

CHAPTER III

PRODUCTION, MARKETING AND EXPORTS OF THAI ORCHIDS

3.1 Production

Planted areas and productions of cut orchids and other cut flowers

Thailand is suitable for producing various kinds of cut orchids and other cut flowers. During 1989-1997, planted areas of orchids were between 12,534-14,500 rai and the average productions were 1,370-1,850 kg per rai. The planted areas and the productions of the orchids were about 32-39 % of the total planted areas for cut flowers while productions was about 40-46 % of the total cut flowers in Thailand (Table 3.1).

In 1996, the major areas for Thai orchids production were in many provinces such as Bangkok, Nakorn Prathom and Samut Sakorn with planted areas of 4,488, 4,145, and 2,912 rai respectively (Subdivision of Agricultural Business Research, 1998). Bangkok was the largest planted area because many export companies were in Bangkok. However the orchid growers were facing with serious problem in water pollution. In the future, the other provinces may become more important planted areas than Bangkok.

The major species of Thai orchid exports

There were several genus and species of Thai orchids that the farmers grow for exports, this study selects the top-tenth genus of Thai orchid exports in the world markets in 1992-1996, which were Dendrobium, Vanda, Oncidium, Cattleya, Phalaenopsis, Ascocenda, Rhynchostylis, Mokara, Aranda, and Arachnis (Department of Agricultural Education Technique, 1992-1996). The most important genus of Thai orchids were Dendrobiums because the farmers prefer growing them and the exporters can export with high values to the world markets (American Business Information Center, Thailand, 1993-1997).

Table 3.1 : Planted areas and productions of cut flowers in Thailand in 1989-1997.

Year	Orchids			Others cut flowers			Orchids / Total cut flowers	
	Planted areas (rai)	Productions (ton)	Average production Kg / rai	Planted areas (rai)	Productions (ton)	Average production Kg / rai	Planted areas (% of total)	Productions (% of total)
1989	13,000	18,750	1,442	21,045	27,224	1,294	38.18	40.78
1990	13,100	17,950	1,370	20,271	28,162	1,389	39.25	38.92
1991	13,100	19,650	1,500	20,071	27,756	1,383	39.49	41.45
1992	13,200	22,500	1,704	23,700	30,501	1,287	35.77	42.45
1993	12,534	21,625	1,725	22,316	24,894	1,116	35.96	46.48
1994	12,614	21,750	1,724	25,700	28,500	1,109	32.92	43.28
1995	14,412	25,900	1,797	26,981	31,450	1,166	34.82	45.16
1996	14,400	26,640	1,850	29,900	36,720	1,228	32.50	42.04
1997	14,500	26,825	1,850	30,500	38,075	1,248	32.22	41.33

Source : Office of Agricultural Economics, Ministry of Agriculture and Cooperative, 1998.

Orchid growers interview

In 1998, from interviewing the sample farmers in Suan Sam Pran district, Nakorn Prathom province, found that they had grown the orchids for domestic markets (about 10-40 %) and the export companies (60-90 %) since 1977-1988. For domestic markets, they sold the orchid flowers in the form of bouquet (about 3 inflorescence / bundle) with the prices about 2-5 baht and 50-80 baht / kg. to the merchants in Moung district. The main products, they sold to the export companies with the prices about 2-4 baht / inflorescence for *Dendrobium spp.* and 10-12 baht / inflorescence for *Oncidium spp.*

The average planted areas for orchid farms were about 3-5 rai, and the average production were about 500-1,000 and 1,000 inflorescence / rai / week for *Dendrobium spp.* and *Oncidium spp.*, respectively.

There were high costs in building nursery, and young orchid plants (seedling) and the growing materials at the beginning. The costs of seedling (*Dendrobium spp.*) were about 70,000 baht / rai (7 baht / seedling and about 10,000 seedling / rai).

During the flower period, the major costs in growing orchids were insecticides about 1,000-3,000 baht / rai / month and fertilizers about 300-1,000 baht / rai / month. The important problems of insects were trips (*Trip palmi* Karny), larva or worm (*Contarnia sp.*), and red mite (*Dolichotetranychus vandergooti*).

Diseases that damaged the orchids were black rot (*Phytophthora palmivora* Butl), flower rusty spot (*Curvularia eragrostidis* (P. Henn) A. Meyer, leaf spot (*Pseudocercospora dendrobii* Deighton), stem rot (*Sclerotium rolfsii* Sacc.) and rot (*Pseudomonas gladioli*).

The important problems for growers are that the selling prices of orchid flowers to the export companies were not different from the domestic markets, a small lower demand for orchid flowers in rainy season (over supply) and the affects from the economic problems during 1995-1997. However, capital is minor problem for orchid growers.

When faced with these problems, they consulted the staffs of the companies that selling chemicals and insecticides and the agricultural government officers. About 90 % of orchid growers prefer to sell their products to the exporters rather than export the products themselves, because they lacked of knowledge to do export

business. They wanted the government to help in reducing the prices of chemicals and insecticides. They also suggested that the government should set policy in environmental control to help with water pollution.

Some orchid growers are the members of the export companies, some farmers sell their products to many companies they know (with verbal agreement). For price provision, it depends on the season and the conditions they deal with the companies. About 87.6 % of the farmers sell their products to the regular customers (companies) with no sale contract (Table 3.2).

From interviewing 20 farmers in Suan Sam Pran, Nakorn Pratom province, the major production constrains in growing orchids were high fixed cost (nursery and seedling), insects and diseases problems.

