

Management Issues of Tea Planting and Tea Crops in Vietnam in the Concept of Sustainable Agricultural Development - and Recommendations on Marketing 4P

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ABSTRACT

Thai Nguyen and Lam Dong provinces are two biggest areas of Vietnam to have tea crops planting. Farmers produce various tea products and among them, Green tea contains polyphenols and catechins as well as caffeine, but green tea has less caffeine than coffee, and many extracts are decaffeinated. Our research goal is to find out real situation of tea planting in Vietnam in the concept of sustainable agricultural development in Vietnam and recommendations and marketing 4P solutions for agriculture and tea products, with the using of both qualitative analysis and regression -quantitative model in order to identify barriers for tea crops and planting as well as management issues of agricultural value chain.

Research results show us that CPI and R (lending rate) and Risk free rate (Rf) have negative correlation with tea export price, while GDP growth has positive impacts.

Next, the State plays an important role in supporting and promoting contractual linkages. Government policies must hold farmers and businesses accountable for the performance of the contract. In Vietnam, with a still agricultural fragmented, backward, the link between farmers and businesses is still loose, the determination of The right direction and support of the Government will create a great impetus to promote development economic links between businesses and farmers.

Our research limitation is that we can expand for other crops, industries and markets as well.

Key words: sustainable development, agricultural value chain, tea and coffee planting, tea products, Vietnam

JEL: M21, G30, G32, G38

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1.Introduction

First, we recognize the importance of tea crops and other crops in Vietnam in the concept of sustainability. Green tea is made from the dried leaves of the same plant (*Camellia sinensis*) as traditional tea, a green shrub in Asia. However, the traditional tea leaves are fermented, and the green tea leaves are steamed but not fermented. Green tea can be brewed and taken orally or taken as an extract tablet or capsule. It has many components that are believed to have antioxidant and anti-cancer effects. Green tea contains polyphenols and catechins as well as caffeine, but green tea has less caffeine than coffee, and many extracts are decaffeinated.

Le Thi Thanh Huong, Vu Quynh Nam, Dinh Tran Ngoc Huy, Pham Van Tuan, Pham Van Hong. (2021) explored explore not only strengths, weakness, opportunities and threats of Coffee and tea growing in the northwestern region of Vietnam, but authors also would suggest that Tay Bac provinces need to have both medium term and long term strategies in agriculture development esp. When Vietnam enter free trade agreements such as EVFTA and UK agreements.

Thai Nguyen province in Vietnam is specialized in tea crops.

Authors find out there are Limited product support services in the field. With the current development trend, products or manufacturing industries all need the system.

ecology to support. This is very important for products that have a need to promote participation enter the international market. However, from the practical study of tea products in the province shows that some necessary support services are still lacking.

With increasing requirements for food safety and hygiene, tests and analyzes for tea products with essential requirements. However, tea exporting companies in Thailand

Nguyen can only do simple tests in Thai Nguyen province or must down to Hanoi. Even quality management agencies lack the equipment for quality assessment, especially for tests with higher requirements.

Studies on policies for production inputs, agricultural development commodity-oriented industry and participate in the value chain: the agricultural sector, Rural areas are home to over 70% of the labor force and a large concentration of poor people. This is an area where the government has won many policies to encourage development such as investment in infrastructure construction, land policy, capital support, support for farmers

access to capital and credit policies, tax exemptions and reductions, technical assistance, seed, farming methods,... (Dang Van Thanh, 2010). Even so, not a few of the main

The policy to support farmers is not suitable with the characteristics of regions, localities and ethnic groups or with seasonal characteristics of crops and livestock. For example, coffee is one of the key export products, but the loan policy

Agricultural production, hunger eradication and poverty reduction are still not suitable with the characteristics of the Western region. Preferential loan programs with small loan sizes, but how to support through many lending channels has dispersed the loan and resulted in The level of lending in each channel is still low, making it difficult to meet the demand for agricultural products export (Nguyen Dinh Hoa and Dang Hoang Giang, 2013).

Studies show that the volume of agricultural products exported is large but low added value, mainly China market

After doi moi, Vietnamese agriculture has achieved great success in terms of production export volume and value. From a country suffering from hunger, Vietnam has become one of the 5 the world's largest exporter of agricultural products such as coffee, rice, shrimp, etc.

However, compared to other countries in the region, Vietnam's agriculture is still inferior to other countries in the region in terms of land, labor and water efficiency. The industry is mainly sold in its raw form at a lower price than other countries due to its high quality. Even for the domestic market, food safety is still getting many concerns (World Bank, 2016). According to Pham Ngoc Tuan (2016), China is gradually become the leading country in importing agricultural and aquatic products of Vietnam.

