



## The Korean flower market - focusing on cut flower

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LAN / Embassy of the Kingdom of the Netherlands in Seoul

### 1. Overall trend of the Korean flower market

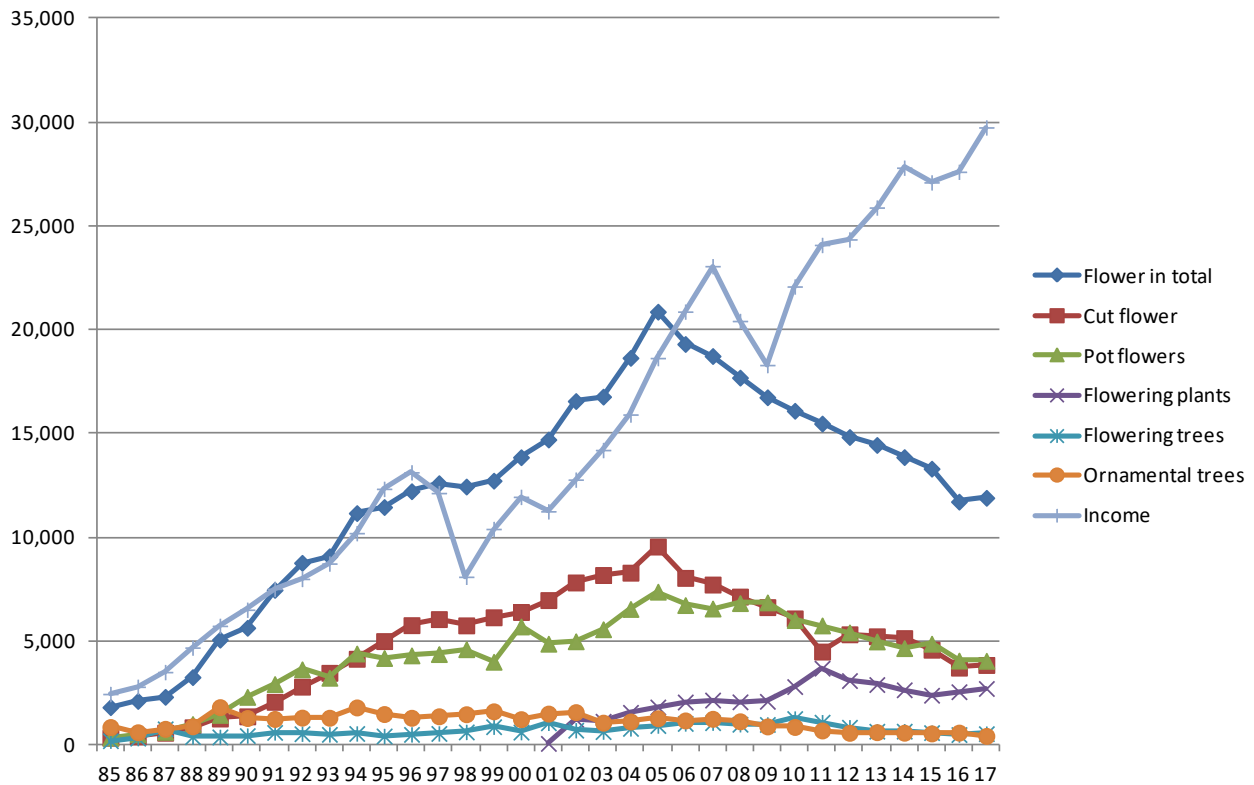
Korea's cut flower consumption is much lower than that of other OECD countries, which is mainly due to relatively lower Individual flower consumption. 80% of the total consumption derives from business concerns that handle ceremonial occasions such as weddings and funerals, from floral decorations in hotels, and so on, while the Netherlands and Japan are only 20% and 30% respectively.

Since 2005, the flower consumption has decreased drastically in spite of increasing per-capita income as shown in the Fig.1. It is a very unusual phenomenon. In general, flower consumption increases if income increases. Experts say that the decrease in per-capita flower consumption is mainly due to too expensive flower prices in the market. Korean flower farmers have enjoyed relatively expensive prices which have been supported by Korean people who set importance on "Face" in business and ceremonial occasions. This has made the sector neglectful in innovation, and the sector has lost consumers' trust. Since mid-2000s, Koreans have become more pragmatic and have simplified ceremonial occasions. The Korean flower sector should have prepared for this paradigm shift. In 2016, Korea enacted a new law called Anti-bribery and graft act. This is making the sector which has shrunk more than 10 years even more difficult.

