ADB

Making Markets Work Better for the Poor

discussion paper

No 01

The Value Chain for Tea in Viet Nam: Prospects for Participation of the Poor

November 2004

www.markets4poor.org

Contact:

ASIAN DEVELOPMENT BANK
Viet Nam Resident Mission
Unit 701-706, Sun Red River Building
23 Phan Chu Trinh Str., Ha Noi, Viet Nam
Tel: +(844) 933 1374
Fax: +(844) 933 1373
Website: www.markets4poor.org

Introduction

1. As countries develop, there is an increasing need to seek out opportunities aimed at raising incomes through the identification and development of higher-value economic activities. The inception of *doi moi* (renovation policy) in Viet Nam in 1988 brought about a transformation of the economy by opening it up to market signals and international transactions. In agriculture, this has been manifested by significant growth in production and exports of rice and coffee in particular (for example, Viet Nam is now the world's second largest rice exporter). The net effect of such liberalization has been a rapid decline in poverty (from 58% in 1993 to 29% in 2002), with the percentage of extreme poor (measured by food poverty) falling from 25% to 11%. Various qualitative measures of well-being confirm that living conditions in Viet Nam have noticeably improved (for example, World Bank, 1999, 2004; IFPRI, 2003). However, despite rapid growth in incomes, there are signs that growth has not been inclusive and that income inequality is rising (UNDP, 2001; World Bank, 2001, 2003). The gap between rural and urban areas has widened, with reports suggesting a doubling of the income gap during 1993-1998. Some areas and groups have benefited less than others: rural areas, certain regions (especially Northern Uplands, North Central Coast, and Central Highlands), and most ethnic minorities. Poverty in these regions tends to be more severe than elsewhere in the country.

2. Moreover, while Viet Nam has excelled in the large-scale production and export of many agricultural commodities, it has not extensively diversified into high-value products. Certain products--notably horticulture, seafood, and specialty products--present income-generating opportunities for Viet Nam. At the same time, there is a need to develop markets for products that can also foster the integration and participation of the poor so as to better distribute the gains from development. This is especially critical given the changing global nature of agricultural markets from a system of market-based transactions to an integrated, agro-food channel where networks of relationships between suppliers, processors, exporters, and retailers are the key drivers of product distribution and innovation. The development of such *value chains* increasingly shapes agriculture and agribusiness, and can confer distinct advantages in improving the efficiency of the supply channel, notably in reduced complexity in sales, lower transactions costs, higher quality, and fewer buyers. However, there has been limited study on whether the poor can benefit from such relationships and whether they too can be a part of an ever-increasing globalized food system. The challenge from the standpoint of poverty reduction in the rural sector is, thus, twofold: develop and promote products that confer higher value to producers while understanding and improving the complex networks that would maximize the benefits from their participation. This implies a need for research on value chains in product areas in which the poor could potentially benefit.

3. This study[*] focuses on the value chain for tea in Viet Nam. There are several motivations for selecting tea for the study. First, tea is a high-value product that Viet Nam

---

[*] This study was conducted under the aegis of the Making Markets Work Better for the Poor Project that is jointly funded by the Asian Development Bank (ADB) and the United Kingdom's Department for International Development (DFID). The general aim of the project is twofold: to conduct analytical work on the functioning of markets and the extent to which the poor are able to benefit from them; and to build capacity to support pro-poor market development through research activities, networking, and promoting policy dialogue. This research was implemented by researchers affiliated with the Informatics Center for Agricultural and Rural Development (ICARD) of the Ministry of Agriculture and Rural Development, the Viet Nam Tea Research Institute (VTRI), and international consultants from Agrifood Consulting International (ACI) from April to October 2004.

is already exporting, and it plays an important role in improving income and generating employment in certain rural areas of Viet Nam, especially in the northern uplands (Ha Giang, Yen Bai, Thai Nguyen, and Phu Tho provinces), north east south (Lam Dong province), and north central coast (Nghe An province). It also has a strong potential for reducing poverty since it is planted mainly on small farms in poor areas, is heavily grown by ethnic minorities, requires few inputs, and is labor-intensive. The two main tea-producing regions are among the country's poorest, and tea is one of the few crops suitable for cultivation there. Viet Nam also has a comparative advantage in tea production, yet remains a small player in the world market. Finally, the tea sector in Viet Nam is currently performing below its potential: yields and productivity are low, transactions costs in distribution are high, and product quality is poor. Although strengthening the value chain could help the tea sector realize significant gains, it is equally important to assess how and whether the poor can gain from improvements in the sector. A value-chain analysis can play an important role by paying careful attention to various types of integration mechanisms at play, the governance systems at work, and the potential opportunities and threats they present (Kaplinsky and Morris, 2001).

4. The research highlighted two provinces (Phu Tho and Thai Nguyen) that illustrate the diversity of existing production systems in Viet Nam. Together, the two regions account for about 30% of tea production in Viet Nam. Phu Tho has traditionally been exporting black tea via state-owned enterprises (SOEs), while Thai Nguyen has cultivated a long-standing reputation in domestic markets for its green tea. There is also significant dynamism in both provinces, with the emergence of several large factories and many small-scale processors. Nongovernment organizations (NGOs) have been active in promoting intensive pest management (IPM) methods in tea in both provinces and tea cooperatives in Thai Nguyen.[1] Moreover, tea production in both regions has historically been smallholder-based.

5. The study used primary and secondary data to map the value chains and determine the benefits of participation by the poor. Communes in the two provinces were selected for the study according to their poverty level, involvement in tea farming, share of ethnic minority farmers, proximity to the provincial capital, and farmer participation in either horizontal associations and/or vertical linkages with processors. The research methodology involved a range of qualitative and quantitative activities with government officials and all stakeholders in the tea value chain: from tea pickers to representatives of export companies. Activities included interviews with all stakeholders, focus groups and larger participatory rural appraisals (PRAs) with producers, and a small formal survey of processors. This was supplemented with secondary data on prices, trade, and production.

6. Several key issues emerged from the research. From its standpoint, *quality* is the key crosscutting issue affecting the tea sector. Quality is multidimensional in the tea value chain in terms of the low-value inputs used and the outputs produced in the tea sector. Throughout the value chain, production, processing, institutional, and information constraints manifest themselves in low-quality tea that is produced by Viet Nam and depress the potential of the sector to be a driver of income growth. Improving quality will necessitate the development and strengthening of partnerships between sector participants and greater diversification of products and markets, both domestically and overseas.

---

[1] IPM is a type of training designed to decrease pesticide application by teaching farmers to use a variety of alternative control techniques to capitalize on natural pest mortality. These techniques include biological control, genetic resistance, tillage, pruning, etc.

7. Improving the benefits of participation by the poor in the tea value chain is fundamentally predicated on the ability to improve coordination and linkages with other players in the value chain. Producers, who are better coordinated with processors through wage or contractual relations, were significantly better off than those relying solely on market-based transactions. At the same time, coordination mechanisms that could improve the participation of the poor, such as cooperatives or contracts, are currently weak. Moreover, the 2003 market downturn demonstrated the potential fragility of linkages among coordinated players in the value chain, stemming from over-reliance on only a few main export markets.

8. The research suggests two avenues for increasing the participation of the poor. First, supply-side interventions that bolster collective action among producers, such as cooperatives and producer associations, should be considered. This would include improvements in organizational capacity, marketing, leadership, and capital to facilitate such developments. At the same time, it should be recognized that the ability of associations or cooperatives—particularly those engaged in specialty or niche production--to serve as a broad engine of growth and poverty reduction, is likely to be limited. Therefore, the ways to increase private sector and foreign investment into the tea sector to create more opportunities for linked channels between processors and producers must be explored. This will require improvements in the enabling environment to facilitate private sector involvement. Relevant interventions include promoting equitable credit access for the private sector, contract regulations, infrastructure development, and more transparent legal protections for brands, intellectual property, and market transactions. These interventions will not only expand opportunities for the poor, but also strengthen existing linkages.

Overview of the Tea Sector in Viet Nam

Domestic Production

9. Viet Nam's involvement in tea cultivation dates back 3,000 years. The French first began to produce tea commercially in the late 19th century, after occupying Indochina. Commercialized tea production in Viet Nam developed strongly in the decades after independence with the establishment of state farms focusing solely on tea. Total production of fresh tea in Viet Nam was more than 400,000 tons in 2003, more than double the volume produced 10 years earlier. The sector is estimated to contribute more than $100 million to Viet Nam's economy. The most recent Agricultural Census (GSO, 2003) showed that nearly 400,000 households cultivate tea on more than 106,000 hectares (ha) in Viet Nam. Producers are concentrated largely in the southeast (65%), north central (9%), northwest (8%), and central highlands (8%) (Figure 1). Tea production systems are fundamentally smallholder-based, with small farmers farming about 70% of the total cultivated area, and estates and factories farming the remainder. Nationally and in the study regions, more than 70% of farmers cultivate tea on less than 0.2 ha of land (GSO, 2003). This percentage rises to nearly 80% in Thai Nguyen and more than 85% in Phu Tho. The limited amount of land available for expansion is a key constraint to the increased output by tea farmers. Data from the fieldwork showed, not surprisingly, that poorer farmers[2] have fewer landholdings than wealthier farmers (0.28 ha on average for the poor, while medium and rich farmers had farm sizes averaging 0.38 and 0.41 ha, respectively).

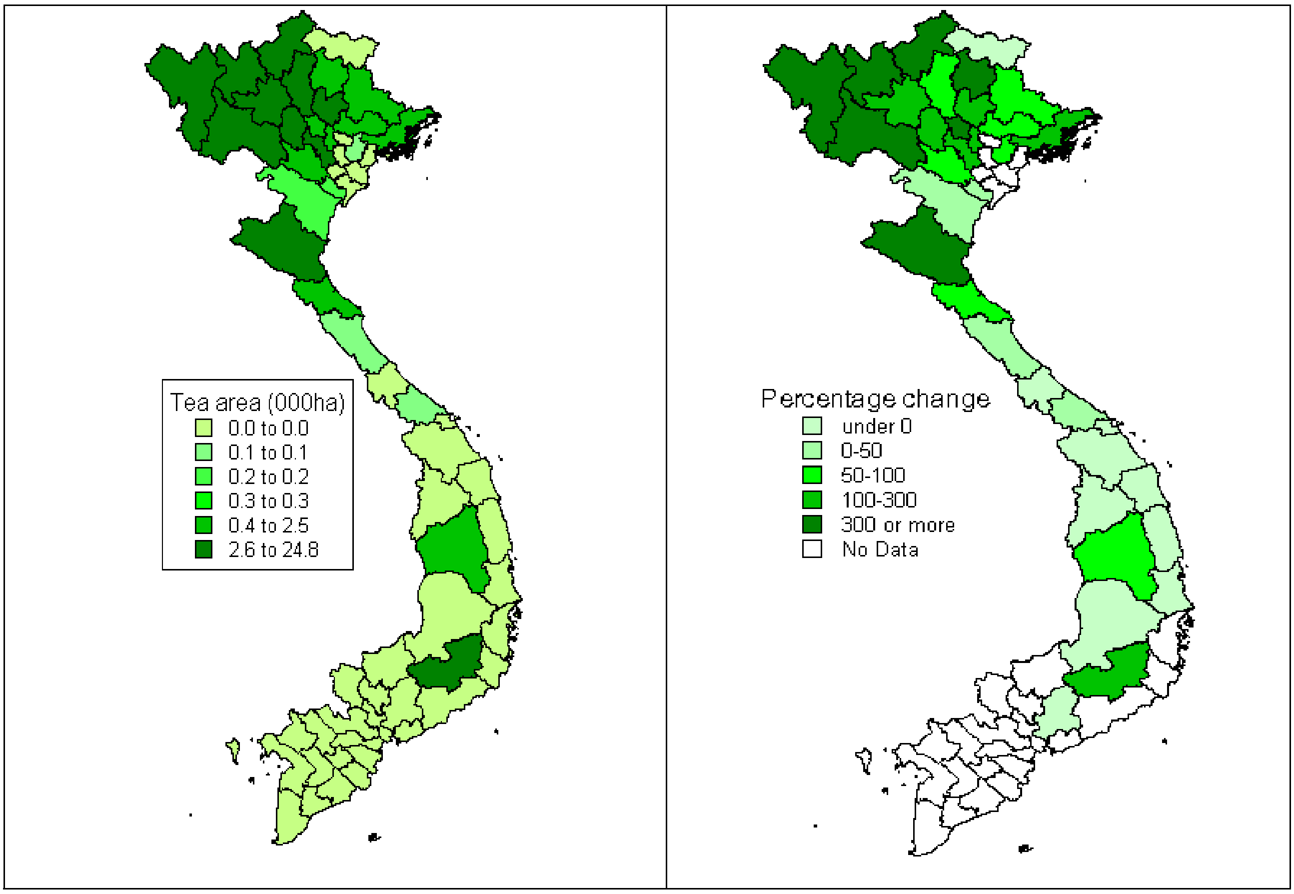
[2] The definition of "poor" in the context of the study was based on several factors, including self-identification by participants or certification by local authorities and neighbors.

