

POMELO COOPERATIVE ASSESSMENT IN VINH CUU DISTRICT, DONG NAI PROVINCE, VIETNAM



A Research Project Submitted to Larenstein University of Applied Sciences in Partial Fulfillment of the Requirements for the Degree of Masters in Agricultural (Horticulture) Production Chain Management.

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List of Abbreviations

IPSARD	The Institute of Policy and Strategy for Agriculture and Rural Development
FAO	Food and Agriculture Organization
IPM	Integrated Pest Management
VietGAP	Vietnam Good Agricultural Practices
GlobalG.A.P	Global Good Agricultural Practices
MIDCA	The Integral model of Diagnosis for Co-operatives and Associations
UBM	The universal business model
WTO	World Trade Organization
TOWS	Strengths, Weaknesses, Opportunities, and Threats analysis
ISO	International Organization for Standardization
HACCP	Hazard Analysis and Critical Control Points
GDP	Gross domestic product
VND	Vietnamese dong

ABSTRACT

This study was conducted to assess the Tan Trieu Cooperative in Vinh Cuu district, Dong Nai province, Vietnam. The research aimed to find out main constraints that cause poor performance of the cooperative marketing function. Based on that, recommendations were made for the purpose of strengthening this function.

The primary data was collected by conducting survey of 17 members of the cooperative and 26 non-member farmers and interviews with other stakeholders (actors, supporters, and influencers). The answers of the respondents were then processed by analyzing tools like Excel, SPSS, UBM, MIDCA, PESTEC and TOWS analysis.

At this moment, the Tan Trieu cooperative is still a technical supporter but not an actor in the pomelo sector due to the fact that their marketing function is not operational. From the conducted study it revealed that most of farmers are in small scale but average yield of the commune is generally higher than the average yield of Vinh cuu district. Selling products through traders is the most common market channel in the sector. The farmers account for the largest proportion of value share, next come the traders. Interestingly, the value share of farmers increases in traditional festival in comparison to other time of the year while the opposite trend is observed for traders.

The results of internal organizational analysis illustrated that the products and its plant extension services are strong points of the cooperative while the cooperative structure and management issues seem to be its weaknesses. With regards to its structure, it seems that the cooperative did not have a clear vision and appropriate long-term perspective which reflected in its unrealistic goals and objectives. Furthermore, it was revealed that the decrease in ambition and commitment of the farmers to the cooperative is one of the main factors that hinder the cooperative from raising capital from its own members.

With regards to its management system, it is concluded that the management skills of board are insufficient. Important management means such as personal evaluation and setting strategic plan were not implemented. Consequently, the cooperative failed to position it in the market as well as realize its weaknesses which are important for setting strategies to overcome it.

Moreover, it was also concluded that there are even though supports from the government, the insufficiency and somewhat impractical in some policies (e.g. loan policy) make it difficult for the cooperative to access to financial sources from banks.

CHAPTER 1: INTRODUCTION AND RESEARCH BACKGROUND

1.1 Background information

Dong Nai is located in south-eastern Vietnam and bordered by: Binh Thuan, Lam Dong, Binh Duong and Binh Phuoc, Ba Ria-Vung Tau, and Ho Chi Minh City (Saigon) (Figure 1.2).

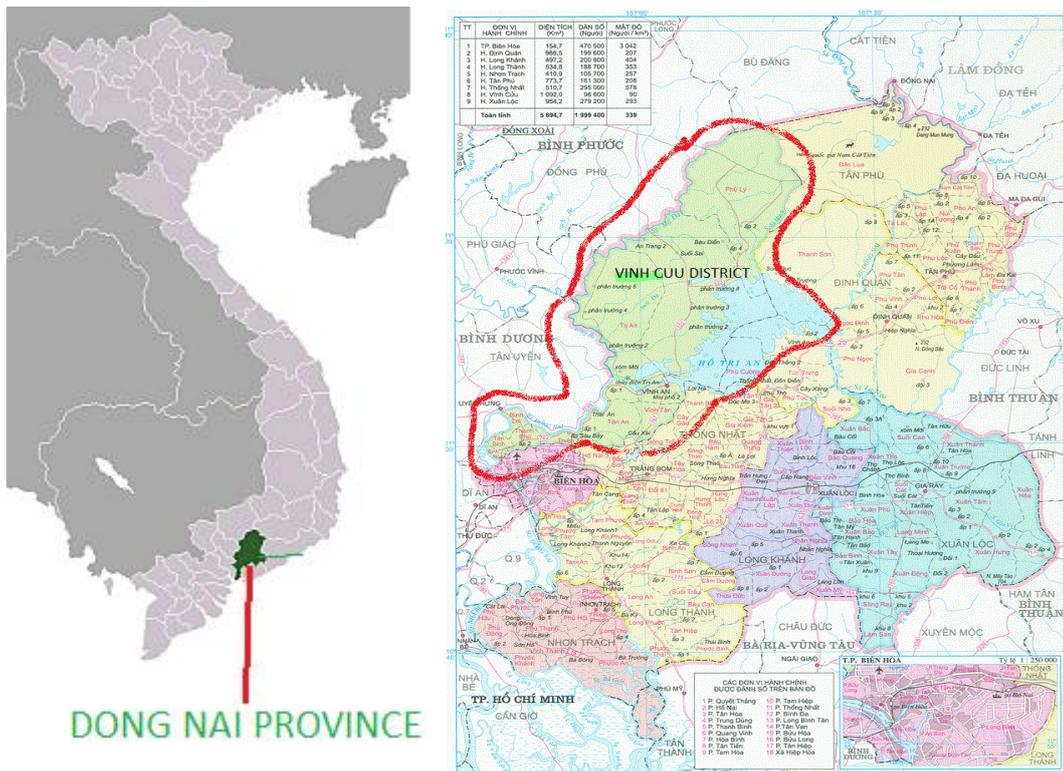


Figure 1.1: Dong Nai Province and Vinh Cuc District geography (VietNam, 2003)

Vinh Cuc district in Dong Nai province has about 750 ha of pomelo in which 370 ha is cultivated in Tan Binh commune and the rest is grown in 5 Dong Nai riverside communes. Having high quality with unique flavors, Tan Trieu pomelo has become a regional famous product of Tan Binh commune with the brand name Tan Trieu Bien Hoa. Recently, more than 50 units want to become domestic agents and there are some importers want to buy a large amount of Tan Trieu-Bien Hoa pomelo. However, the local pomelos are produced in small scale productions and are variable in quality in different communes. Similar to other agricultural producers, the pomelo producers cannot reach the potential market themselves and are depending on traders who normally pay with low prices.

In 2009, together with the support from the farmer association, Tan Trieu cooperative was established in order to support the farmers in issues such as:

- Improving pomelo farming system with aims of increasing productivity, quality and food safety of pomelo
- Connecting directly farmers with markets in order to dismiss the dependency of farmers on traders and to increase farmer's income.

Initially, there were 21 household members agreed to participate and establish the Tan Trieu pomelo cooperative in Tan Binh commune. The total capital of the cooperative was 200 million VND and the total area of cooperative pomelo was 10 hectares. However, until now, the operation of cooperative can only focus on supporting farmer to improve the farming system, and broadcast Tan Trieu pomelo product to market through some fruit festivals or agricultural fairs. Recently, there are only 20 members cooperating in the

1.2 Problem Statement

The Tan Trieu cooperative was initially established not only to support the growers with technologies but also to do marketing function. This function focuses on finding the potential markets, promoting the local pomelo and being a link between the local growers and the markets in order to create more sustainable chain and more profit for the producers as well as to reduce the dependence on traders. However, until now their business activities solely limited in promoting the pomelo of its members through agriculture fairs, but trading activities like collecting, purchasing pomelo from its members and selling to markets haven't yet achieved. As a result, based on cooperative perspective, most of the members of the cooperative are continuing bringing their products to the markets through traders who profit by buying with low prices and selling with much higher prices to the urban areas. Consequently, the growers' profits are low and the cooperative is unable to reach their initially goals.

Problem owner:

Tan Trieu pomelo cooperative.

1.3 Objective

This research aims to find out constraints which lead to poor marketing function of Tan Trieu pomelo cooperative and provide recommendation to cooperative for strengthening this function.

1.4 Main Research Questions

1. What is the current situation of pomelo sector in Vinh Cuu district?

- 1.1 Who are stakeholders in the Vinh Cuu pomelo chain?*
- 1.2 What are the roles/ functions of the stakeholders (chain actors, influencers and supporters) in the pomelo sector?*
- 1.3 What are current channels for the pomelo growers to sell their products?*
- 1.4 What are the quality and quantity requirements of the defined markets?*
- 1.5 What is value share between actors in the chain?*
- 1.6 What are internal constraints of the cooperative to do their marketing functions?*
- 1.7 What are external factors that influences on the cooperative in doing their marketing functions?*

2. What can be done to strengthen the marketing function of the pomelo cooperative in order to reach potential domestic markets ?

- 2.1 What are possible improvements in internal environment of the cooperative that strengthens its marketing function?*
- 2.2 In which way, the cooperative can support its members in producing pomelo, which complies with requirements of the defined market?*
- 2.3 In which way supporters can facilitate and support the cooperative in order to strengthen its marketing function?*

1.5 Research framework

The research will be undertaken in 2 stages (pre-implement stage and implement stage) as describe in the research framework presented in figure 1.2. The framework is an schematic representation of the steps that need to be taken in order to achieve the defined objective (Verschuren and Doorewaard, 2010). The ultimate goal is to find out strategies to strengthen the cooperative’s marketing function, thus diagnostic of the current pomelo sector as well as the internal and external environment that hinder the cooperative from achieved its initial goal is essential. Data and information required to answer the research questions will be collected by means of desk study in which various sources of information such as scientific journals, articles and other publications will be used, survey farmers and interview with different stakeholders in the pomelo sector. After completion of the primary data collection from the field, data analysis was done. Based on the findings, a conclusion was drawn which was followed by the recommendation and suggestion strategies to improve the marketing functions of the Tan Trieu cooperatives.

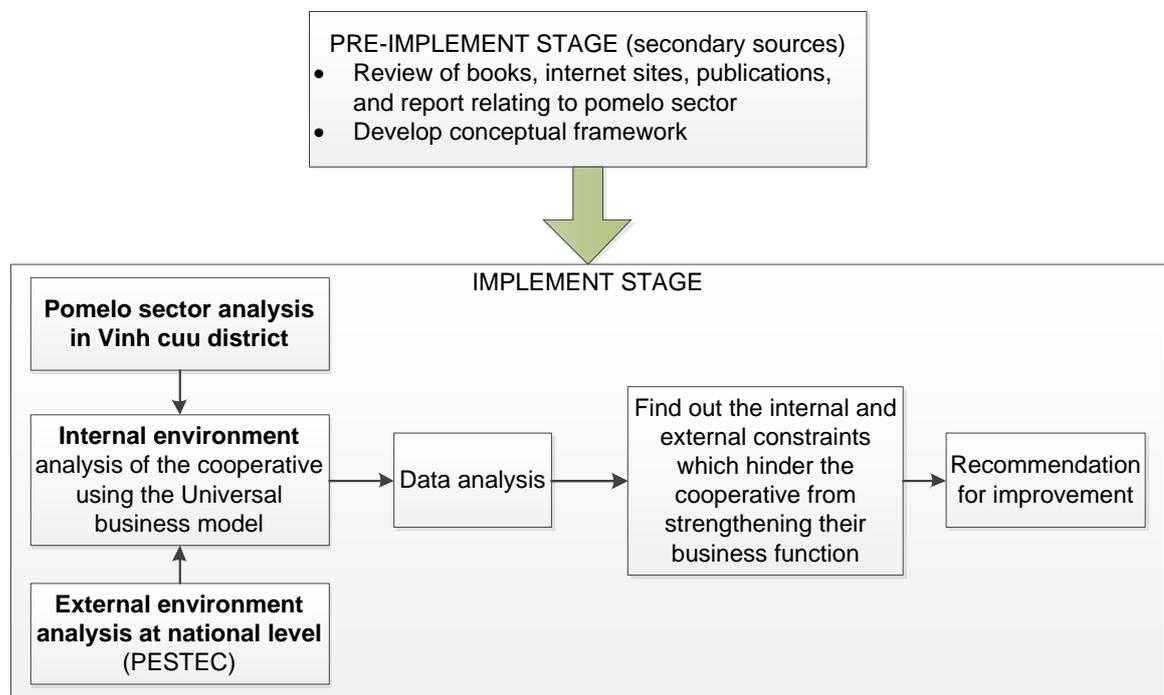


Figure 1.2: Research framework

Conceptual framework

The value chain concept (figure 1.3) will be used to map out the various chain actors as well as other chain supporter and influencing agencies. Findings from interviews are analysed using chain maps, stakeholder analysis matrix will be used to analyse pomelo sector in Vinh cuu district. Data of costs incurred and revenues received that is supplied by the respondents and additional secondary data from the Vinh cuu district office will be used to calculate value share among the various chain actors and across the chains. PESTEC analysis is used to analyse external environment (national level) in term of Political, Economic, Social, technology, Environment, Culture which influence on the cooperative.

On the other hand, student also uses the universal business model (UBM) to analyse the internal environment of the cooperative.(Dowding, 2003). The criteria of the model are also used to develop a checklist for interviewing the cooperative staffs. Moreover,

the Integral model of Diagnosis for Co-operatives and Associations (MIDCA) (Martinez) is used as a grading system to evaluate priority weak aspects of the Tran Trieu cooperative.

MIDCA support user to understand easily and simply organization's situation and operation whereby starting to create and apply action plan in order to strengthen the organization. (GDF, 2012)

Continuously, based on result of internal and external analysis of Tan Trieu cooperative, TOWS matrix was used as the method helps researcher identify relationship between strengths, weaknesses, opportunities and threats of the cooperative in order to develop strategies for the achievement of its organizational objective (Wehrich, 1982).

The result of the analysis is expected to find out internal and external constraints of the cooperative to do the marketing function. Consequently, based on these finding and information from literature review, student will give recommendation to the Board of Tan Trieu cooperative.

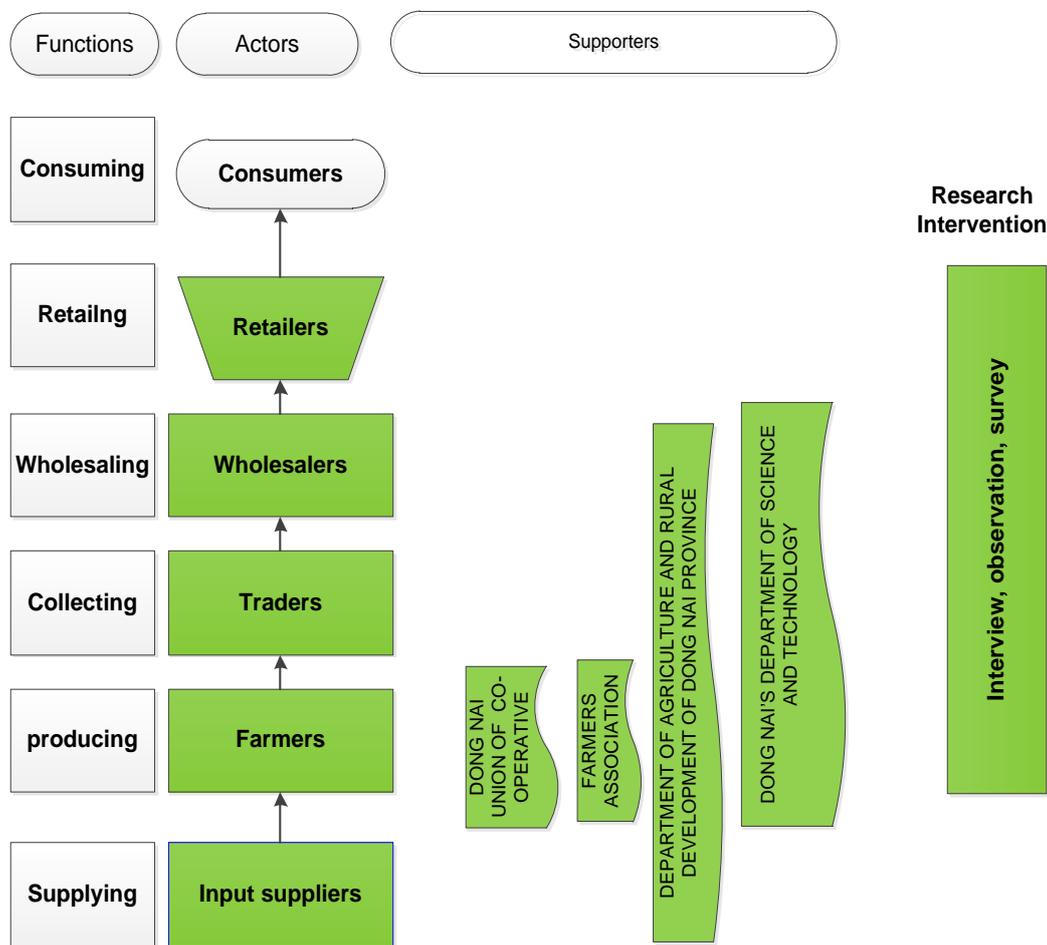


Figure 1.3: Value chain concept

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction to pomelo

2.1.1 Pomelo production and locations in Vietnam

Worldwide grapefruit production in 2010 was 6.23 million tons, which was an increase of 14% above the 1997 - 1999 average (FAO, 2012) and nearly all of the increases occurred in developing countries. In Vietnam, pomelo production area increased gradually from 196,500 tons (2004) to 296,400 tons (2007) and accounted for around 5.8% of the global grapefruit production. Among all kind of fruits, pomelo accounted for about 5% of the total fruit production with approximate 209 thousand tons in 2004 (figure 2.1).