However, this is considered to be a volatile market, with supply and demand information Vietnamese enterprises have very little access to it, with many potential risks. While, Exports to China are mostly raw materials, with very high value.

Research issues

Issue 1: What are real situation of tea planting in Vietnam in the concept of sustainable agricultural development in Vietnam?

Issue 2: What are recommendations and marketing 4P solutions for agriculture and tea products?

2. Literature review

Further discussion on Agricultural value chains and tea crops issues:

First, According to Tran Hoang Hieu and Nguyen Thanh Son (2014), the "large sample fields" shaped formed under the association between farmers, between farmers and enterprises, or State intervention has initially contributed to land accumulation and concentration and this model has shown to contribute to the formation of product chains to supply the market and participate in the international market. According to Phuoc Minh Hiep (2013), the implementation of this model still faces some difficulties such as: small area; production level is not uniform leading to limited ability to absorb and apply science and technology and consequently to uneven product quality; there is no real connection between producers and processing and consuming establishments;...

Next We summarize previous studies as follows:

Table 1 – Summary of previous studies

Authors	Year	Contents, results
Carr	1999	With the reference of more than 30 articles published in international journals, which present subjects such as weather and climate for tea planting (drought and irrigation) scientists have been equipped with modern techniques and also, they train staff within tea sector.
Khoi, NV et al	2015	Despite of small scale (operation), fragmentation and weak connection, Vietnam tea sector has long history and helped many farmers to escape poor life and poverty, esp in the North and North East region of Vietnam.
Bien, N.C et al	2018	With the role as a major export (product), tea production has contributed to economy and foreign currency, as well as creating more employment for workforce increase. Hence it is important to develop tea value chain as well as adding values for tea production in the globalization and integration.
Tran Thi Quy Chinh et al	2020	The study propose solutions including increase credit access for farmers and technical training and reducing costs for farmers, based on recognition of 3 positive factors (credit access, productivity and technical training) and 2 factors with negative impacts (risk and tea area).

Katuwal	2020	Have emphasize important roles of organic farming in tea production in Jitpur and Mangalbare area of Ilam district, with the recognition of factors for transferring to organic environment such as economic benefit,awareness (environmental); bright market prospects, health consciousness and sustainability.
Chen et al	2020	Realize that tea competitiveness was depending on specialization level, with strongest impacts. And next factors influencing competitiveness are Local governments' sectoral strategies and institutional policies .
Saha et al	2021	Recognized in Bngladesh case, 2 factors.vehicles such as yield and area expansion influenced tea production and and productivity increased significantly to 1.05, 1.89, and 0.98% respectively annually for the stage 1972–2018 than 1947–1970.
San Viet Le et al	2021	limited studies have been conducted to determine the viability of this conversion in Vietnam, particularly regarding technical aspects. Focusing on aspects of soil health, tea productivity and quality, here we highlight the benefits and challenges of conventional tea production system and provide a comprehensive evaluation of potential advantages agroecological tea management practices could have for Vietnam. The outcomes of this review are an informative resource for tea producers, tea production management authorities and other relevant organizations; enabling more informed decisions regarding the management methods, policies and programs to promote agroecological tea management in Vietnam and other tea producing nations

Last but not least, Le Thi Thanh Huong, Dinh Tran Ngoc Huy, Pham Van Tuan, Pham Van Hong (2021) stated that In Vietnam, esp. In the northwest region, tea and coffee crops have been increasing in both quality and quantity and scientists are trying to find ways to increase productivity, as well as eliminate damaging insects and coffee berry borer, etc in

order to reduce damages for farmers. The fact in agriculture is that when farmers are in good crops, the coffee price is going down and vice versa.

And Dinh Tran Ngoc Huy, Nguyen Thi Hang, Le Thi Thanh Huong, Pham Van Hong, (2021) mentioned important roles of agriculture project financing and emphasized roles of banks (Huy, D.T.N.; Loan, B.T.; Anh, P.T., 2020).

3. Methodology

Method and Data

Research object: identify barriers and causes inhibiting market participation to international market of tea products.

Research scope:

Space: Thai Nguyen province (tea) and Lam Dong province.

Time: At the industry level: from 2011 to 2018

At the level of tea and lychee product chains: 2018

About the content: Clarifying barriers and reasons for restricting tea products and join the international market

Regarding to tea crops, This study mainly use combination of quantitative methods and qualitative methods including synthesis, inductive and explanatory methods.

