

Supporting and consolidating the development of Hung Yen “Long longan” value chain

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I. Situation of longan value chain in Hung Yen

I.1. Longan in the world and in Vietnam

Like other plant, the official origination of longan is still a debate. According to De Candolle, longan derives from India the country of continental climate; and where the altitude is more than 1600m. At this moment there are many wide longan forests. This kind of plant is grown on the land of 1000m high compared with sea level in the states of Bengal and Assam. However, from the point of view of Groff, the China is the origin of longan (in provinces of Guangdong, Guangxi Zhuang, Fujian, Sichuan, ...), and then it is planted in other continents and countries all over the world. For example, in 1798 it came to India. Meanwhile it was imported to the South of Florida, United State of America in 1903 and then spread to some Caribbean countries such as Bermuda, Puerto Rico, Cuba, African countries, Australia where longan is planted in plantations, experiment farms, etc. as a fruit tree, a bonsai or a tree for shading.

China is considered the biggest country in terms of longan area (25,000- 27,000 ha in costal provinces, for example Fujian, Sichuan, Guangdong, Guangxi Zhuang...) and its productivity is at the peak of the global longan productivity. Although Thailand has just imported longan tree from China since 1896 (TRAN The Tuc, 2004), the longan cultivated area and productivity of this country are considerably great, estimated to reach from 125,000 to 150,000 ton/year. Apart from serving domestic market, Thailand longan is exported to Malaysia, Singapore, Hongkong, Philippin and European countries. In addition, ChiangMai is the national commercial center of longan in Thailand.

In Vietnam, according to Prof. VU Cong Hau, the north of Vietnam can also be the motherland of longan. Tracking documents concerning longan, it can be said that longan was planted in this area from 300 to 400 years ago. The most ancient longan tree planted on the land of the communal house of Pho Hien, Hong Chau precinct, Hung Yen town is now over 300 years old. However, other versions show that the first longan tree was planted since the foundation of Hung Yen province. That means of Minh Mang king dynasty, about 1820-1840. However, there is no evidence indicating that longan originates in Vietnam or was imported to Vietnam. We only acknowledge that longan grow in different regions : northern mountainous area such as Son La, Lai Chau, Hoa Binh, Lao Cai, Phu Tho, Tuyen Quang ; north western area and Red River Delta, for example Quang Ninh, Hung Yen, Hai Duong, Ha Nam, Thai Binh; and southern area like Tien Giang, Binh Phuoc, Vinh Long, Dong Thap... The total area of longan throughout the country is approximately 60,000 ha, in which the north occupies 30,000 ha while the south makes up about 30,000 ha ¹

¹ According to the Department of Agriculture and Rural Development of Hung Yen province-2004

I.2. Longan commodity in Hung Yen province

Hung Yen longan, the regional frontier exceeding product

It is the typical characteristics of Hung Yen longan that makes it famous all over the country. This is the reason why it is worth developing project and program for the development and preservation of Long longan in Hung Yen province. At this moment, the total longan area (concentrated and non-concentrated) is only about 5,000 to 7,000 ha. However, the biggest density of longan can be found around Hung Yen city, which becomes an extremely particular longan region well-known all over the country. Hung Yen longan is famous for its outstanding quality, compared with other provinces. This explains why it was chosen to offer to the kings in feudal regime (according to Vietnamese history).

Main varieties of longan

Hung Yen habitants are much aware of the preservation of their local precious longan varieties. They consider this as a cultural as well as particular feature of Hung Yen province. In the diversified longan variety collection, there are two most popular types of longan which occupy of 40% to 60% of cultivated area:

- Sugar Candy (or Duong Phen) logan: small fruit of averagely 7- 12gram, light brown skin, thick flesh with many small sweet pieces like sugar candy (that is why we call it Sugar Candy longan), typical fragrant smell, black and small seed, time ripening is from 10 to 15 days later compared with other longan varieties (from 20th August).
- Huong Chi longan: big longan, thick flesh, fresh smell, not so sweet, average weight of 12- 14 gram, the advantage of this variety is high productivity of 5 ton/ha, and due to many flower seasons, rarely there is a failure of crop.

Apart from that, there are many different longan varieties and the farmers are still selecting the best variety that they desire.