The consumption has recently slightly been recovered. Younger generation has started enjoying cut flowers at home, and some people are subscribing flowers weekly online.



Fig. 1 Per capita flower consumption (KRW) by type and Per capita income (USD) in Korea



## 2. Local production

It is a worldwide trend that the number of farmers decreases while the farming area stays stable. However in Korea, the farming area and the production have also declined over the last 10 years. In particular, the downturn in cut flower production is remarkable; the area has shrunk by half and the production by volume has dropped by a third. Many of flower growers have changed their crops to vegetables.

Rose, chrysanthemum and lily and carnation were the 4 largest cut flower species produced in Korea in 2017. Rose is the most popular flower and is consumed year-round. Chrysanthemum is largely used for funerals. Lily is produced for local and Japanese markets. Carnation consumption is concentrated on Parents' day and Teacher's day in May. In order to satisfy the demand in May, Korea has to import carnation from abroad.



As shown in Table 2, ornamental plants are mainly raised at plastic greenhouses or open yard. Cut flowers are mostly raised at plastic greenhouses. There were some governmental efforts to grow cut flowers in modern glasshouses in 1990s. However, they were mostly failed because the investments were not paid off; Korean consumers didn't have an eye for high-quality flowers harvested from glasshouses.

Gyeonggi and Gyeongnam provinces are the largest production areas that provide flowers to Seoul and Busan, the biggest two cities in Korea.

