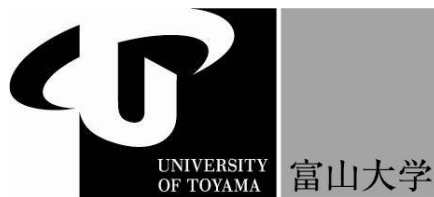


**Working Paper No. 291**

**Flower Bulb Industry in England**

Yasutaka Niisato

24 September 2014



FACULTY OF ECONOMICS  
UNIVERSITY OF TOYAMA

# Flower Bulb Industry in England

Yasutaka Niisato \*

Faculty of Economics, University of Toyama.

24 September 2014

## Abstract

In this paper we survey the flower bulb production area in the Netherland, England and Japan. And we discuss the production and trade of England during the 1990's and the 2000's. We show some features of narcissus production in England and mention some activities in the bulb production place. We conclude that narcissus sector has a strong position and exportable power in the flower bulb industry in England. One of the advantages is quality of narcissi, e.g. relatively large and strong flowers. And another point is a fact that narcissus is a source of stable income for farmers who have vegetables as changeable income.

**Keywords:** flower bulb, tulip, narcissus, flower industry

---

\* Email: [niisato@eco.u-toyama.ac.jp](mailto:niisato@eco.u-toyama.ac.jp)

## **1. Introduction**

Recently Japanese flower bulb industry has stagnated. Especially the domestic production of tulip bulbs is around half of that in fifteen years ago. The main reasons are a decline in demand and strong price competition with imported Dutch bulbs. The Netherlands takes monopoly position in the world flower trade and has more than 400 years history of bulb industry. England is also famous as flower and gardening country and has more than 100 years as well as Japan. And we would like to seek some solutions from British experience.

In 1988 the plant quarantine regulation of tulip bulbs was abolished and Dutch tulip bulbs began to be imported to Japan. As Figure 1, during the several years the level of the domestic production was kept. But, after 1993 the production decreased steadily. In the 1990's Japanese economy as a whole had the long depression after the bubble collapse. Nevertheless, the import and consumption (= import + production) of tulip bulbs increased because of the gardening boom until 2001. But, After 2001 the import and consumption decreased. In 1988 the import share was 20%. In 1996 it was 50%. And in 2006 it reached to 80%. The price movement of tulip bulbs at shipping level is showed in Figure 2. It is noticeable that from 2001 both the bulb price and the consumption decreased.

In 2<sup>nd</sup> section we survey the flower bulb production area in the Netherlands, England and Japan. In 3<sup>rd</sup> section we discuss the production and trade of England during the 1990's and the 2000's. In 4<sup>th</sup> section we show some features of narcissus production in England. In 5<sup>th</sup> section we mention some activities in the bulb production place. In 6<sup>th</sup> section we will conclude.

## **2. Flower bulb production area in the Netherlands, England and Japan**

Table 1 shows some trends of flower bulb production area from the 1980's to the 2000's. In the Netherlands, a lot of kinds of flower bulbs are produced. During the 1990's total bulb production area increased and reached to about 21,000 ha in 2000. It declined to 18,000 ha in 2010. Tulip production area shares about half and is 10,000 ha. The area of narcissi is 1,600 ha.

In the UK, total flower bulb area is around 6,000 ha in 2008. Main bulb crop is narcissus. Its production area in England & Wales is 4,000 ha. It is four times of the Netherlands. Gladioli area is about 200 ha in 2008. Tulips were produced at 269 ha in 1984 and 111 ha in 1990, but the figure did not appear after 1995. Figure 3 shows yearly movement of bulb area in England & Wales. Narcissi and total bulb area decreased in the late 90's and recovered in the 2000's.

In Japan, total flower bulb area is less than 600 ha in 2008. It is about one-third of that in 1980. Main bulb crops are tulips and lilies. Tulip area increased during the 80's. It decreased during the 90's and the 2000's. Tulip area is 260 ha in 2006. It is around 40% of that in 1990. Today Japanese tulip area is 2.5 % of the Netherlands.

### **3. Production and trade in England**

Figure 3 shows production value of flower bulbs in the UK. Total flower bulb production value in the UK as well as England & Wales increased greatly from 1986 to 1993. But during the period the production area did not increase so much, as shown in Figure 4. It is supposed that the prices of bulbs rose because of overall inflation. After then until 2000 bulb production value declined to the level in the late 80's. It is caused by decline of production volume. Production value of narcissi increased until 1996 and decreased until 2001. During the 2000's total bulbs as well as narcissi have an upward trend in production value as well as production area.