Developing stages of Hung Yen longan commodity

- Before the organization of co-operative in 1960s, longan was planted in scattered manner in the gardens of Hung Yen households, and along village roads. Although it was very popular to grow longan, the goods characteristic of longan fruit is not so remarkable. In fact it used to sell in village markets. Furthermore, the production technique was out of date. Almost all longans in Hung Yen were planted by seeds, there was big division in varieties and the quality of longan fruit was not homogenous.
- Cooperative period 1969- 1990: longan was widely planted in public area and in concentrated longan garden of the cooperatives. There was a concentration of longan production. Moreover, longan was also dried and sold to socialist republic countries. Despite of this, the quality of longan in this period was not so good. Furthermore, there was not effective progress in terms of longan cultivated technique, the multiplication of longan varieties based on provining technique. Together with emigrant movement, longan spreaded to a number of new economical regions all over the country.
- After 1990, grafting technique was applied to longan cultivation. Thanks to this technique, the multiplication of small tree became quicker and their quality was more homogenous as well. In 1990s, Hung Yen longan was considered as deluxe product for the rich and the price of some kilograms of longan approximately reach the salary of a cadre. This motivated the production development although there was not any plan of transforming rice cultivated area to longan cultivated area. However, the farmers decided themselves to do this and their decision was accepted by local authorities. As a result, Hung Yen province planned and changed rice cultivated area to longan cultivated area. In the years of 2000, specialized longan cultivated areas and

well planned longan gardens with clear goods production characteristic were formed. This period highlights a remarkable change from scattered longan production to professional concentrated specializing production. The development of longan provided commodity with fresh and dried fruits. Many small and medium enterprises took part in longan commodity. In 2000, Hung Yen played an important role in the crucial fruit commodity of domestic market with the productivity of approximately 22,000 ton/ year.

Longan tree and farming households

Many habitants of districts around Hung Yen town have decided to replace rice by longan. This requires a considerably great material investment in garden planning. However, thanks to the support of the government, and banks, almost all rice area of Hung Yen town and a part of laboring districts have changed to plant fruit trees, in which longan is the most important. Whenever longan is harvested, it can create more profit than the rice. Investigating in two regions: a commune belonging to concentrated longan cultivated area (Hong Nam commune- Hung Yen town) and another commune in new area of longan production around Hung Yen town (Hiep Cuong commune- Kim Dong district), it can be said that the profit that longan brings to farming households play an important role in their income. In traditional longan cultivated area in Hung Yen, the main income of household come from longan production. This income increase considerably, from 30- 40% in 1990 to 86% in 2004. Nevertheless, the lack of collective action among farmers in all production activities makes it difficult to furnish market with stable supply. In fact, the farmers do not have their own organization in terms of longan production and commercialization. Therefore approaching market is really a hard work.

Table 1: The changes of income from longan production of farming households

Name of commune	Income from longan/ total household income		
	1990	1997	2004
Hong Nam commune- Hung Yen town	30-40 %	70 %	86%
Hiep Cuong commune- Kim Dong district	10%	15-20%	30 %

Source: VU Trong Binh, 2005

Commercial channels in Hung Yen town

- 1st channel: This is a direct consuming channel, from producers to consumers, or retailers which takes 30- 40% of annual longan productivity. The longan of this channel is fresh fruit of best quality. In addition, the traders and producers have established their relationship for a long time and they used to sell the product at the gardens of farmers. These products serve the following main markets: Hanoi, Hai Phong, Ho Chi Minh City, etc. Furthermore, Hung Yen province supplies center market, restaurants, hotels, offices with fresh longan of quality or under a kind of presents. Due to high quality and prestige, the price of longan in this channel is rather high but stable, from 16,000 to 20,000 VND/kg.
- 2nd channel: The product is consumed by traders and small collectors, holding 30% of the total productivity. The longan of this channel is also fresh fruit, but of 2nd quality and is sold in provinces and small and medium urban cities. The average price is at from 8,000 to 10,000 VND/kg.

- 3rd channel: A huge quantity of product is collected by local traders and collectors (30% of total annual productivity). However, they are often fresh, watered or small longan that is of so bad quality that can not be eaten when it is fresh. Instead, it is used to produce dried products.

Longan consumption in Hanoi

Almost longan and other fruits coming to Hanoi are gathered in Long Bien market before being distributed to consumers. Apart from Hung Yen longan, there are also many kinds of longan from other provinces such as Ha Nam, Hai Duong, Son La, Yen Bai... Nevertheless, these longans are sometimes sold under the brand name of Hung Yen.