The prices of the orchids from the farmer farms are highly seasonal during the year such as high prices of orchid flowers in dry season in March to May (low production). The orchid prices are low in rainy season in June to October (high production), (Subdivision of Agricultural Business Research, Faculty of Economics, Kasetsart University, 1998). Some orchid growers sell their products in domestic markets because orchid prices are not different from selling to exporters.

Table 3.2 : Selling methods of Dendrobium species of the sample farmer groups in 1996-1997.

No.	Items	% of the farmers in sample groups
1.	Vending methods	
	Forward Agreement of selling with the buyers	
	- Sale Contract	-
	- Verbal Agreement	5.2
	Usual customers, no Sale Contract	87.6
	Selling by themselves	7.2
	Total	100.00
2.	Price provision	
	Price provision in Forward Agreement of vending	-
	Depend on the season	
	- Price provision by the buyers	30.8
	- Price provision by the sellers	53.6
	- Mutual Agreement	15.3
	Total	100.00
3.	Term of payment	
	- Cash	33.9
	- Credit (about 2-3 weeks)	66.1
	Total	100.00

Source : Subdivision of Agricultural Business Research, Faculty of Economics, Kasetsart University, Thailand, 1998.

Orchid export company interview

Data from the sample export companies for orchid flowers are that some companies purchase all orchid flowers from the farmer's farm such as Bangkok Flower Centre Co., LTD.. From interviewing the staff of this company in 1998, the company had exported orchid flowers to Italy (the first customer country), Japan and America since 1969. This company buys all orchid flowers from the farmer farms (100 %), there are about 200 farms that are members of this company in 1998. The company orders the orchid flowers from the farmer farms and transports the entire products by the company's trucks. It's member farms are in Bangkok (Nong Khaem, Klong Kaung, Pasee Charoen, Ratburana, Taling Chun), Nakorn Prathom (Sampran), Rachaburi, and Samuth Sakorn.

Bangkok Flower Center Co., LTD. has the staffs for training the farmers about orchid growing (how to use chemical, fertilizer, and how to protect insects and disease). This company exports orchid flower only one grade, grade A (Supsomboon, 1998).

Some companies buy orchid flowers from the farmer farms that are the members of the companies plus their own farms, because production from the farmer's farms is not enough for exports. The reasons for having their own farm are to reduce the risk. If they buy the total orchid flowers from the farmers for exports and the farmers have some problems such as insects and disease they cannot fulfil their business contract for exports.

For example, Excel Orchid Co., LTD. export orchid flowers to Japan more than 50 % of the total exports. The other important customer countries are the European countries, America and Canada. The growth rates of import values from Japan have been increased every year. This company order orchid flowers from both the farmer farms and its own farm (about 400 rai in Rachaburi province in 1998). The orchid flowers from the company's farm differ from the orchid flowers from the farmer farms in term of varieties and colors. The company carefully produce orchid flowers with high technology for good quality, because only high quality of orchid flowers they export (about 80-90 % exports, and 10 % of low standard size of orchid flowers for domestic markets), (Soponthamkun, 1998).

The numbers of orchid export companies tended to increase from 1992-1997 (Table 3.3). From interviewing 8 orchid export companies one found that the prices of Thai orchid exports have not been increased because of price-cutting among export companies.

Table 3.3 : Number of exporters, quantity and value exports of Thai orchids in 1992-1997.

Year	No. of exporters of Thai orchids	Quantity exports (ton)	Value exports (million baht)
1992	56	11,141	701.33
1993	30	12,374	748.65
1994	n.a.	11,897	782.45
1995	249	11,848	760.15
1996	225	10,620	675.27
1997	212	10,470	744.68

Source : Department of Business Economics, Thailand, 1992-1997.

3.2 The Exports of Thai Orchids

Among the exporting genus of Thai orchids, *Dendrobium spp.* were the main exporting genus, with the highest quantity and values export of Thai orchids. The marketing channel for *Dendrobium spp.* in Thailand in 1996-1997 (Subdivision of Agricultural Business Research, Faculty of Economics, Kasetsart University) indicated that 50.6 % of total production go to domestic market while 49.4 % were exported.

For domestic markets, the main products were distributed to the wholesalers in Bangkok about 32.2 %, which distributed to the small wholesalers, the temple, and the retailers and florist shop. For export markets, the orchid flowers from the farmer farms were distributed to the export companies about 45.5 % and then exported to the importers in the foreign countries. The farmers had exported directly to the foreign importers only 3.9 %.

Thailand had exported orchid flowers for a long time. The growth rates of Thai orchid export values trended to increase every year from 4.31 million baht in 1970 to 744.68 million baht in 1997, as well as the export quantities of Thai orchids (Table A 2.1 and Figure 3.1). The factors that support these increasing values of Thai orchid exports are the numbers of customer countries that increase from 21 countries in 1970 to 86 countries in 1997 (Figure 3.2). The numbers of exporters had grown from 56 companies in 1992 to 225 companies in 1996 (Table 3.3). The top-twenty of Thai orchid export companies during 1993-1997 were listed in Table A 2.7.

Figure 3.1 : Export values and quantities of Thai orchids to the world markets in 1970-1997.