For quantitative analysis, the study is supported with OLS regression.

Data is collected from reliable internet sources and websites of Bureau Statistics, State Bank and Ministry of Finance and Vietnam banks.

4. Main results

4.1 Concepts of sustainability in agriculture and tea planting

Studies on Vietnam's tea value chain

Ngo Thi Hong Hanh (2012) focuses on comparing and evaluating the economic efficiency of varieties of tea (midland tea and branch tea). Research results show that tea branches have higher criteria than midland tea trees, effective in production activities of Exporting tea branches brings higher economic efficiency than midland tea.

New planting, investment in renovating old tea, switching to intensive farming on Kinh tea area Business is being carried out by farmers at all levels. However, in practice This transformation is still facing many challenges that need to be solved, especially for with tea growers.

Nguyen Thi Phuong Thao, Do Thuy Linh (2015) research on the participation of the poor into the tea value chain. Research results show that the poor get difficult to join the chain and enjoy negligible benefits. The poor are productive, harvested yield per unit of cultivated area and total product income tea is lower than that of the average and well-off households.

Cause of the problem

This is because poor households lack production conditions or harvested tea is only preliminary processed for sale.

Meanwhile, well-off households have conditions to invest in tea production at all stages more fruitful.

There are some Recent studies focuses on researching the linkage in the tea supply chain of small and medium enterprises participating in the tea supply chain in Thai Nguyen province.

Originally Research shows the link between subjects in the above tea product chain In Thai Nguyen province, there is almost no tea, or if there is, it is very small and not really tight.

Research by MCG (2014) evaluates the tea value chain under the impact of climate change. Research shows that tea growing areas are mainly located in places with difficult topographical conditions (hills) and harsh weather conditions. Meanwhile, adaptive capacity of tea growers is still limited, the support policies are still inadequate and the system

As a result, tea growers face many risks and find it difficult to participate in the value chain, if participation is also only at the low value-added stage.

Do Thuy Ninh (2015) studies the value chain of tea industry in Thai Nguyen province. The author has analyzed the actual situation of the actors involved, the linkage between actors in the tea value chain in Thai Nguyen province. The research has in-depth economic analysis of the stages in the value chain, the added value of each stage and how the chain is managed. However, This study starts with the tea grower as a starting point and ignores the input supply chain of the chain (inputs for agricultural production, science and technology for tea growers) and thus the chain analysis lacks comprehensiveness. The author only focuses on value chain research with limited domestic market (economic analysis for consumers is the domestic market, not to mention the requirements and ability to penetrate the world market). In particular, the research has not specified the market requirements, the standards of the target markets

Research by To Linh Huong (2017) positioning Vietnam's tea industry in the value chain of global rule. Research results show that Vietnam is mainly involved in the production stage export and import of raw tea. From the actual survey results, the study shows that the actors in the cognitive chain are still very limited in terms of global value chains and requirements of international market demand. For that reason, from farmers to processing enterprises, variables, trade pays little attention to quality, branding and investment for science and technology for quality improvement and competitiveness enhancement.

Guo and Rato (2019) found out that tea culture tourism in Thai Nguyen is developing quickly as a multilevel tourism form combining scenery sightseeing, learning, and hands-on experiences. However, it is still in the emerging stage and faces challenges of infrastructure on its road to development.

The limitation of this study is that it has not been able to compare and evaluate the current situation of stages in the value chain with the requirements of the market, especially the market - international standards (for example, the level of satisfaction of food quality, safety and hygiene; number of households)

produce and obtain certificates of safe tea production and processing). Such comparisons and assessments aim to help better locate the status of stages in the global value chain, thereby making appropriate intervention policies

Table 2- Area of tea crops in Thai Nguyen Province

Area	Certified area (ha)	Certification valid in time	Out of date certificate (ha)
Whole province	735.6	394.3	341.3
Thai Nguyen city	82.7	26	56.7
Song Cong city	10	10	0
Pho Yen town	46.2	20	26.2
Dinh Hoa dist	89.3	31	58.3
Vo Nhai dist	24.7	0	24.7
Phu Luong dist	114.2	88.5	25.7
Dong Hy dist	114.7	44.06	70.6
Dai Tu dist	253.8	174.7	79.05

(source: Industry and Trade Organization, Thai Nguyen)

4.2 Tea planting in Vietnam

4.2.1 Tea planting in the northern region of Vietnam

Studies on tea industry development issues

For tea plants, up to now, there have been many studies dealing with each aspect production, processing, consumption and management of the tea industry. Researches by Nguyen Huu Tai (1993) discuss the management mechanism and the issue of land allocation and documentation production for tea growing households. These studies focus on solving problems about the mechanism for the tea industry in the early Doi moi period, that is, the transition from the next economy planning to a market economy and the issue of land allocation from farms for farm households.