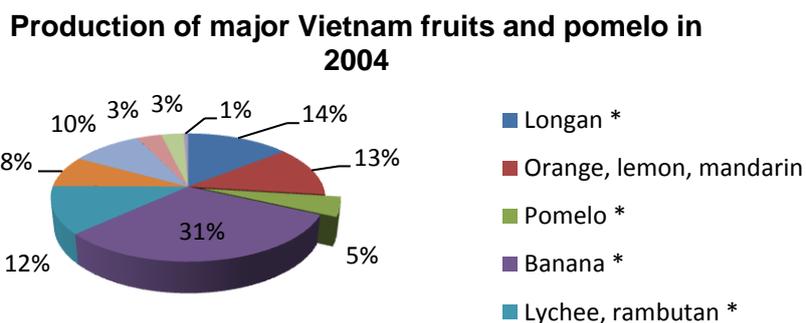


Figure 2.1: Production of major Vietnam fruit and pomelo in 2004

(IPSARD, 2008) Note: * export fruit

In Vietnam, pomelo is grown in almost every province, especially in the southern parts of the country. In 2007, the Mekong River Delta contributed to more than 60% and the Southeast area contributed to about 9% of the country pomelo production. (Figure 2.2) (IPSARD, 2008).

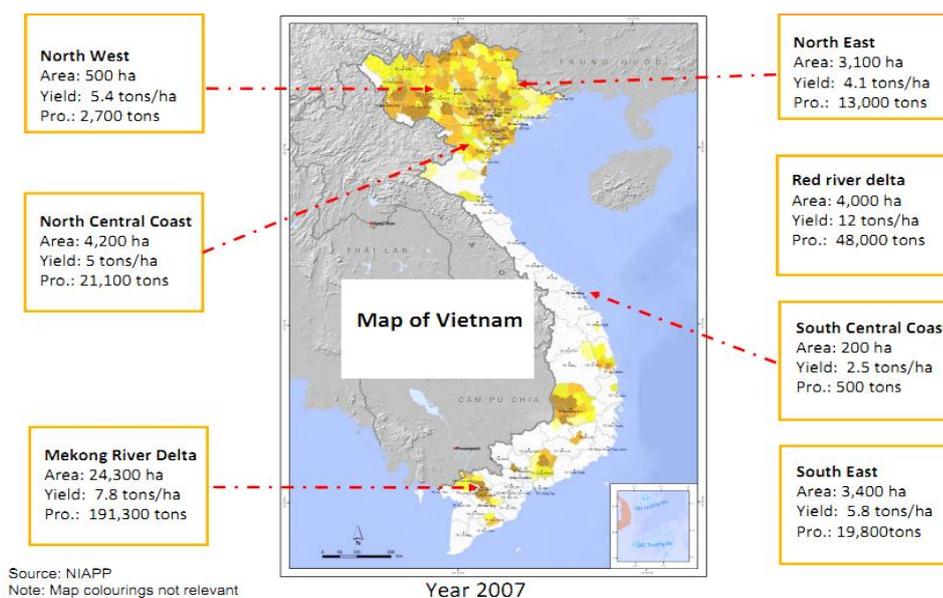


Figure 2.2: Main pomelo production area in Vietnam

(IPSARD, 2008)

2.1.2 Pomelo plant information and Pomelo products

Basic features

The pomelo (or pummelo, pommelo, shaddock), which has botanical name under *Citrus maxima* or *Citrus grand*, is a citrus fruit, usually pale green to yellow when ripe. The fruit is distinguished larger than other grapefruits and is the largest fruit in the citrus family, growing as large as 30 cm in diameter with weight of 1-2 kg, some can be even bigger. Pomelo is native to south-east Asia and a number of Pacific Islands. The best growing environment for pomelo is in warm climates with lots of rainfall. Even though it is an ideal choice for tropical zones, but it also grows well in subtropical climates. Trees also can grow well in swampy damp soil and are often found growing wild along river banks and streams. It is grown commercially in Asia (Dung, 2007).

Pomelo varieties in Vietnam

There are many different pomelo varieties with different features in Vietnam but there are 5 main varieties spreading different region of Vietnam, detail characteristic of them are describe in appendix 3. The following paragraphs describe characteristic of the 2 main pomelo varieties which are growing in Vinh Cuu district of which Duong La Cam is local variety.

Table 2.1: Main pomelo varieties are planted in Vinh Cuu district

Variety	Location and Character	Illustration
Duong la cam:	Famous variety in the Southeast Vietnam especially in Dong Nai province. The fruit is low piriform in shape with yellowish green peel when ripe. Fruit weight is about 1.3kg. Flesh is easily separated from mesocarp, light yellow in colour. Juice is alot, good and sweet in taste (Bix of 10.6 %). The fruit has many seeds but growing seedless is possible with suitable separation method.	 <p>(Hue, 2011)</p>
Buoi da xanh:	Growing widely in the Mekong Delta area. The fruit is round in shade with green skin when ripe. Fruit weight is between 1.8 to 2 kg. Flesh is pinkish red and easily separated from mesocarp. Juice is average, sweet (Brix is between 11-12%) and good in taste, strong flavor with number of seeds per fruit.	 <p>(DST, 2011)</p>

Pomelo-derived products

Pomelo is usually eaten fresh like other grapefruits. The fruit is also squeezed for its juice. Besides, in some provinces in Vietnam like in Dong nai province pomelo is used for a local special salad, a fermented product called “nem” and local pomelo wines. Their essential oils are extracted for oils and for producing mosquito repellent products (Hung, 2008)

2.1.3 Pomelo consumption and factors influencing domestic consumption

In 2007, domestic pomelo consumption was 295,765 tons (account for 99.7% pomelo production of Vietnam). According to experts of the Institute of Policy and Strategy for Agriculture and Rural Development, key influencers of pomelo consumption were GDP, availability and price. Even though, it was still not concluded that there was a strong relationship between GDP level and consumption of pomelo, it was observed in some developing countries (China, India...) that grapefruit consumption per capita has risen as GDP per capita has increased. Similar observation was seen for availability. On the other hand, there were an inverse relationship between pomelo demand and price in some countries although the true causality was still unclear (IPSARD, 2008).

Although accounting for 5.8% of the global grapefruit production, the exporting pomelo from Vietnam is low (only 0.3% per total production). The reasons for that can be explained by several factors as following (IPSARD, 2008):

- Export prices of Vietnamese fresh pomelo are higher than others
- There are overlaps between Vietnam's main growing season (at the end of calendar year) and the US's and countries in the Middle East's which leads to a slightly decrease in the advantage of its relatively long growing season.
- Low application of global standards and food safety standards which are an important element of global competitive market
- Size of orchards is small-scale and mixed with other fruits.

2.2 Agriculture cooperative

2.2.1 The nature of agriculture cooperative

Definitions

The ICA (International Cooperative Alliance) defines cooperative as “an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise” (ICA, 2012).

According to Koopmans (2006) “A cooperative can be defined as a member-controlled association for producing goods and services in which the participating members, individual farmers or households, share the risks and profits of a jointly established and owned economic enterprise.”

In agricultural sector, farmers are establishers of the cooperatives in order to react against unfavorable market conditions. Problems such as low price at farm gates due to inadequate marketing strategy for the products, or buying expensive farm inputs like fertilizers, seeds are normally faced by farmers. By establishing agriculture cooperatives, farmers expect to solve the problems, thus generate more income (Koopmans et al., 2006).

Type, level and function of agriculture cooperative

There are different classification systems for cooperative in general and for agricultural cooperatives in particular. The classification can be based on their orientations toward certain interest (like marketing, service, financing, or consumers' interests) (Koopmans et al., 2006). On the other hand, categorization of the cooperative can also be laid on the difference in their operation principles regarding their ownership, control, benefit allocation arrangements (traditional and proportional cooperatives). Other scholars

introduce different cooperative models such as Nilsson's classification or Cook's classification. Indeed, it is difficult and complicated to find out which model is the best cooperative model but it depends on the business environment and set of political, economic and other social factors that make one model experiences favorable over the others.

Levels of cooperatives are generally graded based on their scope of activities. While primary agriculture cooperatives are normally organized at local level, secondary cooperatives consist of several primary cooperatives operate at regional or higher level aim at strengthening the bargaining position toward other parties (for example input suppliers).

Although some cooperatives are established in order to take advantage of business opportunities, most of cooperatives are created for defensive purposes. This is when the farmers realize that they share common problems that cannot be solve individually such as lack of sufficient agriculture marketing outlets, lack of input supplies or unbalance power between farmers themselves and other parties (buyers or suppliers) to deal with market failure related to production efficiency and economic scales, and transactional efficiency (Kyriakopoulos, 2000).

Field of interests of agriculture cooperatives mostly focus on (Koopmans et al., 2006)

- Input supply: purchase of seeds, fertilizers, machinery and technologies
- Collect and process farm products
- Marketing of products
- Finance: banking, credit supply and assurance

The cooperative' principles

The cooperative principles were first introduced by the Rochdale Pioneer and were referred to as traditional principles. The International Cooperative Alliance (ICA) has been considered the most prominent exponent of this ideology and is responsible for revising and updating this idea. ICA describes cooperative principles as following (ICA, 2012):

1. Voluntary and Open membership
2. Democratic member control
3. Member Economic Participation
4. Autonomy and Independence
5. Education, Training and Information
6. Cooperation among Cooperatives
7. Concern for the Community

The development of Vietnam Agriculture Cooperatives at a glance

In fact, the origin of Cooperative in the world can be traced back to more than 200 years ago, during the period of industrial revolution and since then they have grown rapidly in size and number. In North European and North American countries, they are an important form of organization and contribute significantly to the nation economy (GRET, 2010).

In Vietnam, Cooperatives were established about 60 years ago with distinctive features which can be divided to two periods.

Before the Renovation period (Or before “Doi moi” policy - the name given to the economic reforms initiated in Vietnam in 1986 with the goal of creating a "socialist-oriented market economy"): the establishment of Cooperatives were not based on practical cooperation demands but was a kind of political strategy of the collectivization of agricultural production. In this period, private ownership was not considered important. This is contrary to the *individualism* that contributed to the emergence of modern organizations including cooperatives worldwide during the great social transformation from pre-modern to modern world. The major disadvantage of the collectivization of agricultural production was that an incentive for the individuals to work diligently had been lacking. This accounted for the low level of income and a high degree of poverty which had been spread all over the country during this period (Wolz¹ and Duong, 2010).

After 1986 to the old-style (collective) farms lost their reason of existence and many of them were dissolved. In 1997, the Cooperative Law was adopted (revised in 2003); Cooperatives could be transformed into membership-oriented service cooperatives promoting the income of their members. This transformation took place at local and nation level, resulting in the establishment of new-style cooperative (transformation of collective farms into viable service cooperatives) and formation, registration of completely new agricultural cooperatives. By the end of March 2005, there were total of 8,595 Agriculture Cooperatives in Vietnam, in which 6,115 were transformed, 284 still under transformation and 2,196 cooperative newly established. There are several differences between the transformed cooperatives and newly established cooperatives related to their membership, range of activities, shares in cash etc. For example, if the transformed cooperatives open to all agriculture households, the completely new cooperatives restrict to those share highly focused objectives. The newly established cooperatives build up their funds in form of share capital from scratch, while in general no subscription of shares in cash for the other types of cooperative.

Recently, there is a rapid increase in the number of agricultural cooperatives. By the end of June 2007, already 17,599 agricultural cooperatives had been registered. In addition, agricultural cooperatives at secondary level are also increasing. By the middle of 2007, there were 39 cooperative unions had been registered across the country aim at strengthening the bargaining position toward other parties (for example input suppliers) (Wolz¹ and Duong, 2010).

2.2.2 Cooperative management

Managing a cooperative is challenging and difficult. It consists of different tasks such as managing resources, business operations, dealing with problems originating from the cooperative's distinctive characteristics (as the cooperative's members are both owners and patrons of the cooperative). Thus finding the balance between operational success and sustainability (long-term) and member satisfaction (often a short-term objective) is one of the most difficult and most important tasks in managing the agriculture cooperative.

Similar to other type of business, three major types of resources must be managed in a cooperative including people, capital, and facilities.

Managing the people

Personnel management is a critical phase of business management. It begins with the selection of personnel like a steering committee (the leader board, supervisors),

followed by training and evaluation. A steering committee should have good business sense, knowledge of cooperative organization and they should be respected by members of the community (Koopmans et al., 2006). Personnel management should also include planning and delegating responsibilities and authority, analyzing jobs, and setting performance standards. Setting proper compensation, benefits, incentives and rewards are also important issues in personnel management.

In a cooperative, member relationship management is very important. Thus keeping the members informed about policies, operating practices, financial status and pointing out their responsibilities for the cooperative success need to be carried out continuously. Organizing regular member meeting is one of the mean for that purpose. Besides, a continuous effort is also needed to attract new members to maintain the organization and an adequate volume of products or services (USDA, 1997).

Managing cooperative capital and facilities

Financial management is one of the utmost important issues of cooperatives. It involves considerations of available funds, allocation funds among activities that require financial needs, and to make sure that all aspects of financing are dealt with are consistent with sound business practices and obey the cooperative principles.

Other cooperative assets include building and equipment also require adequate considerations such regular maintenance; rearrangement; daily operating cost records; grounds maintenance, pest control; and compliance of safety, health, and other environmental regulations (USDA, 1997).

2.2.3 Factors influence Cooperative success

The following paragraphs list and describe important factors that considered as main drivers for cooperative success. Most of the information is referred to the work of Koopmans (Koopmans et al., 2006).

Motivated members

As the members of cooperatives are both owners and patrons of the cooperative, their motivation and commitment to the organization are essential and are the basis for the success of the cooperative. It has been seen that there is no use of having inactive or non-committed members. Members should participate in not only the provision of resources (capital, products) but also decision making processes of important issues and in the produced benefits generated by the organization. As mentioned previously, non-committed members (as the case of farmers in collective farms in Vietnam before the Renovation period) can affect directly and tremendously the efficiency of the cooperative operation.

Committed leaders

It is important to have effective leaders right at the early stage of the cooperative establishment. Leaders are driving forces of the cooperative, who play important role in accounting both members' interests and needs (often short-term objective) and long-term commercial goals of the cooperative enterprise and make sure that those objectives are balance.

In fact, since most members of the cooperative have no experience in managing a business enterprise, the leaders should be trained and exposed to practical

experience. Besides, regular training opportunities should be provided for all members who have aspirations or potential to serve in boards or the committees.

The managers and board of director should also have freedom to operate the enterprise for a certain extent in order to be able to quickly adapt and response to the changes of external conditions if necessary. However, transparency and matters such as well inform the members are utmost important.

Other factors

Market is one of the major factors that should be considered and thoroughly studied when establishing a cooperative. The cooperative should be well positioned in the market so that it can be able to compete with other competitors. In order to achieve that existing and future market with economic opportunities need to be determined carefully. On the other hand, technical and economic feasibility should also be assessed properly. This includes analysis of potential risks like political, financial, market risks and technological related problems. After that, strategies need to be made to overcome the problems.

It is important to notice that during the preparatory period, advisors and consultants may be required for assessing or conducting a feasibility of starting a new business enterprise.

Financing is another important and essential factor that contributes to the success of the cooperative. Financial sources of a cooperative can be generated from its own members (most important sources), from surpluses of the cooperative and external sources. It is very true that it is difficult to have enough capital to cover all financial needs just by funds exclusively from the members. Note that, expected financial returns are only generated after some time (can be years) when the cooperative is fully operational and creating profit. Thus, members of the cooperative must be prepared, understand and patient in waiting for their returns.

Last but not least, other factors like legislation and organizational structure are also take important role in the success of the cooperative.

CHAPTER 3: METHODOLOGY

3.1 Research area

According to report of the Department of agricultural and rural development of Dong nai province, Vinh cuu district contributed up to 50% pomelo cultivated area in Dong nai. Especially, the local varieties (Duong La Cam, Duong Nuom, Bui thanh) are planted majority in the area. The advantage of Vinh cuu pomelo production is that the quality is higher than the other districts in Dong Nai. Dong Nai government is planning to invest and develop the area to become a specializing area in the growing of pomelo. (Son, 2010). Tan Trieu cooperative which is the commissioner of this research was established in Tan Binh commune, Vinh Cuu district in 2009.