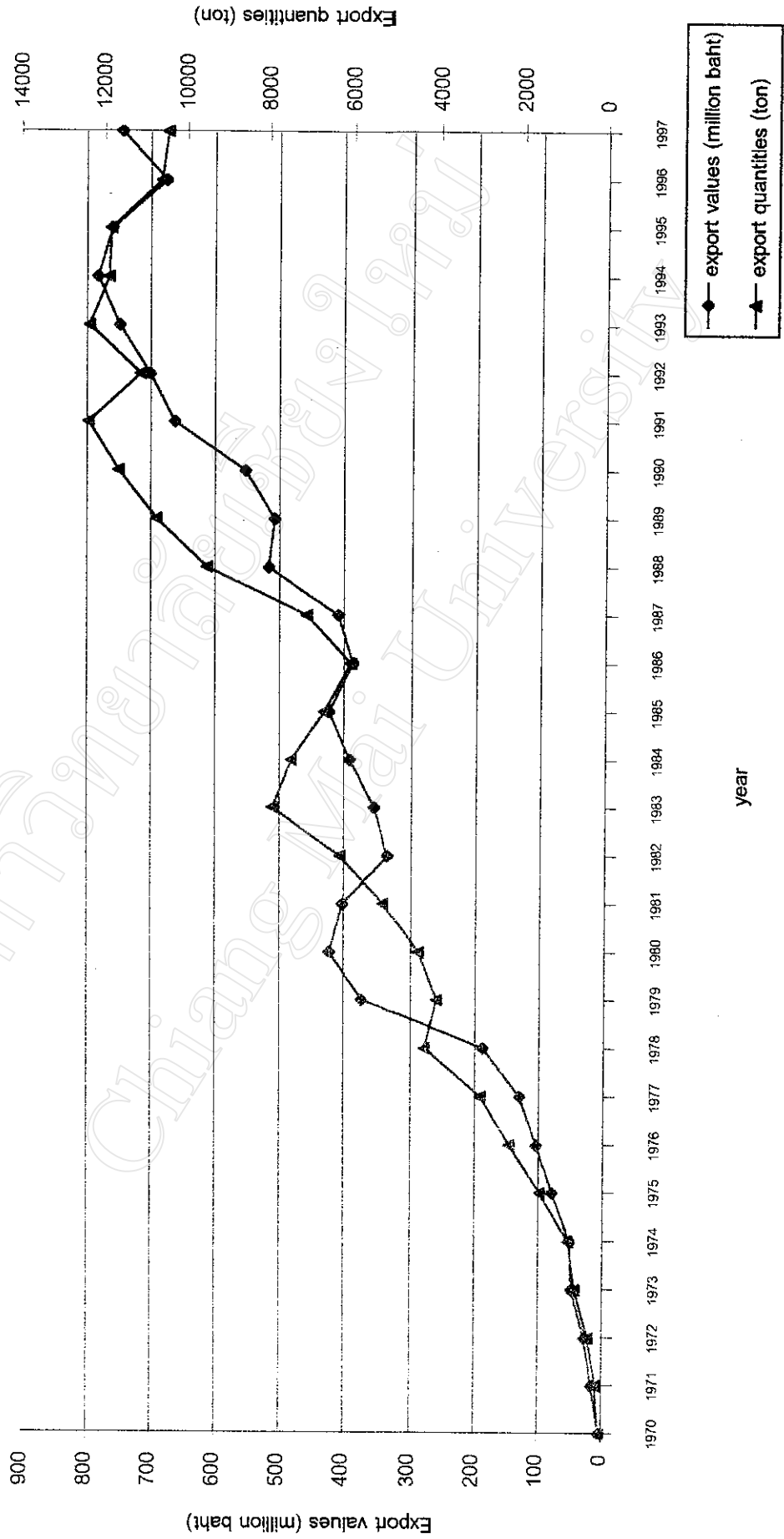


Figure 3.2 : Numbers of customer countries and export values of Thai orchids to the world markets in 1970-1997.