Figure 5 shows a trend of imports of flower bulbs. Important items of bulb imports are tulips, hyacinths, narcissi and gladioli. The imports of total bulbs increased until 1995, stagnated in the late 90's, and increased during the 2000's. Figure 6 shows a trend of exports of flower bulbs. Narcissus is a main export item. Others are very small. Total exports are about one sixth of total imports in 2010. The total export of flower bulbs has an increasing trend. Although it declined during 1988 – 2002, it increased during the 2000's. However, narcissus export decreased after 2006. Only narcissi are positive net export as shown in Figure 7. The export / production rate of narcissi is 35% in 2004. Since 1992 it increased in a trend as shown in Figure 8. English narcissi are exported to European countries and USA.

### **4. Narcissus production**

According to my interview of a bulb trade company and a grower (on 26 and 27 April 2011), British narcissus production has following features as compared to Dutch one.

- 1) Dutch narcissi (e.g. cyclamineus, Double, Trumpet, of which the shares in the Netherlands are shown in Figure 9) are mainly small ones and have one year old flowers. British narcissi are mainly large ones and have two years old flowers. Therefore British narcissi have relatively large and strong flowers
- 2) The difference comes from the soil, price and quality conditions. English narcissi are produced in silt soil but Dutch narcissi are on sandy soil. Dutch farmers make a lot of variety of flowers and do not choose relatively cheap narcissi.
- 3) The other crops than narcissi are different. In the Netherlands narcissus farmers grow narcissi and other flowers. In contrast, British farmers grow narcissi and vegetables. Their crop rotation is 10 years (narcissi 3 years and vegetables 7 years), e.g. 1<sup>st</sup> year: planting bulbs, 2<sup>nd</sup> year: no flowers, 3<sup>rd</sup> year : flowers and harvesting bulbs, 4<sup>th</sup> year: wheat, 5<sup>th</sup> year: wheat, 6<sup>th</sup> year: potatoes, 7<sup>th</sup> year cauliflowers, 8<sup>th</sup>: peas, 9<sup>th</sup>: sugar beet, 10<sup>th</sup>: wheat (or barley). They get stable income from narcissi and changeable income from vegetables. A farmer has a total cultivated area of 50 ha with unit area of 5 ha.

## **5. Spalding as a bulb production place**

Spalding is a birth place of British bulb industry which started at the end of 19th century. In 1916, Spalding Bulb Growers & Market Gardeners Association was formed. After the 2nd world war, for bulb promotion the growers developed 'tulip week' in 1948 and 'tulip time' in 1950.<sup>1</sup> And on May 9, 1959, the first Flower Parade took to the streets of Spalding.<sup>2</sup> The country police put the crowd numbers at almost 400,000 people. Recently visitor numbers are about 80,000. On April 30, 2011, the 53<sup>rd</sup> Flower Parade was taken.<sup>3</sup> See Picture 1.

It was decided to lay out a show garden where bulb growers and merchants could plant a growing catalogue of their wares and give visitors an opportunity to wander round at leisure and view the blooms at close quarters in a series of attractive settings. In spring 1966 Springfields Garden (a site of twenty acres) was open. In 1966 the Springfields Horticultural Society was created to be responsible for the day to day administration of the gardens. But, in the late 1990's the visitors declined and the society decided to redevelop the garden. In 2004 the garden was reduced to the half area and Springfields Outlet Shopping was opened in another half area. The society gets the rent and spends it for the garden. See Picture 2 and 3.

## **6. Conclusion**

Narcissus sector has a strong position and exportable power in the flower bulb industry in England. One of the advantages is quality of narcissi, e.g. relatively large and strong flowers. And another point is a fact that narcissus is a source of stable income for farmers who have vegetables as changeable income.

## **Acknowledgement**

I would like to thank Mr. Rick Gibbard and Mr. Adrian Jansen at Lingarden Bulbs Ltd for their help of my investigation in Spalding.

## **Appendix: Beginning of tulip production in the Netherlands, England and Japan**

### **1. The Netherlands**

'Around 1600 the commercial cultivation of tulips was started and a small scale on the well drained land of coarse-grained sand in surroundings of Haarlem.' Beenakker(2000, p.40). And tulip mania of 1634-37 is famous as the first speculative bubble in economic history.

### **2. England**

---

<sup>1</sup> See Dobbs(1983, p.66).

<sup>2</sup> See Braybrooks(2007, p.24).

<sup>3</sup> In 2013 the parade finished because of a financial problem.

