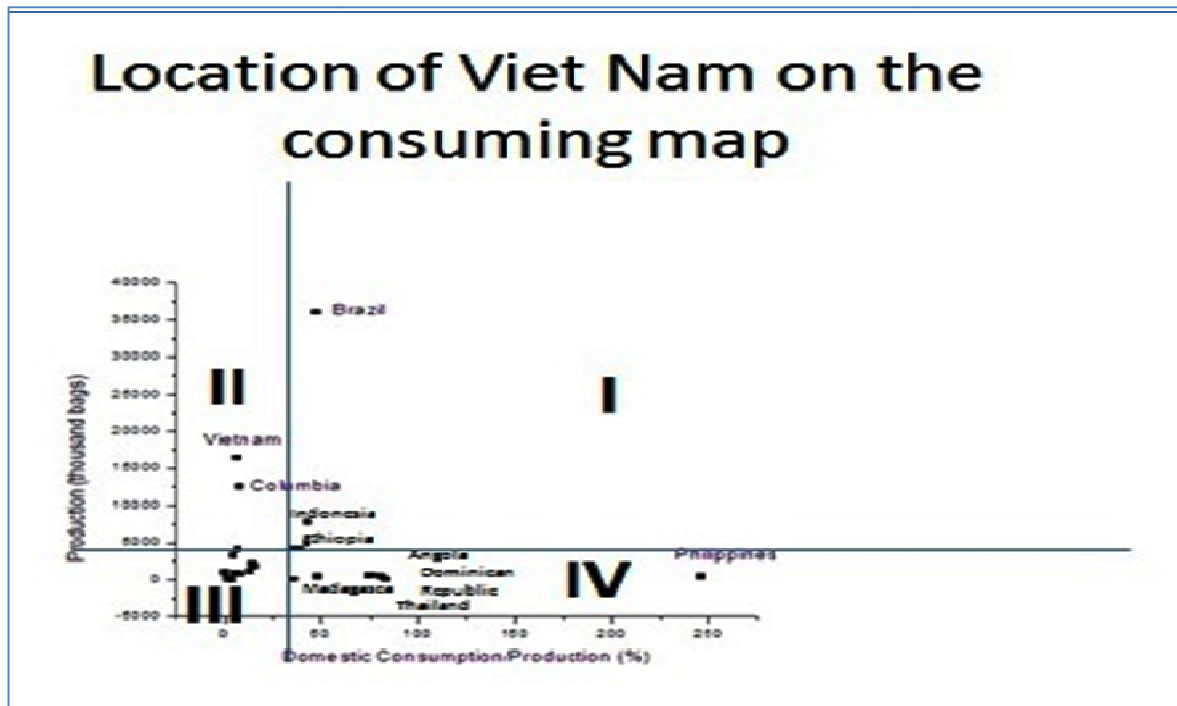


Figure 4.7: Viet Nam position in the coffee world consuming map

The map gives a better vision and understanding about the position of Viet Nam among other producing countries. Among producing countries, there are successful countries in both producing and consumption, there are unsuccessful ones. The paper specifies some examples of successful countries in producing and consumption such as Brazil, Indonesia with their own experiences in producing and promotion. And from the analysis, a lot of lessons can be withdrawn and applied to unsuccessful countries.

In the map, it is obvious to see that the most outstanding country is Brazil. In Brazil, about 40% is for domestic market and 60% is for export. Brazil is a country with big population. Brazil is the colony of Portugal for hundreds of year. Somehow, the lifestyle which is connected to coffee is one the heritage from Portugal. Drinking coffee is one cultural character in this coffee land. This is a big advantage of this country. However, in addition to this good advantage, Brazil government and coffee organizations also have taken a lot of action in promoting coffee consumption. Brazil government has taken out a lot of coffee promotion campaign to make Brazilian aware of the coffee existence as well as to enforce the coffee culture in citizen's mind.

Brazilian coffee domestic consumption continued to expand sharply. From November 2006 to October 2007, Associação Brasileira da Indústria de Café (ABIC) – a coffee association in Brazil recorded a 17.1 million bag consumption, representing a 4.74% increase in relation to the same period (Nov 2005 - Oct 2006), when the volume had been 16.3 million bags. The consumption by inhabitant/year (per capita) was 5.53 kg of green coffee or 4.42 kg of roasted coffee, almost 74 liters a year for each Brazilian citizen, or a 3.5% increase in relation to 2006 (against 4.5% in the prior period), which confirms what was evidenced by the research performed by InterScience that individuals are consuming more cups of coffee a day. With this result, Brazil maintains an important position in the world scenario of the coffee agribusiness, since it is one of the countries where domestic coffee consumption growth is expanding the most. This is one of the most effective forms of giving sustainability to world coffee production, therefore not allowing any coffee bean surpluses, which would make coffee quotes drop to prices that would not adequately remunerate the coffee productive chain agents.