Table 2: Source of longan and traders in Long Bien market

Origination of agents	Number of people	Percentage (%)
<u>Outside the city</u>		
- Hung Yen	7- 10 persons	20%
- Ha Nam	5- 7 persons	15%
- Son La	10- 15 persons	30%
- Yen Bai	5- 7 persons	13%
- Ha Tay	3- 5 persons	7%
- Hai Duong	4 persons	5%
<u>Inside the city</u>		
- Hanoi	4- 6 persons	10%
Total	40- 50 persons	100

Source: VU Trong Binh, 2005

Therefore, Hung Yen longan only occupies a small proportion of the total longan sold in Long Bien market. Statistically, each day this market provides Hanoi with approximately 8 to 10 ton of Hung Yen longan of quality which is then distributed to the central and urban markets, and another 10 ton/ day of these longans for the rural areas. Besides, about 50 tons of longan producing in other provinces is also sold under the name of Hung Yen in Hanoi market. As a result, this reduces the prestige of Hung Yen longan.

II. Problems of Hung Yen longan commodity

II.1. Abuse of famous brandname

Hung Yen province has been famous for its delicious longan for a long time. However, due to not being labeled, there is a serious abuse of Hung Yen longan in domestic market. Consequently, Hung Yen province has to face with competitiveness from other provinces, not only the price but also the quality. Recently, the province also tries to find best way to compete with Thai longan. This means that if we do not build the trade mark and quality management system for Hung Yen longan, it is very difficult to become a competitive product in the market.

II.2. Lack of quality and labeling management system

In Hung Yen province, there is not any quality controlling and supervising system, from the production, processing to selling fresh fruit. Furthermore, the longan is sold without labeling. This degrades the prestige of Hung Yen longan. The quality of the product is

unstable and the consumers do not have much confidence in the product. As a result, it is vital to establish a quality management system from producing, processing to the distribution of fresh and processed longan.

II.3. Lack of collective action among farmers, and between farmers and other stakeholders in the commodity

Because of the lack of collective action among farmers, the efficient practical techniques are not multiplied. Each household applies a different technical procedure. Consequently, the quality of longan sold in the market is not homogenous. In addition to the lack of collective action, there is not any civilian organization of farmers. Hence, this leads to the lack of cooperative mechanism in order to control the quality, commerce and transaction with other agents. Apart from that, the cooperation between farmers and traders is also lack of discipline which limits the investment of the two stakeholders in building together a trademark and quality management system for Hung Yen longan. If this relation and cooperation are not improved, Hung Yen longan commodity can hardly compete with other national and international competitors in terms of production and transaction cost, as well as quality.

III. Consolidating activities for Hung Yen longan commodity chain

III.1. Project's objectives:

General objectives

- Fostering the stable development and effectiveness of “Hung Yen Long longan” commodity chain through supporting the development of producers and stakeholders’ cooperative activities
- Gradually helping producers and commodity chain’s stakeholders establish trademark and appellation of origin for Long longan in Hung Yen province.

III.2. Project components

- Supporting farmers to cooperate, and develop a horizontal integration in producing, processing and commercializing Long longan. Consequently, producers can expand their production, increase income due to scales of economies (raising selling prices, reducing input costs through activities, building plans of production, processing, collective purchasing and sale....)
- Helping farmers establish collective production process and quality control system in order to improve quality, increase the comprehensiveness of product to satisfy the market’s requirements for quality and to reduce risk of bad harvests due to natural disaster.
- Establishing organization of producers, processors and traders in Hong Nam commune, Hung Yen town (in the Hung Yen Long longan association). This organization will support farmers and other commodity chain’s stakeholders to develop collective actions in producing, processing and commercializing Long longan.
- Assisting the Hung Yen Long longan association to build a quality control system and utilize produce trademark from the garden to the stage of processing and commercializing.
- Assisting the development of vertical integration among stakeholders in the commodity chain (producers, traders, supermarkets, restaurants...) through product commercialization contract for farmers in different market channels.