3.2 Research strategies

Fieldwork of the research is conducted from July 16th to August 16th 2012. Fieldwork consists of survey with pomelo growers in Tan Binh commune and interview with different actors in the current pomelo sector (growers, trader, wholesalers, retailer and supporters).

3.2.1 Survey

The surveys will be distributed to 40 farmers in Tan Binh commune including 2 equal groups. The contact information of 21 members of cooperative will be provided by production vice chairmain of Tan Trieu pomelo cooperative. The list of 20 nonmembers will be chosen through support from agricultural officer in Tan Binh commune. Tan Binh district growers are chosen because the cooperative is operating in this commune, and all of the members are citizen of the area. Tan Binh is also the main pomelo production area in Vinh Cuu district with 347 ha

The aim of the survey collecting data of production, agronomic, market channel, quality requirements of market, expectations of farmers with Tan Trieu cooperative. After surveying with individual growers, the student will interview the farmers regarding to price, selling channel of growers. In particularly, 20 members of the cooperative will be asked for internal and external constraints of cooperative and possible changes to improve marketing function of the cooperative.

Surveys will be conducted by using a (semi) structured questionnaire (appendix 2). The respondents will answer the questionnaire with support from student by translating and reading. The data collect from the survey will answer several sub-questions and ultimately aim at answering main research questions.

The raw data of surveys will be analysed by using SPSS version 19 and Microsoft excel 2010.

3.2.2 Case study and Interview

The second part of this study is to conduct interviews with several stakeholders (appendix 3) in the chain in order to find out current internal environment of the cooperative, overview of the pomelo sector in Vinh Cuu district, external constraints of the cooperative which hinder the cooperative to do their marketing function. This part is divided into case study and interview with stakeholders of the pomelo sector

Case study 1: Interview two cooperative staffs: the business vice chairman, the technical vice chairman. The checklist of interview cooperative staff based on 55

elements of Universal business model which is tool to analyses the Tan trieu cooperative.

Interview: Aim at collecting qualitative and quantitative data regarding to role and functions of different stakeholders (2 traders, 3 wholesalers, 2 retailers), current market for Tan Trieu pomelo, value share, strategies and plan of government and supporter to support for pomelo sector as well as Tan Trieu cooperative.

3.3 Expected output

It is expected that this research will yield recommendations on how to strengthen the marketing function of the Tan Trieu cooperative in pomelo sector in Vinh Cuu district.

3.4 Definition of terminologies

GlobalG.A.P. “is a private sector body that sets voluntary standards for the certification of production processes of agricultural products around the globe”. The aim of the standard to reassure the producers produce food with minimum damaging impact on environment of their farming system, reduce chemical use and guarantee the obligated approach for health and safety of labour. GLOBALG.A.P. function as a practical manual for Good Agricultural Practice (GLOBALG.A.P., 2012).

VietGAP: is also a voluntary standards and guidelines to help individuals and/or organizations from producers to consumers in order to prevent risks of food safety, produce quality and labours in production, harvesting and postharvest handling of fresh fruit and vegetables. The standard was developed based on GLOBALGAP and but it is less strict with fewer criterions than these standards. VietGAP was created with aim harmonizing the product standard and facilitating the trade of fruit and vegetables in the Southeast Asia and the world, and due to a need of suitable sustainable agriculture standard for Vietnamese agricultural condition (MARD, 2008)

Geographical Indicators (GIs): are identifying signs which allow distinguishing product on the market like trademarks or commercial names. GIs attend to a marketing tool which can add value to agricultural products by spreading a cultural identity such as specific geographical location or origin, the traditional process and developing a unique identity for the products. If it can be used in concrete way and are well secured, the tools can be an valuable marketing tool to promote and upgrade value to agricultural products (Addor and Grazioli, 2002).

CHAPTER 4: RESULTS

4.1 Current pomelo sector in Vinh Cuu district

4.1.1 Stakeholders of the pomelo sector in Vinh Cuu district

Actors

The actors of the pomelo sector in Vinh Cuu district can be found in figure 4.1 and their roles are described briefly in the following paragraphs.

Input suppliers

According to an officer of the Plant Protection Department of Vinh Cuu District, there are 10 local chemical shops in the area provide fertilizers (organic, inorganic), pesticides and chemical to the pomelo growers. In addition, there is a huge demand for organic fertilizer made of muck from cow, pig, chicken, and quail, but the supply source is not stable because the pomelo sector has to compete with rubber and coffee. Even though Dong Nai is one of the provinces have strongest animal poultry husbandry in Vietnam, where plenty of raw material for composting is available, compost production in this area is usually produced individually in small scale for only family use. The local shops don't have enough many option for farmers to choose, therefore sometimes the farmers have to come to bigger suppliers in Bien Hoa city. The farmers usually buy inputs by cash, so postpone in input application often happen when credit is lacking. In fact, the farmers suppose that a few delay days won't impact too much on their fruit yield and quality. Some of chemical sellers are informal technical consultants for farmers. It has been observed that the pomelo yield and quality decreased due to wrong recommendations (wrong chemical, dosage, time apply) and the use of expired or even fake fertilizers which are sold in local shops.

Pomelo growers

Based on statistics of the Department of Agricultural and Rural Development of Vinh cuu district up to April 2011, the whole district had 703 ha with 554 pomelo growers (appendix 3.3.A). The farmers gather mainly in four communes: Tan Binh, Binh Loi, Binh Hoa, Tan An which located along Dong Nai river. The average pomelo fruit yield is about 14 tons /ha/year. The average age of pomelo farmer in the area is 52 and female farmers account for 18.6% (data from this study).

Trade

According to interview with biggest trader named Nguyen Thi Kim Dung who has 14 year purchasing pomelo in the area. There are 5 or 6 big traders, who take a role as collector, trader, and wholesaler in the Vinh cuu area. As collectors they purchase, harvest, sort, and grade pomelo before selling to street vendors, retailers (70%), other wholesalers (20%) and consumers (10%) in the area.

Wholesalers

Three main pomelo wholesalers in Vinh Cuu are Que Huong, Nhon Hoa, and Nam Hue. The wholesalers collect fruit from traders, their own orchards, and directly from farmers. The enterprises mainly retail product in Dong Nai province (60%) in their own shop and wholesale the rest of their products to outside of the province (40%). On the other hand, in order to add value to the pomelo (class 3) which cannot be sold at good

price, the wholesalers also process pomelo wine from these pomelos. Annually the three wholesaler produce 57,000 liters pomelo wine (19 %vol). Packaging of the product also is developed to satisfy the demand of market such as can, bottle, pomelo-shape bottle. Particularly, Nam Hue enterprise is not only a wholesaler and retailer of the pomelo sector, but also an eco-agro tourism enterprise which promotes for Tan trieu pomelo in Vinh Cuu district.

Retailers-Street vendors

The average number of pomelo street vendors and retailer in the sector is about 150 and 20 respectively. However, these numbers vary between seasons. According to big traders, the street vendors usually purchase pomelo from traders, but sometimes they also collect directly from farmer's orchards. However the second channel doesn't happen during main harvesting season because of the farmers normally sell their pomelo to traders who purchase the whole orchard. The street vendors and retailers retail to consumers in Dong Nai province and the rest to other neighbor province such as Ba Ria-Vung Tau, Binh Duong and Ho Chi Minh City.

Consumers

According the owner of Que Huong wholesaler, Dong Nai citizens consume majority of pomelo in Vinh cuu district (60-70%). High and medium income consumers usually buy class 1 and class 2 through traders, wholesalers, retailers while low income consumers buy class 2 and3 through retailers, street vendors.

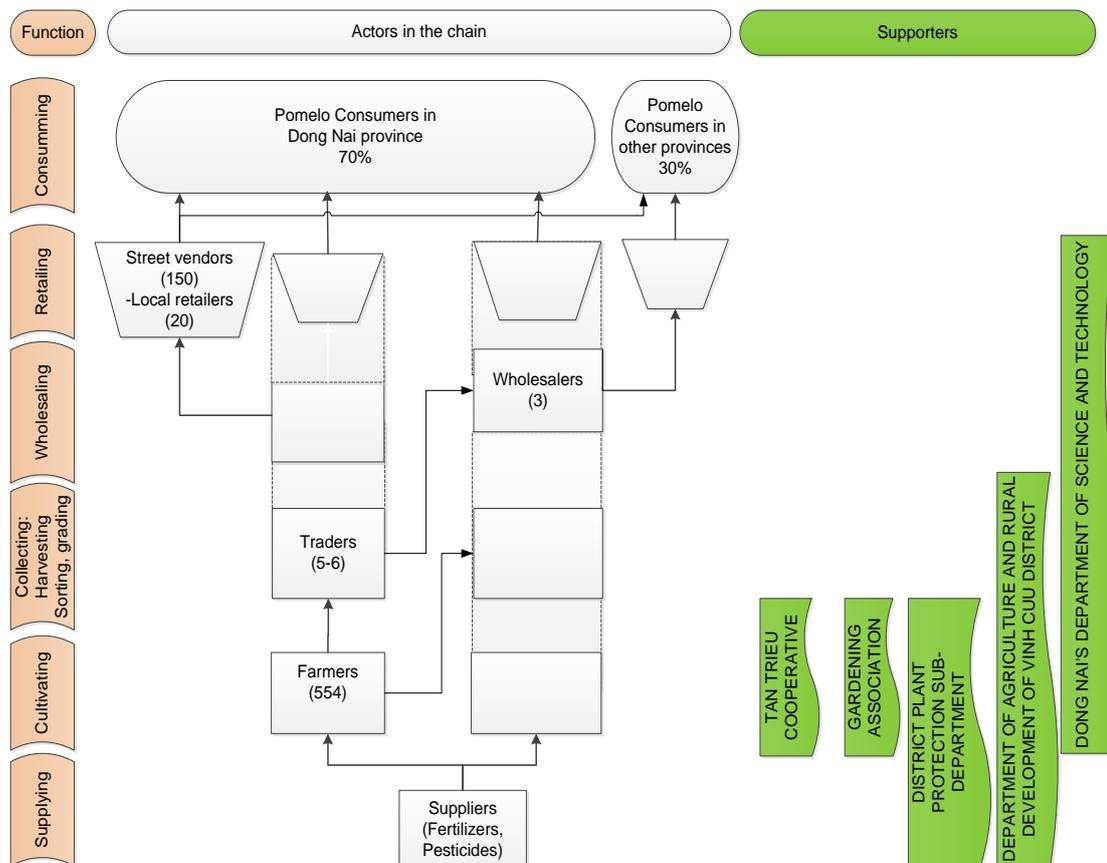


Figure 4.1: Pomelo value chain in Vinh cuu district

Chain supporters and influencers

Table 4.1: Chain supporters

Organisation	Role	Activities	Effect on the pomelo sector
Tan Trieu Cooperative	The cooperative was established in order to become an actor in the chain collector, wholesaler in order to increase benefit for farmers and provide extension service to pomelo growers. However, until now the cooperative is just a technical supporter for farmer and their marketing functions are not operational	<ul style="list-style-type: none"> - Advising agricultural technology to members - Cooperating with other supporters help farmers produce pomelo complies with VietGAP, GlobalG.A.P. - Promoting Tan Trieu pomelo through agri-fairs 	<ul style="list-style-type: none"> - Cooperative members have 6.7 ha pomelo comply with GlobalG.A.P and 3.1 ha comply with VietGAP.
Gardening association	The role of representatives is to take care of the rights and interests of farmers.	<ul style="list-style-type: none"> - Collaborate with Dong Nai department of science and technology to build Geographical Indicators (GIs) for local pomelo - Collaborate with the Plant Protection Department of Vinh Cuu District organize IPM training class for pomelo growers - Support farmers preserve local varieties. 	<ul style="list-style-type: none"> - Developing trade name Bien Hoa-Tan Trieu pomelo in order to add value to pomelo products - Upgrade quality productivity - Decreasing an effect chemical applying on growers or labours
District Plant protection sub-department	Technical supporter State management unit	<ul style="list-style-type: none"> - To carry out plant protection extension activities - To conduct pesticides management (business, usage) - Field examination, report to competence authority (province level) 	<ul style="list-style-type: none"> - Training, propagandizing integrated pest management (IPM) to pomelo farmers
Vinh Cuu Agricultural	Technical supporter	<ul style="list-style-type: none"> - Transferring new agriculture technology to farmers 	<ul style="list-style-type: none"> - Delivering free bag, organic chemical to some model farmers in order to raise

Extension Centre		<ul style="list-style-type: none"> - Training, updating farmers with modern technologies and innovations in order to increase productivity 	farmers' awareness of using bio pest control (to reduce effect of chemical on product and farmers' health and increase productivity, quality of pomelo)
Department of agriculture and rural development of Vinh Cuu district	<p>Policy marker To act as a counselor for people's committee of Vinh Cuu district to develop agricultural infrastructure</p>	<ul style="list-style-type: none"> - Manage expenditure which use to support for agriculture sector in Vinh cuu district - Coordinator of agricultural development project in Vinh cuu district. - Statistical changes in agricultural land, implementation of appropriate cultivation measures for rational exploitation and utilization of land resources, water for production agriculture 	<ul style="list-style-type: none"> - Support to promote the pomelo sector - Coordinating projects which support finance to develop an area specializing in pomelo cultivation in 3 communes along Dong Nai River such as Tan Binh, Binh Loi, Tan An. - Coordinating project which supports member of Tan Trieu cooperative in Tan Binh commune in producing pomelo complies with GlobalG.A.P and VietGAP in Vinh cuu district. - Based on decree 24/2008/NQ-CP named "Tam Nong", the department implements project supports variety to farmers who establish new pomelo orchards. In the project, the department purchase variety from Tan Trieu cooperative about 200 million VND/ year
Dong Nai department of science and technology	<p>Technical supporter Financial support</p>	<ul style="list-style-type: none"> - Guiding, supporting finance to Gardening association build trade mark and Geographical Indicators (GIs) for pomelo in Vinh Cuu district with brand name Tan Trieu pomelo 	<ul style="list-style-type: none"> - Support and promote pomelo in the Vinh Cuu district through trade mark and Geographical Indicators (GIs) in order to add value to pomelo product.
Influencer: Dong Nai Union of cooperative	<p>Advisor and trainer of Tan trieu cooperative staff</p>	<ul style="list-style-type: none"> - Advising law, regulation in order to established cooperative - Training cooperative staffs 	<ul style="list-style-type: none"> - Tan Trieu pomelo cooperative was established in 2009

4.1.2 Current pomelo production in Vinh Cuu district

At the beginning the number of farmers chosen for participating in the survey was 40 (20 member and 20 non-member farmers). However, in reality there were only 17 members of Tan Trieu cooperative could be reached. Therefore, the data was collected by survey with 43 pomelo growers in Tan Binh commune in which there are 17 members and 26 non-members.

Figure 4.2 describes the distribution of different farm (orchard) sizes based on their pomelo production area. It revealed that the largest proportion comes to small scale farmers with areas of less than 0.5 ha, second is medium scale farmers with about 23%. The percentages of farmers who have orchards larger than 1 ha accounts for approximate 14%. Pomelo sales were confirmed as the main income by most of the respondents (81.4%). On the other hand, as expected, Duong La Cam is the variety that has largest production area (93% of all varieties), next comes to Da xanh and other pomelo types (figure 4.3).

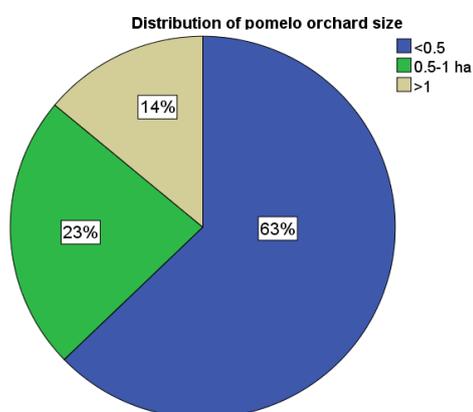


Figure 4.2: Distribution of pomelo orchard size (N=43)

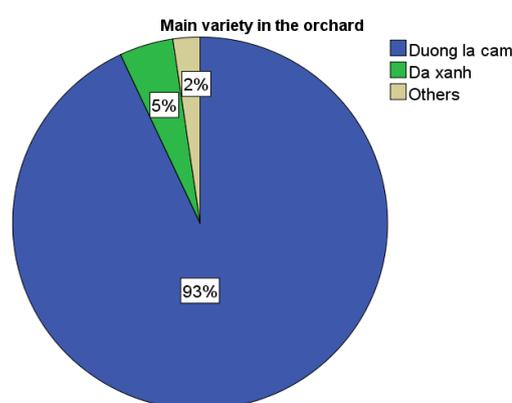


Figure 4.3: Main varieties in the orchard (N=43)

Average yield

The average yield of pomelo production in Tan Binh commune is 13,500 fruit/ ha/ year including all three classes. It is calculated that total yield in kg per ha is about 15,000 kg/ha for the commune (Table 4.2). This is indeed higher than the average yield of Vinh cuu district (14,000 kg/ha). Especially in comparison the weighted average yield between 17 members of the cooperative and non-members, the average yield of the members are higher than non-members (16,000 kg/ha and 14,000 kg/ha)

Table 4.2: Calculation of weighted average yield in Tan Binh commune

(Survey and interview trader)

Yield/ha/year (fruit)	Class	fruit/class	kg/fruit	Yield/class/ha (Kg)	
13500	1	30%	4050	1.3	5265
	2	40%	5400	1.1	5940
	3	30%	4050	0.9	3645
Total kg/ha				14850	

Standard of cultivation method

The standard of the present cultivation method of the farmers (26 non-members of cooperative) in Tan Binh commune can be categorized into 3 types including tradition of the family which means pomelo cultivate according to farmer' experiences, the Integrated pest management (IPM), others certification scheme. Currently the cultivation method base on traditional experience is higher than applying (IPM) (54% and 46% respectively). Meanwhile most of member of the cooperative are producing pomelo complies with GlobalG.A.P and VietGAP. Interestingly, average yield of the cooperative members and non-members are different with 16.7 and 14 tons per ha respectivity (survey with 43 farmers).