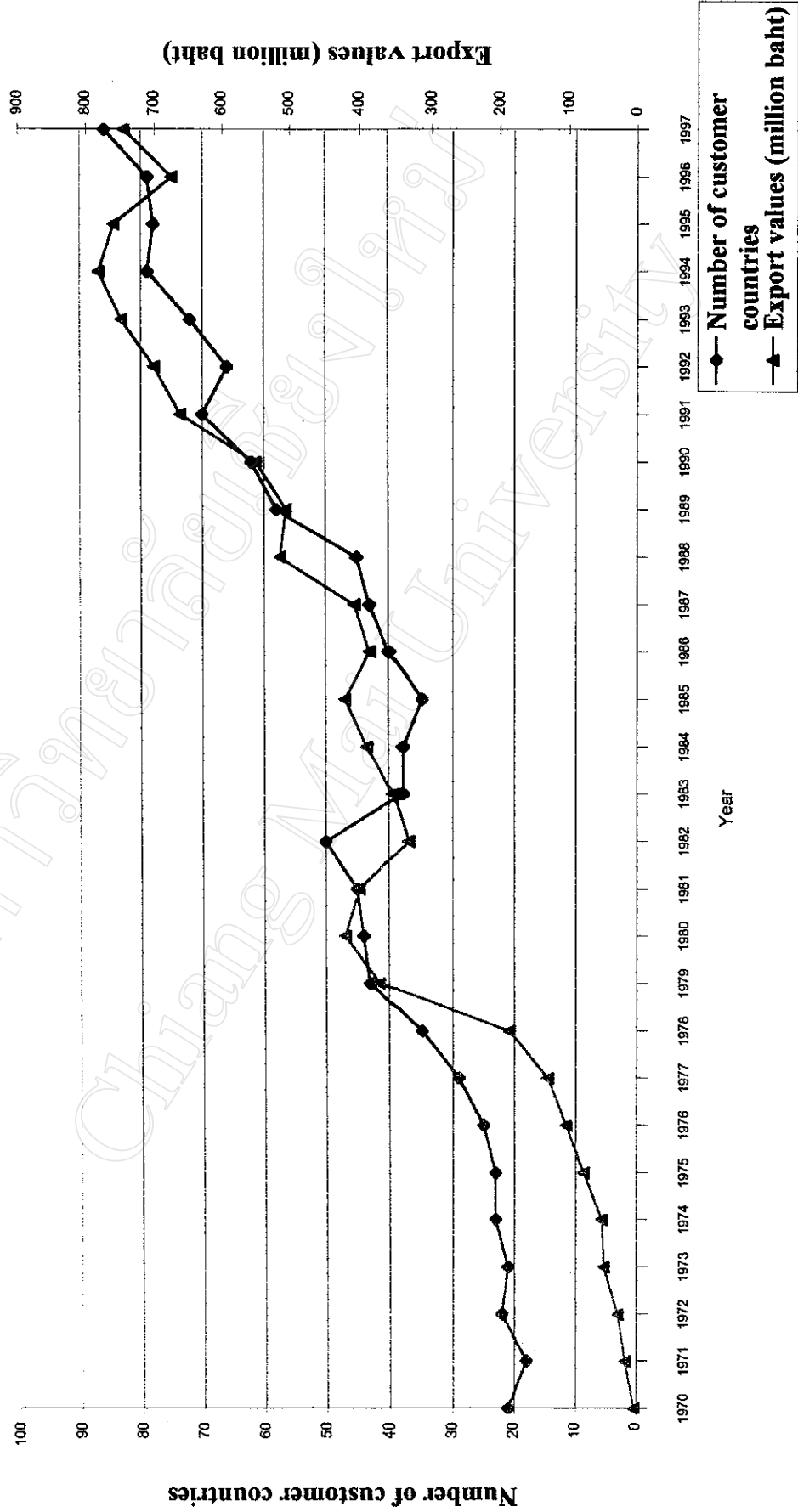


Table 3.4 and Figure 3.3 indicated that seasonality exist in Thai orchid exports. The export quantities were high during the months of September to February and the lowest demand was in June. The export quantities from 1990-1996 were lowest in June with average to 628 ton and highest in October, 1,446 ton. During 1990-1996, the export quantities in each year had standard deviation between 41.85 to 272.10.

These remarkable of Thai orchid exports should be useful information for Thai orchid exporters and the farmers to prepare their products for exports for highest profits.

From the flower consumer survey in Japan for purpose of purchasing cut orchids (Office of Agricultural Economics, 1998) the results showed as follows. During the months of September to March, the export quantities tend to increase or higher than others months of the year because during this time there are a lot of the important days in the customer countries. For example, in Japan, demand for cut flowers are high in New year day, Valentine day, mother's day, as well as graduation and entrance school and university ceremony times (March 15-30). More over, Japanese prefer getting married during the following seasons: Winter, Spring and Autumn, that their needs are high for cut orchids.

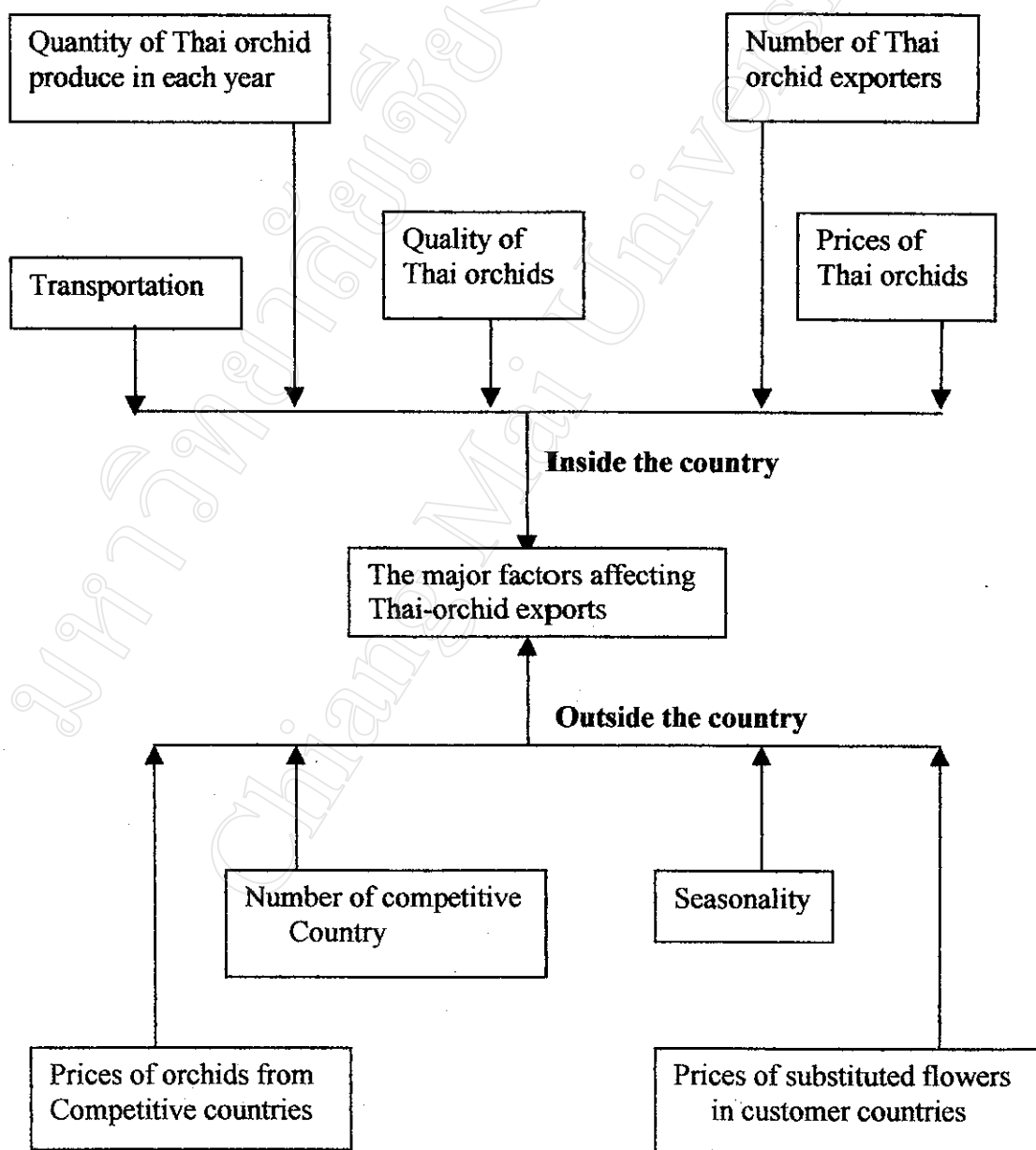
Table 3.4 : Export quantities of Thai orchids to the world markets by months in 1990-1996.