10. Present yields for fresh tea range from 5 to 6 tons/ha, with most farms using older varieties, notably Trung Du in the Midlands or Shan in the upland areas.[3] This is significantly lower than major global producers, such as India, Kenya, and Sri Lanka, whose yields are 30-60% higher than those of Viet Nam. At present, most tea gardens in Viet Nam (about 60-70%) are more than 30 years old--past their most productive age. Their replacement with new and more productive varieties could provide considerable gains. The adoption of newer, higher-yielding varieties is increasing, and results from the fieldwork suggest that adoption rates have increased from 12% in 2000 to 20% today. In the study regions, new varieties are cultivated in 50% of the tea area in Phu Tho and 25% in Thai Nguyen. These, however, are rates higher than those reported in the official statistics for these regions. High cost of new trees also constrains further adoption. While seeds of traditional varieties required to plant 1 ha would cost Vietnamese dong (D)250,000 ($16), the per-hectare cost of planting new, improved trees ranges from D6 million ($382) for varieties, such as LDP1, LDP2, or 1A, to D16 million ($1,019) for high-quality Kim Tuyen and Ngoc Thuy varieties.[4,5]

Figure 1. Tea-Producing Areas in Viet Nam, 1995 and 2002

Tea Area of Viet Nam in 2002 (000 ha)	Percentage Change in Area between 2002 and 1995 (%)

[3] This figure is higher than the one computed by dividing output by total area, as it is based on harvested area rather than total area.
[4] The exchange rate used here and in subsequent calculations is US$1 = Vietnamese dong (D)15,700.
[5] New trees are more suitable than seeds to obtain higher yields from new varieties.



Source: ICARD

11. Outdated cultivation techniques further constrain tea production in Viet Nam. Fertilizer use in the sector has reportedly been low, with only 30% of the cultivated tea area in Viet Nam receiving fertilizer. Pesticide use, on the other hand, is extremely uneven, with many producers (particularly those affiliated with SOEs) using pesticides well in excess of established international levels. Overuse of pesticides compromises market access (notably in the European Union, which imposes strict residue limits on tea) and also negatively impacts producers attempting to grow organic tea in major production areas, as insects tend to migrate to non-chemically treated tea. While irrigation is not a major issue in the tea sector, given that tea is predominately rainfed, the lack of wells in some areas prevents the year-round cultivation of tea and thwarts the ability of producers to exploit higher prices during the dry season.

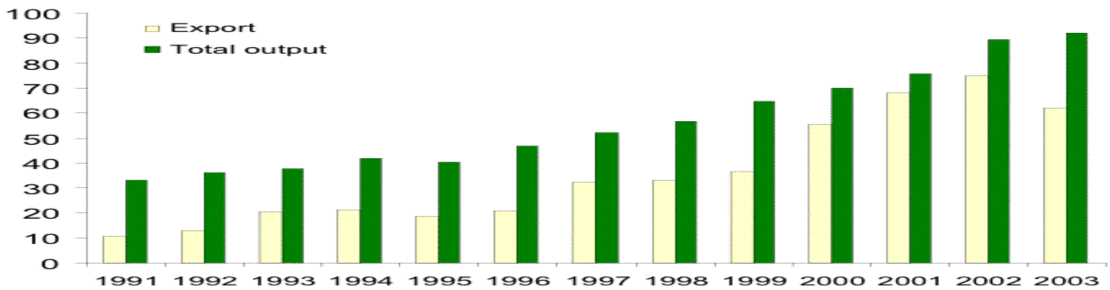
International Trade

12. Viet Nam's tea sector is export-oriented, with almost 84% of production supplying foreign markets in 2002 (Figure 2). Total exports of dried tea[6] in 2002, as reported by the Food and Agriculture Organization (FAO), were nearly 75,000 tons, with an estimated value of $82 million. Export volumes, however, fell in 2003 due to the war in Iraq. Relative to other global competitors, Viet Nam is still a small player in the tea sector, comprising less than 3% of global production and 5% of exports (FAO). Nonetheless, Viet Nam's presence in the world market is rising, as the volume of tea exports has increased by

[6] The conversion rate from fresh tea to dry tea: 4.5-5 kg of fresh tea = 1 kg of dry tea.

more than 600% during the last decade (Figure 2). In 1991, only 20% of production was exported. Domestic resource cost (DRC) calculations show that Viet Nam has a comparative advantage in tea production (0.68 in 2000), although DRCs for tea are not as favorable as either Viet Nam's rice or cashew exports in 2002 (0.52 and 0.25, respectively).[7]

Figure 2: Production and Export of Dried Tea in Viet Nam, 1991-2003



Source: ICARD and FAO

13. Viet Nam has traditionally exported black tea, in either orthodox or CTC form.[8] The majority of tea exports are bulk, undifferentiated products without labels or trademarks; such tea can be blended, repackaged, and/or reprocessed in other markets. Exports of higher-value green tea are low, but increasing. Before 1991, Viet Nam mainly exported small volumes of tea (12,000 to 14,000 tons of semi-processed tea annually) to the Soviet Union and Eastern Europe. During this period, importing counties in the former Soviet Bloc reprocessed and repackaged tea prior to sale. Following the Soviet Union's collapse, Viet Nam expanded the number of overseas markets to which it exports and as of early 2004, it exported tea to 59 markets. Despite attempts at diversification, 80% of exports are destined for India; Iraq; Pakistan; Russia; and Taipei,China (Accenture, 2000; ICARD, 2003). Iraq and Taipei,China together account for about 50% of Viet Nam's total tea exports. While India, Iraq, and Pakistan are the main buyers of black tea, Pakistan and Taipei,China are the main buyers of green tea (Accenture, 2000).

14. The overreliance on a limited number of main export markets has created risks in the tea sector, which were manifested in 2003 when the Iraqi market collapsed due to the war. Iraq was Viet Nam's largest export market, accounting for about 40% of exports on average (1995-2002). The war took a heavy toll on the tea sector in Viet Nam, particularly on those affiliated with SOEs exporting through Viet Nam National Tea Corporation

[7] A DRC of less than 1 denotes comparative advantage, with lower numbers implying higher competitiveness.

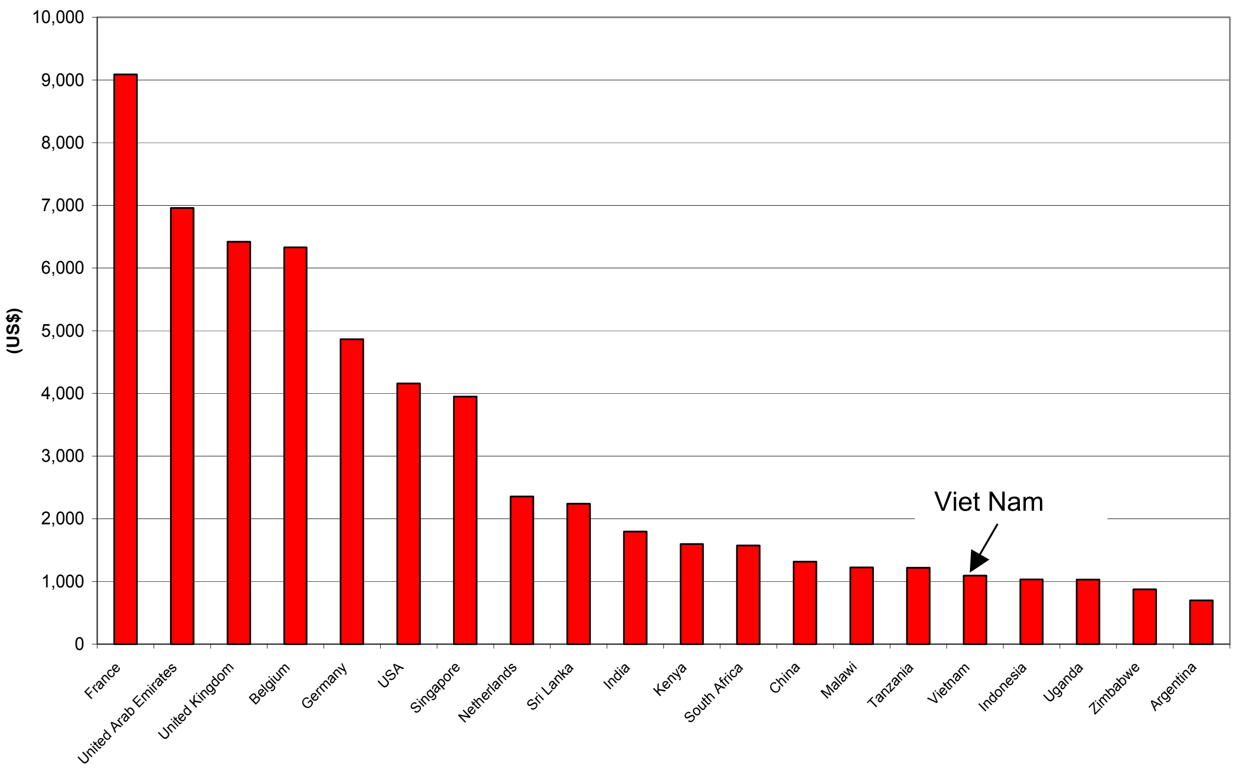
[8] Tea can be classified as black, green, or oolong tea, depending on the type of processing. Black tea involves processing, heating, and drying. Green tea is steamed and rolled before drying and is not fermented like black tea. Oolong tea is semi-fermented. One can further subdivide black tea into orthodox tea, which is withered leaf tea lightly rolled, and CTC tea, which is withered leaf tea "Crushed, Torn, and Curled" (hence the acronym), then shredded and crushed for use in tea bags (Oxfam, 2002).

(VINATEA). Although efforts to diversify into European, American, and Asian markets increased, the share of export value received from European markets, for example, is only 5% of the total export value in tea.

15. Traditionally, VINATEA played a major role in managing tea exports from Viet Nam. At present, some 130 Vietnamese companies export tea, 40 of which are specialized tea exporters. VINATEA is no longer dominant in exports and commands less than a 50% share; its share fell to 20% in 2003 because of the collapse of the Iraqi market. Limited companies now control about 40% of export volumes, joint-venture companies 8%, with the rest accounted for by other types of companies. VINATEA mainly exports black tea processed using orthodox technology. About 70% of the tea sold by VINATEA is remixed and labeled abroad, while only 17% carries a VINATEA label. In addition, VINATEA also sells small volumes of green tea to Japan; Pakistan; and Taipei, China, and a very small amount of CTC tea to Belgium.

16. The quality of exported tea remains low. Vietnamese tea trades at a 25-30% discount on world markets relative to the world price. At the same time, the gradual reduction in the price gap between the export price and world price suggests that the tea sector in Viet Nam is becoming more integrated into the world market. On the other hand, the unit value of tea, compared to other major markets, remains extremely low and demonstrates the bulk, low-value nature of most Vietnamese tea exports (Figure 3).

Figure 3: Export Unit Values for Selected Tea Exporters, 2002 ($/ton)



17. By contrast, while most exported tea is crude or semi-processed, tea sold on the domestic market is finished, of higher quality, and commands a higher price premium than exports. Several tea-growing areas in Viet Nam, notably Moc Chau, Thai Nguyen, and Kim Ahn, are famous locally for the quality of their tea. Vietnamese consumers are typically very conscious of tea quality, with price spreads between the top and bottom

quality grades of tea of up to tenfold (Accenture, 2000). Small household units can sell tea locally for $2-$5/kilogram (kg), while the best production by joint ventures fetches up to $15/kg. Note that these prices are significantly higher than the export unit values illustrated in Figure 3. Despite the high premiums for locally produced tea, local manufacturers have been slow to exploit recent trends in urban areas. For example, foreign tea producers have dominated sales in popular urban tea bars. Domestically traded volumes relative to exports remain low, suggesting that domestic producers are missing out on lucrative, high-value opportunities in Viet Nam's domestic tea market.

Government Policy Toward the Tea Sector

18. In general, the Government broadly intervenes in the tea sector: it has designated tea as a strategic commodity and has set forth broad goals for the tea sector to meet by 2010. For example, the Development Program for Tea (Decree 43/1999 QD-TTG) seeks to increase yields by 1.7 times, more than triple production, and create employment for 1 million people. Prices are largely market-based. In the past, a floor price was set by the Government to stabilize income for farmers; this is reportedly still used, in theory, in provinces, such as Lao Cai and Yen Bai. While such policies were more influential when the state had a larger role in the sector, the impact of such policies today is relatively low. The Government provides support in terms of credit, tax breaks, and investment at the provincial level to participants engaged in the tea sector.

The Value Chain for Tea in Viet Nam

19. The value chain for tea is a complex one. While it involves only three main activities—the production of tea leaves, processing, and the sale of dry tea—several players are involved in each process, differentiated mainly by scale and ownership. In general, the tea value chain involves the participation and interaction of different stakeholders, including tea producers, fresh tea traders/assemblers, processors, exporters, dried tea traders, retailers, and consumers. Wage laborers, such as tea pickers and employees of processing plants, have horizontal linkages with producers and processors, respectively, and have grown in numbers as the sector has grown. For analytical purposes, classifying certain stakeholders into different subgroups is also useful. We identify four types of producers: unlinked farmers, contract farmers, worker farmers, and cooperative farmers. Similarly, we can differentiate processors as household processors, private companies, joint-venture companies, and SOEs.

20. The tea value chain in Viet Nam has two main channels that overlap. The first channel, dominant in the past, is centered on wage farmers (called "worker farmers" in the analysis) or contract farmers affiliated with large plantation-based factories producing tea mainly for export markets (through VINATEA in the case of state-owned or "joint-stock" companies). The second channel—encompassing the majority of farmers—involves smallholders producing tea along with other crops and livestock. In this channel, smallholders are "unlinked," which means that tea sales are made solely through market-based relationships rather than any formal integrative linkages with other players in the chain. From the fieldwork, two channels continue to be largely separate, although less so than in the past as large plantations have begun in small measure to source tea from contracted smallholders, who largely retain their independence and engage in a mix of market and contracted sales. However, contracted sales remain small in general, due to problems among both producers and processors in keeping to the terms of the contract when the market price changes (as it did significantly in 2003).