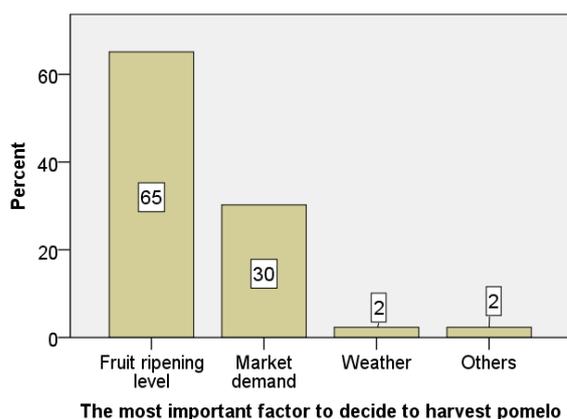


Figure 4.4: Factors to decide harvesting (N=43)

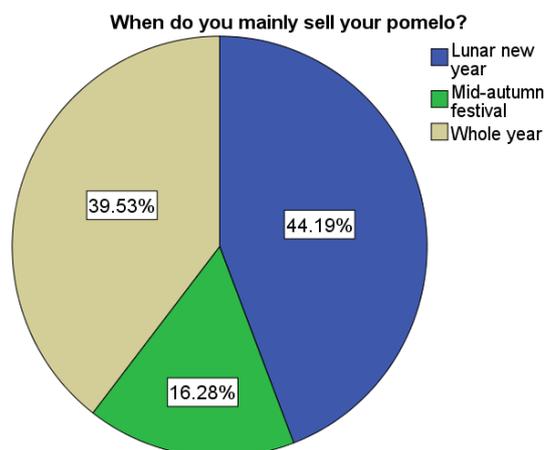


Figure 4.5: Favorite time to sell pomelo (N=43)

Harvesting time

Figure 4.4 describes the importance factors that determine time to harvest pomelo by both member and nonmember farmers. 65% of the respondents said that fruit ripening level is the most important factors for harvesting pomelo, while one third of the respondent harvests their pomelo according to market demands. Weather is not considered as an important factor by most of the farmers. In fact, it is possible to control the ripening level of the pomelo by appropriate cultivation techniques and the farmers usually control the harvest time to one of the main consumption seasons. In Vietnam, even though pomelo is demanded whole year (around 40%), large part of the pomelo consumption occur in two national festivals: Lunar new year (January, February) (44.2%) and mid-autumn festival (17%) (figure 4.5).

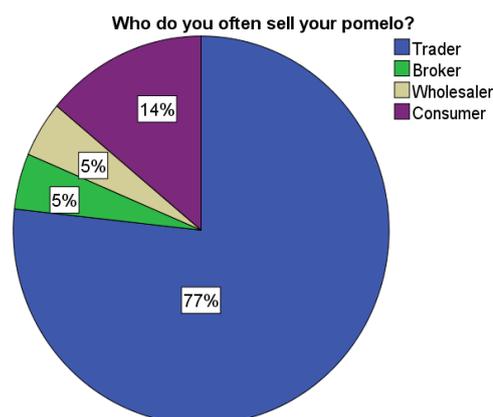


Figure 4.6: Buyer of farmer (N=43)

4.1.3 Current channel for farmer selling their products

According to the trader, traders are the main buyers of pomelo farmers in Vinh Cuu district before delivering to wholesaler and street vendors. This coincides with the result of survey in which there are 77% farmers often sell their pomelo to traders (figure 4.6). On the other hand, the percentage of the pomelo growers who sell their products to wholesalers is equal to the one supply to street vendors (5%). 14% of the respondents said that they often sell pomelo directly

to consumers. The reason is Tan Trieu pomelo is well-known in Dong Nai and neighbor provinces so consumers want to buy originally local products as gifts. On the other hand, farmers are interested in this kind of selling channel as they can get higher profit without any cost for middlemen.

Type of business transaction

In term of business transaction between farmers and buyers, about 63% farmers are selling pomelo in dozen and 37% selling in bulk (figure 4.7). According to traders, because most of farmer in Tan Binh commune apply chemical for induction of flower in off-season in order to get fruits around the traditional festival to gain higher price on the market. Moreover the quality of Tan Trieu pomelo in Tan Binh province is rather higher than other communes, so the farmers usually sell in dozen.

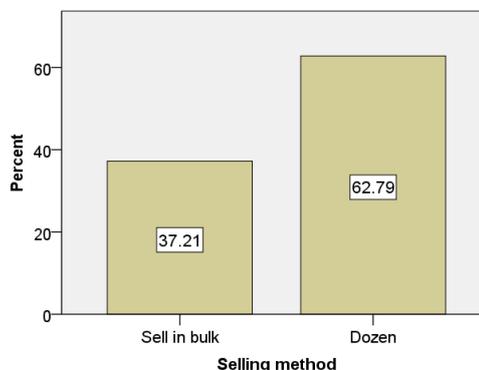


Figure 4.7: Type of business transaction between farmers and buyers (N=43)

Selling agreement between farmers and buyers

Meanwhile, according to result of survey in table 4.3, most of transaction between farmers and buyers is based on verbal agreement which account for 88% (38/43 responses). There is only 12% farmers usually sign contracts with traders. Most of the time contracts are used as mean to guarantee prices, time of harvest.

Table 4.3: Selling agreement between farmers and buyers (N=43)

Selling agreement	Frequency	Percent
Contract	5	11.6
Verbal agreement	38	88.4
Total	43	100.0

Among different types of embedded services such as market information, credit, input supply (chemical, fertilizer), technical advice, contract, others, 100% farmers (43/43 response) said that traders or buyers harvest pomelo by themselves by renting labour for harvesting. Only 2 farmers added that they got market information from traders. From farmer perspective, most of the farmers are interested in market information (about prices, market forecast), stable quality and quantity input supplies (chemical, fertilizers) especially organic fertilizers. In addition, technical advice for chemical application in inducing flowering, pest control is crucial.

In term of payment method, there are 29 respondents usually get cash on delivery while only 4 farmers accept to receive money from buyers sometime after delivering.

Moreover there are 10 farmers can get about 10-20% total money in advance because of quality of the orchards is guaranteed, so traders are willing to pay a deposit in order to ensure the farmers will sell products to them especially during Lunar new year (Figure 4.8).

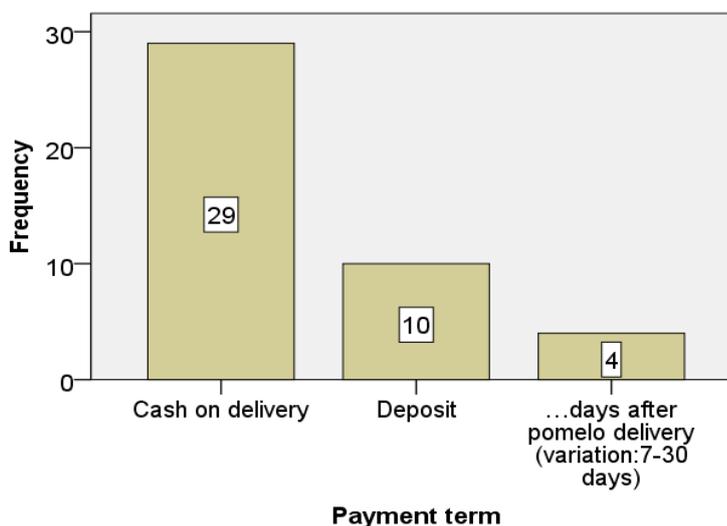


Figure 4.8: Payment method between farmers and buyers (N=43)

4.1.4 Current market for Tan Trieu pomelo

Based on information from interviews with traders and wholesalers, Tan Trieu pomelo is mostly sold in domestic market. It can be divided into 2 markets: inside and outside Dong Nai province. Dong Nai province consumes 70% Tan trieu pomelo through street vendors, retailers and wholesalers. While through street vendors and wholesalers, the remain 30% is sold to neighbor provinces such as Ho Chi Minh city, Binh Duong and Ba Ria Vung Tau and other regions (Ha Noi, Dang Nang). In addition, recently Tan Trieu pomelo is graded into 3 classes for the domestic market (table 4.4)

Table 4.4: Characteristic of different pomelo classification

Classification	Grading standard
Class I (30%)	1.3-1.4kg. Well shaped, without any damage by handling, pest and disease.
Class II (40%)	0.9-1.2kg. As same as class 1 but less weight than class 1
Class III (30%)	<0.9kg. Small fruit and fruit include damage by pest and disease.

According to wholesaler, the owner of Que Huong pomelo enterprise in Bien Hoa, Dong Nai, in 2007 the wholesaler exported a few containers of pomelo to Germany (through a fruit and vegetable exporter) and received an order from from a German importer for supplying pomelo the whole year. In 2009, his enterprise supplied Tan Trieu pomelo with Duong La Cam variety to some supermarket system in Vietnam

such as Maximark, Co.op Mart, and Big C in order to promote Que Huong enterprise and Tan Trieu pomelo. However, because of low volume and heterogeneity of the fruit, both opportunities were terminated.

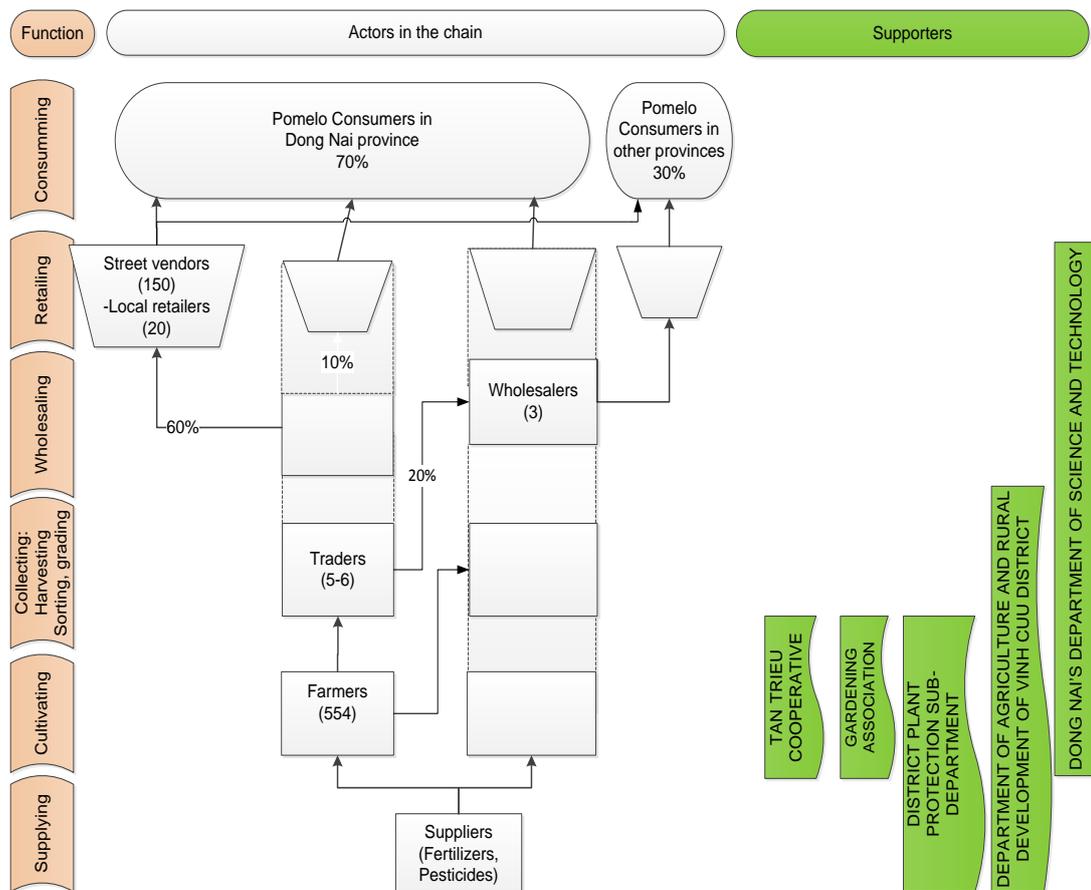


Figure 4.9: Pomelo value chain in Vinh cuu district

4.1.5 Value share in the chain

The value shares of different actors in value chain were calculated by taking the farm gate price of farmer and the marketing margin of the middle man (trader, wholesaler, and retailer) as a percentage of the final value of the product at the consumer level. The difference between selling price and buying price of middle man is marketing margin. The margin show their contribution in the chain from collecting to delivering the product to final buyers regarding to marketing services he provides (Pabuayon et al., 2009).

In the case of Vinh Cuu pomelo chain in figure 4.9, the value share is estimated for three actors including farmer, trader and wholesaler, retailer and street vendors. Selling and buying prices are gathered from interviews with traders, wholesalers in the chain (appendix 5). Based on that, value shares were calculated between the actors in two periods, Lunar New Year and the rest of the year in Table 4.5.

Table 4.5: Value share calculation for actors in the sector

Lunar new year		Farmer	Trader- Wholesaler	Retailer- Broker
	% pomelo/dozen	Selling prices		
Class 1	30%	300,000	350,000	500,000
Class 2	50%	200,000	250,000	350,000
Class 3	30%	20,000	35,000	60,000
Weighted average price/dozen		196000	240500	343000
Added value		196000	44500	102500
Value share		0.57	0.13	0.30

The rest of the year		Farmer	Trader - Wholesaler	Retailer- broker
	% pomelo/dozen	Selling prices		
Class 1	30%	180,000	220000	380,000
Class 2	50%	120,000	160,000	250,000
Class 3	30%	20,000	30,000	50,000
Weighted average price/dozen		120,000	155,000	254,000
Added value		106667	35,000	99,000
Value share		0.42	0.14	0.39

It can be seen in figure 4.10, the value share of farmer accounts for 47% for the rest of the year. It increases significantly in the Lunar New Year (57%). While retailer and street vendors, in contrast, have higher value shares in the rest of the year (39%) and lower value share in Lunar year (30%). Trader-wholesaler only contributes to 14% of the total share and decrease to 12 in Lunar New Year. Note that as some actors of the sectors play more than one role in the chain (e.g. both wholesaler and retailers) their value share can be even higher. For example, in figure 4.9 describes the Vinh Cuu pomelo value chain show there are market channels with only wholesaler or trader is middlemen between farmer and consumer therefore the value share the actor is total of trader-wholesaler and retailer-street vendor.