Year Month	1990 (ton) (%)	1991 (ton) (%)	1992 (ton) (%)	1993 (ton) (%)	1994 (ton) (%)	1995 (ton) (%)	1996 (ton) (%)	Mean (X)	Standard Deviation
January	1,047 (8.96)	1,040 (8.39)	1,161 (10.42)	1,100 (8.89)	1,033 (8.69)	996 (8.41)	947 (8.92)	1,046.29	69.10
February	1,007 (8.62)	985 (7.94)	1,096 (9.83)	938 (7.58)	912 (7.66)	935 (7.89)	990 (9.32)	980.43	61.54
March	972 (8.32)	1,037 (8.36)	947 (8.50)	848 (6.86)	1,040 (8.75)	1,071 (9.04)	1,000 (9.42)	987.86	74.92
April	788 (6.75)	875 (7.06)	903 (8.11)	857 (6.93)	838 (7.05)	927 (7.82)	731 (6.88)	845.57	67.61
May	718 (6.15)	794 (6.41)	779 (6.99)	695 (5.62)	649 (5.46)	804 (6.78)	697 (6.50)	733.71	59.01
June	668 (5.72)	668 (5.39)	514 (4.61)	642 (5.19)	657 (5.52)	629 (5.31)	621 (5.85)	628.43	53.67
July	658 (5.63)	690 (5.56)	556 (4.99)	660 (5.34)	638 (5.36)	656 (5.53)	648 (6.10)	643.71	41.85
August	803 (6.87)	890 (7.18)	657 (5.89)	820 (6.62)	780 (6.72)	972 (8.20)	766 (7.21)	812.57	99.16
September	1,147 (9.82)	1,217 (9.82)	1,084 (9.73)	1,230 (9.94)	1,282 (10.78)	1,184 (9.99)	983 (9.26)	1,161.00	100.73
October	1,414 (12.11)	1,513 (12.21)	1,427 (12.81)	1,617 (13.07)	1,629 (13.69)	1,322 (11.15)	1,202 (11.32)	1,446.29	154.66
November	1,266 (10.84)	1,342 (10.83)	1,011 (9.07)	1,779 (14.38)	1,175 (9.88)	1,133 (9.56)	967 (9.11)	1,239.00	272.10
December	1,190 (10.20)	1,346 (10.86)	1,008 (9.05)	1,188 (9.60)	1,244 (10.46)	1,222 (10.31)	1,076 (10.13)	1,182.00	111.02
Total	11,678 (100)	12,399 (100)	11,142 (100)	12,375 (100)	11,897 (100)	11,849 (100)	10,627 (100)		

3.3 The Major Factors Affecting Thai Orchids Exports

From interviewing Thai orchid exporters about the problems, customer countries, prices, and growth rates of Thai orchid exports one can concluded the important details as follows.

Figure 3.4 : The diagram of the major factors affecting Thai orchid exports.



Source : Thai orchid export company survey, 1996.

General problems

Many problems that the exporters of Thai orchids often face with are following.

1. Difficulty in entering the new markets (countries).
2. The transportation problems in Bangkok, such as traffic jam cause the delay in orchid exports.
3. Problems of getting good quality stock, varieties, and constant supply.
4. Price war among Thai exporters.
5. The numbers of the new exporters had been increased very much for the last three years, in 1995-1997 (Table 3.3).
6. The differential price provisions in the world markets.
7. Late payment from the customer countries.
8. Some crooks customer countries.
9. Limited flights from Thailand.
10. Unable to cooperate among Thai orchid exporters
11. Shortage of cold storage for fresh flowers at the airport.
12. The exporting procedures in Thailand are complex.
13. High percentages check out of bad orchid flowers in some countries.

Low quality problems

Many factors that cause the low quality of Thai orchid exports are as follows.