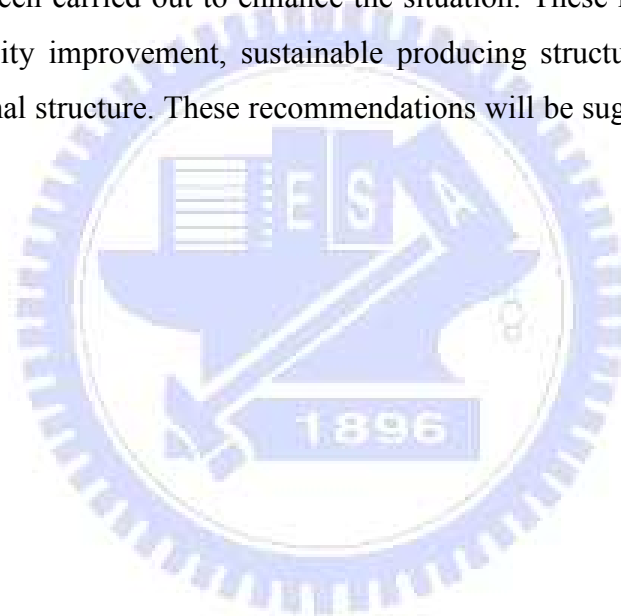
The reason for this high consumption and consumption expansion in Brazil is a series of consistent and long lasting factors. The first one is “Continuous improvement of the quality of coffee” offered to consumers, which increased with the Coffee Quality Program (*Programa da Qualidade do Café - PQC*), launched by ABIC at the end of 2004, and that currently already certifies over 250 brands Brazilwide. In 2008, PQC is complemented with the Sustainable Coffee Program of Brazil (*Programa Cafés Sustentáveis do Brasil*), which offers a complete certification guarantee, from growing to the cup, to sustainably produced coffees. Furthermore, the coffee shops now have a qualification program, the Quality Coffee Circle (*Círculo do Café de Qualidade - CCQ*), with which ABIC wants to stimulate coffee consumption away from home, always with the best quality. The second reason is Consolidation of the Gourmet or Specialty coffee markets, and expansion of the away from home consumption, that are increasingly attracting more attention, interest and curiosity among consumers. Significant improvement in the perception of coffee regarding its benefits to health, as a result of large investments in the Coffee and Health Program supported by the whole agribusiness and better economic conditions in Brazil are the other reasons for coffee consumption expansion in recent years.

Furthermore, investment in Advertising and Promotion also show its efficiency in ensuring coffee consumption. In 2007, coffee companies expanded their investments in marketing and advertising. Large companies made major campaigns in several medias

investing more than R\$50 million. ABIC invested R\$630,000 of its Marketing Fund in additional institutional actions.

From the case of Brazil, it is clear that coffee consumption expansion requires the cooperation among players including governments, coffee growers, companies and consumers. Brazil is a very successful case for Viet Nam to study.

Position of Viet Nam on the map is part II. In comparison with other countries in part II, Viet Nam leads in coffee producing but not in consumption. Viet Nam coffee industry's leaders and organization acknowledge this fact and they are trying to improve the situation. The direction that Viet Nam coffee industry wants to move to is Part I. However, how to move to that part? How to increase the consumption in domestic market are the questioned that Viet Nam coffee industry is still stuck in. A lot of recommendations have been given and trial programs have been carried out to enhance the situation. These recommendations cover all aspects from quality improvement, sustainable producing structure, marketing effort to changing organizational structure. These recommendations will be suggested and discussed in more detail.



# **Chapter 5: Recommendations for a stable development of Viet Nam coffee industry**

## **1. Quality improvement**

Quality improvement needs to be improved through the whole chain of coffee from growers to exporters. Coming back to the methodology, in the part of Viet Nam coffee industry value chain, the paper already analyzed the problems of the whole value chain in detail.

We firstly need to complete and put into force the set of Vietnam Coffee Standards in accordance with the International Standards, market demands and in order to protect the interests of Vietnam coffee industry. A set of coffee standards started to be set up in 1983, and in 1987 it is approved and issued by the State with Coffee Terminologies and Definitions, Export Coffee Technology Standards, and standards on packaging, labeling, storing, transporting... By now there have been some amendments and supplements but it is still necessary that we take completion steps before it can be issued officially and can be referred to in every coffee contracts. The Standards will be the common direction for all coffee players to reach the last purpose: high quality coffee. And all the coffee involvers must apply that regulation in the progress of coffee process.

The technique of coffee harvesting, drying, processing and storing etc should also be improved. Vietnam Government is now considering to approve a project on processing the whole Vietnam coffee industry. Government through the national bank will make it easy for coffee growers, processors, exporters to access the credit source. So the investment in technology will be paid more attention to.