III.3. Some remarkable results after 6 months implemented

III.3.1. Founding cooperatives

Project effect in 2006

- Investigating the desire of farmers in terms of participating in the cooperatives; organizing seminars with those wanting to take part in the cooperatives
- Supporting farmers in establishing a board of founders and leaders of the cooperatives, exchanging ideas and building a plan of cooperative construction
- Consulting, and supporting the foundation of cooperatives, management, organization and collective actions inside the cooperatives
- Assisting the development of collective production procedure as well as regulation of internal quality management system for the cooperative

Result of the cooperative construction

- Number of members in the cooperatives

The cooperative specializes in producing and commercializing fresh longan. Long longan cooperative of Hong Nam commune was born with 22 members, in which there are 20 households directly produce longan while the other two commercialize it.

- Area cultivating Long longan of the cooperatives

The area cultivating Long longan of the cooperative is about 30 ha, in which the area already producing longan is approximately 25 ha with annual productivity of 50 ton of fresh fruit.

III.3.2. Supporting the commercialization of Long longan products

Supporting the identification of channels

The project has taken a market survey concerning fruit and longan market in Hanoi, including:

- + Distribution companies (like Phu Thai Company), 05 supermarkets
- + 30 fruit shops and such clue markets as Long Bien, Hang Da, Buoi,...

Supporting the establishment of commercial options for the products

Objectives

- Piloting new selling channels and exploring markets
- Improving capacity for commercial team of the cooperative: negotiating and making contracts with companies and agents according to new selling channels, etc.
- Consulting commercial team of the cooperative in making contracts with the distributors (like Phu Thai company), supermarkets, fruit shops and clue markets (Long Bien market for example)

Supporting activities already implemented

- Building selling scenarios for different distribution channels based on the support of risk between the project and the cooperative
- Supporting farmers in making contracts and developing new distribution channels
- Supporting the establishment of internal commercial activity regulations of the cooperative

Long longan of the cooperative is packed and labeled to distinguish with other longan products in the market. The households are responsible for their longan quality.

- Internal commitment in terms of commercial activities of the cooperative

The cooperative build a plan of product collection at the beginning of longan season. This plan is discussed and widely announced to households.

On the contrary, each household will inform the cooperative with their productivity and make commitment to sell their products to the cooperative.

Commercial households and households planting longan make commitment to use the same image (label and packaging) of the cooperative during the commercial procedure in order to establish the image of their own products or of the cooperative.

During longan season in 2006, commercial team engages in selling only products of trademarks to pilot new distribution channels. On the other side, consulting company support them to realize this in order to implement piloting activities of product consumption in Hanoi market.

- Product supervising and collecting procedures

The cooperative is responsible to supervise and control the packaging activities with the label of the cooperative during the piloting stage, that i.e. selling the product under the label of the cooperative.

- Supporting the design and label using regulations

According to these regulations, the label of the product is managed by the cooperative. The commercial team is the only group who can use this label to package and sell the product under the supervision of the management board of the cooperative. All the members of the cooperative are not allowed to use this label unless the management board of the cooperative accepts.

- Organizing customer meetings to introduce the product

Supporting and advertising the products through two customer meetings in Hung Yen province (August 9th, 2006) and in Hanoi (August 11th, 2006)

Result of the product commercialization

With the purpose of piloting commercial channels, the products have been sold in the following distribution channels:

- (i). Selling to supermarkets and retail shops through the distribution channels of Phu Thai Company: According to this, the product is well packaged and labeled. Then it is distributed directly to the distribution company- Phu Thai company- right at the store of the cooperative. According to this agreement, Phu Thai Company has the right to distribute exclusively longan of the cooperative to Hanoi market within 15 days. If the company can not distribute 1 ton/day, the cooperative then has the right to sell their product all over Hanoi market. However, the result of this piloting channel is not feasible.
- (ii). Wholesaling at Long Bien market- Hanoi: The product is mainly packaged in spongy box and sold at wholesale price to fruit shop in Hanoi. Each box can contain 30 kg of longan and each bunch of longan is put in reticule with all necessary information on the label (for example date of harvesting, producer, etc.)
- (iii). Directly distributing to retail shop/ kiosks

The channel organized by the cooperative is traditional channel of commercial households in the cooperative. The customers who play the role as the frequent and key consumers of this channel had had business relation before the foundation of the cooperative.

The quality of the product is built and regulated according to the standard of the cooperative (2nd basket). This is the most important factor in the consolidation of product commodity chain. That is why the quality of the product has to be supervised by the commercial team, management board and supervisors of the cooperative.