1. The farmers use low quality water to water the plants. Some industrial factories cause water pollution by their waste products.
2. The farmers use a lot of fertilizers, chemicals, and growth substances to produce orchids in a short time.
3. The exporters had smoked methyl bromide gas on the orchids for a long time (about one and a half-hours) to kill insects before exports.
4. Some exporters put as many orchids as they could in one box because of the limited flights from Thailand.
5. There are very few companies doing breeding or cloning of plants.
6. Lack of proper maintenance of plants.

7. The quality of Thai orchids is not standard from the farmers and the qualities of Thai orchids tend to decline.

8. Insects and diseases damage orchids.

Price problems

Factors that cause the low prices of Thai orchid exports are following.

1. Due to prices cutting between Thai orchid exporters.
2. Lower quality of Thai orchids.
3. The standards of Thai orchids are not the same.
4. The overall economy situations of the world reduce demand in some major importing countries, which cause serious problems in price decrease.

The major problems which cause the decreasing of the export values and the export growth of Thai orchids

The conclusion of the major problems from Thai-export companies that cause the decreasing of the export values and the export growth of Thai orchids are following.

1. The decreasing demand in some customer countries because of the low quality problems.
2. The decreasing number of the orchid-growers in Bangkok, in some areas because of the water pollution or low profit of the farmers.
3. The exports decrease due to an economic problem in Japan in 1995-1996.
4. Lack of good varieties of Thai orchids, because it takes time to propagate the new stock that cause indirect effect on demand from the customer countries, the same species of Thai orchid exports for a long time.
5. The overall economies of the world tend to decline, which cause the decreasing in flower expenditure of the people.
6. The preferences of some customer countries for orchid flowers have changes and tend to use other kinds of flowers.

3.4 The Exports of Thai Orchids to Japanese, Italian and American Markets

Japan, Italy and America import orchid flowers from many countries in the world markets during 1993-1997. Among the exporting countries for orchid flowers to these three markets; the Netherlands and New Zealand are the the main competitive countries of Thai orchid exports in Japanese, Italian and American markets. The others two major competitive countries are Singapore and Costa Rica in Japanese and American markets, respectively (Table 3.5, Table 3.6 and Table 3.7).

Market shares of these exporting countries had been changed every year from 1993-1997. Also growth rates of Thai orchids exports to Japanese, Italian and American markets had fluctuated from 1993-1997. The changes of the export values in these countries may cause instability of Thai orchids. This study is interested in the effects of the competitive countries in these markets, because of the important problems and reasons stated earlier in chapter 1.

Japanese market

For Japanese market, Thailand was rank as the top-second of the exporting countries of orchid flowers into Japan, which had the market shares about 18.9-21.6 % in Japanese market from 1993-1996 (Table 3.5). In 1994, the growth rate of Thai orchids in Japan increased about 3.8 %, but later, it decreased about 2.7 % and 6.9 % in 1995 and 1996 respectively.

The growth rates and market shares of three main exporting countries to Japan (Thailand, Netherlands, and New Zealand) tended to decrease every year from 1993-1996. But the others tended to increase market shares or still the same and had positive values of growth rates (Colombia, Australia, Mauritius and Malaysia). The competitive countries in Japanese market may affect the growth rate, instability, and market share of Thai orchid exports in Japan.

Table 3.5
Growth rates and proportions (% of the total) of Thai orchid flowers and orchid flowers from other countries export to Japan in 1993-1996.

No.	Country	1993		1994		1995		1996	
		Values (million yen) (% of the total)	Growth rate (%)	Values (million yen) (% of the total)	Growth rate (%)	Values (million yen) (% of the total)	Growth rate (%)	Values (million yen) (% of the total)	Growth rate (%)
1.	Thailand	3,732.4 (21.6)	-	3,875.1 (20.2)	3.8	3,767.2 (18.9)	-2.7	3,504.3 (19.3)	-6.9
2.	Netherlands	432.91 (m. B) 6,213.4 (35.9)	-	447.07 (m. B) 6,674.3 (34.8)	7.4	437.90 (m. B) 6,903.1 (34.7)	3.4	368.10 (m. B) 5,123.6 (28.3)	-25.7
3.	Singapore	1,547.0 (8.9)	-	1,415.8 (7.3)	-8.4	1,497.3 (7.5)	5.7	1,451.8 (8.0)	-3.0
4.	New Zealand	1,869.2 (10.8)	-	2,718.9 (14.1)	45.4	2,824.8 (14.2)	3.8	2,703.8 (14.9)	-4.2
5.	Taiwan	823.6 (4.7)	-	710.8 (3.7)	-13.7	707.1 (3.5)	-0.5	817.8 (4.5)	15.6
6.	Columbia	467.8 (2.7)	-	582.7 (3.0)	24.5	677.6 (3.4)	16.2	865.9 (4.7)	27.7
7.	India	0.0 (0.0)	-	11.0 (0.0)	-	126.9 (0.6)	1048.3	447.7 (2.4)	252.6
8.	Australia	951.6 (5.5)	-	1,012.5 (5.2)	6.4	1,108.4 (5.5)	9.4	1,104.2 (6.1)	-0.3
9.	Mauritius	273.7 (1.5)	-	234.4 (1.2)	-4.3	371.7 (1.8)	58.8	331.9 (1.8)	-10.7
10.	Malaysia	99.9 (0.5)	-	202.5 (1.0)	102.6	272.7 (1.3)	34.6	309.1 (1.7)	13.3
	Total 10 countries	15,978.8 (92.4)	-	17,438.4 (90.9)	9.1	18,257.2 (91.8)	4.7	16,660.5 (92.2)	-8.7
	Others	1,297.0 (7.5)	-	1,740.5 (9.0)	34.1	1,620.5 (8.1)	-6.8	1,410.2 (7.8)	-12.9
	Grand total	17,275.9 (100.0)	-	19,178.9 (100.0)	11.0	19,877.7 (100.0)	3.6	18,070.7 (100.0)	-9.0

Source : Trade Statistics Center, Department of Business Economics, Thailand, 1997.