21. Two main marketing channels in the value chain were identified and described, highlighting in particular the linkages between producers, traders, and processors. This is followed by a separate discussion of the sales outlets available in each channel. Finally, a quantitative comparison of costs, profits, and margins highlighting the relative profitability and income distribution among stakeholders is provided.

Channel 1: Integrated Marketing Channel for Tea

22. In the first channel, worker farmers and contract farmers have a closed contractual relationship with factories that produce predominantly for export (Figure 4). Previous to 1995, worker farmers, who were employees of SOEs, received a monthly salary and social security benefits, such as health insurance, retirement, and holidays. All tea land belonged to the state, with the company acting as its representative in tea cultivation. Upon the enactment of the 1995 Decree 01[9], SOEs released land to their farmers, who then became worker farmers. Under this framework, worker farmers had to sign a contract with the company in which they were given the right to use company land for 50 years, and in return, they agreed to sell their leaf tea to the company. The contracts do not stipulate the price that will be paid to the worker farmer by the company. The commitments are fixed and for the long term, while the leaf tea price changes regularly. The exchange process between worker farmers and the company is not only based on market factors, but also involves the land agreement and social insurance payments (for example, worker farmers receive health benefits and a retirement pension). Should worker farmers not follow their agreements with the company, the company is entitled to take the land back. While discussions with farmers revealed that this had never happened, worker farmers were, nonetheless, afraid of this possibility.

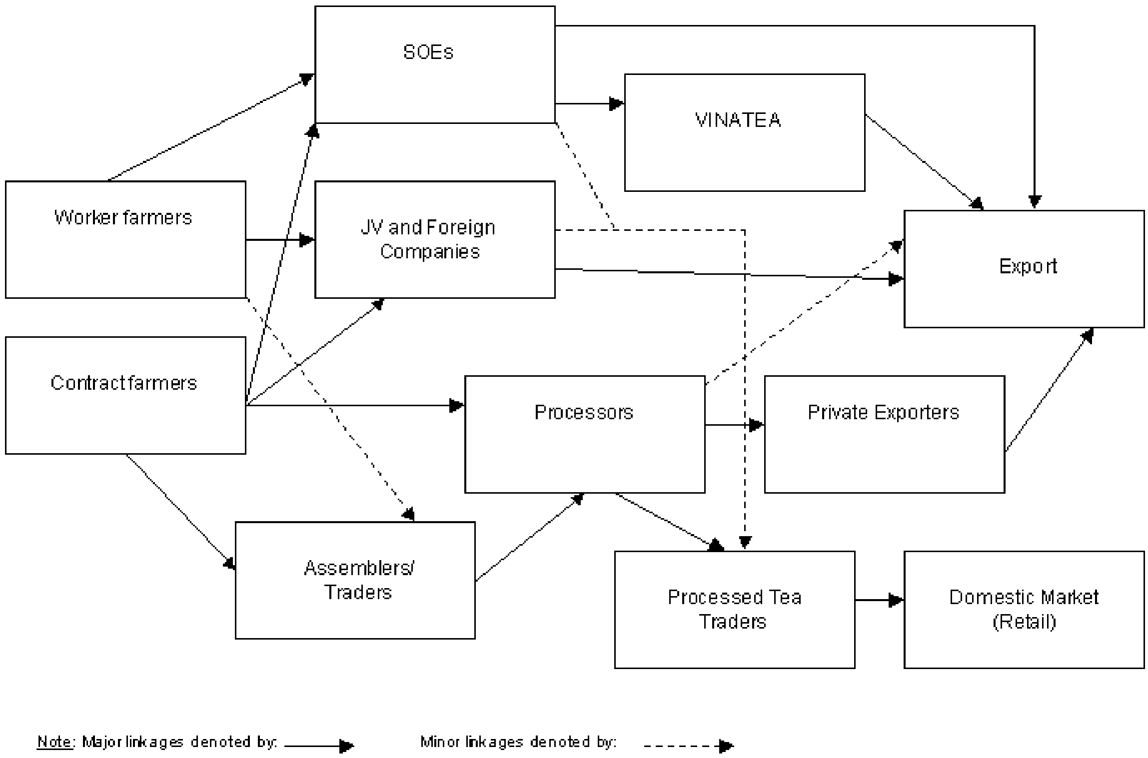
23. The differences between worker farmers and other farmers regarding land issues should be noted. First, worker farmers do not hold title for the land on which they cultivate tea. The local government only bestows land certification on the company for the whole of its area. This implies that while worker farmers can sell tea land, they cannot use it as collateral to formally access credit.[10] Second, the company requires that worker farmers only grow tea on the land released by the company. Consequently, worker farmers do not have the same rights as other farmers to determine what to cultivate.

24. While this type of linkage has generally remained stable over the years, recent market fluctuations have exposed weaknesses in linkages between worker farmers and companies, particularly for companies depending only on one export market. For example, before 2003, the Song Cau Company bought about 5,000 tons of leaf tea per year, almost all of which was eventually exported through VINATEA. In 2003, VINATEA's export market was reduced significantly, leading Song Cau to cut its procurement to only 2,900 tons of leaf tea at below-market prices. This demonstrates how such market dependence may negatively affect producers.

[9] The full name of the Decree 01/1995 is as follows: "Decree of the Government Number 01/CP, 1 January 1995 promulgating regulations on releasing land for using agriculture, forestry, and fisheries of state-owned enterprises."

[10] Interviews with SOEs, joint ventures, and foreign-owned companies revealed no difference in land rights, since both joint ventures and foreign-owned companies were originally SOEs and must follow the 01 Decree of 1995.

Figure 4: The Marketing Channel for Worker and Contract Farmers



25. In response to such market fluctuations, worker farmers have tried to diversify their activities to improve income, although this largely depends on the possibilities available to them. For instance, they might sell leaf tea to the free market illegally to get a higher income. The survey in Phu Tho showed that about 7% of processors in Van Mieu commune bought leaf from worker farmers of the Phu Da Company, and traders in both provinces informally reported having bought worker farmers' tea. Alternatively, they may process tea for sale at higher prices.[11]

26. There are two kinds of contract farmers: (i) farmers who bought land from a company under the 01 Decree and signed a contract with the company (but are not covered by social insurance); and (ii) farmers who have their own land and sign contracts with a company. The first type of contract farmer is not very common; of the five large plantations visited, only the Song Cau Company has this kind of contract. As with worker farmers, the company maintains the land title and, consequently, farmers cannot use the land as collateral for bank loans. The linkages between the company and this type of contract farmer are close. Interviews with several contract farmers with the Song Cau Company revealed that almost all, if not the total, of their output was sold to the company despite their complaints about below-market prices. Like worker farmers, they are expected to honor their contracts.

[11] Note that the selling of processed tea by worker/contract farmers is not always illegal, depending on the company involved, the time of year, and contract stipulations.

27. The second type of contract farmer has been in existence since 2002, when the Government issued "Decree 80 to encourage buying agricultural commodities through contracts." This government initiative has created a framework for contract farming between agro-processing companies and farm households. A number of large companies—both state-owned and joint venture/foreign-owned—have used contracts to expand and stabilize their supplies.

28. This second form of contracting has been strongly affected by market fluctuations and the business performance of the company. In general, the fieldwork found mixed success in the use of such contracts. For example, from 1994 to 2004, the Song Cau Company had an agreement with a Japanese company to produce a special high-value tea for the Japanese market. Beginning in 2002, the company signed one-year contracts with farmers to obtain high-quality leaf tea. However, when the price fell in 2003 and the Japanese shifted production to Son La province in 2004, the Song Cau Company paid for leaf tea from its contract farmers at below-market rates. Likewise, in 2003, the Thai Nguyen tea company signed contracts with 300 farmers to supply tea at prices ranging from D1,800 ($0.11) to D2,200 ($0.14)/kg. However, owing to the export market downturn, VINATEA only bought 100 tons from the Thai Nguyen Company (which normally exports nearly 95% of its output through VINATEA). As a result, the company offered contract farmers only D800 ($0.05)/kg for their leaf tea. Unable to honor the contract, the farmers were left to sell on the free market or process green tea.

29. Not all contract arrangements have worked out badly, however. The Phu Ben Company, a 100% Belgian-owned company that has performed well in recent years despite the 2003 downturn, provides an interesting contrast. Most of Phu Ben's exports are to high-value European markets. It usually obtains half of its tea supply from its own worker farmers and the other half on the open market. To stabilize supply, it signed contracts with 735 farmers starting in February 2003. Under the contract, Phu Ben provides fertilizer to farmers and in return, farmers sell all their tea under contract to the Phu Ben Company. Contracts between farmers and the Phu Ben Company have been more stable largely because the company's price was D100 to D200/kg higher than the market price in 2003. This was due partly to the higher quality of the tea procured by the Phu Ben Company, and its more stable and lucrative European market.

30. Major downstream players in this first channel are large processors (typically SOEs, joint ventures, and foreign-owned companies) and exporters (including VINATEA). Traders play a relatively minor role in this marketing channel, except among some contract farmers selling to factories under Decree 80 relationships. Under such arrangements, farmers will sell to either assemblers or private traders.

31. SOEs have dominated the tea sector for a long time, particularly in processing and exporting. Until the mid-1990s, all SOEs sold their processed and semi-processed tea to VINATEA for export. This process worked in the following manner. At the beginning of each year, companies would submit their planned production to VINATEA. VINATEA would set a plan for total production and the quantity of tea it would buy from each of its members. The companies were completely reliant on VINATEA for a market, and would base their output strictly on VINATEA's plans. After the 2003 market downturn, companies are no longer required to submit production plans and are encouraged to seek their own foreign buyers for direct export.[12] Aside from VINATEA, products from SOEs can follow

[12] According to the head of the Planning Department of Thai Nguyen Tea Company, before 2003 the company had to submit its production plan, including total output and production costs, to VINATEA. VINATEA had to approve these plans and would then buy the company's output for

two alternative paths: direct export, or export through private companies. SOEs lacking marketing expertise may favor the latter option, while private companies capable of finding export markets—but without access to adequate material supplies or processing facilities— may buy tea from SOEs.[13]

32. Joint ventures and foreign companies have only recently (beginning in late 1990s) entered the tea sector. As of 2003, there is a joint venture with Iraq (Phu Da), a 100% Belgian-owned company (Phu Ben), and 11 companies from Taipei,China based in the south. Both Phu Ben and Phu Da, which are located in Phu Tho province in the north, have a annual capacity of more than 800 tons of dry tea. By contrast, foreign companies in Lam Dong mainly produce high-value special tea, with smaller capacities of 70-100 tons of dried tea per year. Export markets for joint venture companies tend to be more stable, given the support received by the joint venture partners.

Channel 2: Market-Based Transactions in Tea

33. In the second channel, unlinked farmers sell fresh tea mostly to assemblers (who may sell to large or small processors) or directly to small-scale processors (Figure 5). Alternatively, they may process leaf tea at home, and then sell dry tea to assemblers. For farmers without fixed linkages, the reforms of *doi moi* created huge opportunities to develop tea production and improve living conditions. Before 1988, the country's tea sector was dominated by SOEs supplied by their own workers. Outside the state system, only a small number of farmers produced tea mainly for their own consumption, although a limited amount was sold to the market informally. The 1988 reforms allowed farmers to sell tea on the free market, giving them an incentive to invest in and expand their own tea gardens. Moreover, the emergence of private sector traders and processors, along with improvements in technology and transport, have enlarged the size of the market and created a large scope for smallholders to increase production. While the development of private processors has increased competition in the tea market and reduced the monopoly power of state companies, their scale remains small.

34. Transactions in this channel can be characterized as arms-length transactions that are completely dependent on market-based interactions rather than active coordination. A similar story was reported by the International Food Policy Research Institute (2003) in their study of the northern uplands area, in which interviews with 90 traders revealed limited coordination between farmers and buyers: "Farmers sell on spot markets and receive virtually no guidance or any other assistance from buyers. On the other hand, farmers generally have a choice of buyers and seem to trust that the prices they receive are fair. There is little evidence that farmers feel they are being 'exploited,' even in the most remote villages" (p. 184).