On how to organize and manage production for tea growing households, research by Tran Quang Huy (2010) focuses on assessing the influence of production factors on demand for cooperation (participation in cooperatives - cooperatives and the relationship between cooperatives and cooperative members) of the household farmers produce and consume tea in key tea areas in Thai Nguyen province.

Hai Ninh, N.T. et al (2018) explored evaluated the situation of tea production of tea growers in PhuTho Province, Vietnam. Average tea plantation area among the largest group of households is 0.61 ha. In production, the types of risks that tea growers encounter include: unfavorable weather (33.4%), diseases (13.2%), insects and worms(2.3%), capital (0.3%) and price which is the most major risk (50.8%). The survey of 1,000 tea growers identified that 46.7% of the households are in need to participate in tea production insurance. The average willingness to pay was estimated to be 2,407.07 (thousand VND/ha/year). If the agricultural program is successfully implemented in the province, it is estimated to have a total agricultural insurance fund of 34-35 billion VND/year. The survey results show that gender, education level, tea growing area and location are factors that affect the level of willingness to pay for agricultural insurance for tea trees.

Do Thi Thuy Phuong (2014) done a Research on production and business activities of cooperatives in Thai Nguyen province, including cooperatives producing and trading tea. These studies are pointing out the meaning and relationship between production relations (cooperatives) in accordance with the nature, presentation, level of productive forces (market power, competition and integration), thereby confirming determine the role of cooperatives in organizing tea growers to take advantage of production to scale, increase bargaining power, meet the requirements of the market economy, international economic integration.

Researching on enterprises in the tea industry, VBCSD (2015) focuses on analyzing, evaluate the competitiveness of enterprises with weaknesses in production inputs (quality of human resources, scale of production capital and science - technology).

The study also pointed out barriers in the business environment for enterprises tea industry.

Positives and limiting factors binding tea products to participate in international markets

The positives/advantages of entering the market

Natural and climatic conditions for tea plants: Thai Nguyen has favorable natural conditions for tea plants, especially tea varieties imported from Phu Tho province, also known as Trung du tea. If the suitable temperature conditions for tea plants to grow are in the range of 22°C-28°C and the humidity reaches 80%-85%, the annual average temperature and degrees

The average annual humidity of Thai Nguyen is quite ideal, at 25°C and 81.2%, respectively.

The average annual rainfall in the province is about 2,000-2,500 mm, set from May to October. Therefore, tea plants of Thai Nguyen, especially Tan tea

Erect, usually grows and develops best in the summer (May to July).

thanks to enough sun, enough temperature and enough water. Tea buds at this stage also develop strongest and most nutritious. As a result, the Midland tea tree when grown in Thai Nguyen grows better and gives a more distinctive and delicious flavor than tea - The same species is grown in Phu Tho.

Tea growers have many years of production experience: With experience and technique of Growing and processing tea is accumulated over a century of history, tea plants from the Originally planted to green the bare lands and hills, it has now become the world strong and is one of the strategic crops of Thai Nguyen province. Hitherto, Tea trees have been planted in all 9 cities/districts/towns of the province with a total area of Cultivation area has been continuously expanded over the years. In 2018, the total cultivated area of The province's tea reaches 22,027 hectares, accounting for about 14.3% of the total cultivated area and 57.9% of the total cultivated area Of perennial industrial crops in the province. Tea industry of Thai Nguyen currently attracts the participation of 95,000 households, or 40% of the total number of households in the agricultural villages, including individual production households as well as production households participating in cooperatives (43) and craft villages (140) (Thai Nguyen Department of Industry and Trade, 2017).

And we analyze challenges and benefits in tea sector as below:

Table 3 - Benefits and challenges for tea production

Benefits	Challenges
- Increase employment	- Land area
- Improve farmers income	- Technical training for farmers
- Increase linkages among producers	- Credit access, credit channels

(source: author analysis)

4.2.2 Tea crops in Lam Dong province, Vietnam

Lam Dong is one of the provinces with the largest and oldest tea growing area in Vietnam. Favored by nature, fertile soil, suitable climate and especially with the advantage that the province is located at an altitude of 800-1,000m, Lam Dong's tea quality is confirmed to be delicious, fragrant, and sweet.