Italian market

In Italian market, Thailand was important country for orchid exports to Italy, because the export values were the highest compared to others countries in Italian market. Even the export values of Thai orchid flowers were high, but the growth rates of Thai orchid exports in this market tended to decrease every year from 1993-1997, except in 1995 where growth rate increased only 0.25 %. The decreasing rates of growth of Thai orchid exports were 14.49 %, 5.31 %, 1.32 %, and 8.43 % in 1993, 1994, 1996, and 1997 respectively. The export shares of Thai orchids were fluctuated from 52-84 % in this market from 1992-1997 (Table 3.6).

In Italian market, there were two major exporting countries of orchid flowers to Italy, Thailand and Netherlands, but both of them had the decreasing rates of growth in this market. These may due to the several new coming countries of orchid exports to Italian market such as Colombia, Zimbabwe, Ecuador, and Hong Kong, and some competitive countries can increase market shares for example South Africa, Mauritius that may cause the affects of export growth of Thai orchids. Even the number of export countries to Italian market increased from 1992-1997, but these new export countries had only a small market share in Italian market. The decreasing growth rates of Thai orchid exports in this market may cause from other factors such as phytosanitary and sanitary regulations of Italy, about insects and diseases.

Table 3.6

Growth rates and proportions (% of total) of Thai orchid flowers and orchid flowers from others countries export to Italy in 1992-1997.

No.	Country	1992			1993			1994			1995			1996			1997		
		Import values (1,000 ECU)	(% of total)	G.R. (%)	Import values (1,000 ECU)	(% of total)	G.R. (%)	Import values (1,000 ECU)	(% of total)	G.R. (%)	Import values (1,000 ECU)	(% of total)	G.R. (%)	Import values (1,000 ECU)	(% of total)	G.R. (%)	Import values (1,000 ECU)	(% of total)	G.R. (%)
1.	Thailand	15,214	84.32	-	13,008	52.99	-14.49	12,317	55.42	-5.31	12,348	59.83	0.25	12,185	58.91	-1.32	11,158	60.50	-8.43
2.	Netherlands	647	3.59	-	10,369	42.24	1,502	8,717	39.22	-15.93	7,247	35.12	-16.86	7,502	36.27	3.52	6,248	33.88	-16.72
3.	New Zealand	506	2.80	-	525	2.14	3.75	578	2.60	10.09	517	2.51	-10.55	639	3.09	23.60	619	3.36	-3.13
4.	Singapore	596	3.30	-	460	1.87	-22.82	363	1.63	-21.09	253	1.23	-30.30	171	0.83	-32.41	117	0.63	-31.58
5.	South Africa	114	0.63	-	55	0.22	-51.75	98	0.44	78.18	118	0.57	20.41	37	0.18	-68.64	57	0.31	54.05
6.	Australia	66	0.37	-	15	0.06	-77.27	37	0.17	146.67	29	0.14	-21.62	28	0.14	-3.45	21	0.11	-25.00
7.	Brazil	24	0.13	-	13	0.05	-45.83	0	0	-100	5	0.02	100	1	0.00	-80.00	5	0.03	400.00
8.	Malaysia	23	0.13	-	25	0.10	8.70	0	0	-100	1	0.00	100	1	0.00	0	57	0.31	5600
9.	United States	27	0.15	-	13	0.05	-51.85	14	0.06	7.69	5	0.02	-64.29	6	0.03	20.00	9	0.05	50.00
10.	France	63	0.35	-	6	0.02	-90.48	1	0.00	-83.33	2	0.01	100	49	0.24	2350	1	0.00	-97.96
11.	Germany	7	0.04	-	7	0.03	0	11	0.05	57.14	15	0.07	36.36	8	0.04	-46.67	87	0.47	987.50
12.	Mauritius	4	0.02	-	15	0.06	275.00	28	0.13	86.67	1	0.00	-96.43	3	0.01	200	4	0.02	33.33
13.	Portugal	2	0.01	-	6	0.02	200	12	0.05	100	11	0.05	-8.33	18	0.08	63.63	17	0.09	-5.55
14.	Philippines	2	0.01	-	0	0	-100	4	0.02	100	0	0	-100	0	0	0	2	0.01	100
15.	Colombia	0	0	-	1	0.00	100	3	0.01	200	18	0.09	500	15	0.07	-16.67	10	0.05	-33.33
16.	Zimbabwe	0	0	-	0	0	-	0	0	-	1	0.00	100	0	0	-100	1	0.00	100
17.	Ecuador	0	0	-	0	0	-	0	0	-	0	0	-	10	0.05	100	4	0.02	-60.00
18.	Hong Kong	0	0	-	0	0	-	0	0	-	0	0	-	7	0.03	100	4	0.02	-42.86
19.	Lebanon	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	9	0.05	100
20.	Sri Lanka	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	8	0.04	100
21.	India	0	0	-	0	0	-	0	0	-	0	0	-	0	0	-	2	0.01	100
Total 21 countries		17,295	95.85	-	24,518	99.88	41.76	22,183	99.81	-9.52	20,571	99.68	-7.27	20,680	99.98	0.53	18,440	99.99	-10.83
Others		748	4.15	-	30	0.12	-95.99	43	0.19	43.33	66	0.32	53.49	5	0.02	-82.42	2	0.01	-60.00
Grand Total		18,043	100	-	24,548	100	36.05	22,226	100	-9.46	20,637	100	-7.15	20,685	100	0.23	18,442	100	-10.84

Source : European Business Information Center, Thailand, 1992-1997.

