

CHAPTER I

INTRODUCTION

1.1 Introduction

In Thailand, orchids were grown for ornamental plants, study, and hobby, however trading of Thai orchid was limited to domestic market in the past. The most preferable species of Thai orchids are *Dendrobium*, *Vanda*, and *Cattleya*, because they are suitable for growing with climates and environment in Thailand.

Dendrobium had the good characteristics for growing in Thailand, such as growing easily, rapidly and strongly. Its flowers are beautiful and fecundity. So, the farmers prefer growing *Dendrobium spp.* than other species of orchids.

Cattleya was less preferable for the farmers in Thailand, compared to *Dendrobium spp.*, because it is hard to give flower bud and difficult to grow. The goodness of this genus is that its flower-size is large and beautiful, which lead to a high price.

Vanda was preferable for the farmers to grow in Thailand, because it has dominant characteristics like *Dendrobium spp.*, which is good character for cut flower (Pusanong, 1958 and Worawan, 1959). This genus is famous and has important characteristics that are well known for the orchid-growers for a long time (details are in appendix I).

About 30 years ago, farmers had begun to grow orchids as commercial flowers and exports. This has made Thailand an important country for flower exports in the world markets. Thailand was rank as the top-fifth and top-fourth country for flower exports in the world markets in 1992 and 1993-1994, respectively (Table 1.1). Among exporting flowers from Thailand, orchid is the most important flower since the export values of orchid average to about 99 % of the total export values of flowers (Department of Customs, 1977-1997).

The values, and quantities of Thai orchid exports tend to increase over time from 80 tons or 4.31 million baht in 1970 to 11,897 tons or 782.45 million baht in 1994. (Table A 2.1). The productions of Thai orchids tend to increase at slow rates

from 18,750 tons in 1989 to 26,825 tons in 1997. (Table 3.1). The major areas for orchid farms are in Bangkok, Nakorn Pratom, and Samutsakorn (Headquarters of Work Plan, Department of Agricultural Extension, 1998). The farmers in these provinces produce orchids for exports about 54 % and 46 % for domestic market (Department of Agricultural Extension, 1998). The main export genus of Thai orchids are *Dendrobium*, *Vanda*, *Oncidium*, *Cattleya*, *Phalaenopsis*, *Ascocenda*, *Rhynchostylis*, *Mokara*, and *Aranda* (Pituck and Usavaprapa, 1994). Among the exporting genus, *Dendrobium spp.* are the highest export values of Thai orchids in the world markets. For example, in American markets from 1993-1997, *Dendrobium* flowers are about 70-80 % of the total orchid-flower imports from Thailand, and about 93-98 % of the total imports of *Dendrobium* flowers in the world markets (American Business Information Center, Thailand, 1993-1997). Including the orchid-plant, *Dendrobium* species are the highest export species to the world markets with the export shares of 65.07 % and 67.15 %, in 1992 and 1996 respectively (Department of Agricultural Education Technique, Thailand, 1992-1996).

From 1970-1997, the major importing countries of Thai orchids were Japan, Italy, and the United States of America (Table A 2.2). In 1997, the export values of Thai orchids to Japan, Italy, America and other countries were 59 %, 12 %, 12 % and 17 %, respectively (Department of Customs, Thailand, 1970-1997 and Figure 1.1).

Japan, begins to be the top-fifth of Thai orchid importing country in 1974, and move to the top-first importing country of Thai orchid in 1981 up to present, the average export value of Thai orchids to Japan is 48.18 %, (Table A 2.2), and the highest export value to this country is 447.07 million baht , 57.13 % in 1994 (Table A 2.3). The increasing rates of export values to Japan tend to increase rapidly in 1974-1994, except in 1995-1996, where the export values decrease. The export values of Thai orchids to Japan were quite high in 1986-1997, which average to about 48-57 % of total export values of Thai orchids (Table A 2.3). So, Japan is the most important country of Thai orchid export.

Italy, was the top-fourth country of Thai orchid importing in 1980-1983, the top-third in 1984 and 1986, finally the top-second in 1985-1997 (Table A 2.2). The export values and quantities of Thai orchid to Italy, from 1970-1994, tend to increase over time. The export values were between 50-90 million baht in 1984-1994 (Table A

2.4). Therefore, Italy is one of the most important importing countries of Thai orchid in Europe.