According to statistics, Currently, the total tea area in the province is 25,929 hectares, down more than 1,000 hectares compared to the previous year. Of which, the tea area is 23,791 hectares for trading, and annually supplied to the domestic and foreign markets is reached. 183,571 tons. In fact, Lam Dong province's tea trees account for 25% of the area and 27% of the country's tea production. Lam Dong tea has been famous for a long time with famous brands such as: Tam Chau, Le Ky, Quoc Thai... Among the famous tea brands, Lam Dong has also contributed high-value products, which are appreciated by many connoisseurs. Acceptable teas such as oolong tea, green tea, black tea, etc.

In Lam Dong, tea is grown mainly in Bao Loc, Bao Lam, and Di Linh. Because tea trees have been planted since the 20s of the last century, many tea areas here are now old, with low productivity. In the past years, especially from 2002 up to now, in the programs and projects to support the development of tea, the province has focused on expanding the area while promoting the "variety revolution", improving the tea garden to achieve high productivity. productivity, high quality and gradually building safe and clean tea material areas. Up to now, the area of new varieties of tea in the province accounts for 32%, with 6,340 hectares of high-yielding branched tea and 2,075 hectares of high-quality Taiwanese oolong tea. And according to the Project on developing tea material areas by 2020, the total tea area will be

raised to 28,000 hectares, of which high-quality and productive tea varieties account for 55%, and at the same time implementing many projects to improve tea gardens.

(source: agro.gov.vn, access date 20/11/2021)

Figure 2- Tea crop in Vietnam



(source: internet)

4.3 Tea products and benefits

A. In the North of Vietnam

In Thai Nguyen, there are many tea regions with very high quality. Because Tan Cuong commune is the first tea growing area of the province. Therefore, Tan Cuong Thai Nguyen Tea brand is also known more.

Besides Tan Cuong, Thai Nguyen tea area also has other delicious tea regions. Like La Bang, Hoang Nong, Trai Cai or Khe Coc tea areas. Although it is the same green tea, each region has its own unique flavor.

The most famous tea of the Tan Cuong Thai Nguyen green tea region is Thai Nguyen Hook Tea. Hook Tea is a type of tea that is crushed until the finished product, the tea leaves curl like a fishing hook.

Figure 3 - Tan Cuong tea in Thai Nguyen province



(source: internet)

B. In Lam Dong province

Bao Loc Oolong Tea

Oolong tea is a famous tea of Lam Dong tea region, popular in many parts of the world. Oolong tea originated in Fujian province, China, then imported to Taiwan and prospered. The worldwide demand for tea has brought the oolong tea variety to Vietnam, and the land of Bao Loc, Lam Dong is the most suitable locality for the wonderful growth of this plant.

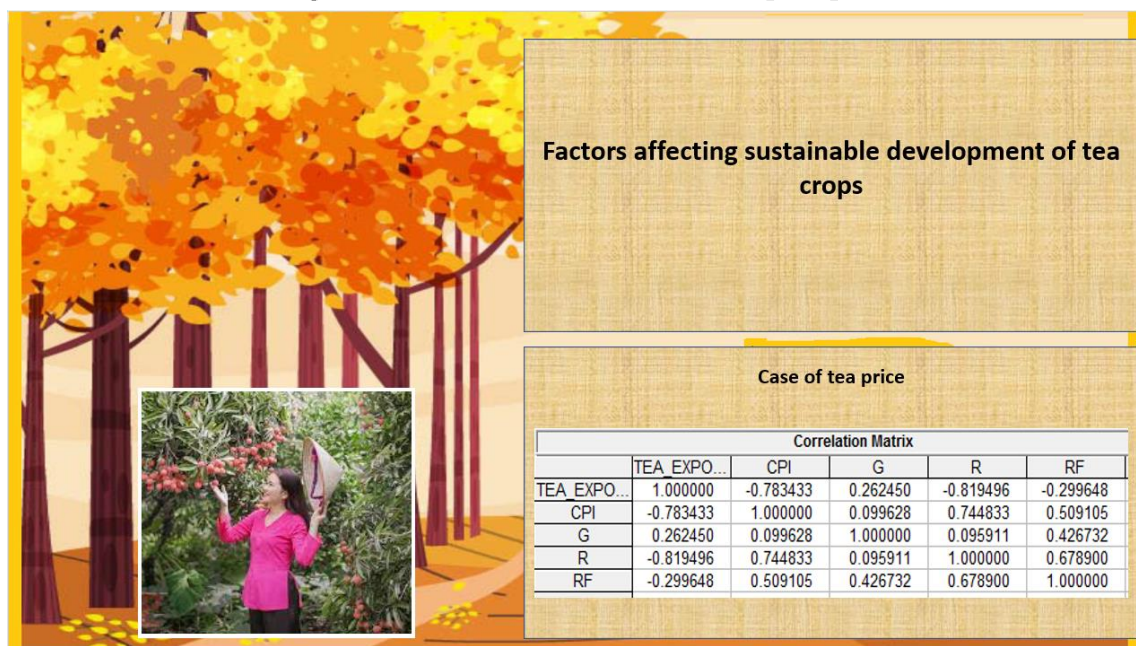
In Bao Loc, there are 3 famous varieties of oolong tea: Kim Tuyen oolong tea, Long Thuan oolong tea and Tu Quy oolong tea. Bao Loc oolong tea is famous because it grows at an altitude of 1,000m above sea level, the climate is foggy all year round, the soil is fertile, suitable for tea tree growth. Along with that is the processing process that goes through many stages: withering, turning incense, frying to kill yeast, jarring bells, shaping jars, drying, etc. To get a delicious oolong tea, Bao Loc people must comply with it. rigorous processing process from harvesting to finished tea products.