Fig. 2 Production of ornamental plants by year

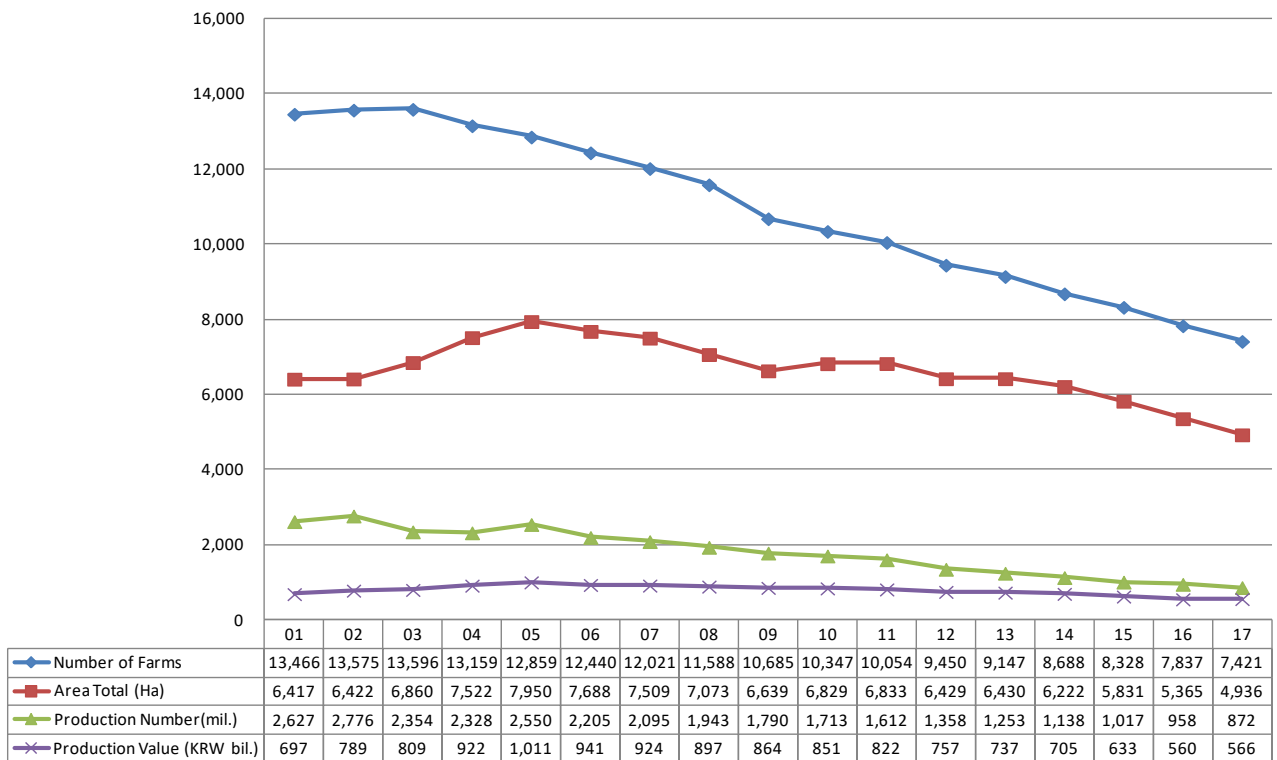




Fig. 3 Production of cut flowers by year

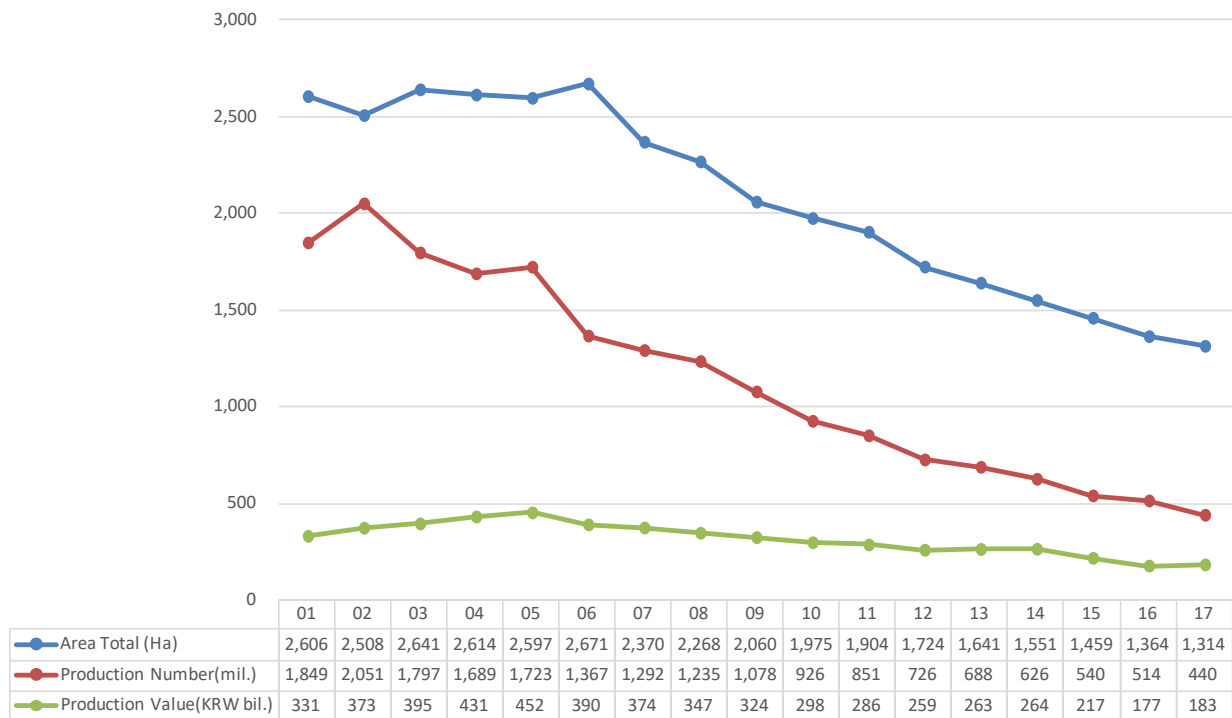


Table 1 Cut flower production by flower species in 2017

Items	Farming Area (ha)	Sales Number (million)	Sales Value (million KRW)	Items	Farming Area (ha)	Sales Number (million)	Sales Value (million KRW)
Total	1,314	440	183,264	Iris	3	1	468
Rose	293	118	50,209	French Marigold	4	1	269
Chrysanthemum	341	131	49,213	Tulip	6	4	1,385
Lily	125	20	14,728	Solidaster	7	2	429
Carnation	49	26	8,848	Sunflower	3	0	148
Gypsophila	53	9	5,877	Stok	26	4	2441
Gerbera	30	23	6,844	Alstomeria	13	7	2,075
Freesia	33	21	4,025	Aster	1	0	71
Gladiolus	17	5	1,508	Bird of paradise	2	0	264
Snapdragon	14	8	1,975	Liatris	0	0	17
Startice	17	3	1,537	Pink	4	1	236
Calla	9	2	1,582	Others	192	41	23,270
Lisianthus	18	4	2,524				



Table 2 Farming facilities by type in 2017 (unit: ha)

	Total						
	Total	Under cover (greenhouse)					Open yard
Sub-total		Glass	Hard plastic board	Plastic	Others		
Ornamental plants total	4,936	2,214	71	133	1,963	48	2,722
Cut flowers	1,314	1,167	53	91	1,000	23	148