It is necessary to do researches to transfer advanced technologies to farmers with GAP and GMP methods; as well as research on preventing mould formation, especially Ochratoxyn A.

## **2. Sustainable coffee structure in producing**

Vietnamese climatic conditions enable to grow both Robusta and Arabica coffee trees in some respective areas. The figure of Vietnam, with the mainland stretches along the meridian of above 150 north latitude, creates favorable conditions for growing Robusta coffee in the southern hot and humid climate and Arabica in the northern mountainous moderate climate and somewhere of about 800 - 900 meters height of sea level in the south. In fact, the

steadiness of Robusta coffee trees in Vietnam has been proved for many years. Climatic conditions such as high temperature and heavy rainfall in the Central Highlands enable Robusta coffee trees to grow fast and produce high yields if it is watered in the dry season which also the time for flowering and fruiting.

Robusta coffee development in Vietnam, the potential of the fertile red basalt soil has been exploited. Labor is abundant and weather conditions are hot with a humid tropical climate. As a matter of course, it is necessary to take into consideration the relationship between Robusta coffee areas and water capacity.

There are many huge unexploited areas in the highlands in Vietnam, especially in the North and North West of Vietnam where the climate is more moderate and would be suitable for Arabica coffee.

In the last few years, Vietnam coffee growers expand their coffee plantations in a spontaneous way without complying with Government's guidelines and plans. Robusta coffee is grown everywhere possible, from hillsides to hilltops. And Robusta is chosen since they find Arabica coffee growing need more seedlings but not as resistant to diseases, so require more investment, more cares and more complicated processing method. That's the reason for the poorness of Vietnam coffee product.

In order to cope with market changes both in the long-term and short-term, Vietnam coffee industry has carried out studies for the adjustments on area, production, and Robusta-Arabica proportion structure to the whole industry. All the new plantations outside the planned area with unsuitable soil and hydrographic conditions and with weak growing, low productivity will be erased. Robusta plantations in places better suitable for Arabica will be replaced by Arabica. It is still encouraged to develop Arabica coffee in suitable places as middle lands and mountainous areas in the North. After some years investigating Vietnam, several prospective and well-developed Arabica coffee areas have been formed. Such are North West areas, mainly in Dien Bien and Son La. The belt of land in the Central as in Phu Quy of Nghe An province, Khe Sanh of Quang Tri province and A Luoi of Thua Thien Hue province. In the South, Gia Lai, M'Drak, Dak Nong, Lam Dong and especially famous Da Lat city should be mentioned. The Bourbon coffee has good quality and is praised by drinkers. The aromatic flavor of Bourbon can also be compared with mild coffee in the Central America.

Therefore, in the next few years Vietnam will have around 300,000 to 400,000 ha under Robusta coffee and around 100,000 ha under Arabica. The total production will then be around 600,000 tons equal to 10 million bag in which 7.5 million bags of Robusta and 2,5



million of Arabica. The remaining cultivation land in coffee areas will be used for pepper, fruit trees etc. depend on conditions of each area.

During such adjustment we need also take much care of high value products as organic coffee, specialty coffee and gourmet coffee etc. As regard to our traditional export coffee, Vietnam has long been exporting solely green coffee. So we should make some adjustments to produce more of other value added products as soluble coffee and roasted coffee etc.

Such policy is very correct and necessary that the key policy of Vietnamese coffee industry is to reduce itself both coffee areas and coffee production. Annually, Vietnamese coffee industry only supplies a reasonable amount with high quality of green coffee to the market to meet consumers' demand. This is the orientation of Vietnamese coffee industry to integrate the world coffee market.

### **3. Domestic consumption and marketing effort**

Domestic consumption of coffee should be promoted and concerned. Currently, only 5% of coffee produced is consumed in domestic market, 95% is exported. It also means that the coffee market in Viet Nam depends too much on the foreign customers. So to create a stable market for the coffee industry, domestic market is a good choice. Brazil and Indonesia are good example for us to see. According to a coffee report from Indonesia, 33% of coffee is consumed in local market, 67% is exported. And in Brazil case, about 40% is for domestic market and 60% is for export.

To learn the lessons from Brazil, Colombia, Indonesia and India, it is necessary to have a program for promoting coffee consumption in Vietnam; priority encourages home consumers consuming more than one million bags of coffee every year. Conferences, exhibitions are organized. Books, documents and newspapers are published to introduce subjects related to coffee and health, encourage people to drink more coffee, etc... These works are required much of time and efforts.

