

CHAPTER 2

OVERVIEW OF AGRICULTURE AND TEA

INDUSTRY IN VIETNAM

2.1 Socio-economic context

2.1.1 Vietnam economy

Vietnam is a country in transition. Its economy is undergoing rapid change as it moves away from non-market socialism to a market economy with a socialist orientation. Vietnam is the 12th most densely populated country in the world with a population of more than 78 million people, and land area of 329,000 sq. km. It is made up of a long narrow landmass bordering Cambodia, Laos and China, with the whole of its east coast located on the South China Sea.

Vietnam is a country with vast natural wealth, rich in mineral resources and with significant human resource potential. With much of the population still depending on subsistence farming, Vietnam has a GNP per head of only US\$ 300 per year and is classified as one of the poorest countries in the world.

Table 1 Real GDP growth (%) in period of 1990 - 2000

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
5.1	6.0	8.6	8.1	8.8	9.5	9.3	8.8	5.8	4.8	5.6

Source: General Statistics Office, 2001.

Vietnam's economy has experienced very strong growth over the past decade with GDP averaging 7.5%, even though growth in the last few years has not been quite so high. A number of factors account for this economic slow down towards the end of the decade: The slow pace of economic reforms, inefficiencies in some areas, such as State own enterprises (SOEs) and banking, decreased domestic demand/consumption, decreased investment/ foreign investment, decreased industrial output, the impact of the East Asian financial crisis.

Some of the factors contributing to stronger economic growth in recent years are strong world economic growth, recovery in the Asian region, improving manufacture and commodity prices, rapid growth in Vietnam's industrial sector, especially the non-state sector.

2.1.2 Vietnam agriculture and its role

Economic reforms are transforming Vietnam from an agricultural economy to an industrial and services economy. As the data below shows, agriculture's share of total output has decreased markedly while output in the industrial and services sectors has increased. Given this shift you would expect increased migration to towns and cities, however, this has not been the experience in Vietnam, and it remains a predominantly rural society with much of the population living in rural areas.

Table 2 GDP structure in Vietnam

Sector	1990	1994	1997	1999	--%-- 2001
Agriculture	41	29	26	25.8	24.2
Industrial	23	30	31	33.5	36.7
Services	36	42	43	40.7	31.0

Source: General Statistical Office, 2001.

Agriculture is focused on farming rice, coffee, cashews, corn, potatoes, rubber, soybeans, tea, marine products, while clothing and footwear, electronics, calculators and parts are key growth industries. The services sector is concentrated on tourism.

As shown in Table 2, agriculture is a key sector in Vietnam, accounting for 25% of gross domestic product (GDP), about 72% of employment, and 30% of export value. About half the value of production is attributed to food crops, with the balance contributed by industrial crop (15%), fruit (6%), vegetable and beans (5%), and livestock (22%). In terms of cultivated area, rice occupied 4.2 million hectares (ha), other annual crops 1.2 million ha, and perennial crops 1.3 million ha (General Land Administration, 2000).

The sale of land is not permitted in Vietnam with the state retaining all land ownership. Economic reforms, however, have led to household farming replacing collective farming, with land rights guaranteed for twenty years on cropland and fifty years on forestland. While farmers cannot own land, they have the right to use, inherit and rent out land, as well as use it as collateral.

Vietnam initiated agricultural reforms in 1981. This was followed by the first wave of overall economic reforms in 1986, which accelerated in 1989. The macroeconomic stabilization process, accompanied by measures for price liberalization, deregulation, and de-collectivization of agriculture helped unleash the natural resource potential, leading to substantial gains in agricultural productivity and farm incomes. As a result, the agriculture sector has grown steadily, at an average of 4 - 5% per annum, although growth fell to 2.8% in 1998 because of the effects of droughts and the overall slowdown in economic growth (from 9 - 10% to 4 - 5%). Vietnam has moved from rice-importing country with annual imports of 1 million tons, to become the second the largest rice -exporting country after Thailand with exports of 4.5 million ton in 1999. The New Land Law of 1993 also enhance agricultural performance by (i) recognizing the farm household as the main unit of agricultural production; (ii) privatizing land use rights, with farmers granted 20-years rights for rice and other annual crops, and 50-years rights for land used for perennial crops (the red book); and (iii) liberalizing farm decision making for the purchasing of inputs and sale of outputs.