Table 3 Farming area and production by province in 2017

Province	All ornamental plants				Cut flowers			
	Number farms	Area (ha)	Sales (number ×1,000)	Sales (1,000 KRW)	Number farms	Area (ha)	Sales (number ×1,000)	Sales (1,000 KRW)
Total	7,421	4,936	872,045	565,787,591	2,491	1,314	439,599	183,264,134
Sejong	64	73	6,198	2,789,218	2	1	50	34,000
Seoul	139	48	2,744	8,697,213	6	1	81	36,450
Busan	334	135	51,386	34,199,103	199	89	40,847	18,768,373
Daegu	67	27	8,841	6,446,658	13	4	3,399	1,082,310
Incheon	49	27	6,744	3,220,750	38	22	5,858	2,041,750
Gwangju	41	28	4,177	1,204,091	16	14	3,726	772,473
Daejeon	34	12	2,303	4,665,980	4	2	90	124,000
Ulsan	31	10	1,062	2,517,000	3	1	283	240,000
Gyeonggi	2,318	974	295,536	260,139,787	594	263	64,414	40,013,589
Gangwon	146	175	34,566	17,870,573	117	100	16,582	10,267,236
Chungbuk	247	159	97,998	40,113,191	62	41	24,126	5,497,434
Chungnam	530	417	72,630	43,536,441	327	191	60,080	24,114,344
Jeonbuk	835	778	54,914	23,199,844	142	135	42,738	15,720,909
Jeonnam	1,149	895	55,933	30,064,927	163	81	26,701	10,776,462
Gyeongbuk	315	290	47,100	22,123,742	193	77	41,227	14,514,395
Gyeongnam	947	692	114,623	49,401,429	505	223	98,647	32,401,801
Jeju	175	199	15,295	15,597,643	107	71	10,750	6,858,608



### 3. Trade

The export of ornamental plants has dropped since 2010. More than half of the exports are cut flowers, and Lily accounts for 61% of the cut flower exports. Around 60% of ornamental plants are destined to Japan. Lily cut flowers are 100% destined to Japan.

On the other hand, the import of ornamental plants has steadily increased since 2005. The Netherlands was the 2<sup>nd</sup> largest exporter of ornamental plants into Korea after China in 2017. The imports from the Netherlands and Thailand have grown in the last 3 years while those from China and Taiwan have slightly declined.

The upward trend in cult flower imports is more dramatic. As the local flower sector has been shrinking, Korean consumers have increasingly relied on imported cut flowers with higher quality and lower price since 2011. This trend is expected to continue and would be an opportunity to Dutch exporters.

Chrysanthemum was the largest cut flower species imported into Korea in 2018 followed by carnation, rose, orchids and tulip. China was the largest exporter of chrysanthemum into Korea accounting for 91% of the export. Columbia was the largest exporter of carnation accounting for 77% of the export, followed by China. Ethiopia and Columbia were the two largest exporters of rose into Korea. Thailand was the largest exporter of orchids accounting for 76% of the export, followed by the Netherlands. The Netherlands was the only country that exports tulip cut flowers into Korea. Columbia and the Netherlands are increasingly exporting different kinds of cut flower species into Korea.