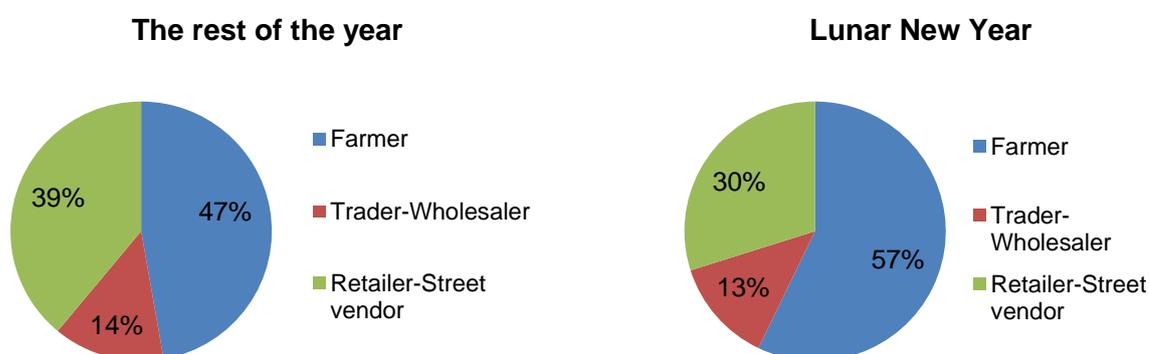


Figure 4.10: Value share between actor in the pomelo chain in Lunar New year and the rest of the year

4.2 External environment analysis at macro-level

Table 4.6: PESTEC analysis

Issue	Situation	Effect on pomelo sector
Political	<p>Vietnam become member of the World Trade Organization in 2007</p> <p>Decree 41/2010/NĐ-CP about credit policy for agriculture and rural development</p>	<p>Opportunity: Open exporting market</p> <p>Constraints:</p> <ul style="list-style-type: none"> - Confront with economic, food safety barriers. Agriculture enterprises and producers are on the defensive with international certification such as ISO, HACCP, GlobalG.A.P (Thao, 2009). - The local agriculture products are competing strictly in international market but also in domestic market with Chinese and Thai products. As China, Thailand fruit industries, etc. have developed long time before Vietnam (starting from 1990's). Therefore Vietnam fruits are facing strong competitors for the same kind of fruits in the International markets. (Hoa, 2007) - According to the Decree, since June 1, individuals or cooperative engaging in agriculture can borrow loans. In which individuals providing agricultural services will be considered to borrow up to VND 50 million. For agricultural cooperative they can borrow up to 500 million VND. - Banking institutions specializing in agriculture and rural development, commercial banks will be assigned to conduct the activities. - In case, the borrowers cannot return their loans on time because of large-scaled natural disasters and epidemics, the Government will provide specific assistance to hard-hit insolvent individuals and organizations <p>However, farmers and Cooperatives want to access to the credit source, they confront with many constraints such as administrative formalities, and anxieties from bank. (Thanh, 2010)</p>
Economical	Financial crisis	<ul style="list-style-type: none"> - Financial crisis caused many impacts on agricultural products export: fluctuating prices, decreased consumer demand, market revenues narrow, and lack of new orders. The economic crisis also made some input price increases and volatility regulations. The financial crisis and the global recession caused investors private investors more cautious and payment difficulties have affected strong market for agricultural products. (Thao, 2009)

	GDP per capital increases nearly triple from 413 USD in 2001 to 1174 USA in 2011	- . Even though, it was still not concluded that there was a strong relationship between GDP level and consumption of pomelo, it was observed in some developing countries (China, India...) that grapefruit consumption per capita has risen as GDP per capita has increased (IPSARD, 2008)
Social	The imbalance of rural-urban, about human resources is currently in place.	<ul style="list-style-type: none"> - There is a trend that labours with professional skill and workers are moving from rural to urban. (Anh, 2006). According to survey (N=43) average age of pomelo farmer in the area is quite high about 52. The youngest farmer is 32 year old. Moreover, farmer said that recently their children don't want to take over their jobs. The younger people with knowledge or a worker tend to work in city or factory. As Dong Nai province located in the center of Southern key economic zone with more than 30 industry zone in 2010. (ITD, 2011) - Human resource of agriculture sector and rural area in general is low (level of education, technical expertise, strength, flexibility, adaptability and limited sense of discipline). It led to many difficulties in accessing to new production knowledge, and a positive shifting of labour structure of agriculture and rural areas. Farmers lack of knowledge of business, lack of understanding of the new technologies applied in crops, livestock and processing agricultural products. While consultancy and dissemination of knowledge as well as technology transfer system are insufficient. (Ngoc, 2010)
Technology	<p>Conventional cultivation method is majority and area production is small and scatter</p> <p>Post-harvest technology</p>	<ul style="list-style-type: none"> - Conventional farms normally apply excessively chemicals (cultivation habits) which may quality and safety of fruit products. On the other hand, with small production area and cultivation custom, the advantage of economic scale is normally not utilized probably, thus fruit volume is unstable. These reasons impact on price and image of Vietnam fruits in the international market. - Vietnam fruit industry is still at developing stage for quality, safety, quantity to meet the demand of high value export markets, and to fulfill GlobalG.A.P and BRC standards (post-harvest standard)(Hoa, 2007). - Storage and processing infrastructure are shortage and underdeveloped. Therefore there are difficult to preserve fruits. Lack of specialized vehicles to transport products from producers to consumers which lead to increase loses as well as decrease competitiveness in the international market. Particularly average post-harvest fruit damage accounted for > 20% (Hai, 2008)
Environmental	Advantages of geographical location with Dong Nai river flow along Vinh Cuu district	- Maintain water supply for agricultural production

	Climate change Pest and disease increase due to apply	- Based on the report of World Bank in 2009, Vietnam is one of the five countries predicted to be the most affected by climate change because agricultural sector contributes greatly to the nation economy. According to Mr Ngo Quang Tam, staff of The Plant Protection Department of Vinh Cuu District, pomelo growers are confronting with difficulty in inducing flowering on time because of changing climate. On the other hand, the new pests are harming homogeneity of pomelo, such as those create tumor on skin of pomelo fruit.
Culture	Lunar new year Mid-autumn holiday	- Pomelos are popular in the mid-autumn, and lunar New Year. Especially in Lunar New Year, because the time is not a main season of pomelo, prices of pomelo usually highest at this time in comparison with the rest of the year.

4.3 Cooperative analysis

The cooperative analysis is the study of the organizational environment to pinpoint internal and external factors that can significantly influence organizational operations. This chapter analyzes the business environment through Universal business model (UBM), the Integral model of Diagnosis for Co-operatives and Associations (MIDCA).

4.3.1 Internal environment analysis of the Tan Trieu cooperative

In this chapter, the Universal Business Model is used to give an overall picture of the Tan Trieu Cooperative looking at different aspects. Ten aspects with relevant elements of the UBM model were used as a checklist of topics to be covered in order to provide a consistent and systematic approach for understanding the organization. Table 4.6 describes eight aspects of the UBM model relating to the cooperative, more detail information can be found in the appendix 6. In the second part, a subset of the model with relevant elements was chosen for a more in deep evaluation using the MIDCA model. Choosing relevant elements in this part was regarding to the purpose of focusing to the cooperative marketing function and main factors that may affect it in both direct and indirect ways.

Table 4.7: Defining the cooperative in terms of different organizational

Aspect/ element	Description
Identity	
Name	Tan Trieu service and agriculture co-operative
Reputation	The first pomelo cooperative that initiated and is applying GlobalG.A.P and VietGAP to part of its members. The cooperative's pomelo products are legally sold under the brand name Tan Trieu Pomelo which is granted a trademark certificate by the Vietnam Office of Intellectual Property Rights.
Purpose	
Raison d'etre	Develop a more sustainable pomelo chain with high and stable quality products (e.g. follow VietGAP and GlobalG.A.P) in order to support the farmers in stabilizing their production and creating prosperity
Vision	A cooperative of pomelo growers produce "clean and high quality products" that is able to satisfy national and international quality standards (as an pomelo exporter)
Mission	To successfully apply, maintain and extend VietGAP pomelo production area in the local area
Target market	Domestic market (at first): Dong Nai and Vung Tau Province
Structure	
Roles and jobs	In theory, the Tan Trieu cooperative has a chairman, the business vice chairman, the technical vice chairman, a treasurer, external accountancy. Beside there are a supervisory with three members of cooperative are elected. However there are only 3 members who are working.
Workplace	Field and main office in Tan Trieu, agricultural fairs

Reporting structure	Report to the Tan Trieu Community Council Regular report to the cooperative members
External infrastructure	External organizations involved: The farmers' association, Gardening association, Dong Nai union of cooperatives, Vinh Cuu agriculture department, Dong Nai plant protection department, Vinh Cuu Agricultural Extension Centre
Enablers	
Land and building	The cooperative is authorized by the government to use 500 m ² of land as a place to operate. This land can be used as property for bank loans. However, at this moment legal administration work is not yet completed makes it is impossible for the cooperative to loan money from banks using this land as a pledging property. One office (20 m ²), a warehouse and a packaging room (100 m ²) located inside the area of 500 m ² (mentioned above) are of the cooperative's right to use.
Technology	Packaging machine, post-harvest handling equipments (e.g washing machine), dryer
Information	Information and reports regarding financial issues, sales, order and customers is stored normally in form of text reports
Skills	The board: is currently trained with management skills The business vice chairman: is originally a trader, having negotiation, selling, buying skills The technical vice chairman: was awarded "good pomelo production farmer" of Tan Trieu, graduated from a college (agriculture techniques, specialized knowledge...)
Core competencies	To be able to conduct VietGAP and GlobalG.A.P training and transfer technology to farmers
Relationships	With local government departments and other pomelo supporters (as mentioned in external infrastructure element) With customers (on theory only)
Financial resources	Charter capital from members 150 million VND (equals to 5000 to 6000 euros) Subsidies from government in establishing office and initial infrastructure (warehouse, packaging room) (40%)
Activities	
Line-of-business	To be evaluated using MIDCA model
Support	Cooperate with agricultural institutes and other organizations to open classes for farmers, training for staffs; technical supports for members; marketing activities for promoting the cooperative products and image
Management	Members meetings are organized regularly No specific objectives for staffs are set No strategic plan for a specific goal or target with regards to business activities
Compliance	Tax law, Vietnam Law No. 18/2003/QH11 on Cooperatives

Deliverables

Products	Pomelo, fertilizers, plant protection products
Services	Technical supports and training (VietGAP and GlobalG.A.P, agriculture practices)

Culture

Management style	Democratic: the cooperative board allows its members to discuss issues and reach decisions through discussion and voting (for important or controversy matters)
Rules and customs	Each member cannot contribute more than 30% of the standard charter capital. Everyone has equal “voice” which not related to the amount of charter capital they paid Rules of reward, profit distribution, tax... etc. are according to what was approved and agreed by members at the beginning.
Attitude to work	Most staffs was very enthusiastic at the beginning but their ambitions to work decrease by time when they have to face unsolved problems such as could not find financial resources for marketing operations
Benefits and perks	Salary of the cooperative staff members is not fixed but bound strictly to the profit created by the operations of the cooperative At this moment almost no salary is paid for the staffs (too low, kind of “on-paper” only)
Personal development	Ad hoc courses, yearly training and technology updates classes are regularly opened for the cooperative staffs and its members The board members are (recently) trained with management skills and other soft-skills that can support the management of the cooperative

Performance

Scale	1 shop, 5 staffs, 21 members with 10ha under pomelo cultivation
Efficiency	To be evaluated using MIDCA model
Innovation	Slow in changing even though the old forms or initial targets are not realistic
Financial	Estimated annual financial needs cannot be covered by the cooperative itself Cannot access to any local bank due to lacking of required pledges Farmers are not willing to contribute more

4.3.2 Evaluation of key elements of Tan trieu pomelo cooperative

The MIDCA is a model that enables the users to diagnose, evaluate and define organizations including different types of cooperative. MIDCA evaluates both qualitative and quantitative variables from the organization in a simple and more visual way. Based on its results, the users can draw pictures of the organisation’s situation and performance, thus strategies and action plans can be developed to strengthen the organization’s performance.

In this report, the MIDCA model focused on evaluating 8 elements of the cooperative including its long term perspective, staff capacity, and relationship with stakeholders, financial management, membership base, benefits and perk, the product, line-of-

business. The reason for focusing on these elements was firstly due to the relationship of them towards the performance of the marketing function and secondly based on what have been seen as concerns of the members and the staffs during interviews, surveys, and UBM analysis.

Details of MIDCA inputs and data can be found in Appendix 4. Most of the scoring criteria were originated from the MIDCA model, with addition of the criteria for “benefits and perk” element were developed by the student. Scores were based on data from interviews, survey and/or observations of the students.

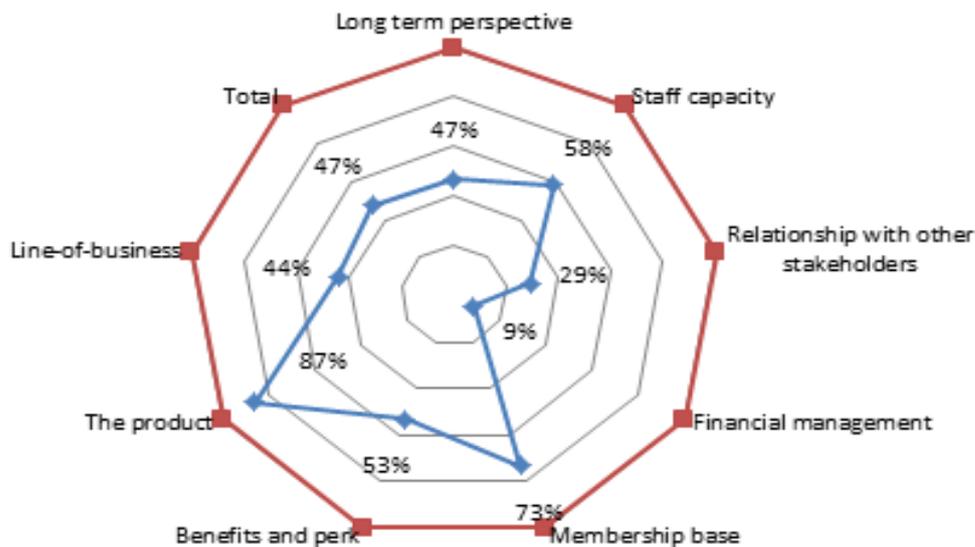


Figure 4.11: Spider web graph – MIDCA analysis

Figure 4.11 describes the results of the MIDCA analysis. It can be seen clearly that among elements, the score for financial management (expressed in percentage of the maximum score for this element) is the lowest (9%) meanwhile the pomelo products seems to be the strongest point of the cooperative with 87%. Note that for most of the elements, the percentages are below 50%. Consequently, the overall score for the whole element set remains lower than 50%. This gives an indication of the inefficiency of the cooperative with regards to the performance of relevant elements. In the following paragraphs, explanations for the scores of these elements will be discussed.

Financial management

The scores of most of the concepts of this element stood at the lowest point (0) of the grading range; as a result, the overall score for this element was only 3 over 35 of the maximum score. According to the technical and business vice chairman, at this moment, the cooperative cannot access to any local financial resources to support its trade financial needs. The estimated financial needs for buying pomelo and other products like pesticides, fertilizers will consume up to 4 billion VND while the balance of the cooperative was only 9 million VND (data up to June 2012). In theory, the cooperative can raise fund from its own members to carry these activities. However, after 2 years of working inefficiently, the trust of the cooperative members is decreasing because of different reason but the main reason is the marketing function hasn't operated. Therefore farmer cannot satisfy with beginning incentive when they participate cooperative such as selling at higher price, extension services, and link to

new market. Consequently, they are afraid of losing their money and are not willing to contribute more.

Line-of- business

The line of business element concern selling, buying, marketing activities is another important point for discussion. As mentioned previously, financial needs cannot be covered lead to a “non-trading” status of the marketing function. Pomelo producers do not want to sell their products if there is no money to be paid immediately after harvesting (as other traders do). The cooperative have a line of product processing and storing that complies with VietGAP standards but there is no product to produce. This makes the marketing function is only “on-paper” or “just a name” (said the members, the vice chairman).

Staff capacity versus benefits and perk

Score expressed in percentage for staff capacity and benefits& perk stand at 58% and 53% of their relevant maximum score respectively. The strongest competence of the organization is its experience and technical knowledge of applying VietGAP on growing pomelo. The production vice chairman has agriculture practical experiences, skills, knowledge on applying VietGAP and GlobalG.A.P and was used to be rewarded as “good pomelo growing farmer” in the past. For these reasons, the score of this concept is high (5/5). However, management skills and leadership may be not strong points of the board. Management skills are set of skills that support the leaders in problem solving, decision making, planning, meeting management, delegation, and communications and managing themselves (self-management). It has been observed that the board did not have good and clear plans for the cooperative at the beginning (this will be discussed more details in the long term perspective element). And time and schedule was not actually set for a certain target, the plans are normally very vague and some may difficult to achieve. Problem solving skill of the board may be another point of interest. Establishment since 2009 and still the board cannot find appropriate markets for VietGAP pomelo, and there are no document recorded the problems and/or strategy to overcome it. On the other hand, according to the members there are only 2/5 staff members are really available and actively perform their roles and jobs (the supervisors, treasurer and somewhat the chairman are not always available for their jobs). The governance structure even though is simple and rather straight forward but is sufficient because the scale and financial resources of the cooperative is small. However it does not perform well regarding lacking both leadership experience and ambition from some of the board members.

Interview with the technical vice chairman revealed that the payment policy concerns salary of the board may be one of the reasons of decreasing ambition towards their works. According to him, time required for working for the cooperative is too large compare to the salary paid by the cooperative. The payment policy looks logic in theory (salary of the board depends strictly to the annual profits). However as during the first 2 years of operation, no profit was made thus salary of the staffs were kinds of "on-paper" only.

Long term perspective

Last but not least, the mission and vision of the cooperative were even though clearly written on the cooperative's declaration, they seems not realistic and difficult to be achieved. For instance, the vision of being a clean and high quality (VietGAP and GlobalG.A.P) domestic pomelo producer and a pomelo exporter were set regardless the limited in production area and without having any strategy to guarantee the market for VietGAP pomelo.