Economical efficiency achievements

Table 1: Cost for 1 kg longan in cooperative system

No.	Items of cost	Free channel	Labeling product channel
1	Buying price for farmers in cooperatives	X	X
2	The buying price is much higher for members of the cooperative, compared with other farmers who are not members of the cooperative	0	1.500
3	Collecting at the gardens + transporting to the stock of the cooperative	500	500
4	Packaging longan according to bunches	0	300
5	Undergoing loss	600	1.000
6	Transporting to Hanoi + Loading and unloading	600	500
7	Renting a kiosk in Long Bien market	100	250
8	Packaging and label	0	550
9	Telephone	50	50
	Total of cost	1.850	4.650
	Estimated profit	1.500	1.500
	Minimum price ensuring estimated profit	X + 3.350	X + 6.150

Consumers' comment for the product

One hundred percent of consumers and wholesalers in Hung Yen province remarks that the package and label of the product is very beautiful (even more beautiful compared with the one of the provincial Long longan association), as well as easy to transport. In addition, it is a wonderful present with the reticule bolt. However, from the point of view of customers, we should package at least 2 kg of longan in the reticule instead of 1.5 kg/ bag. In terms of the price, the majority of wholesalers said that it was so high and that they could buy longan at the garden of farmers with lower price.

The questionnaires were made at 5 longan shops in Hanoi. These are shops that frequently consume Long longan from Hung Yen. The total number of customers participating in our questionnaires are 60 persons, most of them are female at the age of 33- 35. The results of the questionnaires show that:

- They are frequent customer of longan shops or kiosks in the markets (80%). Rarely do they buy longan in the supermarkets since they find that is not convenient, moreover,

the price is higher. Or they can buy longan of vendors but the quality of the product is not so good).

- The proportion of customers buying longan of the cooperative:
 - + Once/ season: 60% of the customers, 1- 1.5 kg/ times, mainly for tasting
 - + Twice or three times/ season: for eating and giving present: 25- 30%
- Number of customers well informed of the product by television, press, and radio is very small (only 10% of the total customers), the rest is often frequent consumers of the fruit shops.
- Main reasons for their buying decision:
 - + Delicious: 80%
 - + Attracting label and package: 30%
 - + Clear origin: 20%
- Judgment in terms of quality: Most of the customers prefer longan of (1) Size: big, (2) Sweet level: strongly sweet; (3) Peeling level of flesh: easy to peel the flesh; (4) Color of skin: bright
- Remark on package and label: Nearly 100% of customers taking part in the questionnaires indicate that the label and package of the product are beautiful. Some customers suggest providing more information on the label, for example typing of longan, date of harvesting, etc.
- Most of the customers make comparison of longan prices in the market (especially compared with Thai longan). At this moment the price of Long longan from Hung Yen province is 1.5 times higher than the one from Thailand. Thus, the price should be reduced to meet with the demand of the customer.

Therefore, it is essential to convince customers by concentrating in the particular variety, processing characteristic, standard package and label and quality management system. Even in Hanoi market, there is a gap in the demand of quality, label and package according to the place selling longan. In general, the shops in the center of the city like Hom market require that longan is packed in reticule or basket while the other markets surrounding the city such as Cau Giay, Cau Trung Hoa, Buoï markets would like to pack longan only in spongy box.

IV. Conclusion and prospect

Conclusion after 6 months implemented

Although the project has just been implemented for 6 months, it has provided great support to Hung Yen Long longan in introducing the product in markets and piloting successfully some selling channels. In fact, the project has assisted farmers in developing their own civilian organization for the production and making business. Despite of this, the Long longan cooperatives have not succeeded in establishing an efficient quality management system. Moreover, the internal contradictions between members of the cooperatives in coordinating the production and commercialization have restrained the cooperatives' production planning and commercialization. Although the products of the cooperatives have been advertised, there have not been sustainable market channels for the product until now.

Prospect of the project

This project has made its plan for the year 2007 with the focus of completing the supports for farmers. In 2007, the project will concentrate on supporting cooperatives in developing a common production process, product quality management system, coordinating collective action, building internal management regulations, finance and profit division. In addition, the project will implement the construction of EUROGAP quality management system for fresh and processed longan of the cooperatives. Furthermore, the project will reinforce the support for cooperatives in finding new partners, introducing products, developing the relation of partners and supermarkets as well as great distribution channel in big cities.

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