(source: <https://yeutraviet.vn/vung-che-lam-dong/>, access date 20/11/2021)

4.4 Regression model for tea - export price versus macro factors:

First of all, we see below correlation matrix and see that:

Figure 4 - Macro factors versus tea export price



(source: author analysis and Vietnam economy)

4.5 Process of making green tea

Like Tan Cuong Thai Nguyen green tea, the flavor is considered the easiest to drink. Easy to drink here can be understood in the sense that the taste is easily liked by many people.

In Tan Cuong Thai Nguyen tea, there is always a prominent flavor, that is: the aroma of nuggets is passionate, greasy, and sweet. In it, there is less bitterness.

Overall, green tea is low in caffeine compared to other caffeinated beverages. As long as you're consuming caffeine within the recommended limits above, the amount of caffeine in green tea shouldn't be a concern.

In summary, Green tea contains less caffeine than other beverages. As long as you stay within the recommended caffeine limit, the amount of caffeine in green tea should not be a concern.

A 230ml cup of green tea mixed with 2g of tea contains 30-50mg of caffeine. The maximum recommended amount of caffeine per day is 400mg, which is equivalent to about 8 230ml cups of green tea.

However, it's best not to drink 8 cups at a time, especially if you're sensitive to caffeine.

Overall, green tea is a nutritious drink that contains safe amounts of caffeine.

Best of all, drinking green tea may even have some amazing benefits for your health. (Source: <https://www.healthline.com/nutrition/caffeine-in-green-tea>).

How to choose to buy fresh green tea leaves

Fresh green tea leaves are not shiny, small leaves, dark green in color.

Should choose the top part that is old, has a lot of flat leaves (which are neither too old nor too young).

Avoid choosing leaves that are too old, crushed, when cooking the tea will be acid.

Then, Follow below steps:

Preliminary processing of tea leaves

Tea leaves pick up the leaves, remove old branches and damaged leaves and then wash a few times with water. Then, soak the tea leaves in water for 10 minutes before steeping and then draining.

Kettle tea

Gently rub the tea leaves and put them in the jar.

Next, to rinse the tea, pour 0.5 liters of boiling water into the pot, shake it gently, and pour the water into the glass.

Then, pour into the pot 2.5 liters of boiling water, leave for 10-20 minutes for the tea to infuse. Finally, pour the boiling water over the tea before to fill the tea pot.

Green tea juice has a beautiful light yellow color, has a slightly sweet taste and a slight aroma of tea leaves. Sitting and sipping a cup of green tea, eating a piece of cake with family and friends is great.

Figure 5 - Green tea made



(Source; internet)

5. Discussion and Conclusion

The environment and policies for agricultural development are still limited.

Vietnam's agriculture is still facing major obstacles in the process of restructuring structure and improve global competitiveness. According to Diaz-Bonilla and Kwiecieński (2014), growth-encouraging environment and agricultural competitiveness of Vietnam is much less favorable than its main competitors in the market such as China, Thailand, Brazil, Mexico, Chile,... Obstacles bring

fundamental factors such as human resources, capital, agricultural institutions, the operation of markets (goods, labor, financial services) is still limited.