CHAPTER 5: DISCUSSION

5.1 The impact of the internal environment of the cooperative on its marketing functions

5.1.1 The cooperative structure

The results of MIDCA analysis indicate that there are several issues regarding the cooperative operational and governing structure that may have negative effect on the economic performance of the cooperative.

The cooperative vision and perspective

Firstly, the analysis result raises the question whether the cooperative long-term perspective is unsuitable and how it is affecting the performance of the cooperative. One of the main reasons for the establishment of the Tan Trieu cooperative is to applying VietGAP and GlobalG.A.P program for Tan Trieu pomelo to create a more sustainable pomelo chain and by that generate more profit for the farmers. Indeed, the VietGAP and GlobalG.A.P have been demonstrated to be effective agriculture practices in adding value to products and are certifications for the products to compete in the international market. However, there are no study have ever been done to access the feasibility of the enterprise or market demand and economic opportunities for VietGAP and GlobalG.A.P pomelo. Meanwhile, it is clear that realistic and achievable vision and long-term perspective as well as the conduction of initial market and feasibility researches in the preparatory stage are crucial for the success of an organization (Koopmans et al., 2006). Data from interviews with the board indicates that the area that is suitable for VietGAP, GlobalG.A.P in Tan Binh commune is only 40 ha in total 347 ha of pomelo area. This is due to several reasons including the requirements of VietGAP and GlobalGAP (such as no intercrop with other varieties, the orchards should not be too young or too old). Thus, even if successfully apply VietGAP; GlobalG.A.P for the whole 40 area, the total volume is too little for export. In addition, in domestic market, Tan Trieu pomelo is famous and shortage in supply is often occurred due to high demand especially in festival seasons. This feature decreases the advantage of VietGAP pomelo toward traditional pomelo. In other words, the value added by these GAP programs seems not significantly noticeable while procedures to obtain GAP certifications consume time, money and efforts.

Role of motivated and committed members

The results suggest that there are decrease in motivation and commitment of the members and also the director board to the cooperative. According to Koopmans, when the level of trust and confidence in the beginning leadership and advisors is decreased, it is hard to maintain the commitment of members which is crucial to acquire finance and support from them. A distinctive feature of a cooperative is that the members are both owners and patrons. Thus if the members do not fully and actively participate in the cooperative operations, failure can occur. Therefore it is important to realize the true reasons for those decreases. To understand the issue, it is necessary to recall the experience and impression of Vietnamese farmers to the old-style cooperatives. Results of the survey show that the average age of the cooperative farmers is 52. In other words, they are also the witnesses of the development and transformation of the cooperative system in Vietnam before and after the Renovation policy. Old-style cooperatives had a strong impression of ineffective and unrealistic ways of operations. That is also one of the reasons concerns the farmers in participating into the cooperative. In fact, farmers are aware of the fact that financial means to cover the marketing activities need to be raised by themselves before asking

for external supports, however, they are afraid of losing their money if the cooperative does not work well (as has been seen for the last 2 years). Most the members are small scale farmers (63% having less than 0.5 ha) and pomelo is their main cash income (81.4% responses), thus they do not dare to supply the pomelo to the cooperative without guarantee that they will receive the money (often they want cash on delivery). Lacking both products and capital inputs from its own members, malfunction of the market role of the cooperative is unpreventable.

On the other hand, a large part of Vietnamese cooperatives is still born according to the administrative needs of government and is considered as a part of local authorities to manage the activities of rural life (active irrigation, drainage, pest control, etc.). Thus, the cooperatives are still subsidized by the government on infrastructure, human resources and they operate in a passive way. The farmers seem to be dependence on supports from the external supporters, the mercy of the board and sometimes even forget that they are the members and the owners of the cooperative (GRET, 2010).

5.1.2 The cooperative management

The results of UBM and MIDCA analysis indicate that lacking management skills from the board has effected clearly on the cooperative performance with regards to its marketing function. Normally, different management means such as accounting system, control reports, evaluation, training, communication, incentive programs, strategic planning are often used to support the managers and the members in managing the enterprise (USDA, 1997). In the case of Tan Trieu cooperative, some of those means are used (training, communication, report) but some important measures have never been applied. Evaluation and strategic planning are those missing measures that student want to address in this paragraph. Management evaluation should be done for both personal and for the management performance of the cooperative to see whether they are efficient. For personal evaluation, appraisal forms can be a good tool. Evaluation of the cooperative management can be complicated and specialized knowledge may be required. The managers of the cooperative may be encouraged to have the evaluations by himself or herself but in many cases a professional management consulting firms may be hired for locate weaknesses and strengths, and suggest what types of management training are needed (normally seen in big enterprises).

It has been noticed from this report that there is no such strategic planning that has ever been established by the Tan Trieu cooperative to support its long-term visions and objectives. The main purpose of a strategic planning is to determine the current position of the cooperative and orient its future direction. It is objective oriented and focuses on specific measurable actions. Assigning specific responsibilities, tasks, and time schedules for a specific objective and reviewing of progress are those of important facts of strategic planning. In fact, strategic planning uses the cooperative's strengths to put it in the best possible position while change is occurring. Strategic planning makes a cooperative proactive instead of reactive by continuous assessment and evaluation of alternative actions (USDA, 1997).

5.2 The impact of external environment on the marketing functions of cooperative

It is clearly that the agricultural business environment is complicated, thus agricultural cooperatives have to confront with many challenges such as low product prices,

higher production costs, increasing rival, as well as other performance difficulties (Park, 2004) .Therefore, Tan trieu cooperative is also facing different difficulties, challenges and impacts from the pomelo sector in Vinh Cuu district. In this paper, the impacts of external environment are discussed at 3 levels: pomelo chain (pomelo production and market channel), meso and macro levels in order to find out interaction between them and the marketing function of the cooperative.

Pomelo production

The result of the survey shows that Duong La Cam variety is main variety in most of pomelo orchards in Vinh cuu district. However, in these orchards Duong La Cam is often intercropped with other varieties. Thus, it is difficult for farmers to produce pomelo complies with GlobalG.A.P and VietGAP requirements. Moreover, there is also a cost for initial investment of infrastructure and fee for renew the GAP certifications every year. Even though, the governance has policy to support the farmers (money for VietGAP and Global GAP registration and building initial infrastructure (20%)), they are still big investments. As the pomelo brings main cash income to most of the farmers, it may be risky to implement GAP programs when there is no guaranteed market.

Note that, although the ages of the farmers are relatively high (52), their children or inheritors seem do not want to work in the pomelo sector. This decrease in labour force has been observed in other sectors of agriculture as well. Thus, the elderly farmers have different perspective in pomelo production, which focus more on short term rather than long term benefits. Meanwhile, some advantages of implementation of Global GAP or VietGAP are only come after some time (e.g. sustainable agriculture, soil and environment protection, social effects).

In short, the above reasons may prevent the cooperative from extending VietGAP and Global GAP production area, thus prevent it reaching higher pomelo volume.

Pomelo marketing channel in Vinh Cuu

The result suggests that traders are the main competitors of the cooperative. The following paragraphs list some strengths of the traders in compared to the cooperative with regards to marketing channel.

In Vinh Cuu district, most of the farmers are interested in producing and selling pomelo during the Lunar new year (off-season) due to high price and higher value share they can get. The cultivation and selling custom are difficult to change unless the cooperative can offer interesting price to farmers. Besides that, in the pomelo sector, traders, wholesalers are potential competitors of the cooperative due to their strengths in term of financial, markets and relationship with retailers and street vendors (who deliver the bulk of pomelo to consumers). Traders and wholesalers have strong floating capital, they can offer different payment methods to farmers such as cash on delivery, or deposit an amount of money before harvesting while most of agriculture cooperatives cannot give similar offers for farmers due to lack of cash.

Furthermore, having a diversity range of buyers such as wholesalers, street vendors and retailers; the traders have guaranteed market outputs, thus, can handle all classes of pomelo from the farmers. The traders can offer 2 types of transactions like selling in bulk and in dozen for the whole farmer's pomelo orchard.

Meso and macro-level

Currently, there are many organizations from the government which are supporting the pomelo sector in Vinh Cuu district in term of technology, policy and promotion. However the feasibility of the policies and regulations is somewhat limited. The following paragraph introduces some examples of policies from government for cooperatives.

The government policies for cooperatives to access credit and other financial sources are the first point of discussion. Even though, the government has established several funds for cooperative, it is not easy for the cooperatives to access to those funds. On the other hand, many preferential credit policies were introduced but they seem not to be very realistic. Financial institutions like banks are always interested in the mortgaged property, while very few cooperatives have common properties to meet loan conditions. Secondly, training policies are inappropriate. Even though, the government has a budget for training cooperative boards, the effectiveness of the training course is not high. Most of the time, the courses are too general and focus on “quantity” rather than “quality” **(GRET, 2010)**.

5.3 Developing strategies for Tan Trieu pomelo cooperative

Table 5.1: Application of the TOWS matrix to Tan Trieu pomelo cooperative

<p>Internal factors →</p>	<p>Strengths:</p>	<p>Weaknesses</p>
<p>External factors</p> <p>↓</p>	<ol style="list-style-type: none"> 1. Most of members of the cooperative produce pomelo can comply with IPM, GlobalG.A.P, VietGAP (even in other communes) 2. Members produce high quality pomelo products and higher yield than non-member of cooperative 3. Duong La Cam is originally local pomelo variety 	<ol style="list-style-type: none"> 1. Inappropriate and realistic long-term perspective 2. Decrease of motivation and commitment in members 3. Board is lacking of management skills with appropriate management tools 4. No strategic planning (assessment and evaluation of the processes toward specific objectives; position of the cooperative in the sector) 5. Low source of capital 6. Low volume
<p>Opportunities</p>	<p>S-O: maxi-maxi</p>	<p>W-O: mini-maxi</p>
<ol style="list-style-type: none"> 1. Increasing farmer's demand of organic fertilizer and standard fertilizer 2. Many support (infrastructure) form government and other supporters to develop the pomelo sector and the Cooperative 3. Total pomelo area in Vinh Cuu district is 700 ha 4. Increasing domestic market demand and importer 	<ul style="list-style-type: none"> • An improved protection of Geographical Indicators (GIs) is in the consumers' interests (O3, S1,S2, S3) 	<ul style="list-style-type: none"> • Suitable management skills training should be organized not only for the board but also for other motivated and active members (O2, W2, W3, W4) • Developing a clear strategic plan (include a realistic business plan) with clearly defined schedules, responsibility, capital investment and potential returns. (O1, O2, O4, W1, W2, W4) • Investigate feasibility of expanding VietGAP, GlobalG.A.P to other commune (O4, W3, W4) • Organizing regular to cooperative meeting between the board and members.

Internal factors



Strengths:

1. Most of members of cooperative produce pomelo can comply with IPM, GlobalG.A.P, VietGAP (even in other communes)
2. Members produce high quality pomelo products and higher yield than non-member of cooperative
3. Duong La Cam is originally local pomelo variety

Weaknesses

1. Inappropriate and unrealistic long-term perspective
2. Decrease of motivation and commitment in members
3. Board is lacking of management skills with appropriate management tools
4. No strategic planning (assessment and evaluation of the processes toward specific objectives; position of the cooperative in the sector)
5. Low source of capital
6. Low pomelo volume of the cooperative (10ha)

External factors



Threats

1. Limited Pomelo area in Tan Binh commune which can adapt requirements of GlobalG.A.P and VietGAP.
2. Competitors: traders, wholesalers with strength in term of financial, diversity markets, relationship with other stakeholders.
3. High costs of initial investment and renew certification GlobalG.A.P and VietGAP standards
4. Imbalance in labour forces between rural and urban area, while average age of farmers is quite high.
5. Conflict between credit policy and bank for accessing credit

S-T: maxi-mini

- Propagandizing and mobilizing others farmers produce pomelo complies with VietGAP **(T1, S2)**

W-T: mini-mini

- Market research need to be conducted **(T1, T2, T3, W1, W6)**
- Set up new long-term and short-term objectives that suitable for the new situations and the capacity of the cooperative **(T1, T2, T4, W1, W4)**
- Lobbying and accelerating administrative procedure for receiving a certificate of the land use right in order to use it as pledging property **(T5, W5)**

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

This study is focused on marketing function of the Tan Trieu pomelo cooperative. The research aimed to find out causes of poor marketing function of this cooperative and to recommend the Board of the cooperative in order to strengthen its marketing function. The conclusion of the study is written based on the results of the analysis of data collected from survey with pomelo growers (members of the cooperative and nonmember) and interview with different stakeholders in Vinh Cuu pomelo sector.

Current situation of the Pomelo sector in Vinh Cuu district

The pomelo value chain in Vinh Cuu district consists of input suppliers, farmers, traders, wholesalers, retailers, and street vendors. Most of pomelo growers in the area are small scale farmers (63%) with farm size below 0.5 ha. However, weighted average yield of the commune is generally higher than the average yield of Vinh cuu district. Note that, in the chain the wholesalers also do other functions besides wholesaling. Their activities range from cultivating, collecting, wholesaling, retailing to processing pomelo wine.

Selling products through traders is the most common market channel in the sector (77%). Traders purchase pomelo in bulk or dozen and farmers refer to receiving cash on delivery. After that traders sell fruits to wholesalers, retailers and mainly to street vendors. The majority of Vinh cuu pomelo is sold out in Dong Nai province and the rest in Ho Chi Minh City, and neighbor provinces. The pomelo is classified into 3 classes, in which class 1, 2 are usually purchased by high income consumers through traders, wholesalers, retailers, while class 3 is consumed by low income consumers, or is processed to pomelo wine by wholesalers.

The farmers account for the largest proportion of value share, next come the traders. Interestingly, the value shares of farmers go up in traditional festival in comparison to other time of the year while the opposite trend was seen for traders.

External factors that influences on the cooperative in doing their marketing functions

Based on the current situation of pomelo sector there are some external constraints impact on the cooperative such as: Limited pomelo area in Tan Binh commune which can satisfy the requirements of GlobalG.A.P and VietGAP; High costs of initial investment and annual renew or audit of GlobalG.A.P and VietGAP certification; Dominance of traders, wholesalers in the chain with regards to financial resources, diversity markets, relationship with other stakeholders; Imbalance in labour forces between rural and urban area, while average age of farmers is quite high.

On the other hand, it was also concluded that there are even though supports from the government, the insufficiency and somewhat impractical in some policies (e.g. loan policy) make it difficult for the cooperative to access to financial sources from banks.

Internal constraints of the cooperative to do their marketing functions

Currently, the Tan Trieu cooperative is still a technical supporter but not an actor in the pomelo sector due to the fact that their marketing function is not operational. The results of internal organizational analysis illustrated that the products and it plant extension services are strong points of the cooperative while the cooperative structure and management issues seem to be its weaknesses. With regards to its structure, it seems that the cooperative did not have a clear vision and appropriate long-term perspective

which reflected in its unrealistic goals and objectives. Furthermore, it was revealed that the decrease in ambition and commitment of the farmers to the cooperative is one of the main factors that hinder the cooperative from raising capital from its own members.

Regarding to management system of the cooperative board, it is concluded that the management skills of the board are insufficient. Important management measures such as personal evaluation and setting strategic plan were not implemented which contributed to the failure of the cooperative in positioning it in the market and to find out suitable strategies to overcome the problems.

6.2 Recommendation

Based on results of this study, some recommendations are provided to the Board of Tan Trieu cooperative, the recommendations are divided into 2 parts concerning the internal and external environment of the cooperative (the pomelo sector) with aims at strengthening the marketing function of the cooperative.