Fig. 4 Ornamental plant exports from Korea by destination country

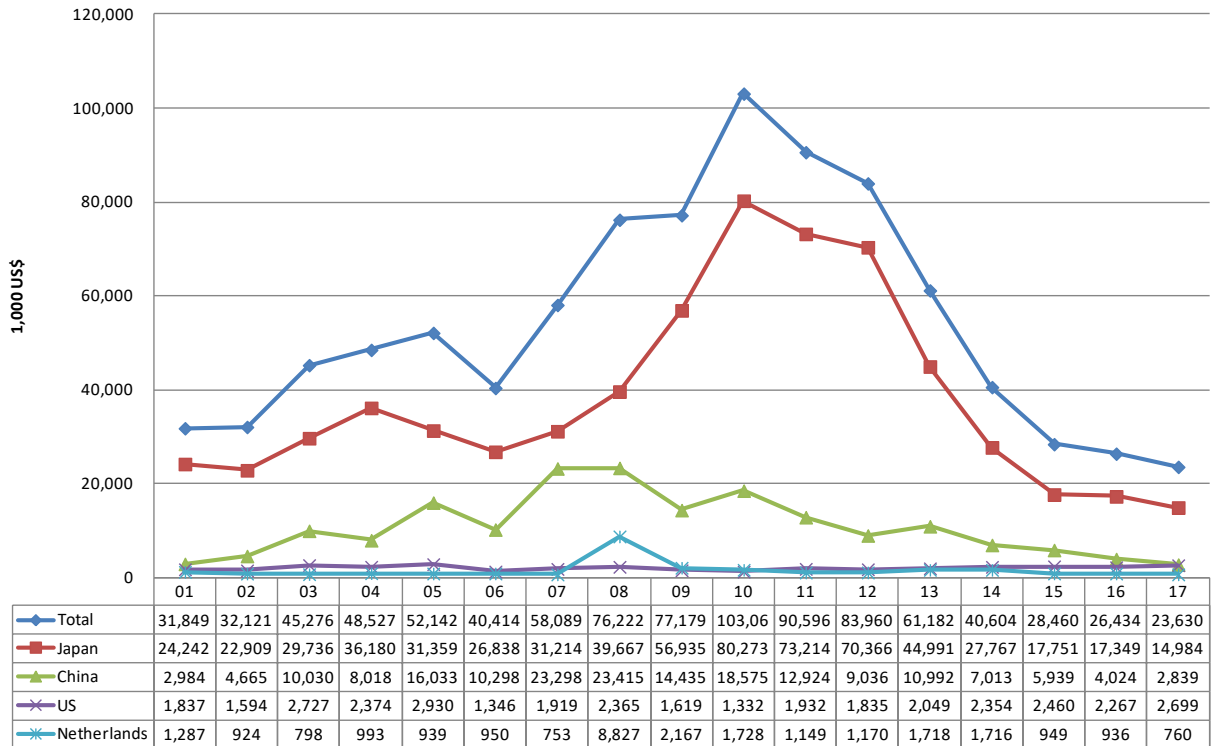


Fig. 5 Ornamental plant imports into S. Korea by origin country