U.S.A. was the top-fifth of Thai orchid importing country in 1984-87, up to the top-fourth in 1988-1989, and then the top-third country in 1990-1997 (Table A 2.2). The export quantity and value from Thailand to this country tend to increase every year, except in 1995-1996, the export values were about 50-77 million baht in 1990-1997 (Table A 2.5).

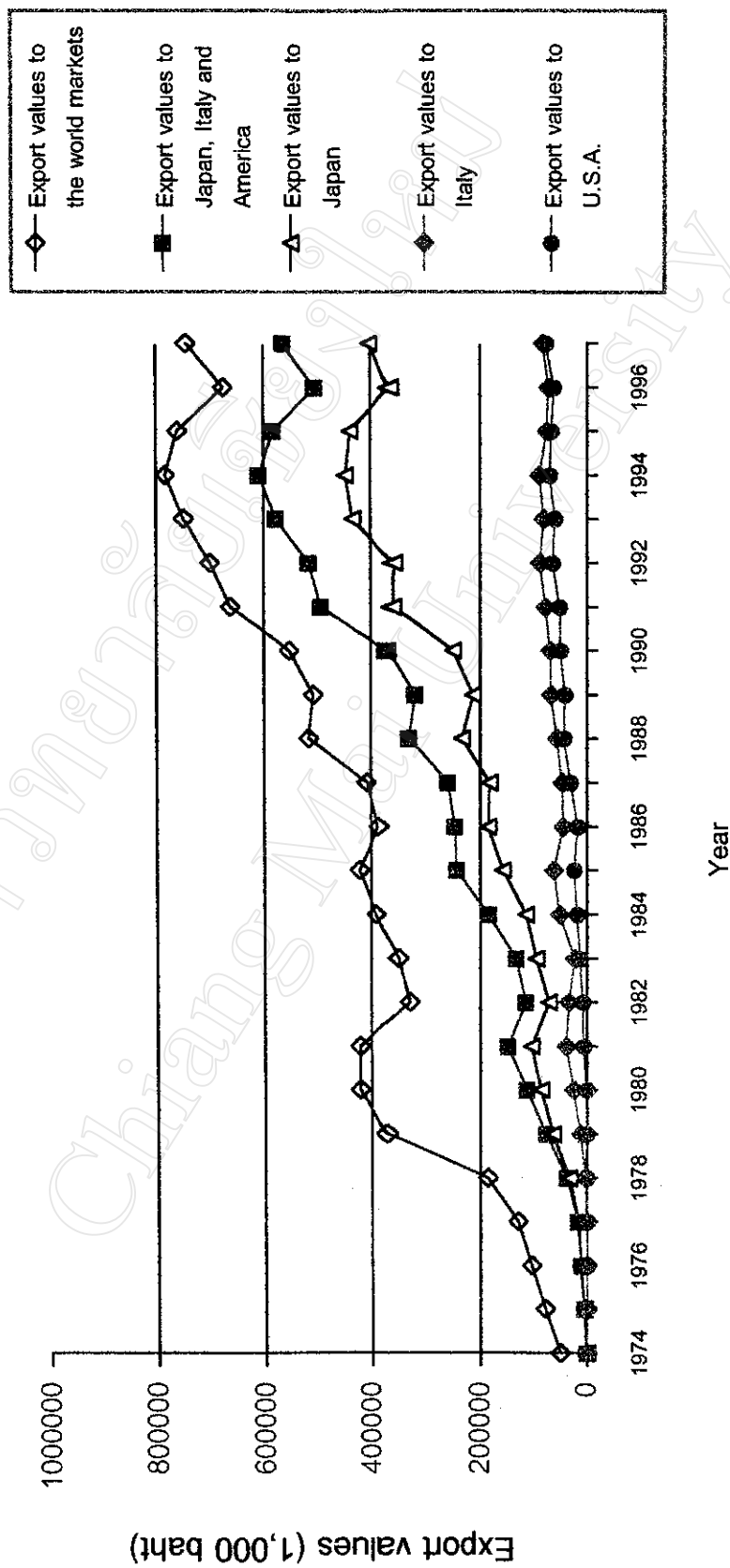
From the information above, Japan, Italy, and America are quite important countries for Thai orchid export, and the export values of Thai orchids to these countries are between 245.60 million baht in 1985 and 608.57 million baht in 1994, 58 % and 77 % respectively (Table A 2.6 and Figure 1.1). Therefore, it is important to study about the growth rates and the stability of Thai orchid export in these countries. In addition the short-term fluctuations from the normal trend of the increasing rates and the decreasing rates of Thai orchid exports is quite important information for the exporters and the orchid-growers in Thailand.