Agricultural product exporting value obtained US\$ 3.5 - 4.5 billion is contributing into modernization and industrialization of the country. Major agricultural products are exported, i.e., rice, coffee, tea, cashew nut, rubber.

2.2 Tea industry in Vietnam

2.2.1 Origin and role of tea plant

In its wild state the tea plant is a small tree or shrub. It was first named *Thea sinensis*, and is now known as *Camellia sinensis*. Tea can be classified into the following four types (Kinh, 1997):

- Chinese big leaf tea (*Camellia sinensis* var. *macrophylla*).
- Chinese small leaf tea (*Camellia sinensis* var. *bohea*)
- Shan tea (*Camellia sinensis* var. *Shan*)
- Indian tea (*Camellia sinensis* var. *assamica*)

According to Muraleedhara (1991) the tea plant originates from the triangle formed by Naga, Manipuri and Lushai along the border between Assam and Burma, stretching to China, and southeast to the hilly areas of Burma to Thailand and Viet Nam. Djemukhatze (1976) did a survey on wild tea plants in a number of places in Viet Nam (Ha Giang, Nghia Lo, Lao Cai, and Tam Dao) and based on the biochemical evolution of the tea, he concluded that the tea was originated from Viet Nam. In short, the tea plant originally grew in mountainous forest areas, and then gradually moved to lower areas, where the ecological systems are different from its original sources, causing the changes in its growth and occurrence of pests and diseases.

Tea plant does not require soil conditions as strict as coffee, fruit trees, and is suitable to climatic conditions of Vietnam, in particular, provinces of North Mountainous and Mid-hill regions, North Central Coast region where a large number of the concentrated tea plantations have been formed. Tea is planted at elevation of 300 - 1500 m above sea level where climate and soil is suitable for emergent and growth of tea plant. Large range of temperature between day and night in the regions creates tea products of aromatic and high quality. Many tea products with famous trade labels such as Tan Cuong (Thai Nguyen), Suoi Giang (Yen Bai) and To Mua (Moc Chau) are being sold in the domestic market at premium prices (VND80,000 - 100,000 per kg). In addition, according to Japanese tea traders, if Shan tea were

processed under Taiwan and Japanese technologies, it would be exported at the premium prices (US\$1,850 - 3,500 per ton) (National Institute of Agricultural Planning and Projection, 1999a).

Tea was considered as comparative advantage plant in crops in Vietnam since the country was known to be one of seven tea cradles on the world (Werkhoven, 1974), and has planted and processed tea for a long time. Its tea quality is similar to tea, which is produced in famous tea areas on the world such as Maldora, Deijling in India and highland areas in Sri Lanka.

The advantage mentioned in previous is also addressed to by some Japanese businessmen; they supposed that fresh tea materials of Vietnam were so good. If the fresh tea have been brought into processing under modern equipment and advanced technologies, consequently, its final products will be high quality tea, obtaining the price as much two or three times as current prices of tea processed by backward and manual technologies. Therefore, development of tea production accompanied with raising quality of tea products lead to the promised exporting value for Vietnam (National Institute of Agricultural Planning and Projection, 1999a).