Fieldwork in Phu Tho showed that most fresh tea procured from household producers is sold to traders and small processing units. The appearance of private processors in material zones in 1999-2000 bolstered farm households' selling options. By contrast, in

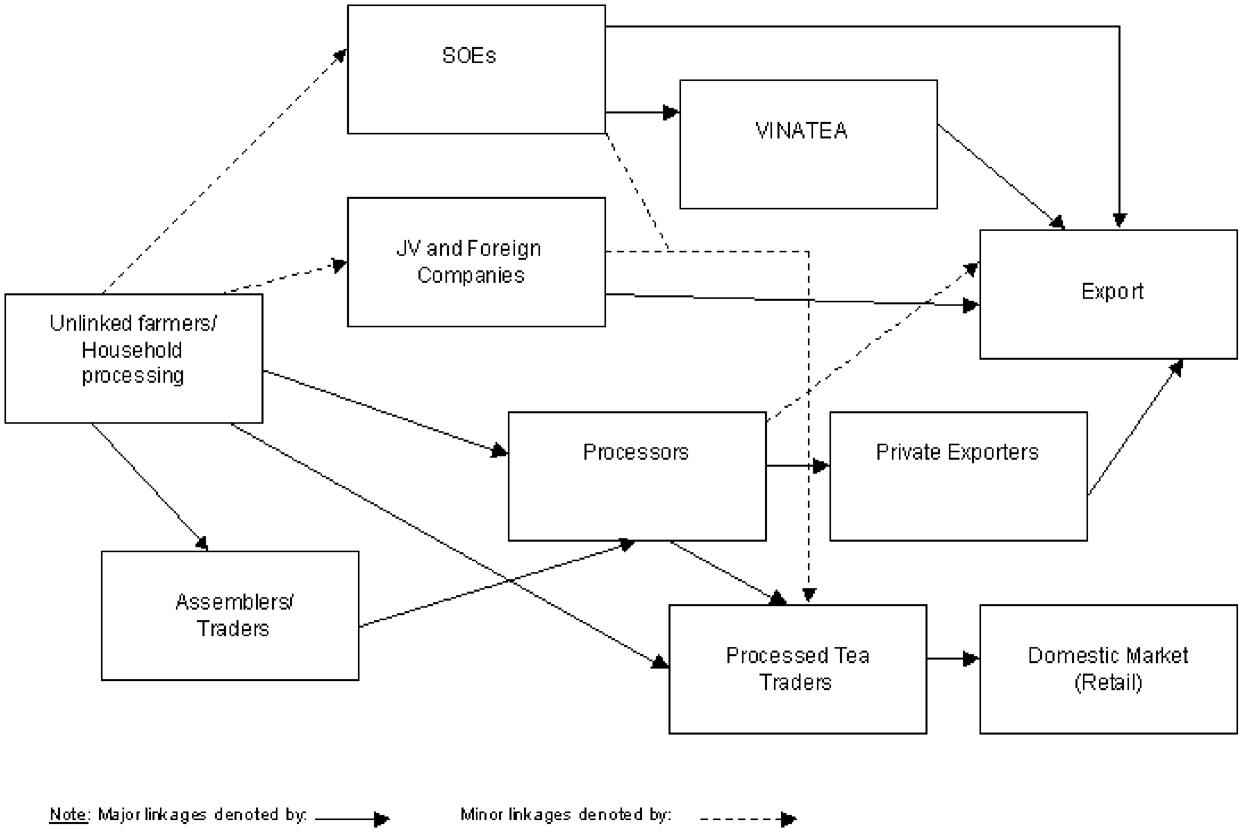
---

export. In 2003, VINATEA realized it could no longer buy all its members' output and, consequently, gave more freedom to its members. Currently, his company does not have to submit its production plan and can export tea directly (key informant interview, June 2004).

[13] An example of this is the Future Generation Company, which began its business by buying leaf tea from SOEs for export. In 2003, it set up two large processing factories [one with a capacity of 5,000 tons (dried tea)/year, the other 1,000 tons (also dried tea)/year]. However, the company's output is not sufficient to meet its export demand, and it must still procure tea from other companies (key informant interview, April 2004).

Thai Nguyen, some larger companies order special dried tea directly from farm households. For example, the Hoang Binh Limited Company (Thai Nguyen city), not only annually buys 750 tons of fresh tea, but also about 30 tons of special green tea directly from farmer households in Phuc Triu commune. High-quality dried tea bought from these farmer households (both poor and nonpoor) is packed and exported directly to domestic and international buyers (including Czech Republic, Germany, and Slovakia). In both provinces, some sales by traders to large factories have also been observed.

Figure 5: Marketing Channel for Unlinked Farmers



35. Non-registered household processors that use their own leaf tea production and that of other producers are common in tea-producing areas. This is particularly true in Thai Nguyen, where 67% of producers also engage in household processing. By contrast, only 20% of households in Phu Tho are involved in such activities. Nonregistered households in Phu Tho mostly purchase leaf tea from other households (more than 80% of their supply). Green tea is their principal product. The expansion of activities by producers in Thai Nguyen began in 1996, when local enterprises developed new equipment to facilitate household processing. Falling prices of processing equipment have encouraged the involvement of more players, while the price declines of 2003 have provided further incentives for producers, particularly in Phu Tho, to expand into such activities, given the more stable market and higher returns from dry tea.

36. Processed tea products from unlinked farmers are sold to retailers or exporters. In Phu Tho, non-registered and registered households sell processed tea mostly to traders, while private companies sell to exporters or export directly. In Thai Nguyen, about 40% of non-registered households sell to domestic retailers, signaling a strong domestic market.

However, the quality of tea produced by these units is still low and uneven because of (i) inconsistent input material, as these enterprises do not have their own material zones for procurement but rather buy tea with different grades from farmers; and (ii) simple and old-fashioned processing facilities.

Other Marketing Channels for Tea

37. While the two marketing channels already discussed characterize the vast majority of marketed tea, a very small number of farmers belong to cooperatives, which are intended to strengthen members' bargaining power with buyers. Most existing tea cooperatives are located in Thai Nguyen province and were established by the NGO *Centre d'Education et de Co-operation International* (CECI).[14] Since 2002, CECI has supported the establishment of six cooperatives in Thai Nguyen. Phu Tho does not yet have any cooperatives, although some farmers interviewed, who are involved in IPM clubs, expressed interest in forming one.[15] Interest in forming cooperatives has increased since 2003, when the tea price was low.

38. The marketing channel for cooperatives can be described as follows. First, the cooperative will sign contracts with buyers and proceed to mobilize dry tea from its members.[16] The buyers will then arrange sales to retail outlets, or more commonly, to exporters who sell to developed markets. At present, the contracts between cooperatives and buyers have remained small, with most members finding their own buyers on the free market. For instance, in 2003 the Huong Thinh cooperative sold 5 tons of dry tea, but this accounted for only 5% of total dry tea produced by its members. However, CECI (2002) reports that sales and profits from cooperatives are rising. In Thai Nguyen, the proportion of sales by cooperatives increased from 3% to 10% over a 16-month period during 2001-2002. Moreover, profits for four of the six cooperatives increased (albeit slowly) over the same period.

39. Fieldwork in Thai Nguyen demonstrated a considerable weakness in cooperatives at present. In particular, cooperatives lack trading and marketing experience. Cooperatives have had difficulties in mobilizing members to use unified production and processing techniques. This resulted in an uneven product quality, a factor that inhibits bulk sales. In addition, cooperatives frequently break contracts when the market price is higher than the contract price. Cooperatives also face budget constraints in promoting their trading activities. The three cooperatives interviewed had budgets of D8 million ($509.55) (Tan Huong), D10 million ($636.94) (Huong Thinh), and D20 million ($1,273.88) (Thien Hoang) that were obtained from member dues. These funds are enough only to buy furniture and cover operations. To date, the activities of cooperatives have focused mostly on providing inputs rather than selling output. CECI (2002) notes some success in obtaining fertilizer at more favorable prices than the market (roughly 2-7% cheaper over various months in 2001 and 2002).

40. The production of organic tea, often identified as a market for cooperative farmers, also poses some unique constraints. Organic certification following international norms

---

[14] Generally, in rural areas of Viet Nam, cooperatives mainly provide inputs for food crops; few cooperatives specialize solely in one cash crop.

[15] For instance, the leader of the IPM club in Vo Mieu commune told team members that he and other club members were interested in forming a cooperative, but that they were unsure whether the business would cover operating costs and the fee paid to the Government.

[16] Most cooperatives mobilize dry tea that has been processed by its members; only the organic tea cooperative mobilizes leaf tea from its members that it processes itself for sale.

costs about $4,000-5,000. While this fee is paid by NGOs in some instances, in other cases it represents a barrier to entry to this market since most cooperatives do not have this type of budget. Vietnamese certification programs exist, although at present, they are not considered reliable. Indeed, there is significant ambiguity in Viet Nam as to what constitutes an "organic" product: laws establishing standards have not yet been approved, and indigenous mechanisms to enforce such arrangements have not been implemented. Moreover, the production of organic tea is extremely expensive and risky for two reasons. First, while markets for organic tea overseas fetch a huge premium (roughly three times the price of conventional tea), domestic prices for organic tea are generally lower than conventional tea (due to its lower quality).[17] This uncertainty in finding markets makes this kind of investment difficult. Second, the quality of organic tea is often compromised by insect damage that results from organic fields being surrounded by traditional tea fields using heavy amounts of pesticides. Consequently, insects will migrate to the organic fields and cause greater damage, thus lowering the quality of the organic tea.[18] Typically, it takes 3-5 years to recoup yields after the transition is made to organic production.

Sales Outlets for Tea

41. About 84% of Viet Nam's tea output is destined for export. According to the Viet Nam Tea Association (VITAS), some 160 companies exported tea in 2002. This figure is much higher than the number of rice exporters or coffee exporters in Viet Nam. Nearly 100 of these companies specialize in tea; for the remainder, tea accounts for only a small portion of sales. Tea can be exported through three channels: SOEs (mostly through VINATEA), joint ventures and foreign companies, and private companies (including limited and joint stock companies). As noted earlier, the role of the state has dropped markedly in recent years, while the private sector is becoming increasingly important: in 2003, private companies accounted for 12 of the 19 largest exporters.

42. In the domestic market, four main retail channels characterize urban areas: small teahouses (*quan coc*), tea bars, traditional tea retailers, and supermarkets. Increasingly, traditional tea sales outlets (teahouses and traditional tea retailers) are facing increased competition from tea bars and supermarkets. Traditionally, small tea houses have catered to a working class clientele, and are located in crowded areas near schools, companies, and markets. Traditional tea retailers sell dry tea and their suppliers come from famous tea areas, such as Thai Nguyen. In larger cities in the north, such as Hanoi, tea retailers were prevalent. With the increasing number of tea bars and emergence of many kinds of instant tea, however, their number has fallen. At the same time, the small number remaining in the business have profited from this development, since they face less competition.

43. In recent years, young people increasingly tend to drink in tea bars owned by tea company agents, in which tea is sold alongside other types of drinks. Flavored teas in these bars are popular, as are foreign brands, such as Lipton, Dilmah, or Nestle. Supermarket consumption is gradually replacing purchases of green tea from traditional

---

17 For example, in 2003, the Thien Hoang organic tea cooperative sold a total of 10 tons of tea, of which1 ton was sold as organic to export markets, while the remainder was sold on the free market at a substantial discount. The organic tea was sold to Eco-link at D60,000 ($3.82)/kg, while the remainder was sold locally as low-quality conventional tea at D30,000 ($1.91)–D35,000 ($2.23)/kg only.

18 For this reason, companies interested in developing organic tea sales are setting their sights on more remote areas than our field sites. In these areas, farmers are already producing tea organically because of limited resources.

retailers, in part because supermarket pricing is transparent, products are safe, and it is convenient for consumers. Most tea sold through this channel (perhaps 70%) is foreign. However, domestic brands, such as Kim Anh, Hong Tra, and Cozy are increasingly common. In the coming years, tea retailers will likely be under strong competition from the supermarket system, given that specialty teas from Thai Nguyen, Ha Giang, and elsewhere have begun to appear in this channel. The sizable future growth in purchases of food and beverages from supermarkets will further compound these pressures.

Comparison of Marketing Channels

44. The study analyzed the costs and benefits accruing to different stakeholders in the marketing channel to assess the profitability among different players in the channel and the income distribution within the value chain. Through a formal survey, data was collected on operating costs and sales prices for worker farmers, unlinked farmers, traders, processors, and exporters; a summary of our sample is reported in Tables 1-3. While the sample size for each of the stakeholders is relatively small, it nonetheless provides some directions in trends facing the value chain for tea. Data, however, was insufficient to do such an analysis for cooperative farmers or contract farmers engaged in Decree 80-type transactions with companies. Since linkages and collective action in the value chain is an important policy issue, future research may assess the relative profitability and benefits between cooperative and contract farmers to better aid the design of optimum coordination mechanisms.

Table 1: Sample of Tea Producers and Local Government in the Survey

Province	Commune	Activities	Participants	Of which poor
Phu Tho	Vo Mieu	- Focus groups - Key informant interviews - Local government interviews	10 unlinked farmers 5 unlinked farmers Commune leaders	- 5 poor - 3 poor
	Van Mieu	- Focus groups - Key informant interviews - PRA - Local government interviews	10 worker farmers 5 worker farmers 20 worker farmers Commune leaders	- 4 poor - 2 poor - 10 poor
	Yen Kien	- PRA	20 worker farmers	- 10 poor
Thai Nguyen	Hoa Trung	- Focus groups - Key informant interviews - Local government interviews	10 contract farmers 5 contract farmers Commune leaders	- 6 poor - 4 poor
	Minh Lap	- Focus groups - Key informant interviews - Local government interviews	10 cooperative farmers 6 ethnic farmers	- 7 poor - 5 poor
	Phuc Triu	- Key informant interviews	5 cooperative farmers	- 2 poor
	Song Cau	- Key informant interviews - PRA	5 worker farmers 20 worker farmers	- 2 poor - 7 poor

Table 2: Sample of Tea Processors Interviewed in the Survey

Type of processor	Phu Tho	Thai Nguyen	Total
Non-registered households	36	20	56
Registered households	8	0	8
Private companies	5	9	14
Joint-venture/foreign companies	2	1	3
Others	1	0	1
Total	50	30	82

Table 3: Sample of Exporters Interviewed in the Survey

Number of export companies	Type of ownership	Location
2	Private	Hanoi
2	State	Hanoi
1	Equitized company	Hanoi
2	Private	Thai Nguyen
2	Joint-venture	Phu Tho
1	Exporter	Phu Tho

45. The results from the analysis are as follows. First, it costs unlinked farmers more to produce 1 kg of leaf tea than worker farmers (D1,450 ($0.09)/kg vs. D1,314 ($0.08)/kg). Thus, given the same market price, worker farmers tend to receive higher profits than unlinked farmers. Moreover, unlinked farmers obtain slightly lower yields than worker farmers. The relative share of costs allocated to each activity is similar, although unlinked farmers spend slightly more on fertilizer (on a share basis) and still obtain smaller yields. The high cost of fertilizer and pesticides explains why some farmers neglect their tea when tea prices are low. Such neglect typically accentuates price instability—when demand returns to normal, there is typically a supply shortage, as happened for the early tea crop in 2004.