Table 1.1
World cut flower exports rank by source country in 1992-1994.

No.	1992		1993		1994	
	Country	Value (million baht) (% of total)	Country	Value (million baht) (% of total)	Country	Value (million baht) (% of total)
1.	Netherlands	53,839 (64.79)	Netherlands	36,944.71 (58.31)	Netherlands	39,977.30 (58.55)
2.	Colombia	9,891 (11.90)	Colombia	10,544.03 (16.64)	Colombia	10,879.11 (15.93)
3.	Israel	3,653 (4.39)	Israel	2,924.25 (4.62)	Israel	3,380.65 (4.95)
4.	Italy	2,782 (3.35)	Thailand	1,658.44 (2.62)	Thailand	1,718.53 (2.52)
5.	Thailand	1,689 (2.03)	Kenya	1,536.58 (2.43)	Kenya	1,702.86 (2.49)
6.	Kenya	1,537 (1.84)	Italy	1,227.55 (1.94)	Ecuador	1,332.45 (1.95)
7.	Spain	1,317 (1.58)	Ecuador	968.47 (1.53)	Italy	1,284.44 (1.88)
8.	Zimbabwe	718 (0.86)	Spain	725.78 (1.15)	Spain	1,108.14 (1.62)
9.	France	704 (0.84)	Zimbabwe	703.18 (1.11)	Zimbabwe	845.61 (1.24)
10.	Ecuador	633 (0.76)	New Zealand	501.87 (0.79)	New Zealand	747.96 (1.09)
11.	New Zealand	458 (0.55)	Costa Rica	437.35 (0.69)	Costa Rica	540.79 (0.79)
12.	Singapore	452 (0.54)	Singapore	417.77 (0.66)	France	537.07 (0.79)
13.	Mexico	446 (0.53)	France	416.45 (0.66)	Australia	403.60 (0.59)
14.	Canary Islands	411 (0.49)	Mexico	363.30 (0.57)	Mexico	392.01 (0.57)
15.	Germany	408 (0.49)	Australia	343.79 (0.54)	Singapore	389.61 (0.57)
16.	Others	4,158 (5.00)	Others	3,646.48 (5.76)	Others	3,042.59 (4.46)
	Total	83,096 (100)		63,360 (100)		68,282.72 (100)

Source : International Floriculture Trade Statistics, 1995.

Figure 1.1 : Export values of Thai orchid flowers to Japanese, Italian, American and the world markets in 1974-1997.



Source : From Table A 2.6

1.2 Rationale

The major export markets of Thai orchids are Japanese, Italian, and American markets. Therefore the growth rates of Thai orchid exports to these countries may effect the export values of the exporters and the production of orchid in Thailand.

The high instability and slow growth rates of foreign trade of Thai orchids are subject to economic development of Thailand. The major effects are that the instability of Thai orchid exports can have the direct effects on productions of the orchid-growers and the export values of Thai orchid exporters, and then the others consequence effects, such as saving, investment, employment, balance-of-payment and per capita income of Thailand.

Falls or slow rates of export growth of Thai orchids may involve efficiency and dislocations in production, price effects and the same effects as instability of exports. More over, the problems of growth and instability of Thai orchid exports are connecting with excessive trade concentration and high trade barriers.

The fluctuation of Thai orchid exports in some years may cause the instability of Thai orchid exports. An increasing of the competitive countries in the main export markets of Thai orchids may cause the slow growth rates and instability of Thai orchid exports, as well as the high market concentration of those markets.

The change in demand of Thai orchid exports may cause from an increasing export of the competitive countries in the major markets of Thai orchids, and the lower prices of the orchids from those countries. The results of this will create the instability and slow rates of growth of Thai orchid exports. So, the interesting problems that should be study are the growth and instability of Thai orchid exports in the important markets in the world.

The fluctuation in values and prices of Thai orchid exports in some years can cause instability and slow growth rates of Thai orchid exports, which are important to the orchid-growers and the exporters of Thailand. Japanese, Italian and American markets are very important markets for Thai orchid exports because the sales in these markets are quite high (Table A 2.2, A 2.3, A 2.4). This study will analyze the export growth and market concentration of orchid-export in the major importing countries

(Japan, Italy, and America) and instability index of Thai orchids in these countries. In order to know the levels of growth and competitiveness, the relationships between market concentration of orchid-export countries and instability of Thai orchid export in these markets should be analyze.