Tea can yield considerably and stably even in the drought years and have also active effects in anti-erosion and covering soil. Development of tea can create more job opportunities, i.e., 250,000 labors involved in tea production in the North Mountainous Region, and being really contributing into poverty alleviation and hunger reduction in the North Mountainous provinces. Although (conventional) tea has such advantages but it also have disadvantages, in particular, tea production has affected environment because in the production, tea farmers are applying synthetic chemical fertilizer and pesticides which could have contaminated water sources and air atmosphere. Alternatively, organic tea development is also satisfying the targets related to environment and raising farm income for tea growers. Organic tea production is developed as new alternative for gaining high income for tea farmers. Furthermore, it can be friendly with environment, not contaminated water and air, and in consumption aspect, it can create new products, which can be accepted by consumers due to high and aromatic quality.

2.2.2 Tea production

Tea development history

Tea has a long history in Viet Nam. People, in both rural areas and cities, have had the custom of drinking tea for a long time. The northern part of Viet Nam is part of the region where the tea plant has its origins. In this area there are still many places where tea grows "wild" and is harvested by the local people, for example the Shan tea variety. The main tea cultivation areas of Viet Nam are also located in this part of the country, where it has developed greatly since the 1930s.

After occupying Indochina in 1882 the French immediately paid a lot of attention to growing tea. In 1885 the French made the first survey on the tea plant in Viet Nam and in the period 1850 – 1891 other surveys were carried out, especially along the Da River and Mekong River. The first tea plantation was established in 1890, in Tinh Cuong district, Phu Tho province. To overcome initial problems with the tea cultivation a number of tea stations were established, of which the station of Phu Tho was the first, in 1918. Other stations were set up in Pleiku in 1927 and in Bao Loc in 1931, where tea developed strongly after 1925-1930 when French companies made large investments in tea plantations in the area. The northern part of the country, however, remained the largest tea production area.

Kinh (1997) indicated that the history of tea production in Viet Nam can be divided into three stages:

- *The first period was from 1890 to 1945.* First tea plantations were set up, i.e. 60 ha in Tinh Cuong district, Phu Tho province and 250 ha in Duc Pho district, Quang Nam province. By 1938, the total area of tea production in Viet Nam was 13,405 ha, yielding 6,100 tons of dry tea. In 1839, the total production reached 10,900 tons, making Viet Nam the 6th tea producing country in the world, after India, China, Sri Lanka, Indonesia and Japan.

- *The second period was from 1945 to 1954.* Because of the war, most of the tea plantations were abandoned and no a market, the production went down. In 1946 the overall production was only 300 ton of tea.
- *The third period was from 1954 to now.* This period showed a great development in export and domestic markets for tea. In 1958 Viet Nam had a total area of 30,000 ha under tea. In 1977 the total area increased to 44,330 ha, with a yield of 17,896 tons of dry tea. In 1985 the country had 52,047 ha of tea, with a yield of 25,391 tons of dry tea.

Current status of tea production

Tea production in Viet Nam has increased both in acreage and yields. In 2001, the total tea area was 84,600 ha and output of 62.5 thousand tons processed tea; and according to forecast by the year 2010, the figures will be 90,000 ha and 6,5 tons of fresh tea ha⁻¹ (National Institute of Agricultural Planning and Projection, 1999b).

Table 3 Situation of tea production and trade of Vietnam in 1990 – 2001

Year	Area (‘000 ha)	Output ^a (‘000 tons)	Export (‘000 tons)	Consumption (‘000 tons)
1990	59.1	32.2	16.1	16.1
1991	58.3	33.1	8.0	25.1
1992	60.0	36.2	13.0	23.2
1993	60.0	37.7	21.2	16.5
1994	62.9	38.0	17.3	20.7
1995	63.4	37.8	17.5	20.3
1996	61.0	42.3	21.0	21.3
1997	66.7	47.0	24.0	23.0
1998	69.0	50.1	30.0	20.0
1999	78.6	52.1	31.0	21.0
2000	77.4	53.0	36.0	17.0
2001	84.6	62.5	45.0	17.5

Source: General statistical Office, 2002.