Vietnam has a population of approximately 86 million people and the per head consumption capacity is merely of 0.5kg/head/year. With a promotion program conformable to the normal income of the people, Vietnam is managing to achieve the average capacity of 1 kg/head/year. In the next few years, with the total population increases to 100 million people, the total domestic consumption is estimated at 100.000 tons. The remaining 500.000 tons of Vietnam annual production will be for exports. With this strategy, Vietnam is striving to contribute to harmonize the coffee supply-demand balance.

Another concern that Viet Nam Government as well as all coffee producers and growers are bothered with is building a trademark for Viet Nam coffee. Coming back with the coffee value chain, the value added is not at “material producing” period. In person service or symbolic are the main value added along the chain. Coffee growers and processors are aware of the importance of produce high quality products, high value added products, change the habit of consumers and a sustainable trademark for Viet Nam coffee. Instead of producing coffee bean only, more investment is put in coffee roasting and processing. The appearance of more coffee products under different company brands on the market is a good signal. It diversifies the consumers’ choice. Going around supermarket chain, it is easy to find so many kinds of instant coffee: G7, Coffee moment, Vinacafe, Ca Phe Buon Ma Thuot, Ca phe Dak Lak, coffee Trung Nguyen... or ground coffee with the famous brand Trung Nguyen.

In the higher quality class market section, going around big cities with high income and open culture environment like Ha Noi, Ho Chi Minh, coffee shop appears everywhere, in every small alley to big shopping mall. The appearance of Trung Nguyen Caphe ignites the new era for Viet Nam coffee in domestic market. Following Trung Nguyen coffee success, a lot of coffee shop chains come up. Typical are Nang Sai Gon, New Window, Buon Me Thuot... The slogan which is correct for this time is: Where Viet Nameese people live, where you can find Viet Nam Coffee. Viet Nam domestic coffee is prospering now.

Viet Nameese people migrate to other countries like USA, France, and Australia... are very proud of Viet Nam coffee. It is easy to enjoy one cup of coffee outside Viet Nam border. It is a good beginning for coffee traders who want to promote Viet Nam coffee to the outside world.

Establishing a trademark is a long process requiring much effort of sectors and industries. It is strongly believed that ‘Viet Nam’ coffee trademark will become popular in the coming years.

#### **4. Co-operative organization**

It is the right time to think of setting up co-operative organizations for coffee specialty including people together to produce coffee product in order to help the farmers to do their services of input and output, etc,... to set up and co-ordinate producing process, not to earn benefit from such services but benefit from collective activities.

Co-operative of specialty would also develop spontaneous network for agricultural extension, create favorable conditions to transfer advanced technology to production. This is a

new type of co-operative which helps farmers approach and accesses the market as well as specializes and professionalizes in production.

As a matter of course, to set up such co-operative, the Government should have sponsor fund and programs combining application of new technology with building co-operatives of specialty. Therefore, the coffee industry could overcome individual farmers' shortcomings, farmers are linked together to participate in the market; enhance competitiveness of Vietnamese coffee producers.



## Reference

1. Behrens, B., Dembski, N. and Georg Müller-Christ, (2006). “*Bastian Behrens, Nadine Dembski, and Georg Müller-Christ*”
2. Born, H. and Bachmann, J., (2006). “*Adding Value to Farm Products: An Overview*”, ATTRA Publication #IP141
3. Daviron, B. and Ponte, S. (2005). “*The coffee paradox*”
4. Doan, T.N., (2005). “*Vietnamese Coffee Industry after 5 Years’ Crisis and it’s Future Orientation*”, 2nd World Coffee Conference, Salvador, Brazil
5. ICO workshop, (2009). “*Towards Sustainable Coffee Production*”, Turkey
6. IPSARD, (2007). “*Viet Nam coffee profile*”
7. Kaplinsky, R., Morris, M. 2001). “*Who gains from product rents as the coffee market becomes more differentiated? A value chain analysis*”, IDS Bulletin Paper 2001
8. Kaplinsky, R., Morris, M. 2001: *A handbook for value chain research.*
9. Lewin, B., Giovannucci, D. and Varangis P., (2004). “*Coffee Markets: New Paradigms in Global Supply and Demand*”
10. Marsh, A., (2007). “*Diversification by smallholder farmers: Viet Nam Robusta Coffee*”, FAO
11. Osorio, N., (2005). “*Action to avoid further coffee price crisis*”, G-8 Summit, Gleneagles, Scotland
12. Patrick de Fontenay and Leung, S., (2002)“*Managing commodity price fluctuations in Vietnam's Coffee Industry*”, International and Development Economics idec02-4
13. Talbot, J.M. (2004). “*Grounds for Agreement. The political Economy of the Coffee Commodity Chain*”, Boulder, New York, Toronto, London: Rowman & Littlefield Publishers
14. Tuck School of Business at Dartmouth, (2002). “*Starbucks Coffee Company*”
15. Tuvhag, E., (2008). “*A Value Chain Analysis of Fairtrade Coffee*”, Lund University