6.2.1 Improvement of internal environment of the cooperative

- **Short-term**
 - **Market researches** need to be conducted to access current potential markets that are suitable for the current quantity and quality of the cooperative's pomelo. It is crucial and urgent at the moment for the cooperative to find stable market outputs for its members with suitable prices in order to create profits and surplus that latter on can be used for the cooperatives 'operations.
 - **Set up short-term objectives** that suitable for the current situations and the capacity of the cooperative
 - **A clear strategic plan with realistic business plan** need to be developed with clearly defined schedules, responsibility, capital investment and potential returns. This will not only help the cooperative to actively move towards its goal but also can increase the trust of its members and investors thus increase the possibility to attract more financial capital.
 - **Raising sources of capital:** lobbying and accelerating administrative procedure for grant a certificate of the land use right in order to use it as pledging property.
- **Long-term**
 - **Role of motivated and committed members:** the board and the members should organize regular meetings. Important issue for discussion may also include the necessary of helping farmers to be aware of the nature of the cooperative, aware of their role and ownership. The members should be aware that not only profit but possible risks of the cooperative need to be faced and shared by all members.
 - **Suitable management skills training** should be organized not only for the board but also for other motivated and active members
 - **Set up new long-term objectives** that suitable the capacity of the cooperative taking into account possible changes of market demands, market opportunities, policy and regulations changes etc.
 - **Increase pomelo volume:** Investigate the feasibility of expanding VietGAP, GlobalG.A.P to other communes

6.2.2 Pomelo sector

- Propagandizing and mobilizing potential farmers to participate into the cooperative and to produce pomelo complies with VietGAP or Global G.A.P in Tan Binh commune
- **Collaborating with supporters** (Gardening Association, Dong Nai department of science and technology) to open more training classes for farmers and also for promoting the image of the local pomelo. For instance, currently, the project aims at developing the protection of Geographical Indicators (GIs) for the local pomelo is being carried out. The cooperative can collaborate with competent authority and agency in supporting this project. As GIs can increase confidence of the customers in the true origin of the product, it will add value to the Tan Trieu pomelo as well.
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APPENDIX

Appendix 1: Questionnaire for pomelo producers

QUESTIONNAIRE FOR POMELO PRODUCER

Date:

1. Gender: Male Female
2. What is your age?
3. How many hectares do you currently have in pomelo production?
 - A. less than 0,5 hectare
 - B. 0,5 - 1 hectare
 - C. more than 1 hectare
4. What is your pomelo average yield per year?
5. What is the main variety in your pomelo orchard? (you can choose more than 1 answer)
 - A. Duong la cam
 - B. Bui Thanh
 - C. Da xanh
 - D. Duong num
 - E. Other.....
6. Is pomelo crop a main income in your family?
 - Yes
 - No
7. What is the standard of the present cultivation method?
 - A. Traditional of family
 - B. IPM
 - C. VietGap
 - D. Other: _____
8. What is the most important factor to decide to harvest pomelo?
 - A. Fruit ripening level
 - B. Market demand
 - C. Availability of family labour
 - D. Weather
 - E. Other _____
9. When do you sell your pomelo? (you can choose more than 1 answer)
 - A. Lunar new year
 - B. Mid-autumn festival
 - C. Whole year
 - D. Other.....
10. Who do you sell your pomelo? (you can choose more than 1 answer)
 - A. Trader.....
 - B. Wholesaler.....
 - C. Street vendors
 - D. Sell directly to consumers

11. What type of selling agreement between you and buyer?
- Contract
 - Verbal agreement
 - Other.....
12. What is your payment method?
- Cash on delivery
 - Deposit
 - 100% cash in advance
 - ...days after pomelo delivery
13. What type of embedded service provision by your buyer? (you can choose more than 1 answer)
- No
 - Market information
 - Credit
 - Inputs
 - Technical assistance
 - Harvest
 - Others.....
14. What type of selling method do you sell your pomelo? (How much average per unit of the method)
- Sell in bulk.....(VND)
 - Kg.....
 - Others.....
15. What are your buyer's requirements? (you can choose more than 1 answer)
- Size
 - Taste
 - Homogenous of product
 - Outlook
 - Weight
16. Are you member of cooperative? If yes please answer question 17 to 19; If no please answer question 20 to 22.
- Yes
 - No
17. What are the main incentives that encouraged you to participate to the cooperative?(you can choose more than 1 answer)
- Sell at higher price
 - Extension service
 - Link to new market
 - Guarantee of market
 - Others.....
18. Among the main incentives mentioned in question 16, circle the ones that you are currently not satisfy with (you can choose more than 1 answer)
- Sell at higher price
 - Extension service
 - Link to new market
 - Guarantee of market
 - Others.....
19. What are your suggestions for improving the cooperative's marketing function?
- Regarding internal environment (e.g structure, staff capacity, financial management)
 - Regarding supporting its members in producing pomelo which complies with requirements of the defined market?
 - Regarding supports from other supporters (financial, technical, political)

20. Do you want to be a member of cooperative?
 A. Yes
 B. No
21. If yes, what services (offers) do you expect to receive from the cooperative?
 A. Sell at higher price
 B. Extension service
 C. Link to new market
 D. Guarantee of market
 E. Others.....
22. If No, indicate main reasons hinder you participate cooperative
 A.

 B.

 C.

Appendix 2: Main varieties in Vietnamese domestic market

Variety	Location and Character	Illustration
Buoi 5 roi:	Growing widely in the Mekong Delta area. The fruit has greenish yellow skin when ripe. Average fruit weight is about 1.8 kg. Flesh is lightly yellow and can be separated from mesocarp easily. The taste is sweet (Brix of 8.3%) with lots of juice, strong flavor. Seedless if cultivated separately.	 Source: buoinamroi.com
Buoi da xanh:	Growing widely in the Mekong Delta area. The fruit is round in shade with green skin when ripe. Fruit weight is between 1.8 to 2 kg. Flesh is pinkish red and easily separated from mesocarp. Juice is average, sweet (Brix is between 11-12%) and good in taste, strong flavor with number of seeds per fruit.	 Source: buoidaxanh.com.vn
Duong la cam:	Famous variety in the Southeast Viet nam especially in Dong Nai province. The fruit is low piriform in shape with yellowish green peel when ripe. Fruit weight is about 1.3kg. Flesh is easily separated from mesocarp, light yellow in colour. Juice is alot, good and sweet in taste (Bix of 10.6 %). The fruit has many seeds but growing seedless is possible with suitable separation method.	 Source: Nam Hue eco-agritourism park
Doan Hung	Famous variety in Northeast Vietnam (Vinh Phu province). The fruit is small (0.5 to 0.8 kg), juicy, easy to peel, with few seeds; flesh is sweet and bitter.	 Source: http://phuthotv.vn

Appendix 3: List of interviewee

Actor	Name of interviewee	Role in organisation
1. Tan Trieu cooperative	Ngo Van Than Nguyen Thi My Hanh	Technical vice-chairman Business vice-chairman
2. Trader	Ms Nguyen Thi Kim Dung	Owner of Que Huong pomelo enterprise Owner of Nam Hue eco-agro tourism Owner of Nhon Hoa pomelo enterprise
3. Wholesalers	Mr: Nguyen Thanh Sang; Mr : Huynh Duc Hue Mr Nguyen Thanh Nhan	
4. Retailer	Ms Nguyen Thi Sau	
5. Supporters	Mr Nguyen Cong Luat Mr Huy Mr Nguyen Phan Bien Mr Ngo Quang Tam	Vice chairman in department of agricultural and rural development of Vinh cuu district Staff of Vinh Cuu Agricultural Extension Centre Head of Gardening association Staff of Plant Protection Department of Vinh Cuu District, Dong Nai Province

Appendix 4: Content of Interview

1. Interview trader-wholesaler

Name interviewee: Nguyen Thi Kim Dung

Operation time: 14 years

Roles: Collector, trader, wholesaler, retailers

Business activities: collecting, sorting, grading, wholesaling and retailing fresh pomelo

Main product: fresh pomelo

- Selling 2 main varieties of pomelo: 80% Duong La Cam which is purchased in Vinh Cuu district and 20% Da xanh, Duong nuom which are bought from Mekong delta area.
- The trader purchases pomelo directly from growers
- Pomelo is classified based on weight, size, skin, taste, and outlook.
- Purchase method depends on market demand and season such as in Lunar New Year, demand of pomelo is highest in year, the trader have to buy by dozen (12 fruits) and classify pomelo in 3 classes which have different prices. The rest of the year, they purchase pomelo in bulk in average prices.
- Payment terms depends on the quality of pomelo in each orchard in order to compete with other traders

- + High quality: Giving deposit for farmer before harvesting or cash on delivery
- + Low quality: paymentdays after pomelo delivery
- Transportation: truck without cooling system
- Packaging: PE plastic bag
- Percentage of rotten pomelo: 2% in dry season and 15-20% in raining season.
- Costs: Besides cost for purchase pomelo, cost for harvesting and transportation are also main cost of traders.
- Customer: The trader supply for 70% pomelo to street vendors, 20% to wholesalers, 10% directly to consumers.
- Market of Tan Trieu pomelo is mainly in Dong Nai province (70-80%), 20-30% is neighbor provinces. High and medium income consumers usually purchase class 1, 2 to give other people as a present or consume. Class 3 bought by low income citizens

Table: Classification of pomelo and prices

Classification	- Input prices/dozen-12 fruits (VND) - Buy in bulk	- Output prices/dozen-12 fruits (VND)	Grading standard
Class I (30%)	Lunar new year: 300,000	350,000	1.3-1.4 kg Well shaped, without any damage by handling, pest and disease.
	The rest of the year 180,000	220,000	
Class II (40%)	180,000	250,000	0.9-1.2kg As same as class 1 but less weight than class 1
Class III (30%)	20,000-30,000	30,000-35,000	<0.9kg Small fruit and fruit include damage by pest and disease.

1 Euro = 25,896.53 VND (24/08/2012)

Opportunities

Turnover increases 20-30% each year

Constraints

There is no difficulty to do their business

Stakeholder in the chain:

Traders: In Vinh Cuu district, there are 5-6 big traders who buy, collect pomelo from farmers, and then they also sorting, grading pomelo before sell to street vendors, wholesalers, and consumers

Street vendors: the number of the type of retailers is fluctuating depending on season. The number normally is about 100-120, but the number increases threefold in Lunar New Year.

Wholesaler: the actor is small enterprise who wholesales pomelo to other provinces such as Ho Chi Minh, Ha Noi, Vung Tau...but the market only account 20-30% of their turnover. Meanwhile they retail in Dong Nai province. On the other hand they are a

collector in a chain in order to adapt enough quantity and quality pomelo for their customers.

2. Interview the wholesaler-retailer

A. Name of enterprise: Que Hương

Name interviewee: Nguyen Thanh Sang

Operation time: 6 years

Business activities: Wholesaling, processing, retailing

Main product: fresh pomelo , pomelo wine.

Wholesaling and retailing fresh pomelo (class 1, class 2)

- Selling 2 main varieties of pomelo: 80% Duong La Cam which is purchased from Vinh Cuu district and 20% Da xanh which are bought from Mekong delta area.
- The wholesaler purchases pomelo directly from growers (50%), collector (10%), and 40% is harvested from their orchards.
- Pomelo is classified based on weight, size, skin, taste (%Brix), and outlook.
- Purchase method depends on the quality of pomelo in each orchard in order to compete with traders and street vendors
- + High quality: Giving deposit for farmer before harvest
- + Low quality: paymentdays after pomelo delivery

Table: Classification of pomelo and prices

Classification	Input prices/12 fruits (VND)	Output prices/12 fruits (VND)	Grading standard
Class I	1. Average in Lunar New year: 350,000	500,000	1.3-1.4 kg Well shaped, without any damage by handling, pest and disease. %Brix: 9-11
	Rest of year: 220,000	380,000	
Class II	1. 250,000	350,000	0.9-1.2kg As same as class 1 but less weight than class 1
	160,000	250,000	
Class III	30,000-35,000	Processing pomelo wine	<0.9kg Small fruit and fruit include damage by pest and disease.

1 Euro = 25,896.53 VND (24/08/2012)

- Average prices: the wholesaler buy dozen of fresh pomelo at farm gate and from collectors at 230,000 VND and sell to consumers at 350,000 VND
- Transportation: truck 3.5 tons without cooling system
- Packaging: carton and PE plastic bag
- Percentage of rotten pomelo: 10% caused by handling and transportation.

- Market: the wholesaler has 60-70% buyer in Dong Nai province and 30-40% outside the province. For buyers from outside of the province, they have to pay transportation cost. Most of time the buyers have to transfer money firstly and the wholesaler will deliver pomelo.
- Consumer' feedback: they are interested in the Tan Trieu pomelo because of:
 - + The pomelo shape is beautiful and appropriate to be used as a present in holiday
 - + Taste is delicious
 - + The variety can be stored 2 months in normal temperature but the quality is still good.
- Beside purchase cost, transportation cost, pomelo taxes 5%

Opportunities

- Turnover increase 20% each year
- Demand is stable

Constraints

- The company created the brand name (Tan Trieu pomelo) 5 years ago and they paid a lot for advertising the products on media (Television) and in agrifairs. They had to return the brand name to every farmer according to the decision of the government.
- Low volume of pomelo limits the enterprise in exploring potential markets such as the North Vietnam, European, and Taiwan...
- In 2007, the wholesaler exports some containers of pomelo to Germany however the low volume and heterogeneity of the pomelo affect capacity of their supply.

Processing and retailing pomelo wine

- The enterprise produces pomelo wine following two main seasons: Mid-autumn festival in September; Lunar new year in December, January, February
- Production of pomelo wine: 12000 liters
- Input: In order to produce 1 litre of pomelo wine they need 1kg pomelo (variety: Duong La Cam). And the pomelo is class 3 which normally sold at lowest price. The firm normally has to find a source of pomelo from collectors and they purchase in bulk without any contract. In term of quality control, the firm produces wine complies with food safety and standard of Ministry of health in Vietnam.
- Product: there is only one type of wine 19%vol which is packaged in 3 different sizes. (1 litre, 0.75 litre and 0.5 litre)
- Price per litre (without packaging) is 60.000 VND (consumer price)
- Packaging is very importance to increase value of pomelo wine because consumers want to use them as gifts
- Pomelo wine account for 10%-15% of turnover of enterprise
- Before there are a lot of pomelo wine processors, however recently there are only 3 main processors: Que Huong, Nhon Hoa (25,000 litres /year), Nam Hue (20.000 litres) who also retail their products.

B. Name of enterprise: Nam Hue eco-agro tourism

Name interviewee: Huynh Duc Hue

Operation time: 11 years

Business activities: Restaurant, Wholesaling, processing, retailing

Main products: fresh pomelo, pomelo wine, food (main ingredient: pomelo).

Turnover: 4.5 billion VND in which eating and drinking services: 65%; pomelo and pomelo wine: 35%

Fresh pomelo:

Average sale is 1000 fruit per/ week in which 100% is Duong La Cam variety

Pomelo was collected from their own farm (2 ha), farmers, and local traders.

Restaurant and tourism:

The number of tourists is about 100-200 people per day, during national holidays: 500-600 tourists per day

Strength	+ Special food prepared from pomelo fruit, leaves. + Geography: Tan Trieu is a part of Tan Binh commune, the area located in a small island of Dong Nai river.
Weakness	+ Agent is not professional, they cannot communicate in English
Opportunities	+ The number of foreign traveller is increasing
Threat	+ Lack of river traffic to revitalise the eco-agro tourism.

Supporter: Dong Nai department of culture, sport and tourism

3. Interview supporter

A. Department of agricultural and rural development of Vinh cuu district

Interviewee: Nguyen Cong Luat

Position: Deputy Manager

Role: to act as a counselor for people's committee of Vinh Cuu district to develop agricultural infrastructure.

Functions:

- + Manage expenditure which is used to support agriculture sector in Vinh cuu district
- + Coordinator of agricultural development projects in Vinh cuu district.
- + Statistical changes in agricultural land, forest land, water aquaculture, forest changes; implementation of appropriate cultivation measures for rational exploitation and utilization of land resources, water for production agriculture and aquaculture.

Activities policies to support pomelo chain in the area

- Support to promote commercial of pomelo sector

- Coordinating project which support finance to develop an area specializing in pomelo cultivation in 3 communes along Dong Nai River such as Tan Binh, Binh Loi, Tan an.
- Coordinating project which supports members of Tan Trieu cooperative in Tan Binh commune producing pomelo comply with Global GAP and Viet GAP in Vinh cuu district.
- Based on decree 24/2008/NQ-CP named “Tam Nong”, the department implements project supports variety to farmers who establish new pomelo orchards. In the project, the department purchase variety from Tan Trieu cooperative about 200 million VND/ year

Table: Pomelo area in Vinh cuu district

Pomelo area up to 4/2011					
No.	Commune	Total area (ha)	Harvesting (ha)	New orchard (ha)	Pomelo area in plan 2011 (ha)
1	Binh Hoa	55	53	2	
2	Tan Binh	347	314	33	405
3	Binh Loi	149.4	75.4	74	225
4	Thien Tan	6	6	0	
5	Tan An	86.2	32	54.2	166
6	Tri An	20	20	0	
7	Hieu Liem	11.4	4.55	6.85	
8	Phu Ly	20	7	13	
9	Ma Da	4	4	0	
10	Thanh Phu	4	4	0	
Total		703	519.95	183.05	

- 554 households are mainly in Tan Binh, Binh Loi, Tan An, Binh Hoa

B. Vinh Cuu Agricultural Extension Centre

Interviewee: Mr Huy

Position: Staff of centre

Role

- Transferring new agriculture technology to farmers
- Training, updating farmers with modern technologies and innovations in order to increase productivity

Function

Strategies, policies, regulations and programs for the pomelo sub-sector (especially: the cooperative)

- On-going program: cooperate with other organizations to carry out VietGAP program:
 - + Make selection of potential farmer candidates for Viet GAP program
 - + Training Viet GAP to farmers

Impacts on production, trading and processing

Viet GAP program aim at: increase both pomelo yield and quality, thus increase added value for the local pomelo and maintain sustainable agriculture systems as the same time.