Note: ^a output in processed tea

Nowadays, tea is grown in 30 provinces. The largest tea producing area is in the north of the country, where 14 mountainous and midland provinces grow a total area of 42,273 ha, or 63,5% of the national total. The Central Highlands have 15,596 ha, or 23,4%; the Red River delta provinces 2,818 ha, or 4,2%; the North Central provinces 4,208 ha, or 6,3%; and the Central coastal provinces 1,675 ha, or 2,5%. (National Institute of Agricultural Planning and Projection, 2000)

Tea is one of the most comparative advantage plants of Vietnam, the country annually produce over 100 thousand tons and export up to 40 - 50 thousand tons, ranked at 5th of area and 8th of exporting volume on the world (Hien, 2001). The socio- economic survey indicated that contract farmers typically have up to 1.5 ha of tea land and had contractual obligations to supply fresh tea to state owned processing unit. The small holders had an average of 0.3 ha tea land, and tea cultivation done in the context of mixed farming together with paddy and other food production. Both contract farmers and smallholders were poor with an average total farm income of US\$ 680 per annum (ADB, 1997). Vietnam has quite favorable climate and soil for developing tea with specialized areas equipped tea processing engineering, and is one of the tea-producing countries over the World (Eden, 1964). Vietnam has 7 agro-economic regions, in which, 3 regions have produced tea with large area and big outputs named North Mountainous and Mid-hill, North Central Coast, Highland Plateau. The regions have had tradition of tea farming for a long time with diversified farm techniques, high specialization with processing enterprises of modern technologies (Kham and Hiep, 1996).

The North Mountainous and Mid – hill Regions are large areas producing almost tea and the pioneers in producing organic tea. Organic farming is new introduction into the NMR and MHR in order to produce new agricultural products, high quality and intend to satisfy the demand on safe and organic tea and go towards to export if to have opportunities. At present, organic tea area is covered few percent, and number of tea small holders and organic tea areas accounted for inconsiderable percent (2 - 3%), and number of tea smallholders is greater than organic tea farms. Number of organic tea farmers that were involved in training courses and carried out in their tea plantations is around 80 in Thai Nguyen and 65 in Phu Tho provinces

under project of CIDSE (International Cooperation for Development and Solidarity, 2000) whereas IPM tea farmers and conversion organic tea farmers have more percent than formal organic tea farmers, they accounted for 25 % in Thai Nguyen (Thai Nguyen Department of Crop Protection, 2002) and 23% in Phu Tho provinces (Phu Tho Department of Crop Protection, 2002).

2.2.3.3 *Manufacture tea*

The State owned Vietnam National Tea Corporation (VINATEA) accounts for about half of the production, and the provincial state owned factories contribute another 45 %. The balance is by private factories, many of which are small workshops operating under unhygienic conditions (ADB, 1997). At present, Vietnam has 72 enterprises that produce black tea with requirement of tea material of 110,000 tons per year, and processing capacity of 21,400 tons processed tea a year. Most of them has designed capacity types of 6 - 10 tons per day, 12 - 20 tons per day, 25 - 35 tons per day and the largest is 60 tons per day, i.e., Kim Anh joint-stock tea processing Co. Ltd. Over 80% tea processing plants processed tea under OTD technology, and there are two assembly lines produce under CTC and remain are combination both of OTD and CTC.

There are a large number of small enterprises with old and backward equipment that are producing low quality tea, i.e., OPA tea. These products are repurchased by VINATEA and LADOTEA, next continuously sorted, after that exported to foreign countries. The enterprises are mainly producing black tea, at present equipped with Russian machines, now that are very old and not meet the requirements of tea product diversification and quality.

2.3 Organic farming and organic tea in Vietnam

2.3.1 History and development of organic agriculture

Organic farming in Vietnam that was initially started as an ecological movement at the beginning of the 1990s, is still in its early stages, with some crop such as vegetable, rice, fruit, tea. The lack of organic producers is due to the fact that

farmers ignore the economic possibilities of the sector and there is no efficient support or education from the state. The first organic farmers were mostly amateurs. Vietnam at present has no formal framework for organic agriculture development, even though is member of IFOAM. Therefore, it leads to having no regulations in detail for each specific organic product. Organic campaign only is developed according to small projects at local levels. Some organizations namely SNV, CIDSE, Ecological Economics Institution, has supported and encouraged to develop the organic trend. Slow increase of number of organic farms and their produces, areas is appeared, in other words, organic movements may be expanded slowly in term of, numbers of organic farms, the slow increasing trend for organic farms and geographical imbalances of organic farms, and limited range of the cultivated crops.