This study hypothesize that Thailand can compete with other countries that export orchid flowers into Japanese, Italian, and American markets and market concentration are related to the instability of Thai orchid exports in these major important countries.

From this, orchid can be the product champion of agricultural export goods of Thailand in the future if Thailand can increase export growth over time, to follow the Government Plan in the year 1998-2002. Also, Thailand can expand the markets, increase the growth rates of Thai orchid exports and stabilize exports in these markets.

1.3 Literature Review

Hantaepinth (1977) had reported her study on the productions and the export markets of Thai orchids that the orchid export values tended to increase, and there had several important problems of Thai orchid exports such as prices cutting down between Thai orchid exporters, disadvantages in price agreements of both the farmers with the exporters and Thai orchid exporters and the importers of Thai orchids, as well as the future competitive countries of orchid exports in the world markets.

The results of the marketing problems of Thai orchid exports that reported by Phaewphraikul (1980) found that there were many problems both inside and outside the country for Thai orchid exports. Inside the country were involved with the orchid growers, the exporters, the orchid association and the methods of the government offices. For example the farmers lacked knowledge in technology to improve the qualities of orchid flowers. Thai orchid growers do not have farmer cooperative to bargain for the fair benefits of price and marketing systems with the exporters. The orchid association of Thai orchid exporters is not strong in managing marketing systems, compared to other countries. Phaewphraikul suggested that the orchid growers and the exporters should cooperate in group system. The orchids association

of Thailand should act as a mediator to find satisfactory solutions and check whether its members follow the guidelines of the association and promote its objectives. The government should help the farmers and the exporters to solve these problems in order to expand Thai orchid exports by joining with the private sectors and tackling all existing problems.

Gavinlertvatana and C. Konjing (1982) studied the trend of Thai orchid exports in the European market during the years 1978-1981. Their study showed that although the quantity import of orchid flowers to West Europe from Asia didn't increase, but Thailand exported more orchids than Singapore and Malaysia. The trend of Thai orchid export had quickly increased in quantity for the *Cymbidium species*, but decreasing in price, in the European market in 1976. However, in 1981, the importing rate of German for Thai orchid flowers tended to decrease, German was the major importing country during this period, and so did the countries of Extra-EUR. They suggested that Thai exporters should be settled in standard companies and improve the qualities of packaging, grading, new varieties of orchids, transportation and meticulous choosing the export markets. The orchid growers and the exporters should cooperate in order to eliminate the problems and the government should support them in capital, do the market research of the important markets and advertise for Thai orchid flowers by International Trade Center (UNCTAD / GATT) to other countries, not only European countries.

Gavinlertvatana (1983) compared the production of Thai orchid exports in industrial systems with Singapore and Malaysia in the European market and reported that although the prices and the quantities of Thai orchid exports tended to increase with a decreasing rate in the European market, they were still higher than the export values of Singapore and Malaysia. He suggested that the most important thing to expand Thai orchid exports in the European market was to have good variety of orchids.

Watcharotayan (1983) studied the ideas of the exporters in orchid-growing for export, and found that *Dendrobium Pompadour* tended to decrease in production

and prices, but the export values of this species were still high in foreign markets. If the exporters want to expand the markets in the future they should concern about the quality of orchid productions more than to increase only the productions as much as possible. There were many problems in Thai orchid exports, such as orchid quality problems, high cost of transportation, competitive exporters, and lack of new varieties. The exporters wanted that these problems should be solved and supported by the government including the tax systems in the customer countries, especially the transportation costs and systems.

The studying of factors affecting Thai orchid export demand by Watchararat (1988) about the situation of orchid productions and export markets of Thailand. He analyzed the export demands for Thai orchid (both cut flowers and orchid plants) to the main importing countries and to recommend policies for market expansion of Thai orchids. The results of this study showed that both planting areas and quantities produced were increased. The main importing countries of Thai orchid cut-flowers were the Federal Republic of Germany, the Netherlands, Italy, France, Japan, Hong Kong and the United States. The results of export demand analyzes indicated that the important factors affecting export demands for Thai orchid cut-flowers in the Federal Republic of Germany, the Netherlands, Italy, Japan and the United States were gross-domestic products, Thai orchid cut-flowers export price, price of substitute cut-flowers and seasonal dummy variables. The policies recommended were that, to increase quantity and value of exports for Thai orchid to the main customer countries, the export prices should be stabilized in general but should be decreased in Japan

Somsap (1971) studied the instability of export receipts of Thailand from 1950 through 1967, which have three major parts of the study, (a) the degree of instability of receipts from exports of goods and services of Thailand for 1950-1958 and 1959-1967, (b) factors associated with such instability, and (c) ways to deal with the problems of export instability, by using theory of Instability index of Joseph David Coppock(1962). This study use time series data of export values of goods and services of Thailand from 1950-1967.