46. At the same time, both types of tea farmers often face price fluctuations for tea. For example, for several months in 2003, producer prices for unlinked farm households in Van Mieu and Vo Mieu communes in Phu Tho fell to under D1,000/kg of fresh tea, which is less than production cost. Even at this price, unlinked farmers still must harvest tea, since failure to pick tea during harvesting time can harm tea gardens, hence reducing tea yield and quality in subsequent years. Harvesting must be done even when the price received is lower than the cost for tea picking. Worker farmers are also affected by price instability, with the difference between company prices and market prices sometimes working to the disadvantage of worker farmers compared to unlinked farmers. For instance, in 2003, the Song Cau Company paid its worker farmers D1,800 ($0.11)/kg while the market rate was D2,500 ($0.16)/kg.

47. Producing tea as an unlinked farmer is usually more lucrative in Thai Nguyen than in Phu Tho, despite higher production costs. The reasons for higher production costs are twofold. First, farmers, who only produce tea in Thai Nguyen, practice a more intensive type of farming that requires higher amounts of fertilizer and pesticide. For example, while unlinked farmers apply 300 kg of fertilizers (per 1,000 m^2 of land) in Thai Nguyen, worker farmers in Phu Tho use less than half of this quantity. Second, in Thai Nguyen, tea picking is popular and specialized, which means that the cost of labor for picking leaf is also quite

high. Indeed, with such costs, and a fresh tea price of D1,500 ($0.09)-D1,600 ($.10)/kg in 2003, tea producers in Thai Nguyen lost money by selling fresh tea. Nonetheless, as noted previously, a majority of farm households (nearly 70%) in Thai Nguyen also process tea and receive higher returns than those selling leaf tea only.

48. Nonpoor farmers tend to incur not only slightly higher production costs but also slightly higher profits than their poor counterparts. The difference in profit was the same (and low) in 2003, while slightly higher profit accrued to the nonpoor in 2004. Nonpoor farmers typically received higher prices (3-5% higher) for their fresh tea than poor farmers.

49. In downstream industries, assemblers and traders have similar unit profits (roughly D50/kg), although higher volumes managed by traders imply a higher profitability. From the standpoint of processors, profits from green tea were higher than those from black tea. Private companies in Thai Nguyen are more profitable than those in Phu Tho because of higher sales prices, which offset higher production costs.

50. Comparing margins within two distinct channels (green tea for the domestic market in Thai Nguyen and Phu Tho vs. black tea for the export market in Phu Tho), the study was able to assess the marketing margins and distribution of profits for the tea value chain; a description of our approach is given in Appendix A. Ideally, data should have covered different producer subtypes (worker farmers, cooperatives, etc). However, data received from downstream participants (traders, processors, exporters) does not distinguish whether products were bought from worker farmers, poor farmers, cooperatives, or other groups and, thus, may not accurately assess the margin structure inherent among such players. As a consequence, at the producer level, the study used the cost structure for unlinked farmers, given that such smallholders predominate in the value chain (about 70% of producers).

51. In the domestic channel for green tea in Phu Tho, the marketing margin of producers is largest, accounting for nearly 45% of the retail price (Figure 6). Farmers also bear the brunt of the highest unit costs (nearly 55%) in the channel. As a result, the share of profits obtained by farmers is only 13%. By contrast, retailers incur only 8% of unit costs, but have a profit share of more than 26%. Processors have the highest share of profit in the value chain at roughly 34%. By contrast, in Thai Nguyen (Figure 7), household producer-processors receive a much higher share of profits (31%) in the value chain, suggesting greater gains within the chain by adding-value through processing. The highest share of profit (46%) is found among retailers in Thai Nguyen.

Figure 6: Costs, Profits, and Margins in the Tea Value Chain: Green Tea in Phu Tho

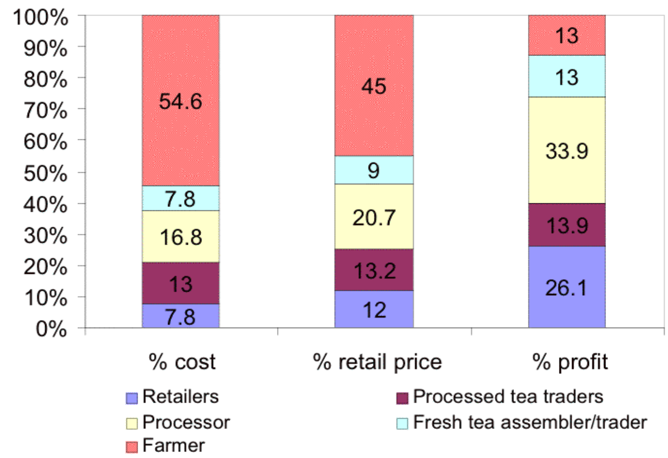
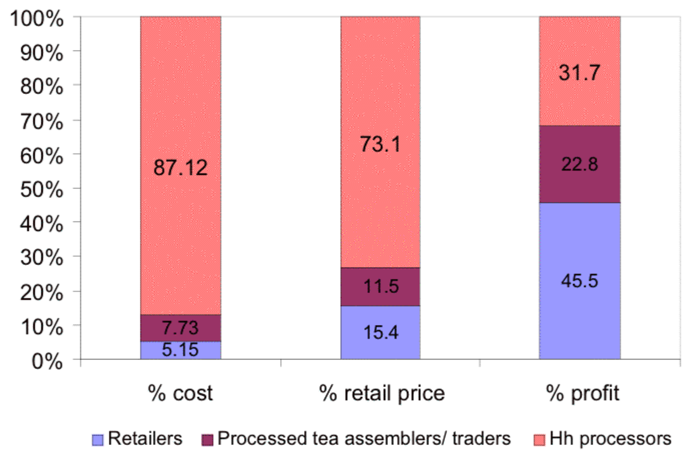
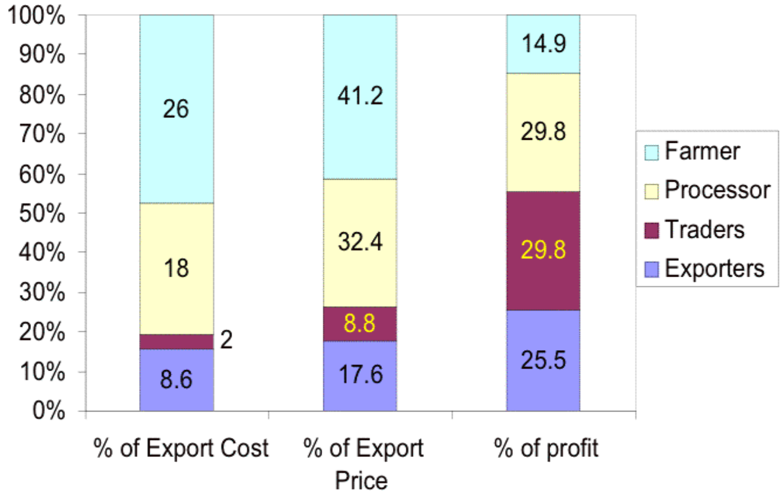


Figure 7: Costs, Profits, and Margins in the Tea Value Chain: Green Tea in Thai Nguyen



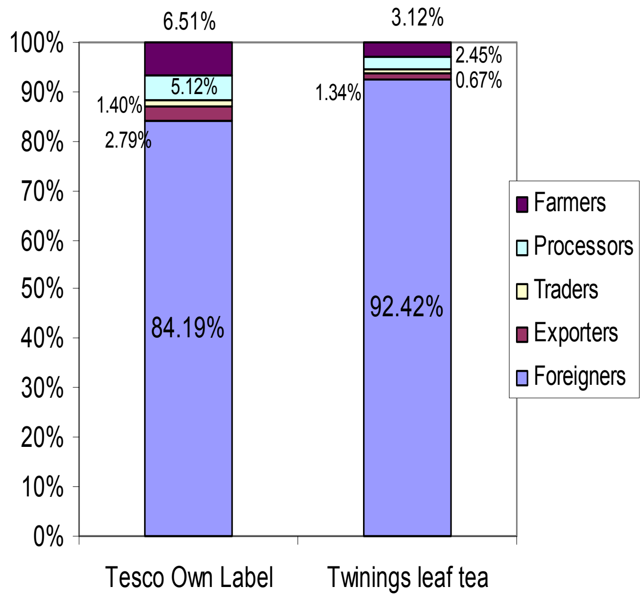
52. The export channel for black tea indicates a slightly better story for unlinked farmers who receive about 15% of profit in the value chain in Phu Tho (Figure 8). In this export channel, tea traders and processors gain the highest profit shares, with nearly 30% each in total channel profit, while exporters earn 26% of channel profit. However, one should qualify these results as the data are based on 2003, when the tea export market was beset by low export prices. For example, if we assume that costs remained and look at the value chain with the average export price in 2001-2002 (D19,500 ($1.24)/kg), total profit from the value chain would be roughly D5,800 ($0.37) higher per kg compared to 2003. It is not clear, however, how this additional profit would be divided among participants within the channel.

Figure 8: Costs, Profits, and Margins in the Tea Value Chain: Black Tea for Export in Phu Tho



53. The nature of export-oriented tea production dictates that most value-added is captured abroad. Oxfam (2002) reports that more than 80% of value-added is generated outside the producing nation. In another experiment, the structure of the export-oriented value chain was combined with information on international markets (here, British supermarkets) for two types of leaf tea (own-label and Twinings) (Figure 9). While these comparisons give neither any indication of where the tea was sourced nor show representative of markets widely accessed by Viet Nam at present, the figures illustrate the amount of value-added that is captured abroad, particularly in the case of Twinings through the brand name. It suggests that greater brand development in Viet Nam, while perhaps not changing the structure of the distribution of margins, may at the very least increase the total value generated by tea, which could subsequently increase income for all players in the tea value chain in Viet Nam.

Figure 9: Margins in the Tea Value Chain: International Comparisons



Source: Calculated from study figures and prices obtained at http://www.tesco.com/pricecheck, Sept. 2004.

Impact of Tea Production on Poor Producers

Role of Tea as a Source of Income

54. Tea is an important source of income for farmers engaged in its production: in the four field sites the study team visited, tea accounted for about 40-60% of farm income. A study by IFPRI (2003) indicated that tea is increasingly an important new source of income for farmers in the northern uplands, a traditionally poor region. At the same time, increased tea production has not compromised food security, as rice production has remained stable.

55. Statistics from the 2002 Viet Nam Living Standards Survey show that, compared to non-tea farmers, tea farmers in Thai Nguyen have higher incomes, although the opposite is true in Phu Tho. However, anecdotal and survey evidence from the fieldwork revealed that, in several communes, incomes had reportedly doubled since the production of tea began. One commune leader told the study team that monthly incomes from tea in his commune equaled yearly incomes from rice production. Our survey work shows considerable benefits from the standpoint of income for worker farmers in both Thai Nguyen and Phu Tho (Table 4). In particular, worker farmers earn two to four times more gross income than unlinked farmers that are not engaged in processing activities.[19]

Table 4: Income of Producers in Phu Tho and Thai Nguyen by Type (D000/year)

Farmer category	Phu Tho	Thai Nguyen
Worker Farmers	7,850	10,450
Contract Farmers	6,700	3,520
Cooperative Farmers	--	4,500
Unlinked Farmers	3,315	2,400

Source: Survey results

56. To assess the impact of tea production on the poor, the study obtained qualitative information from a series of key informant interviews, focus groups, and PRAs conducted in Phu Tho and Thai Nguyen provinces. The analysis considered farmer perceptions of the determinants of participation in, and impact of, tea farming on each of the different farmer groups (worker farmers, contract farmers, unlinked farmers, and cooperative farmers). Appendix B provides a summary of the methodology followed.

Worker and Contract Farmers

57. Worker and contract farmers comprise a minority of smallholders in the tea value chain, as noted in our estimates on the size and structure of the two value chains in Table 5. Using ADB's (2000) estimate of worker farmer landholdings (1.2 ha per household), the study estimates that between 25,000-30,000 households are involved in the linked channel, representing less than 10% of all tea producers. This probably understates, however, the actual number of worker/contract farmers. The survey showed that the

[19] While worker farmers (Table 4) are much better off in terms of absolute income, on a per-hectare (per-ha) basis, income depends crucially on land size. Evidence from Thai Nguyen suggests that this is still the case. For worker farmers, per-ha income is about D24,300 ($1.55)/ha, while for unlinked farmers, it is D20,740 ($1.32)/ha. Despite smaller land sizes, cooperative farmers have per-ha incomes of D32,895 ($2.09), owing to higher value sales. Contract farmers, by contrast, have very low per-ha incomes of only D7,530 ($0.48), although this might be due to sales to SOEs. Note also that the analysis found that per-kg profits from tea were higher for worker/contract farmers in Phu Tho.

wealthiest farmers had average landholdings of less than 0.5 ha and that the largest household had less than 1 ha. Among worker farmers in our sample in Thai Nguyen, for example, the average land size was 0.43 ha. Given that yields from worker and contract farmers tend to be higher than those from unlinked farmers[20], the study estimates that they produce about 55% of total tea output. The overwhelming majority of output (more than 90%) is exported, owing to their links with SOEs, joint ventures, and foreign-owned companies.

58. Worker farmers and contract farmers typically enjoy better living standards than other tea farmers. These farmers receive benefits, notably (i) stable output procurement and prices; (ii) access to good quality company land; (iii) technical training; (iv) inputs on credit; and (v) a retirement pension and insurance against sickness (worker farmers only).