Studies on planning and planning management of crops and livestock for

Stabilizing supply in the market:

Planning is a tool of the state used for development orientation, in line with the socio-economic development strategy, and at the same time ensure essential balances in the economy and the ecological environment. Identify important roles the importance of planning work, in recent years, central and local agencies

The province has implemented many plans for almost all sectors, fields and agriculture industry is no exception. However, many studies have shown the status of

The planning for the development of crops and livestock in the agricultural sector is not yet guaranteed

Due to poor quality, reliability and management, plans are often destroyed

broken.

On the quality of human resources in the agricultural sector. Results of the survey of rural, agriculture and fishery shows the number of people of working age in the agricultural sector Villages with the ability to work with professional and technical qualifications have a very slow increase and only a small percentage. Number of people of working age who are able to work with qualifications - technical expertise from elementary level upwards in 2011 accounted for 2.95% (in 2006 it was

2.48%. The region has the highest percentage of workers who are trained in skills from elementary to high is the Southeast with 5.25%. The lowest is the Mekong Delta with only 1.71%. rate of workers with intermediate education is 1.23% (in 2006 it was 0.89%); university degree reached 0.21%

(in 2006 it was 0.11%) (TCKT, 2012). Thus, there are more than 97% of agricultural workers Currently, there is no professional training, no professional certificate. Lack of labor Having professional qualifications will be a major obstacle in applying the production method modernity, especially modern production thinking in the context of integration.

Factors affecting participation in the global agricultural value chain

To promote and improve the agricultural value chain, key factors play a supporting role and influence the entry of agricultural products into international markets, especially the market of developed countries including:

Support services

Input support services

Availability of input services (seeds, fertilizers, pesticides, raw materials/fuels production, ..) is an important basis to help producers and processors of products

Agriculture increases production efficiency by reducing transaction costs. However, The quantity of input products is an important factor for agricultural products

produced to meet export standards to international markets, especially the domestic market and developed countries. Availability of responsive production input supply services meet the standards of export markets, especially markets of other countries

development is an important condition for producers to access. If the services provided inadequate levels or they provide unqualified inputs also affect quality of agricultural outputs. Post-harvest and processing support services Unlike other value chains, agricultural products are often seasonal, easy to damaged, so normally, agricultural product chains are not continuous.

Moreover, the time of harvesting is concentrated, so the harvested output is often very large in very short period of time. Due to asymmetries in terms of supply and demand in the market, prices of agricultural products have been greatly reduced. This trend occurs quite often in many locations

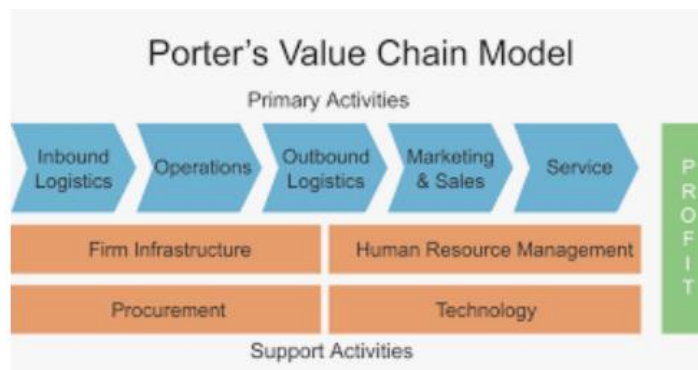
In the locality, the phrase "good harvest" is still a haunting obsession of many businesses agricultural authorities as well as farmers. To relieve pressure and master

become more active in the production, processing and consumption of agricultural products, supporting services -Post-harvest support (cold storage, transport vehicles, preliminary

processing/processing techniques, chemical testing, etc.) play an important role in helping agricultural products last longer in storage, processing and consumption of products. On the one hand it reduces the failure rate for post-harvest products for farmers, partly to help prolong the processing time transform and consume products to improve efficiency and add value in the value chain.

Value chain model:

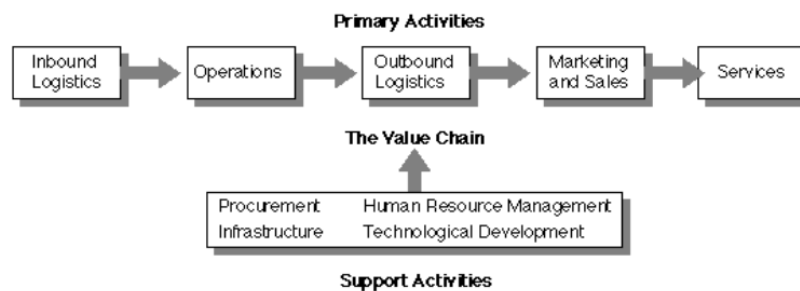
Figure 6 - M.Porter value chain



(source: M.Porter, 1985)

Figure 7 - Value chain model

Porter's Value Chain



(source: M. Porter, 1985)

Marketing 4P recommendations

Using this marketing strategy will help firms to understand the market, needs and wants of consumers. Since then, manufacturers have constantly created products to satisfy that desire of consumers. Products must be standardized, the quality of products put on the market must be guaranteed. Products bring benefits that even exceed consumer expectations. Moreover, Enhance brand value, company reputation in the market.