Key constraints to the development of the pomelo sub-sector (production, trading and processing) in the district and province

- Limited pomelo production area
- Irrigation systems work ineffectively lead to local waterlogging thus reduce quality of the pomelo

Key opportunities regarding the development of the pomelo sub-sector (production, trading and processing) in the district and province

Support from government: with strategy to develop a large specialized pomelo production area (1000 ha)

C. Plant Protection Department of Vinh Cuu District, Dong Nai Province

Name: Ngo Quang Tam

Position: staff of department

Role/function of the institution related to pomelo production, trading and processing

- To carry out plant protection extension activities
- To conduct pesticides management (business, usage)
- Field examination, report to competence authority (Province level)

Current situation of Plant Protection

Plant disease	Plant worm
Phytophthora root rot	The Citrus lea
Pink disease	Prays citri Milliire
Disease caused by Xanthomonas canpestris pv. Citri	Citripestis sagittiferelle (More or less severe in Daxanh)
	fminer (Phyllocnistis citrella)
	Red Spider

Types of pomelo varieties planting within district and province	Production volumes	
Duong La Cam (90%)	350 trees/ha	
Da xanh (6%)	100-120 fruits/tree	Member of cooperative:
Others (4%)	Nonmember:	cooperative:
	Grade 1: 30%	Grade1: 30%
	Grade 2: 40%	Grade2: 50%
	Grade 3: 30%	Grade3: 20%
	Saleable: 80%	

Strategies, policies, regulations and programs for the pomelo sub-sector (especially: cooperative)

- No specific supportive strategies for the Cooperative
- Support local farmers with technology (e.g. GAP), plant protection extension activities (disease control and prevention, herbicides and pesticides management)
- Report to competence authority at province level
- Support and give advice to the Department of Agriculture of Vinh Cuu District in setting up programs for supporting the local farmers

Quality of enforcement (policies and regulations) and implementation (programs)
 Not very good due to lack of labor force, and employees' ambitions toward their work (low salary)

Key constraints to the development of the pomelo sub-sector (production, trading and processing) in the district and province

- Competence of the district officers: not enthusiastic, not creative, not active
- Lack of management competence

Key constraints regarding the competence of the Cooperative:

Lack of competent staffs

Key opportunities regarding the development of the pomelo sub-sector (production, trading and processing) in the district and province

- The famousness of the Bien Hoa pomelo because of its high quality
- Increase in market demand
- Increase in the diversity of pomelo-based products (pomelo wine, grapefruit essential oil, mosquito-repelling incense, etc)
- Possible increase of pomelo's quality and quantity due to advance technologies.

Stakeholder in a chain:

Supplier: supplier mainly provide fertilizer (muck, inorganic), pesticide. Currently there are 10 suppliers in Vinh Cuu district. Most of seedling was supplied by farmers themselves.

Appendix 5: Defining the cooperative in terms of its elements

Aspect/element	Description
Identity	
Name	Tan Trieu service and agriculture co-operative
Constitution	Type of organization: Cooperative of Pomelo farmers, establishment and operation follow Vietnam Law No. 18/2003/QH11 on Cooperatives
Reputation	The first pomelo cooperative that initiated and is applying GlobalG.A.P and VietGAP to part of its members. The cooperative's pomelo products are legally sold under the brand name Tan Trieu Pomelo which is granted a trademark certificate by the Vietnam Office of Intellectual Property Rights.
Impact	Visual appearance Logo:
Product packaging	

Purpose	
Raison d'etre	Develop a more sustainable pomelo chain with high and stable quality products (e.g. follow VietGAP and GlobalG.A.P) in order to support the farmers in stabilizing their production and creating prosperity
Vision	A cooperative of pomelo growers produce “clean and high quality products” that is able to satisfy national and international quality standards (as an pomelo exporter)
Mission	To successfully apply, maintain and extend VietGAP pomelo production area in the local area
Target market	Domestic market (at first): Dong Nai and Vung Tau Province
Structure	
Physical deployment	One office, a warehouse and a packaging room in Vinh Hiep, Tan Binh commune, Vinh Cuu district
Functional composition	Marketing function and agricultural extension services function
Roles and jobs	In theory, the Tan Trieu cooperative has a chairman, the business vice chairman, the technical vice chairman, a treasurer, external accountancy. Beside there are a supervisory with three members of cooperative are elected. However there are only 3 members who are working.
Workplace	Field and main office in Tan Trieu, agricultural fairs
Reporting structure	Report to the Tan Trieu Community Council Regular report to the cooperative members
External infrastructure	External organizations involved: The farmers’ association, Dong Nai union of cooperatives, Vinh Cuu agriculture department, Dong Nai plant protection department, Vinh Cuu Agricultural Extension Centre
Participants	
Owners	Its members
Managers	The cooperative board
Workers	The cooperative board, temporary workers
Channel	(In theory) Directly sell pomelo to customers Receive order via phone and face-to-face contact
Customers	Pomelo consumers
Suppliers	Member’s farmers Nonmember’s farmers
Partners	No partner, works independently
Neighbors	Farmers from others commune, the local residents
Enablers	
Land and building	The cooperative is authorized by the government to use 500 m ² of land as a place to operate. This land can be used as property for bank loans. However, at this moment legal administration work is not yet completed makes it is impossible for the cooperative to loan

	<p>money from banks using this land as a pledging property. One office (20 m²), a warehouse and a packaging room (100 m²) located inside the area of 500 m² (mentioned above) are of the cooperative's right to use.</p>
Technology	Packaging machine, post-harvest handling equipments (e.g washing machine), dryer
Intellectual property	The cooperative name and logo Product brand-name
Information	Information and report regarding financial issues, sales, order and customers is stored normally in form of text reports
Skills	The chairman: is currently trained with management skills The business vice chairman: is originally a trader, having negotiation, selling, buying skills The technical vice chairman: was awarded "good pomelo production farmer" of Tan Trieu, graduated from a college (agriculture techniques, specialized knowledge...)
Core competencies	To be able to conduct VietGAP and GlobalG.A.P training and transfer technology to farmers
Relationships	With local government departments and other pomelo supporters (as mentioned in external infrastructure element) With customers (on theory only)
Financial resources	Charter capital from members 150 million VND (equals to 5000 to 6000 euros) Subsidies from government in establishing office and initial infrastructure (warehouse, packaging room) (40%)
Activities	
Line-of-business	To be evaluated using MIDCA model
Support	Cooperate with agricultural institutes and other organizations to open classes for farmers, training for staffs; technical supports for members; marketing activities for promoting the cooperative products and image
Management	Members meetings are organized regularly No specific objectives for staffs are set No strategic plan for a specific goal or target with regards to business activities
Compliance	Tax law, Vietnam Law No. 18/2003/QH11 on Cooperatives
Deliverables	
Products	Pomelo, fertilizers, plant protection products
Services	Technical supports and training (VietGAP and GlobalG.A.P, agriculture practices)
Influences	
Constraints and pressures	External constraints: are discussed more detail in PESTEC Internal constraints: Lack of resource including funds, management skills and availability of staffs
Risks- threats	Will be discussed in SWOT analysis
Opportunities	
Competitors	Traders, Wholesaler

Culture

Management style	Democratic: the cooperative board allows its members to discuss issues and reach decisions through discussion and voting (for important or controversy matters)
Rules and customs	Each member cannot contribute more than 30% of the standard charter capital. Everyone has equal “voice” which not related to the amount of charter capital they paid Rules of reward, profit distribution, tax... etc. are according to what was approved and agreed by members at the beginning.
Attitude to work	Most staffs was very enthusiastic at the beginning but their ambitions to work decrease by time when they have to face unsolved problems such as could not find financial resources for business operations
Benefits and perks	Salary of the cooperative staff members is not fixed but bound strictly to the profit created by the operations of the cooperative At this moment almost no salary is paid for the staffs (too low, kind of “on-paper” only)
Personal development	Ad hoc courses, yearly training and technology updates classes are regularly opened for the cooperative staffs and its members The board members are (recently) trained with management skills and other soft-skills that can support the management of the cooperative

Performance

Scale	1 shop, 5 staffs, 21 members
Efficiency	To be evaluated using MIDCA model
Innovation	Slow in changing even though the old forms or initial targets are not realistic
Financial	Estimated annual financial needs cannot be covered by the cooperative itself Cannot access to any local bank due to lacking of required pledges Farmers are not willing to contribute more

Appendix 6: The Integral model of Diagnosis for Co-operatives and Association

Organization: Tan Trieu pomelo cooperative

		Max	Score	%
Purpose	Long term perspective	15	7	47%
Enablers	Staff capacity	25	15	58%
Activities	Relationship with other stakeholders	25	7	29%
Deliverables	Financial management	35	3	9%
	Membership base	15	11	73%
Performance	Benefits and perk	15	8	53%
Culture	The product	30	26	87%
	Line-of-business	25	11	44%
	Total	185	88	47%

No	Concept	Indicator	Criteria	Max. Score	Score	Comments/Observations/ Information
1	Long term perspective			15	7	
	Vision and Mission	There is a written declaration of the organization's vision and mission.	Yes=5, No= 0	5	5	Written on the cooperative's declaration
	Long term strategy	There is a Long term strategic plan	Yes=5, No=0	5	0	No long-term strategies were set especially with regards to market for Viet GAP pomelo
	Strategic long term financial vision.	The organization has a clear vision on building capital and becoming financially self-sufficient in the long term.	Range: Definitely Yes=5 Definitely No=0	5	2	a plan was set but not realistic and very vague
2	Staff capacity			25	14.5	
	Management Staff (office)	There is sufficient management staff and they are well trained for their tasks and responsibilities.	Range: Definitely Yes=5 Definitely No=0	5	2	Currently staffs are trained with management skills (theory) but their practical experience in managing is still lacking
	Technical Staff (field)	There is sufficient technical staff and they are well trained for their tasks and responsibilities.	Range: Definitely Yes=5 Definitely No=0	5	5	The production vice chairman has agriculture practical experiences, skills, knowledge on applying Viet GAP and Global GAP
	Technical staff coverage	The needs of all producers in terms of Field Technical Assistance are covered.	Range: Definitely Yes=5 Definitely No=0	5	3	Due lack of labour force, not all assistance are covered (1 production vice chairman and 21 members (regular or daily assistance); for irregular assistance like official training classes, experts from outside may be recruit as trainers.
	Organizational (operational) structure evaluation	Does the current organizational structure works?	Range: Definitely Yes=5 Definitely No=0	5	2	Works but in limited extent due to only 2/5 staff members are really available and actively perform their roles and jobs
	Governance structure evaluation	Is the current governance structure sufficient and does it perform well?	Range: Definitely Yes=5 Definitely No=0	5	2.5	The governance structure even though simple and rather straight forward but is sufficient because the scale and financial resources of the cooperative is small. However it does not perform well regarding to lacking both experience and ambition in some of the board members)

No	Concept	Indicator	Criteria	Max. Score	Score	Comments/Observations/ Information
3	Relations with stakeholders			25	7.3	
	Producers	What is the relationship of the organisation with each of the parties? To be evaluated in terms of constructive cooperation, transparency, trust, mutual respect, win-win, long term.	Range (per category): Very strong=5 Improvements needed urgently=0	5	2	Interviews with members of the cooperative showed a decrease in trust and mutual respect towards the cooperative because of lacking in transparency in several issues (financial, sales), members is doubting whether some of the board members is using the name cooperatives for their own benefits.
	Clients			5	0	No regular clients
	Financers,			5	0	No relationship with banks
	Supporters (NGO's)			5	4	Having relationships with diverse type of external organisations see (UBM-external infrastructure element)
	Community			5	1.3	Survey of nonmembers farmers showed only 7/26 of the farmers trust and want to join the cooperative
4	Financial management			35	3.013	
	Trade Finance Needs	Percentage of financial needs covered.	Percentage (%) * 5	5	0	Balance sheet at this moment is 9 million while financial needs for 1 year (buying pomelo and plant protection products is about 4 billion VND), members don't want to contribute more (afraid of losing investment), plus cannot loan from local bank
	Access to local financial resources	The organization has access to local bank/financial institutions to cover their financial needs.	Yes=5, No= 0	5	0	Cannot loan from local bank due to lack of required pledge

No	Concept	Indicator	Criteria	Max. Score	Score	Comments/Observations/ Information
	Organized and up-to date administrative processes, audited statements	Financial information of the last three years is available and audited	Range: Definitely Yes=5 Definitely No=0	5	2.5	It is available but isn't audited
	Financial Performance: solvency	Good score on solvency ratio, above 30%	Above 30%=5, less than 30% is 0	5	0	
	Financial performance: liquidity ratio	Good score on liquidity ratio, every month is above 1.	Yes=5, No= 0	5	0	
	Financial Independency between Departments	Each organ, committee, department operates with its own budget and/or financial resources.	Yes=5, No= 0	5	0	One budget for all activities
	Funding Sources	The organisation's independency on sources of grant funding.	% of operations costs covered by donations 1/(%*5)	5	0.513	Total credit of the cooperative: 210.5 million VND in which 83.9 million VND is financed by government to build warehouse for sorting, grading, packaging pomelo which cost 190 million VND
5	Membership base			15	11	
	Active Membership	% of active members out of total members	Percentage (%) * 5	5	4.2	18/21 members are active
	Certified members	% of members that are certified	Percentage (%) * 5	5	3.8	5 members have Global GAP certifications, 11 members are certified Viet GAP
	Actions to increase membership	The actions to increase (active) membership are the appropriate and have resulted in increments of active membership.	Range: Def yes, 5 Def no=0	5	3	Open Vietgap training class for non-member farmers in order to attract more farmers to join the cooperative but actually 73% non-member farmers answered that they don't want to be member of cooperative

No	Concept	Indicator	Criteria	Max. Score	Score	Comments/Observations/ Information
6	Benefits and perk			15	8	
	Benefits distribution	There is a written declaration of the organization's benefits distribution, perks, reward.	Yes=5, No= 0	5	5	
	Salary	The degree of satisfaction of the staffs with regard to salary	Range: Definitely Yes=5 Definitely No=0	5	1	Time required for working for the cooperative is too large compare to the salary paid by the cooperative (said the board members),
	The reality of staff salary payment policy	Does the payment policy reality?	Yes=5, No= 0	5	2	The payment policy looks logic in theory (salary of the board depends strictly to the annual profits (but the first 2 years of operation, no profit was made thus salary of the staffs were kinds of "on-paper" only)
7	The product			30	26	
	Production Volume	Productivity per hectare is growing	Increased: 5 points, remained the same: 3 points, lowered: 0 points.	5	5	.
	Average Price paid to producers	Average price paid to members increases	Increased: 5 points remained the same: 3 points, lowered: 0 points.	5	3	
	Quality of Product.	Size, taste, homogeneous, weight, outlook	Increased: 5 points, remained the same: 3 points, lowered: 0 points.	5	4	The members are following the technique of Global GAP and Viet GAP

No	Concept	Indicator	Criteria	Max. Score	Score	Comments/Observations/ Information
	Quality Management	A good Quality Management System (QMS) is in place and guarantees good quality pomelo.	No QMS=0 points; QMS in place, but not able to measure improvement=3 points; QMS in place, constant monitoring of a quality and measurement of improvement= 5 points	5	4	The members are following the technique of Global GAP and Viet GAP
	Productivity	Average production per hectare compared to averages in the area (province, department etc).	More=5, same=3 less=0	5	5	Compare with average productivity of district 14 (tons/ha): the productivity of member cooperative is higher about 15 tons/ha, and the percentage of pomelo in class 1 and 2 increases in which the percentage of class 1, 2 of member is 75-80% and non-member is 65-70%. the reason of the result is the members are following the technique of Global GAP and Viet GAP
	Environmental measures	The organization has a written plan and implements measures and techniques to minimize the impact of its operations on the environment.	Range: Def yes, 5 Def no=0	5	5	Comply to VietGAP standards
8	Line-of-business			25	11	
	Average sales price	Average sales price received for pomelo sold increases	Increased: 5 points, remained the same: 3 points, lowered: 0 points.	5	0	No sales
	Marketing activities	The organization efficiently executes marketing activities to broaden the client portfolio.	Range: Definitely Yes=5 Definitely No=0	5	4	Every year, the cooperative is supported finance to participate Agrifair and fruit festival to promote Tan Trieu pomelo and the cooperative to potential clients.

No	Concept	Indicator	Criteria	Max. Score	Score	Comments/Observations/ Information
	Flow Harvest - Sales	Time from harvest to sales is appropriate and allows the organization to function properly and fulfill obligations to internal and external clients.	Range: Definitely Yes=5 Definitely No=0	5	5	In theory, the flow harvest-sales is good as it is following VietGAP standard, however this flow has not yet been used in reality (no sales were carried out), only samples for agriculture fairs were done
	Diversified product offer	The organization offers a sufficiently diversified product range (pomelo qualities and/or different products) so that the organization is not overly dependent on one single product.	Range: Definitely Yes=5 Definitely No=0	5	2	Mainly pomelo
	Diversified client base	The organization has a sufficiently diversified client portfolio so that they are not overly dependent on a few clients.	Range: Definitely Yes=5 Definitely No=0	5	0	
TOTAL				185		