59. In companies with direct export channels and stable output markets, these “linked“ farmers enjoy more benefits and suffer less from the negative effects of participation. Companies that have stable output demand do not impose such a high “water discount“ rate or strict quality control on leaf tea delivered by worker farmers. Furthermore, worker farmers can avoid the negative effect of pesticide overuse if the company directly exports processed tea to the European high-income markets with high-quality standards. However, farmers linked to SOEs exporting through VINATEA find themselves at a disadvantage due to difficulties in the export markets managed by VINATEA, and the companies’ inefficient production and high transaction costs.

Table 5: Estimated Structure of the Tea Marketing Channels in Viet Nam

Total land in tea (2002)	106,700 ha	
Total production, fresh tea (2002)	403,300 tons	
Percentage exported (2002)	84%	
	Worker/Contract Farmer	**Unlinked/Cooperative Farmers**
Land allocation by group (%)	30	70
Total land by group (ha)	32,010	74,690
Average yield per group, tons per ha /a	9.6	3.3
Average land size per household (ha of cultivated tea) /a	1.2	0.2
Estimated number of households (number)	26,675	373,450
Percentage households per group (%)	6.7	93.3
Estimated fresh tea output by group, based on ADB (2000) (tons)	307,296	246,477
Percentage output by group	55.5	44.5
Adjusted fresh tea output (tons) /b	223,832	179,468
Adjusted dried tea output (tons, conversion rate of 0.22)	49,243	39,483
Percentage exported by group (%)	90	77
Total exports by group (tons)	44,319	30,211

Source: ADB (2000), GSO (2003), and team estimates.

[20] The estimates obtained by ADB (2000) and the survey in terms of yields and land sizes for worker/contract and unlinked farmers differ considerably. Further survey work on the sector would provide more accurate statistics.

a Figure is from ADB (2000).
b Adjusted output total 2002 production by the percentage of output calculated using the ADB (2000) yield figures.

60. However, it is difficult for other tea farmers to register as worker farmers because of historical factors and the limited size of the companies' tea plantations. Moreover, the need for sufficient labor, youth, technical experience, good education, and available capital impedes poor tea farmers from becoming worker farmers. As a result, it is not feasible to integrate poor tea farmers into large companies' value chains in this manner given the current tea market instability. In the long term, such vertical integration could only be established if large investments were made to expand the scale of processing companies and their tea plantations.

61. It is much simpler to be a contract farmer than to be a worker farmer. The two basic determinants are capital availability to hire company land and technical experience. If the company obtains a certain level of stability in the output market, then the expansion of land area for contract farmers is not too difficult. Even for smallholders, the possibility of participation is quite feasible if they can form a group to sign a contract to hire land and deliver products to the company. The study found examples of this at the Phu Ben Company (a foreign-owned company) and at the Song Cau Company (an SOE). The company may enable such farmers to pay the land rental fee over a long duration.

Cooperative Farmers

62. Tea cooperatives have been established by international NGOs within the last 3 to 5 years to protect the environment, ensure safer tea consumption, and support the poor. It is typically not difficult for the poor to fulfill the membership requirements. In the long run, participation in cooperatives may bring net benefits to cooperative farmers in general and to the poor in particular if cooperative sales can increase. However, sales to date have been small, with most cooperative members selling the overwhelming majority of their produce independently. Low working capital and a general lack of marketing experience make it difficult for cooperatives to obtain credit to procure and store high volumes of leaf tea, and to find marketing channels for large sales. It partly explains why the tea volume sold via cooperatives is insignificant (perhaps less than 5%). Moreover, members tend to produce tea of very uneven quality, which works against bulk sales.

63. Viet Nam currently has one small cooperative producing organic tea. Its farmers report that their yields have fallen since making the transition, but consider its production to be much safer. However, sales to date have been minimal due to problems in securing markets both domestically and overseas. Without the further development of organic marketing channels—domestically and in overseas—organic production will remain very small and largely experimental.

64. For cooperative sales to expand, *cooperative farmers* need to produce higher and more even qualities of tea, which could potentially impede the participation of the poor. Therefore, careful consideration of the trade-off between the cooperatives' efficiency *versus* their support for the poor is necessary. If the cooperatives only intend to accept the procurement of high-quality tea, it would be difficult for the poor to participate without outside support.

Unlinked Farmers

65. Unlinked farmers comprise a large majority of smallholders in the tea value chain (Table 2). Given that yields from unlinked farmers tend to be much lower than those from worker farmers, the study estimates that they produce about 45% of total tea output. About 75% of output from unlinked farmers is exported, while the remainder is consumed domestically.

66. Unlinked farmers specializing in tea production are typically not as well off as their counterparts who are vertically integrated with processing companies. Poor, unlinked farmers do not have necessary conditions to benefit from tea value-chain involvement, even though market expansion may open opportunities for them.

67. The analysis suggests that these farmers confront a number of constraints, namely: a lack of land, capital to invest in improving tea varieties or processing equipment, inputs, labor, irrigation (essential for profiting from lucrative dry season production), and technical training. Although special credit is targeted toward the poor, tea farmers generally refrain from investing in their tea gardens for fear that a market downturn would make it impossible to repay their loans. As a result, their investment in tea is sporadic; when the tea price is low, many farmers neglect their tea gardens—which means in good years, only richer farmers reap the benefits of continual investment. Tea farmers in general—particularly the poor—have little bargaining power. They rely almost exclusively on traders and factories for price information; and in any event, the fact that leaf tea begins to degrade 4-6 hours after picking greatly narrows their options for its sale. Finally, majority of producers are producing a low-value, mostly undifferentiated, product, which further limits their bargaining ability.

68. The results of the PRA analysis, combined with the value-chain analysis in the previous section, demonstrate that the majority of the benefits from increased production and export have generally accrued to better off "unlinked" farm households and farmers linked to companies outside the state sector. Among these four types, contract and worker farmers are typically better off than their counterparts. Poverty is concentrated among unlinked farmers, including those in cooperatives, and their poverty tends to be more severe. The question of cause and effect remains open since it is only relatively more privileged farmers who typically meet the conditions to become worker farmers or contract farmers. Nonetheless, it appears that they continue to benefit in several ways from their situation. Meanwhile, the poor—who have less ability to withstand shocks—suffer disproportionately from market downturns as price changes are transmitted locally.

Summary of Constraints in the Tea Value Chain

69. Many constraints affect the tea value chain in Viet Nam. Producers are affected by limited land area, low-quality production, high costs of planting new varieties, inadequate fertilizer and pesticide use, price variability, poor infrastructure, erratic market information, and fragile or limited coordination mechanisms with downstream partners.

70. Certain constraints are magnified, depending on the type of producer. For instance, while worker and contract farmers tend to be less affected by the availability of inputs or market information, and are linked in long-term relationships with buyers, they are nonetheless captive to the ability of such downstream companies to conduct business in a profitable manner. Consequently, such farmers are often negatively affected by often capricious and non-transparent standards set by processors when the market is poor. Moreover, worker and contract farmers linked to SOEs tend to overuse pesticides, degrading the quality of tea, limiting market access to low-value markets, and causing

health problems for farmers.[21] Access to high-value markets constrains unlinked and cooperative farmers. The lack of coordination between unlinked farmers and the rest of the value chain mitigates the transmission of market signals to such farmers to make quality improvements. In the case of cooperatives, poor organization, marketing inexperience, and uneven-quality tea among members hamper collective efforts to link with niche and specialty markets that could raise incomes.

71. Further downstream, processors and exporters are constrained on three levels. First, constraints that increase the variability of the quality of supplier's leaf tea impede the ability of processors to consistently generate higher-value tea products. Secondly, low levels of technology in the processing sector imply the limited capacity of processors to upgrade into innovative products; indeed, the fieldwork found that most processors upgrade to increase scale rather than technology. Finally, the over reliance on bulk, non-branded exports to four or five major markets (and in some cases, just one: Iraq), has dampened incentives to diversify markets and products. As with producers, these constraints are worsened by the limited coordination among players in the value chain.

Strategic Orientations for the Tea Value Chain for Improved Quality

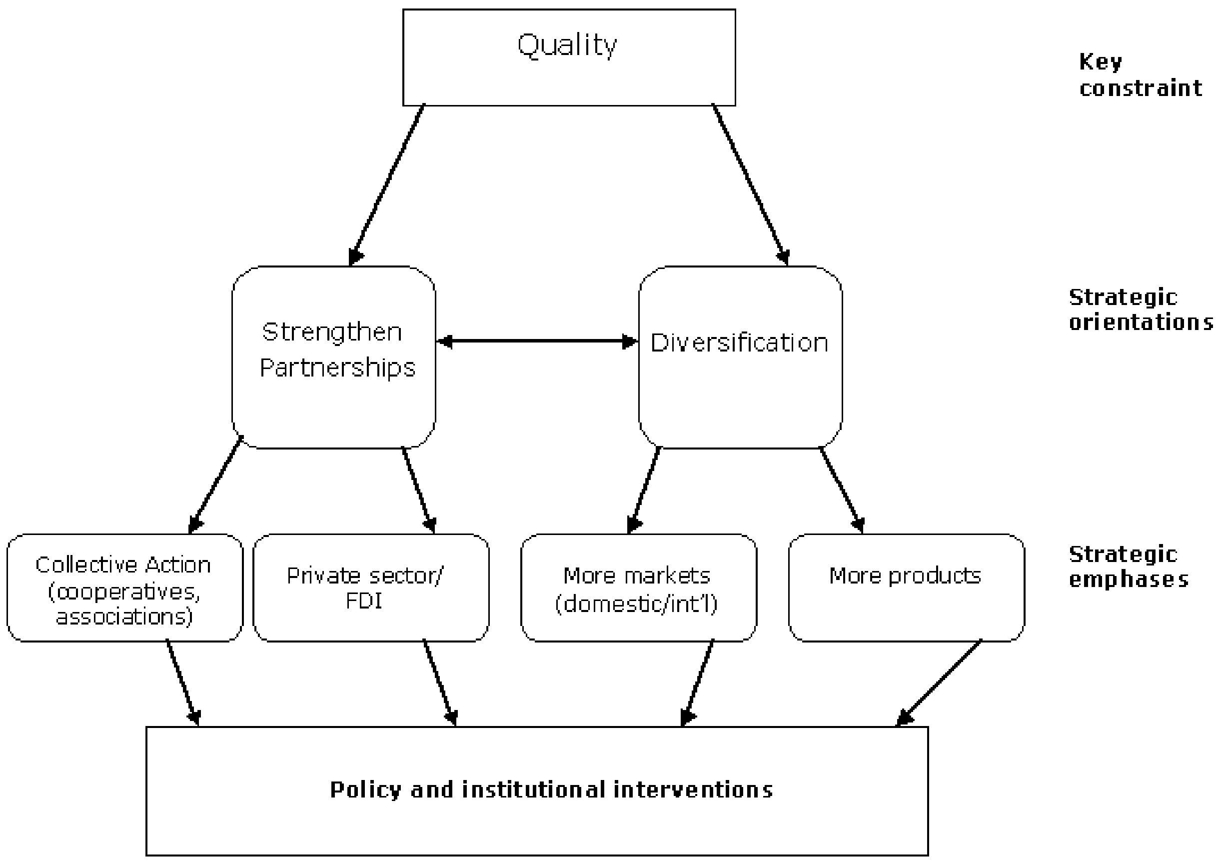
72. **The unifying constraint throughout the value chain is the *low quality of products*, both in terms of inputs (i.e., leaf tea) and outputs produced by processors**. In general, Viet Nam has to date specialized in producing bulk, undifferentiated tea with a focus on volume rather than quality. As a consequence, for the tea sector to be a driver of rural income growth, interventions in the sector need to address the means of raising quality in the value chain.

73. Interventions specific to one set of stakeholders will not by themselves be sufficient to add value in the tea sector. For instance, interventions that subsidize fertilizer use or the planting of new varieties would improve the quality of inputs generated by upstream producers. However, this type of intervention would not help raise the income of producers if processors and exporters continue to operate using low technology and marketing geared toward limited, low-value bulk export markets. Conversely, policies that facilitate access to capital by processors or provide funds for market development by exporters will likewise fail to add value if processors are not coordinated with producers to supply inputs necessary to exploit such opportunities. Rather than focusing on specific interventions for certain groups, addressing coordination and institutional issues that strengthen the value chain itself and create more linkages between players, especially the poor, is more appropriate.

74. The study thus focuses on two strategic orientations for the tea value chain: **strengthened partnerships for improved quality** and **increased diversification of markets and products**. These will help promote higher quality in the sector and improve the benefits of participation by the poor. These orientations are described in detailed below. Figure 10 illustrates the interaction behind the strategic orientations, emphases, and policy interventions that outline this analysis.

[21] The severity of these health effects should not be underestimated. Farmers interviewed by the study team often served water to interviewers instead of tea, claiming that their tea was unsafe to drink. Researchers
were told stories of cattle dying from eating pesticide-laced leaf tea and of farmers suffering headaches and dizziness from applying the chemicals. At one SOE, an informant claimed that the company retirement age had been lowered from 25 years of service to age 45, because most farmers were too ill to work past that point.

Figure 10: A Typology of Strategic Recommendations for the Tea Value Chain



1. Strengthen partnerships within the value chain to improve quality

75. The research reveals two distinct marketing channels in Viet Nam's tea sector. First, there is a small, integrated sector consisting of worker and contract farmers linked with companies primarily producing for export. Second, there is a channel emphasizing market-based transactions between much more numerous unlinked farmers (more than 90% of tea farmers) and processors. Furthermore, the research demonstrates that players in the first channel are typically much better off than unlinked farmers, both qualitatively and quantitatively.