Beside, Dao Thi Huong, Dinh Tran Ngoc Huy (2021) said that The goal of internal marketing is to satisfy internal customers and retain employees. When internal customers are satisfied, they will become more loyal and committed to the company. Internal customers will be ready to serve to satisfy and create loyalty of customers outside the business. Thus, internal marketing needs to be done before doing external marketing. The function of internal marketing is that the internal communication between the business and its employees must function effectively before the business can succeed in realizing its goals in relation to the external market.

Table 4- Marketing 4P suggestions for tea and agricultural products

<p>Products (coffee, tea,...) -Naming products can be done via combination between product names and company names - Can expand width and depth of products (categories)</p>	<p>Price - Follow various pricing strategies - When determining the selling price, the business owner carefully determines the costs to perfect the product: the cost of materials, labor, transportation, design, etc. to make a profit. For example, The profit rate is about 15-30% of the total product value.</p>
<p>Place - Online marketing for agricultural products - Choose either Direct distribution: manufacturers sell products directly to customers without any intermediaries, businesses have stores, organize a sales team, and sell websites. Indirect distribution: manufacturers distribute their products through intermediaries such as supermarkets, shops, restaurants,</p>	<p>Promotion - change social media, communication - Advertising online - Individual sale need to be enhanced - PR through events connecting to clients</p>

(source: authors analysis)

Research limitation

Authors can expand model for tobacco products as well.

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Exhibit

Exhibit 1 – Inflation, CPI over past 10 years (2007-2017) in Vietnam

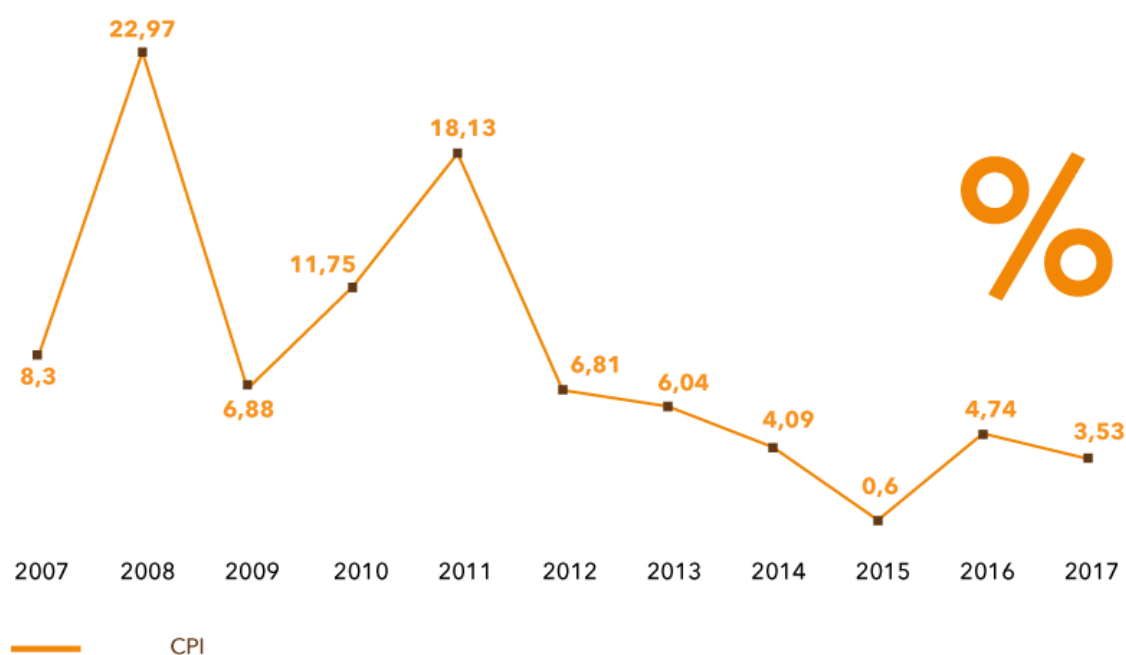


Exhibit 2 – GDP growth rate past 10 years (2007-2018) in Vietnam