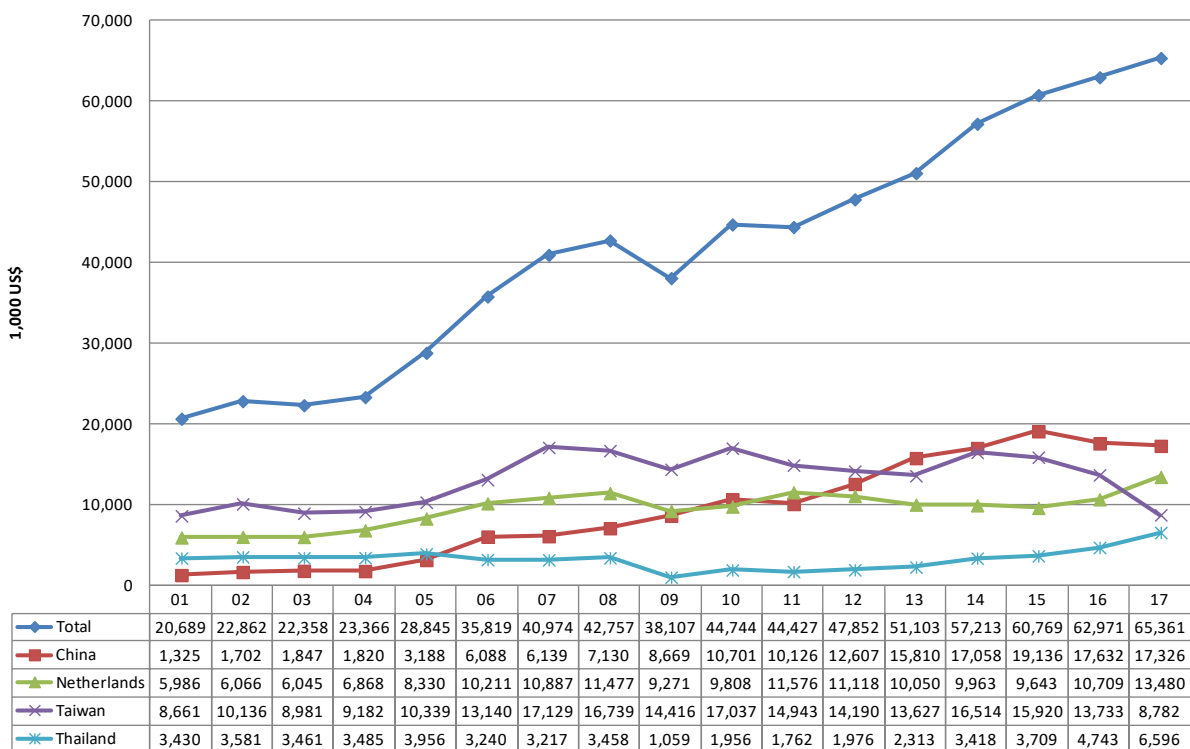




Fig. 6 Cut flower imports into Korea by country

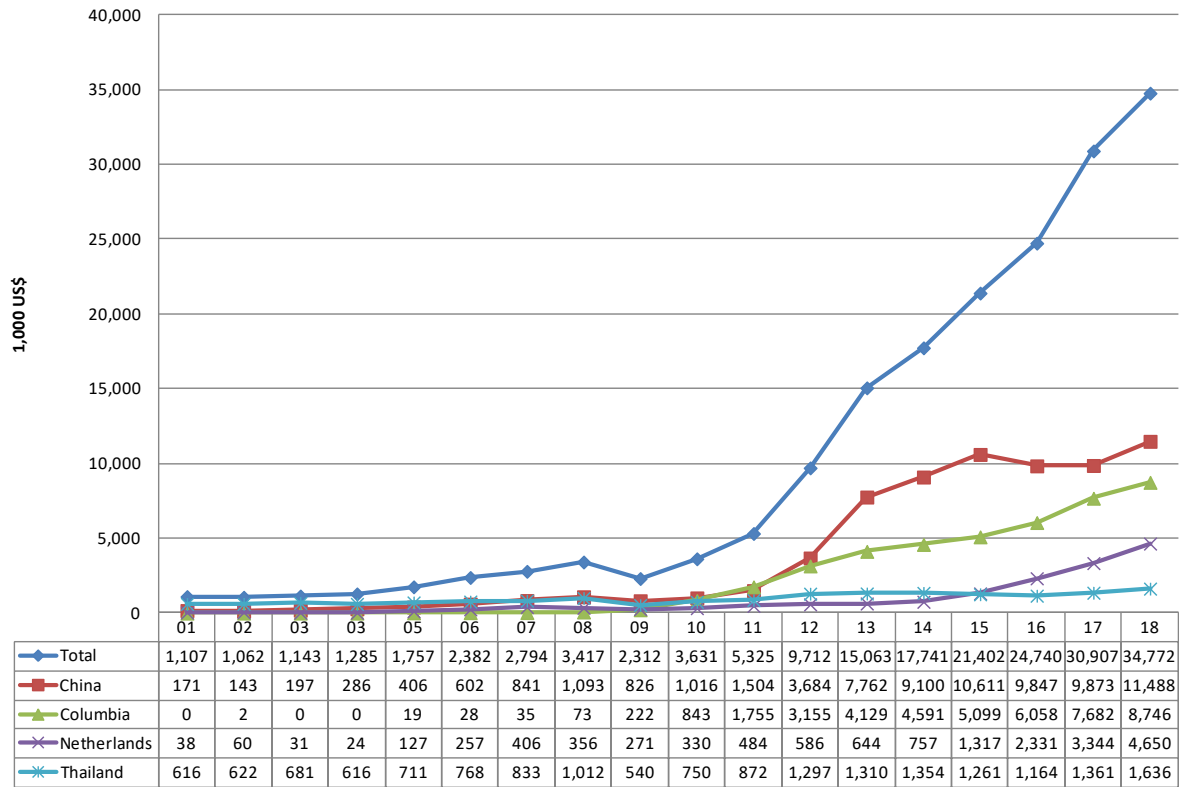
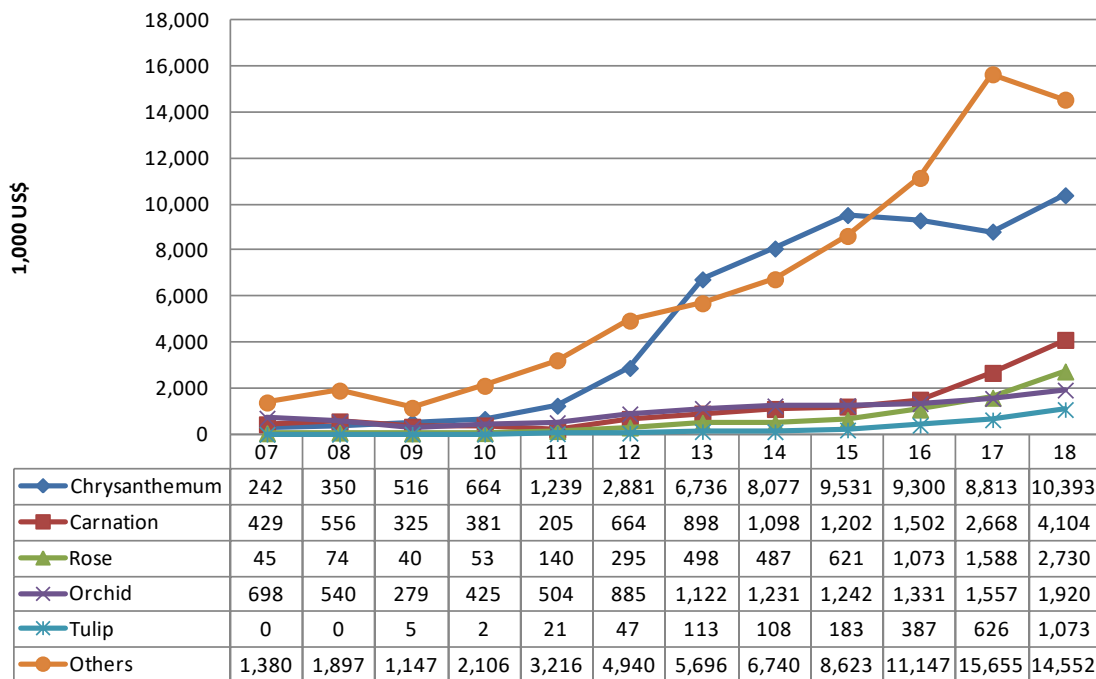