76. The results from the study suggest the need to create and strengthen linkages between poor farmers and the rest of the tea value chain. Otherwise, only wealthier unlinked farmers and worker/contract farmers will continue to capture the opportunities offered by tea market expansion and increasing prices, since companies, processors, and assemblers prefer to contract with them owing to their large amounts of tea land and better quality tea. Moreover, while market-based relationships may dominate the value chain at present, it is difficult to envision quality improvements being made without greater linkages within the value chain and correspondingly, a shift from market-based to more coordinated forms of governance.

77. Two strategic emphases follow to increase the benefits of participation in the tea sector by the poor (Figure 10). First, activities that broadly **promote collective action** should be encouraged. Improved collective action—whether through producer associations, cooperatives, or other forms—can be a good basis for unlinked farmers to obtain capital support for the shift toward new high-yielding tea varieties; provision of inputs at lower, bulk prices; and for technical training. Producer associations and cooperatives can further assist smallholders in developing linkages with processors, retailers, and exporters for sales. Such organizations could play a major role in developing specialty and niche markets (e.g., organic tea) and as a basis for groups of poor farmers to expand into other activities in the value chain, such as processing, which the study showed as a way for producers to add value.

78. Two caveats, however, deserve mention in regard to this recommendation. First, producer associations and cooperatives in their current form are quite weak in terms of management, marketing, and organization. Consequently, private sector players and NGOs could help producers build organizational capacity, develop business and marketing skills, and promote entrepreneurial leadership among participants. Second, and more importantly, the development of producer organizations will likely engage only a small portion of the poor in the tea sector. While it can have tremendous benefits for those who participate, it is unlikely to be a broad-based solution for most smallholders.

79. Consequently, the second recommendation and fundamental conclusion of this report is to **increase private sector and foreign direct investment (FDI) in the tea value chain**. The rationale for this recommendation is straightforward: by increasing the number of farmers linked in coordinated supply chains, the benefits for participation by all farmers, including the poor, should increase. From the standpoint of quality, research in other value chains, such as supermarkets (Reardon et al, 2003), has demonstrated that the private sector can play a major role in establishing quality standards that can coordinate activity among players in the value chain. The poor should benefit from this development, although in some cases targeted interventions to build the capacity of farmers to meet the standards imposed by the private sector may be needed (Boselie, Henson, and Weatherspoon, 2003).

2. Diversifying markets and products

80. The diversification of tea markets and products is a crucial step for Viet Nam to upgrade its productive and value-adding opportunities. Indeed, from the standpoint of international markets, the 2003 market downturn highlighted the danger of focusing on only a few main markets, particularly by the SOE sector. Access to new (and particularly high-value) markets fundamentally requires improving the quality of tea produced in Viet Nam, and is a necessary step in realizing the gains of upgrading in the sector. Conversely, understanding the needs of diverse markets will play a vital role in determining necessary product improvements. Three issues illustrating the strategic emphases of more markets (domestic and international) and more products need to be stressed (Figure 10).

81. First, improvements in marketing and the development of new overseas partners are needed. The research found that most companies have cultivated their customers primarily based on personal relationships or through government-to-government sales via VINATEA. Export markets with the highest values are currently not targeted by Viet Nam (Figure 3). Accessing those markets will require new and different skills in marketing and promotion, particularly by SOEs, and the active participation in trade fairs and missions overseas.

82. Secondly, Viet Nam has a large, latent tea-consuming population that needs to be targeted by domestic producers. The rise in popularity of urban teahouses has been recognized by foreign tea companies, but domestic producers have been slow to seize such opportunities. Moreover, since there have not been any surveys on domestic tea consumption, tea processors do not have a clear vision for domestic market exploitation. There are strong arguments for developing domestic markets on the basis that satisfying local demand allows companies a solid platform upon which to base overseas trade. At the same time, given the rapid growth and urbanization in Viet Nam over the past 10 years, a focus on only the domestic market could, nonetheless, be quite fruitful for some companies. Other types of specialty channels (hotels, restaurants, and tourism) should be explored as well.

83. Further, Viet Nam should pay careful attention to trends in international markets with respect to adding value in production. In particular, international demand for green tea has grown markedly over the past 7 years and now comprises 40% of total international exports. Given that green tea has a higher unit value and fewer global suppliers, and that Thai Nguyen tea has a strong domestic reputation in Viet Nam, Viet Nam has the opportunity to capitalize on these trends through greater market and brand development of this type of tea to domestic and international markets.

84. Both of these strategic orientations have significant benefits for the poor and can improve their participation in the value chain. Strengthening partnerships in the value chain helps the poor in several ways. First, collective action among producers strengthens the bargaining power of poor producers and enables them to gain greater access to markets, particularly those that are of high value. Second, promoting the private sector generates crucial linkages that integrate the poor and alleviate many production constraints. As observed to some extent with worker and contract farmers in this study, the private sector can provide its linked farmers with inputs, investment capital for new varieties, improved market information, and greater stability in markets—all of which enhance the position of the poor in the value chain. Some unlinked farmers may not be able to access such coordinated chains due to isolation or technical constraints; thus there is scope for NGOs and other groups to be involved in targeted interventions in capacity building for such farmers. Increased commercialization in the sector may engage the poor in other ways besides farming, such as in processing or other ancillary functions in the tea value chain (distribution, marketing, retail, etc).

85. Market and product diversification stabilize markets and add value to the sector, clearly benefiting the poor. As the study demonstrated, the focus on only a few markets creates unnecessary dependence that harms the poor when these markets experience difficult times. Market diversification spreads the risk from market vagaries and adds value to the sector, thus improving the benefits of participation in the value chain by all players, including the poor. Increasing the scope of products fosters innovation and dynamism in the sector to produce new, higher-value products. The poor can also benefit from this development, provided that they orient production in a way that satisfies this demand. This will require greater coordination and could benefit from targeted interventions in capacity to particularly vulnerable groups.

Policy Options and Recommendations

86. In light of these strategic orientations, the study recommends the following policies and activities to strengthen partnerships that will improve quality and further diversify markets and products. These will require careful study and design through consultation with stakeholders in government, industry, and agriculture. The study can be grouped into

two categories. The first are marketing activities that could be implemented through seed money from donors or other groups to engage the private sector in ways that improve partnerships, and diversify markets and products, to raise the quality of tea in the sector. The second are policy recommendations and activities that would help stimulate such an environment.

Marketing activities to strengthen partnerships and diversify markets and products

- Promote competition among domestic processors and companies (audited by independent third parties, such as NGOs) to develop a business proposal that develops a "Trung-Nguyen" style of privately owned tea chains (as in the case of coffee), with a cash award to the winner.

- Provide competitive grants (audited by independent third parties, such as NGOs) for small farmers to obtain organic tea certification by foreign companies.

- Provide competitive study tour grants for unlinked organic and specialty tea producers to tour tea plantations in leading tea countries to learn more about cultivation techniques.

- Create an annual competition (with cash prize) for unlinked producers to produce the highest-quality blend, as judged by an international panel of experts.

- Use private sector experiences in other countries and provide competitive venture capital funds to develop brands and appellation labels for tea from Viet Nam.

- Establish a biannual trade fair and exhibition for domestic and foreign tea producers, buyers, sellers, retailers, and exporters in Viet Nam through collaborative efforts of different tea associations to coincide with the introduction of a "tea day" in Viet Nam to promote the business and cultural aspects of tea in Viet Nam.

- Establish competitive grants and scholarships for private and SOE managers to take short courses in business and market development, or masters is business administration training, in top United States and European agribusiness departments.

Policies to strengthen partnerships and diversify markets and products

- Create alternative, private sector tea associations (organic tea association, specialty tea associations) that provide statistics, market research, and trade promotion activities to members, with significantly reduced (or free) membership fees for poor producers.

- Revise contracting regulations under Decree 80 to promote greater flexibility and enforcement of contracts. The use of commune leaders as guarantors might reduce market risk for all parties. Pilot studies that test alternative approaches should be encouraged.

- Actively promote FDI from leading global tea companies to Viet Nam, through business and tax incentives on land, profit earnings, and capital.

- Promote government- and association-based monthly trade missions to leading foreign markets for tea by both private and SOE managers to meet with buyers and brokers, to establish new contacts, and to tour tea production facilities in leading tea countries.

- Eliminate SOE bias in providing credit from banks.

- Enact legislation on land markets that facilitate the provision of red books to all farmers engaged in tea cultivation.

Areas for further research

87. The tea value chain described in the study contains several elements that warrant further discussion and study. Highlighted below are some issues that need to be addressed, particularly to better understand the benefits of participation in the tea value chain by the poor. Three categories of research focuses are provided. The first two correspond to the strategic orientations provided in this report. The third highlights more general areas of research relevant to the tea sector.

Strengthening partnerships to improve quality

88. **Impact of branding and labeling in the tea sector**. The study found that most exports of Viet Nam's tea are unbranded, bulk products that are blended, repackaged, and/or reprocessed overseas. Likewise, domestically produced tea that is sold in Viet Nam, while sometimes denoted by region of origin, has not been widely branded or trademarked by companies. Moreover, the margin analysis demonstrated the benefits that branding has on improving the amount of value-added captured by the owners of the brand. At the same time, it has been emphasized in other research that the imposition of a label or brand does not automatically add value and requires new skills in management and marketing (Rich, 2003). Therefore, there is scope to study the costs and benefits of branding and labeling programs for tea in Viet Nam to determine relevant policies in this direction. Pilot studies that assess the viability of such programs should be encouraged, as should marketing activities that promote the development of private sector brands.

89. **Design and development of contracts**. Contract enforcement in the tea value chain is weak. Present contracting arrangements give incentives for both parties to breach the contract in the event that market conditions change, as optimum forms of risk-sharing are not incorporated in contract terms. The study emphasizes the need for more research on the design of contracts that would be flexible and specific to the conditions of the tea market, but ensure long-term coordination. Pilot studies that design and implement different types of contracting forms should be pursued.

90. **Implementation of certification programs for tea**. Certification programs for various types of tea are only in their infancy in Viet Nam. More research efforts to look at the costs and benefits of private and public certification programs as a marketing tool for international markets and as a food safety signal for consumers need to be conducted.

91. **Mechanisms for collective action**. While improved collective action will benefit the sector, it is not clear what types of organization would be most effective. Producer associations can strengthen the collective power of farmers, thus improving bargaining and relationships with processors. Cooperatives should also be explored. On the positive side, successful cooperatives have been able to obtain higher prices for output and improve the quality of production. On the other hand, cooperatives in the tea sector have had problems with management, marketing, and organization, which have limited their effectiveness. Further research to identify suitable mechanisms of organization for the tea sector will be needed.

Diversifying markets and products

92. **Marketing strategies for tea in domestic and international markets**. More research is needed on the marketing strategies for increasing the diversity of markets and products served by Viet Nam. Recent trade missions to Morocco (*Viet Nam News*, 2 August 2004) illustrated the specific demands required to orient production toward new markets. Additional research on consumer demand and consumption trends in potential overseas markets should be conducted to help exporters develop marketing strategies to exploit such markets. Similar studies need to be undertaken on the Vietnamese market to tap into latent domestic demand.

93. **Experiences of foreign companies in Viet Nam**. Two issues are noteworthy. First, the lack of penetration by large foreign companies (Lipton, Tetley, Dilmah) in the production of tea in Viet Nam warrants further study. It would be interesting to study the types of issues that constrain such companies from entering the Vietnamese market, and the conditions and incentives that would be necessary to promote investment. Second, given the increasing number of joint ventures and foreign-owned companies in Viet Nam, case study research on the experiences of current ventures would give greater insights on investment and coordination with producers.

94. **Characteristics of international markets**. A quality-oriented strategy will be unsuccessful if Vietnamese production is not competitive relative to global competitors. This suggests further study of international value chains for tea to compare differences in production costs, marketing, and distribution, and to identify potential bottlenecks in Viet Nam. Research work could also focus on ways large multinationals and domestic companies have developed their value chains to understand the experiences of different types of coordination programs between producers, processors, and exporters.

95. **Costs and benefits of an auction market in Viet Nam.** Most international trade in tea (84% in 1997) is conducted through auction markets, which have the advantages of facilitating sales between buyers and sellers, transparency, allowance for effective market clearing, and low costs of administration (less than 2% of the merchandise value). At the same time, auctions often have drawbacks, notably collusion and discrimination against new, unknown buyers (Ali et al., 1997). Auctions also tend to prevent hedging or risk management by buyers and, subsequently, mitigate the formation of long-term relationships between buyers and sellers. While there have been discussions by VITAS to open a trading floor as a precursor to an auction, no such system has yet been undertaken. It would be worthwhile to study the advantages and disadvantages of an auction system in Viet Nam, particularly if volumes continue to increase and quality becomes a more important issue.

Other areas of research

96. **Production costs and contractual relations**. Given uncertainty over the structure of linked versus unlinked farmers in the tea sector in Viet Nam, comprehensive survey work aimed at assessing the nature of characteristic assets (including land and capital), cost of production, yields, revenues, and contractual relationships would be a useful tool to better understand the benefits of participating in linked marketing channels.

97. **Impacts of previous sector loans on the tea sector in Viet Nam**. ADB has provided loans to Vietnam Bank for Agriculture and Rural Development timulate credit access in the sector. It would be useful to evaluate the broad effectiven s of this program as well as specific cases of investment from this activity.

REFERENCES

Accenture. 2000. Competitor Analysis, Viet Nam. Copy of presentation.

Agrifood Consulting International. 2002a. *Rice Value-Chain Study: Cambodia.* A Report Prepared for the World Bank, Phnom Penh, Cambodia, Agrifood Consulting International.