There is a few certifying organizations for organic in Vietnam, beside of Organic Agriculture Certification Thailand and Organic Agriculture Associations (Foodlink). These organization are in charge of checking inputs in organic production, then after conversion period from conventional into organic by reducing or not using synthetic fertilizer and chemical contents in the production, finally it certify the organic certificate to farmers, means that farmers can put label on products bags, and consumers can buy organic products with labels.

The range of the crops cultivated in Vietnam is considered to be small. The main reason for that is the fact that most farmers are used to produce some particular products and that growers are oriented towards perennial rather than annual crops. Traditionally, the main organic crops have been rice, coffee, tea, vegetable citrus fruits. Fresh vegetables are also produced for the domestic market. Presently, the production of coffee is of negligible importance, but farmers show increasing interest in developing these crops. Organic animal products do not exist in the domestic market, as no regulation for biological animal breeding has been adopted in the country.

2.3.2 Marketing of organic products

The marketing network of organic products is still in its infancy. This is due to the lack of well-organized distribution channels and the negative opinions of retailers regarding the promotion of organic products. Organic products are available mainly through the organic producers themselves, who sell their products at local weekly open markets or directly at the farm gate. A small number of specialized stores buy and sell organic products on a wholesale basis, too. Producers are also retailers, processors and sometimes wholesalers to other retailers. As far as the prices are concerned, the prices of organic products are higher than those of conventional ones, since they are products of top quality and the cultivation/production cost is higher.

2.3.3 Producer attitudes towards organic products

Organic farming does not seem to spread considerably out of the geographical regions from which it was originated. The majority of the producers focuses on a few perennial crops due to lack of information about organic production techniques of other crops. On the other hand, there are producers who are unaware of treatments that should be applied during conversion period, since there is not enough institutional support. In general, there is lack of information throughout production, post-harvest and marketing processes. Furthermore, the small number of organic producer associations and the small size of the majority organic operations are serious drawbacks for the marketing of the products.

2.3.4 Consumer attitudes towards organic products

Vietnamese consumers seem to become more and more sensitive and demanding at the same time, when it comes to their nutrition and they seek for safe, natural and free from agrochemical food products. However, they do not have the appropriate information background that is they are unaware of the existence of organic products or their value. The knowledge about these products seems to be rather higher in the urban and in areas with high degree of tourism. When consumers are finally informed, then they seem to have the intention to buy them. The majority of the consumers are not so well informed about the proper labeling of organic

products, cannot easily distinguish them from the conventional ones and consider organic products hard to be found. As far as the price is concerned, consumers know that the quality converges with higher prices and they would be willing to pay a higher price for a product of better quality. It should also be noted that consumers tend to consume organic products because of healthy reasons and not because of environmental consciousness.

2.3.5 Challenges and outlook

Organic agriculture in Vietnam is still at an embryonic stage, compared to many other developed countries. However, there was a great progress in the last few years. This can be justified by the fact that the country regions favor organic farming due to their soil and climate conditions. However, further development of organic farming in Vietnam requires adequate information about the importance of biological products. Official training, including an organized system of specialized extension services for the continuous education of organic farmers and new applicants, as well as seminars subsidized by concern organizations on organic agriculture could be useful. Identification of potential and successful markets included effective strategic marketing for penetration. Sufficient distribution network for better access to the products is necessary. There is also need for better promotion of the qualitative characteristics, the production process and the certification of organic products. Policy initiatives and standards help farmers adopt organic agriculture.