Fig. 7 Cut flower imports into Korea by flower species by year







#### 4. Wholesale and Retail

The Korean government established 8 joint markets (6 markets now) for ornamental plants nationwide in 1990s to modernize the distribution system. Prices are set through auction, and farmers and retailers are connected via wholesalers in the markets. “Yangje flower market” in Seoul is the largest wholesale market among the (semi-) governmental flower markets accounting for 52% of all. There are also some private markets nationwide. The largest private flower market in Korea is “Gangnam express bus terminal market” in Seoul. 37% of local ornamental plants go to the (semi-) governmental markets while 63% go to private markets. As for local cut flowers, 65% go to the (semi-) government markets while 35% go to private markets. Since the (semi-) governmental joint markets were established to promote local flower industry and to protect local farmers, the markets usually don’t deal with imported flowers. Therefore imported flowers are mostly distributed through private markets.

As shown in Fig. 9, the auction prices of cut flowers in the (semi-) governmental markets have not grown that much over the last 10 years. The prices of rose, gypsophila and gladiolus have increased while those of chrysanthemum, carnation, lily and gerbera have been stagnant. This shows that flower species for ceremonial occasions are becoming less popular.

Wholesalers in Korea are very small and do business in an old-fashioned way. There are so many (hundreds) small wholesalers and are no medium- or large-scale wholesalers in the markets. Some wholesalers are active as importers, but are generally weak at trade and English communication. Consumers sometimes visit wholesale shops to buy flowers directly at lower prices.

For many decades, Korea consumers have purchased flowers in small shops in each village, mainly for individual uses. For ceremonial occasions and business, people have usually ordered flowers online or by phone. There are many small online/home-delivery flower shops in Korea, and are connected with small offline shops by region on a contract basis.

Recently, some online shops such as Kukka don’t work with offline shops, and make flowers by themselves and deliver them directly to consumers. In this way, their flower subscription business is getting successful. High-end flower shops are also being established in high-class hotels. Those shops provide hotels with floral decorations and sell high-end flowers to rich people.



In big supermarkets such as E-mart, Lottemart and Homeplus, cut flowers are not on sale. Only pot plants are increasingly sold to consumers. If there are farmers or importers who can provide cut flowers to the big supermarkets stably, it could contribute to the development of the Korean flower sector.