American market

Thailand was ranked as the top-first country for orchid export into the American market in 1993-1997. Even the import values for Thai orchid flowers were the highest value of the United States of America, but the import values of Thai orchid flowers tended to decrease (83.02, 80.81, 79.45, 78.46 and 80.24 % in 1993, 1994, 1995, 1996 and 1997 respectively (Table 3.7). The total import values of orchid flowers of America increased about 5.20 % and 5.26 %, in 1994 and 1995, and decreased about 6.91 % and 11.57 % in 1996 and 1997, respectively. Also growth rates of Thai orchid exports to the American market increased and decreased at the same year by increasing about 2.40 % and 3.48 % in 1994 and 1995 and decreasing about 8.02 % and 9.56 % in 1996 and 1997, respectively.

This may be caused by the new entry countries of orchid flowers to the USA, such as Dominican Rep., Peru, India, and Israel in 1993-1997. Even growth rates of orchid exports of these countries tended to increase every year from 1993-1997, but they were less than 10 %.

From these numbers and market shares of the exporting countries for orchid exports, it may not affect growth rates, instability and market shares of Thai orchid exports in the American market in 1993-1997.

Table 3.7

Growth rates and proportions (% of total) of Thai orchid flowers and orchid flowers from others countries export to USA. in 1993-1997.

No.	Country	1993			1994			1995			1996			1997		
		Import values (1,000 US \$)	(% of total)	Growth rates (%)	Import values (1,000 US \$)	(% of total)	Growth rates (%)	Import values (1,000 US \$)	(% of total)	Growth rates (%)	Import values (1,000 US \$)	(% of total)	Growth rates (%)	Import values (1,000 US \$)	(% of total)	Growth rates (%)
1.	Thailand	4,036	83.02	-	4,133	80.81	2.40	4,277	79.45	3.48	3,934	78.51	-8.02	3,558	80.24	-9.56
2.	Netherlands	333	6.85	-	344	6.72	3.30	387	7.18	12.50	345	6.88	-10.85	379	8.54	9.85
3.	New Zealand	204	4.19	-	236	4.61	15.68	249	4.62	5.51	250	4.98	0.40	152	3.42	-39.20
4.	Costa Rica	70	1.44	-	198	3.87	182.86	204	3.78	3.03	202	4.02	-0.98	214	4.82	5.94
5.	Australia	45	0.92	-	36	0.70	-20.00	45	0.83	25.00	52	1.03	15.55	50	1.12	-3.85
6.	Colombia	44	0.90	-	16	0.31	-63.64	4	0.00	-75.00	45	0.89	1,025	6	0.13	-86.66
7.	Taiwan	4	0.08	-	0	0	-100	0	0	0	0	0	0	21	0.47	100
8.	Singapore	19	0.39	-	80	1.56	321.05	132	2.45	65.00	66	1.31	-50.00	28	0.63	-57.57
9.	Canada	0	0	-	7	0.13	100	12	0.22	71.43	37	0.73	20.83	6	0.13	-83.78
10.	Haiti	3	0.06	-	0	0	-100	0	0	0	0	0	0	3	0.06	100
11.	Jamaica	0	0	-	22	0.43	100	44	0.81	100	38	0.75	-13.64	3	0.06	-92.10
12.	Dominican rep.	0	0	-	0	0	0	0	0	0	0	0	0	2	0.04	100
13.	Peru	0	0	-	0	0	0	0	0	0	0	0	0	2	0.04	100
14.	India	0	0	-	0	0	0	0	0	0	2	0.03	100	2	0.04	0
15.	Israel	0	0	-	5	0.09	100	0	0	-100	2	0.03	100	0	0	-100
Total 15 countries		4,758	97.88	-	5,077	99.27	6.70	5,354	99.46	5.45	4,973	99.24	-7.11	4,426	98.81	-10.99
Others		105	2.12	-	37	0.73	-64.76	9	0.54	-75.67	38	0.76	322.22	8	0.19	-78.94
Grand Total		4,861	100	-	5,114	100	5.20	5,383	100	5.26	5,011	100	-6.91	4,434	100	-11.51

Source : American Business Information Center, Thailand, 1993-1997.

The export procedures

Thai orchid exporters should study the information of the import rules and regulations of Japan, Italy and America well in order to success in business. The main information in orchid exports to these three countries is plant quarantine systems, Plant Protection Law, phytosanitary certificate requirements, import inspection, custom duties, product characteristics requirements, packaging, market conditions, and distribution channels (some details are in Appendix IV).

Some rules and regulations for Thai orchid exports to these countries caused the problems in exports such as GSP in Italy that some countries (Colombia, Kenya, Zimbabwe and Ecuador) can get free tax for orchid exports, not include Thailand (Subdivision of General Goods, 1997).

The following chapters, chapter 4 and chapter 5, are results of the study the relationship between the growth rates, instability indexes, market shares of Thai orchid exports and market concentration indexes of orchid flowers of Japan, Italy and America. It should be useful information, if this study estimate the market shares of Thai orchid exports in 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.