The results show that the highest instability and also the highest contribution to total instability came from exports of C-1 (food, beverages and tobacco, and animal and vegetable oils and fats) to India, Japan, and the United Kingdom during 1950-1958. On the other hand, in 1959-1967, it came from exports of C-2 (crude materials, inedible, except fuels) to Switzerland and C-3 (chemicals, manufactured goods classified chiefly by material, machinery and transport equipment, miscellaneous manufactured articles, and miscellaneous transactions and commodities, n.e.s., not elsewhere specified) to China and Italy. The annual growth rate of Thailand's goods exports was the most important factor associated with the export instability.

The studying of the export promotion and income instability of industrial export goods of Thailand by Sukonetapatipark (1975) using time series data of 15 industrial export goods to 23 markets in 1972-1980. By using an average percentage deviation from the least squares trend line of Coppock's log variance index (1962) to study instability index of income from the industrial export goods. The goodness of this method is that the appropriate of the linear time trend equation to the trend of export values of each good and market.

For market concentration index of export goods and export markets by using the Hirschman-Gini Coefficient to analyze the market concentration index of time series data of 15 industrial export goods to 23 markets in 1972-1980. The goodness of this method is that it is easy to calculate and understand the meaning of concentration index of estimation.

Studying the relationships between the instability index of income of industrial export goods and the market concentration index of export goods by using the secondary data in 2 ways. (1) The Cross-section approach use Cross-section of disaggregated data of 15 export goods and 23 markets. To increase enough data for study by Pooling Cross-section and time series data of 15 export goods to 23 markets, and using the degree of freedom of the time series combination. The goodness of this method is that it can increase enough data, and more degree of freedom to analyze. (2) Time-series approach to test the relationship between instability of income of each market and each good in each year.

Purvisanont (1989) analyzed the two major parts of Thai rice, the first part is analyzed the change in structure of the export markets of Thai rice (three standard levels) in 1957-1987. This study analyzed the changes in export value, quantity, and the major importing country by categorization the statistics of Thai rice export data to major importing countries, from 1957-1987. The market concentration index of three standard levels of Thai rice used the theory of the Herfindahl index of concentration of Hirschman (1973). This method has some goodness, because the Herfindahl index takes into account all the firms in the market, and this index reflects the existing inequality between each firm in the market and every other one. Nevertheless, this Herfindahl index show only the overall values of the contribution of the markets but can not indicate the inequality of the market share in each levels, the weakness of this method.

The study about growth rates of the export values of Thai rice between 1982-1984, by using the theory of Constant Market Share analysis of export growth of E.E Leamer and Stern (1970). This method can show the export growth, the competitiveness of the export of Thai rice with other countries in the world markets.

The second component deals with export stability and the factors influencing the growth of the rice exports by using the index of Instability method of Joseph David Coppock (1962) (time series data of the export values and prices of Thai rice in 1957-1987). It has a good trend line that get from the Arithmetic Mean of the algebraic differences between the logarithms of the successive pairs of export values, and found that high standard rice tended to be more stable than medium and low standard rice.

The analysis suggested that high standard rice tend to be more stable both in total values and unit value (price). Between 1957-1968, which was a period of relative stability, the Coppock instability index was 9.7 for the high standard rice, 63.69 for the medium standard rice and 128.47 for the low standard rice.

1.4 Objectives

The objectives of this study are following.

1. To identify the problems and constraints of Thai orchid exports that effects the instability of Thai orchid exports in Japanese, Italian, and American markets.
2. To study the relationship between the growth rates of Thai orchid exports and market concentration indexes of orchid flowers in Japan, Italy and America.
3. To study the relationship between the instability of Thai orchid exports and market concentration indexes of orchid flowers in Japan, Italy and America.
4. To study the relationship between market shares of Thai orchid exports into Japanese, Italian and American markets and market concentration indexes of Japan, Italy and America in order to know the competitiveness of Thai orchid exports that can maintain or increase the market shares in these markets.