Fig. 8 Market share of (semi-)governmental joint flower markets in 2017

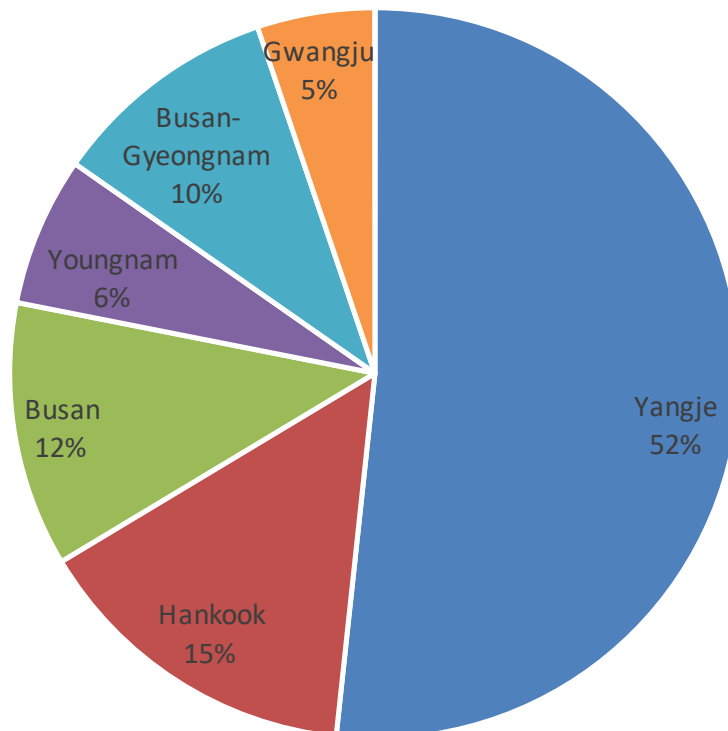
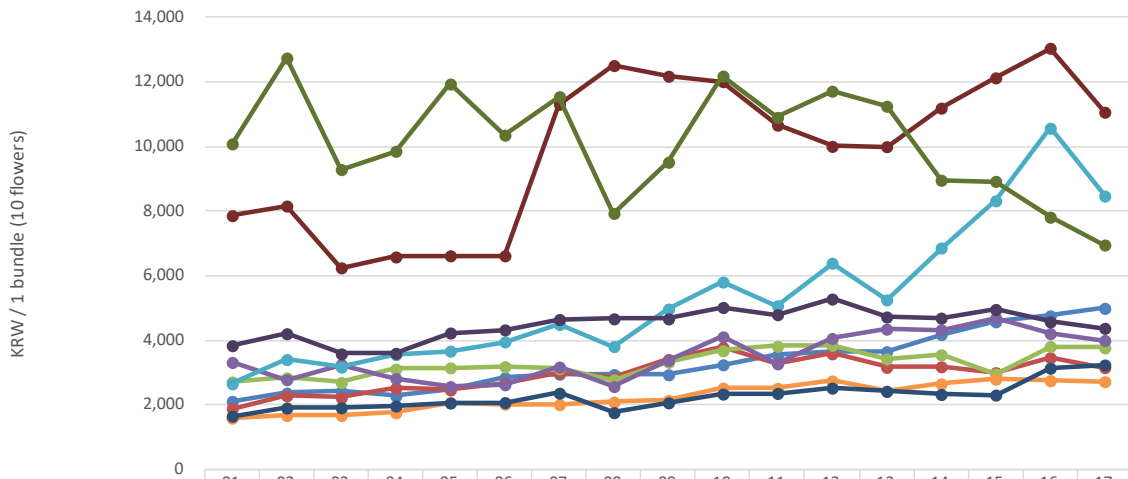




Fig. 9 Prices of cut flowers by species by year (auction prices)



	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17
Rose	2,115	2,367	2,412	2,278	2,490	2,845	2,955	2,943	2,936	3,245	3,542	3,661	3,651	4,182	4,577	4,759	4,992
Chrysanthemum	1,890	2,284	2,225	2,523	2,468	2,671	2,986	2,832	3,409	3,780	3,299	3,586	3,165	3,183	3,002	3,463	3,157
Lily	2,712	2,839	2,695	3,113	3,151	3,187	3,126	2,781	3,323	3,678	3,817	3,850	3,427	3,555	2,960	3,809	3,769
Carnation	3,318	2,784	3,252	2,817	2,570	2,628	3,175	2,572	3,385	4,111	3,275	4,060	4,348	4,327	4,690	4,211	3,998
Gypsophila	2,657	3,407	3,174	3,562	3,667	3,954	4,493	3,810	4,971	5,806	5,073	6,389	5,254	6,859	8,322	10,568	8,467
Gerbera	1,593	1,673	1,676	1,758	2,069	2,026	2,011	2,089	2,142	2,521	2,515	2,743	2,425	2,654	2,801	2,754	2,720
Gladiolus	1,655	1,906	1,915	1,970	2,063	2,075	2,365	1,764	2,067	2,339	2,359	2,523	2,422	2,326	2,308	3,140	3,239
Oriental Orchids	7,862	8,160	6,246	6,583	6,619	6,619	11,311	12,508	12,178	12,010	10,663	10,007	9,998	11,190	12,128	13,043	11,064
Cymbidium Orchid	10,083	12,740	9,289	9,855	11,935	10,353	11,545	7,933	9,516	12,182	10,904	11,715	11,249	8,958	8,923	7,814	6,954
Phalaenopsis	3,837	4,207	3,582	3,601	4,229	4,326	4,647	4,668	4,665	5,020	4,797	5,281	4,725	4,691	4,958	4,575	4,375