ACI. 2002b. *Rice Value-Chain Study: Cambodia.* A Report Prepared for the World Bank, Phnom Penh, Cambodia, Agrifood Consulting International.

Ali, Ridwan, Yusuf A. Choudhury, and Douglas W. Lister (1997). *Sri Lanka's Tea Industry*: *Succeeding in the Global Market*. World Bank Discussion Paper No. 368. Washington, DC.: World Bank.

Asian Development Bank (ADB). 2000. *Loan Recommendation and Report, Tea and Fruit Development Project.* Hanoi.

ADB. 2004. *The Participation of the Poor In Agricultural Value-Chains: A Case Study of Tea*. Report prepared for the Making Markets Work Better for the Poor Project (Hanoi, Viet Nam: Asian Development Bank and Department for International Development).

Boselie, D., S. Henson, and D. Weatherspoon. 2003. Supermarket Procurement Practices in Developing Countries: Redefining the Roles of the Public and Private Sectors. *American Journal of Agricultural Economics* 85 (5), 1155-1161.

Canadian Centre for International Studies and Cooperation (CECI). 1998. *Rapid Green Dried Tea Distribution and Market Opportunities Appraisal.* Hanoi: CECI.

CECI. 2002. *Micro-enterprise promotion and rural development project Phase II Final progress report.* Montreal: CECI.

Food and Agriculture Organization. 2001. *FAO Agricultural Commodity Projections to 2010*. Rome.

Glover, D. and K. Kusterer, eds. 1990. *Small Farmers, Big Business–Contract Farming and Rural Development.* London: Macmillan.

General Statistics Office (GSO) 2003. Unpublished data.

Informatics Center for Agricultural and Rural Development. 2003. Internal database.

International Food Policy Research Institute (IFPRI). 2003. *Income Diversification and Poverty in the Northern Uplands of Viet Nam*, Paper prepared for Japan Bank for International Cooperation. Washington, DC. Available at **http://www.ifpri.org/divs/mtid/dr/200307/dr200307incometoc.pdf**.

Kaplinsky, R. and M. Morris. 2001. "A Handbook for Value-chain Research". Working Paper Prepared for the International Development Research Centre (IDRC), Brighton, United Kingdom, Institute for Development Studies.

Minot, N. and Baulch, B. 2002. "The Spatial Distribution of Poverty in Viet Nam and the Potential for Targeting." Discussion Paper No. 43. Markets and Structural Studies Division. International Food Policy Research Institute. Washington, DC.

Oxfam. 2002. *The Tea Market: a Background Study*, Draft paper prepared for Make Trade Fair campaign. Available: **http://www.maketradefair.com/assets/english/TeaMarket.pdf**.

Reardon, T., C.P. Timmer, C.B. Barrett, and J. Berdegue. 2003. The Rise of Supermarkets in Africa, Asia, and Latin America. *American Journal of Agricultural Economics* 85 (5), 1140-1146.

Rich, Karl. 2003. "Stagnation or Innovation? The Unintended Consequences of Food Labeling Systems," Working Paper, University of Illinois at Urbana-Champaign.

Rich, Karl. 2004. "A discussion note on value-chain analysis in agriculture: methodology, application, and opportunities," Unpublished paper for the Asian Development Bank, Hanoi, Viet Nam: Agrifood Consulting International.

United Nations Conference on Trade and Development (UNCTAD). 2002. *World Commodity Survey, 2000/01: Markets, trends and the World Economic Environment*. Geneva.

United Nations Development Programme (UNDP). 2001. National Human Report 2001. Hanoi. Available: http://**www.undp.org.vn/vnnhdr2001**).

Viet Nam News. 2004. "Tea Firms Scope New Foreign Markets" (2 August).

World Bank, Department for International Development of the United Kingdom, Action Aid Viet Nam, Oxfam (GB), Save the Children (UK), and Viet Nam-Sweden MRDP. 1999. *Viet Nam Voices of the Poor: Synthesis of Participatory Poverty Assessments*, Hanoi: World Bank, November. Available: http://www.worldbank.org.vn/strategy/cprs/pdf/voice.pdf.

World Bank. 2003. *Viet Nam Development Report 2004: Poverty, Joint Donor Report to the Viet Nam Consultative Group Meeting*, Hanoi, December 2-3. Hanoi: Viet Nam Development Information Development Center. Available: http://www.siteresources.worldbank.org/INTVIETNAM/Data%20and%20Reference/20210656/Viet Nam-Development-Report-2004.pdf

Appendix A: Methodology Employed to Compute Marketing Margins and Profit in the Value Chain

One of the more interesting aspects of a value-chain approach is in the analysis of profitability and margins within the channel. Indeed, the assessment of profitability within the chain is a particularly useful tool to highlight aspects of governance, upgrading, and equity within value chains and can point to relevant policy interventions. Kaplinsky and Morris (2001) suggest that the ideal measure of profitability within the channel is to compute the returns to net assets, which is defined as follows:

Returns to net assets = Gross assets (Equity + reinvested profits + outstanding payments)
- Liabilities (Short-term loans + Long-term loans + Outstanding Debts).

A second-best measure, and the one often adopted in studies on value-chains in agriculture, is to look at profits and margins, based on partial budgets computed from survey work (for example, Agrifood Consulting International, 2002a, b). Kaplinsky and Morris (2001) remark that profit is not an ideal measure because the value of margins depends on the volume of sales and, thus, may not adequately reflect how profitable a particular actor is. While granting this critique, it is argued that in the context of the rural sector in developing countries, detailed profit and loss data is usually not available, particularly at the farm-level. Moreover, at the company-level, it is often difficult to obtain this information as many companies fear government recrimination (for example, tax collection) or access to such data by competitors.

The computation of profits and margins, using partial budget data, is illustrated below. Data on costs are as comprehensive as possible and assess information on the costs of labor, inputs, fuel, capital depreciation, and other materials. One must take care that costs, revenues, profits, and margins are denominated in the same units (for example, for rice, all calculations would be in paddy equivalent). Also, the starting point for the analysis is likewise important. If farmers are the starting point, they will not have a margin per se, rather the first margin will be from farmer to trader, for example.

Chain Actor	Costs			Revenues	Profits		Margins	
	Unit Total Cost	Added Unit Cost*	% Added Cost	Unit Price	Unit Profit	% Unit Profit	Margin	% Retail Price
Farmers	A	--	A/F	G	G-A	(G-A)/ (K-F)	G	G/K
Assemblers	G+B	B	B/F	H	H-B-G	(H-B-G)/ (K-F)	H-G	(H-G)/K
Processors	H+C	C	C/F	I	I-C-H	(I-C-H)/ (K-F)	I-H	(I-H)/K
Traders	I+D	D	D/F	J	J-D-I	(J-D-I)/ (K-F)	J-I	(J-I)/K
Retailers	J+E	E	E/F	K	K-E-J	(K-E-J)/ (K-F)	K-J	(K-J)/K
TOTAL		F=A+ B+C+D+E	100		K-F	100	K	100

Source: Rich (2004)

Appendix B: Methodology Used in the Fieldwork

The principal methodological challenges of this research were to develop a comprehensive map of the value chain for tea, its functional characteristics (with respect to linkages, integration of the poor and governance), and its effects on poor producers and wage laborers.

With respect to the value chain, our general approach was to first consider each stakeholder separately. Initially, a "pyramid" approach is followed to better understand the sector that focused on the group with the fewest elements—large exporters—and then traced the upstream linkages to encompass traders, processors, producers, and wage laborers.

Since our particular interest was in the linkages between the poor and the value chains for tea, the study focused on poor tea leaf producers and the particular structures conditioning their integration –-in this case, estate farming ("worker farmers"), contract farming, and smallholder production for the market either individually or through cooperatives.[22] The characteristics and situations of each of these types of producer were then compared. In areas where these linkages were present, the study undertook separate types of qualitative work with producers who were and were not participating to determine the reasons certain producers chose to participate and to ascertain the effects of participation (both for those involved and for the larger community).

To carry out this plan, the study undertook detailed quantitative and qualitative fieldwork with many value-chain stakeholders—including exporters and traders, processors, retailers, consumers, producers, and wage laborers involved in both processing and tea picking. The following methodological tools were used: key informant interviews, focus groups, participatory rural appraisals (PRAs), and a formal survey.

Key informant interviews were used in the first instance to obtain background information about the sector and, thereafter, to obtain additional information from participants in focus groups or the processor survey. They were chosen to elicit information that was felt to be either too detailed or sensitive to emerge from the focus groups, for participants that were unlikely to agree to focus group participation (such as managing directors of export companies) or, with the processors, to address issues in some way divergent from the pre-set survey.

Team members conducted interviews with representatives of VITAS and VINATEA, enterprise managers, traders, producer group leaders, farmers, processing employees, tea pickers, and other important participants in the value chain, such as government officials. Before the interview, the study team prepared a broad list of questions, with the aim of giving maximum flexibility to the respondent. The interviews provided considerable information about the sector and its performance, the history of the value chain, the main effects of involvement on different groups, and the challenges and opportunities anticipated over the coming years. In addition, producers, exporters, and traders were asked for quantitative information during interviews, to give us an approximate understanding of costs, prices, and margins.

---

[22] Horizontal linkages can be understood as linkages among producers, while vertical linkages are defined as those links between stakeholders (for example, between producers and traders, processors and exporters).

Second, a small formal survey was undertaken to obtain a representative picture of how the processing subsector is operating, and of linkages between different types of processors (small, large, domestic, state-owned, joint-venture, foreign) and producers. The survey served to facilitate the collection of quantitative and, in some cases, sensitive data. The attention given to processors is justified as they represent the basic nexus between leaf tea production and manufactured tea. Moreover, it helped gain a better understanding of the huge growth of household-based processing in recent years in field sites.

The number of tea processors interviewed totaled 82: 56 non-registered households, 8 registered households, 14 private companies, 3 joint venture/foreign companies, and 1 Phu Ho processing unit under the management of the Tea Research Institute. In the survey, processors were given a questionnaire that consists of indicators about their activities, input procurement, tea production costs, tea sales, contract issues, and equipment.

In areas where there are (were) linkages between producers and the rest of the value chain, it became crucial to identify farmers who are (were) and who are not (were not) involved in the relationship both to assess determinants of participation, and to identify any spillover effects on nonparticipants. Producers directly involved in linkages with processors were separated from those who were not. Here two types of activities were used.

First, focus groups were used to acquire non-sensitive and detailed subjective information from small groups of 7-10 individuals. While they elicited less detail than key informant interviews, they allowed for often animated discussion among participants, for a wider spectrum of viewpoints to emerge, and for identifying areas of agreement and difference between community members. Focus groups were conducted with producers in each commune, with scripts for these discussions prepared to allow comparison of the different groups' conclusions. Three types of farmer groups were assembled randomly: (i) poor and nonpoor together; (ii) poor only; and/or (iii) those involved (or not) in a particular linkage. The definition of the poor within each community is not based on, for example, the poverty line defined by the World Bank, but rather as defined by local leaders, neighbors, and participants themselves. In each case, care was taken to involve household members most involved in tea production and to foster women participation.[23]

Second, the research team conducted a series of PRAs with producers to elicit non-sensitive information best acquired through discussion with and between large numbers of individuals. The groups typically involved between 20 and 30 individuals, half of which were from poor households. Each group was first asked to complete a short (anonymous) questionnaire regarding their socioeconomic and demographic characteristics (Figures 1 and 2), which was later used in two ways. Initially, the questionnaire asked the household whether they were poor or nonpoor, but also additional information that allowed the poverty status to be triangulated.[24] The questionnaires also contained coding that allowed them to be linked to the informant's later responses to analyze if and how the responses varied based on the poverty status of the respondent. Next, the information allowed a

[23] Indeed women were, in some cases, disproportionately represented in PRAs and focus groups reportedly because the men in the household were not interested in discussing poverty.

[24] In one case, the study asked the focus group organizer to categorize the attendees as poor, medium, or well-off, but found that this significantly differed from the responses given by the attendees, and that the attendees' responses were more correlated to other socioeconomic information they provided.

comparison of respondents with area census data to ascertain their relative socioeconomic status.

Finally, participants engaged in a series of exercises designed to trace the history of their involvement in tea production and the linkages in place, to identify the determinants of participation in their linkage, to assess its effects on the participants and the community as a whole, and to identify problems with the system and potential solutions.

Participants were asked about the major landmarks of their community's involvement in tea production and the linkages in place. The identification of determinants and effects of participation involved a ranking and weighting exercise. Participants were first asked to brainstorm the determinants of and later the effects of involvement, with suggestions being offered from the earlier focus group. They were then asked to individually rank their importance using ranking cards. Finally, the factors were written on a piece of paper, and individuals were asked to rank their importance using pieces of maize. In assessing the effects of involvement, the participants were asked to rank the importance of the factors to their well-being. The negative effects identified were made positive (i.e., low prices became high prices, poor health became good health) to allow the comparison of the negative and positive effects together. Finally, the negative effects were fed into a problem-tree analysis—where participants were asked to identify the causes of the negative effects identified and potential solutions.

In these case studies, the study faced the methodological challenge of identifying the poorest households in areas where most of the population could be identified as poor by government or international standards. The study dealt with this problem at first by asking commune leaders who were the relatively poorer farmers, and also by asking focus group participants to identify the characteristics of poor and non-poor farmers in the community, and which households they considered to be poor.

Within each area, the sequence of activities proceeded as follows. First, commune leadership and other community leaders were met to collect background information. Second, focus groups were conducted with various producer groups, followed by the PRA exercises, with participants grouped according to participation in a given linkage. Finally, key informant interviews were conducted with poor farmers, farmers involved in the various linkages, as well as "unlinked" farmers.