‘At Spalding in England, Production began at the end of the 19th century, with small plots of snowdrops and daffodils. The first tulips were grown, on a field scale, between 1905 and 1910. In June 20, 1916, Spalding Bulb Growers’ and Market Gardeners’ Association was formed.’ Braybrooks(2007, p.8)

### 3. Japan

‘The commercial cultivation of tulips started in the beginning of twentieth century in Niigata. In 1904 Yoshiro Mizushima brought 140 Dutch tulip- bulbs from a Japanese seed company. The two farmers started a bulb company in 1919. In 1930 The growers from Niigata decided on starting a co-operation. ‘The Niigata Flower and Flower-Bulb Association’ was founded. In Toyama, in 1918 Bunzo Mizuno started experimenting with a few tulip-bulbs. He mainly aimed at the production of cut flowers. From 1923 his flower-bulb company delivered bulbs from Toyama to the whole of Japan. In 1924, they joined their efforts and started cooperating. This led to the foundation of the ‘Toyama Tulip-bulb Growers Association’(1938).’ Beenakker(2000, pp.57-61)

### References

- Anon. 2011. Spalding Flower Parade Guide 2011, Programme
- Beenakker, J.J.J.M. 2000. The Netherlands – Japan: Four centuries of flowerbulb culture, Museum de Zwarte Tulip. Written in Dutch, Japanese and English.
- Benschop, M., Kamenetsky, R., Marcel Le Nard, M., Hiroshi Okubo, O. 2010. The Global Flower Bulb Industry: Production, Utilization, Research, Horticultural Reviews, Volume 36, pp.1-177.
- Braybrooks, D. 2007. Spalding Flower Parade: The Golden Years, Spalding Guardian & Lincolnshire Free Press
- Dobbs, R.C. 1983. Bulbs in Britain: A century of Growing, Abbey Printers Ltd.
- Niisato, Y. 2009. Tulip Bulb Industry in Japan since 1988. Acta Horticulturae 831:285-292.
- Tompsett, A. 2006. Golden harvest: The story of daffodil growing in Cornwall and the Isles of Sicily. Alison Hodge, Cornwall, UK.

Springfield Shopping center <http://www.springfieldsshopping.com/>

Springfield gardens, Spalding <http://www.springfieldsgardens.co.uk/>

Springfield Horticultural society <http://www.springfields.mistral.co.uk/>

Spalding Flower Parade <http://www.spalding-flower-parade.org.uk/home>

Basic Horticultural Statistics [http://data.gov.uk/dataset/basic\\_horticultural\\_statistics-0](http://data.gov.uk/dataset/basic_horticultural_statistics-0)

Department for Environment Food and Rural Affairs <http://www.defra.gov.uk/>

Agriculture in the United Kingdom <http://www.defra.gov.uk/statistics/foodfarm/cross-cutting/auk/>

Lingarden Bulbs Ltd <http://www.lingardenbulbs.co.uk/>

Table1. Flower bulb production area in the Netherlands, UK and Japan

<b>Netherlands</b>								
Flower Bulbs and Tubers, production area in ha								
Spring Flowers	1980	1990/91	1995/96	2000/01	2005/06	2008/09	2010/11	
Tulips	6,086	7,128	9,405	10,372	9,859	10,562	9,856	
Narcissi	1,523	1,652	1,496	1,940	1,739	1,673	1,578	
Hycinths	827	933	1,076	1,154	1,225	1,299	1,235	
total	9,917	11,127	13,568	15,139	14,360	14,689	13,822	
Summer Flowers	1980	1990	1995	2000	2004	2008	2010	
Gladioli	1,903	1,711	1,643	1,190	915	774	722	
Lilies	2,667	2,560	3,539	4,520	3,844	3,875	3,681	
Dahias	368	431	480					
Total Bub flowers	16,758	15,827	18,336	20,849	19,119	19,338	18,225	
<b>UK</b>								
Flowers & Bulbs in the open in ha	5,537	5,899	6,200	6,293	6,376	6,100		
Bulbs in the open, <b>England &amp; Wales</b>	5,359	5,385	5,727	4,107	4,660	4,932		
Narcissi	4,013	3,972	4,334	3,530	3,900	4,079		
Tulips	269	111						
Gladioli		110	253	70	130	234		
Others		1,303	1,140	533	630	64		
<b>Japan</b>								
area in ha	1980	1990	1995	2000	2005	2006	2008	
Bulbs	1,578	1,546	1,160	995	597	575	567	
Tulips	433	628	484	430	282	261		
Lilies	462	400	257	218	100	96		

Source: AIPH. International Statistics Flowers and Plants 2001, 2004, 2008 and 2011.

DEFRA. Basic Horticultural Statistics 1984-1994 and 2012.

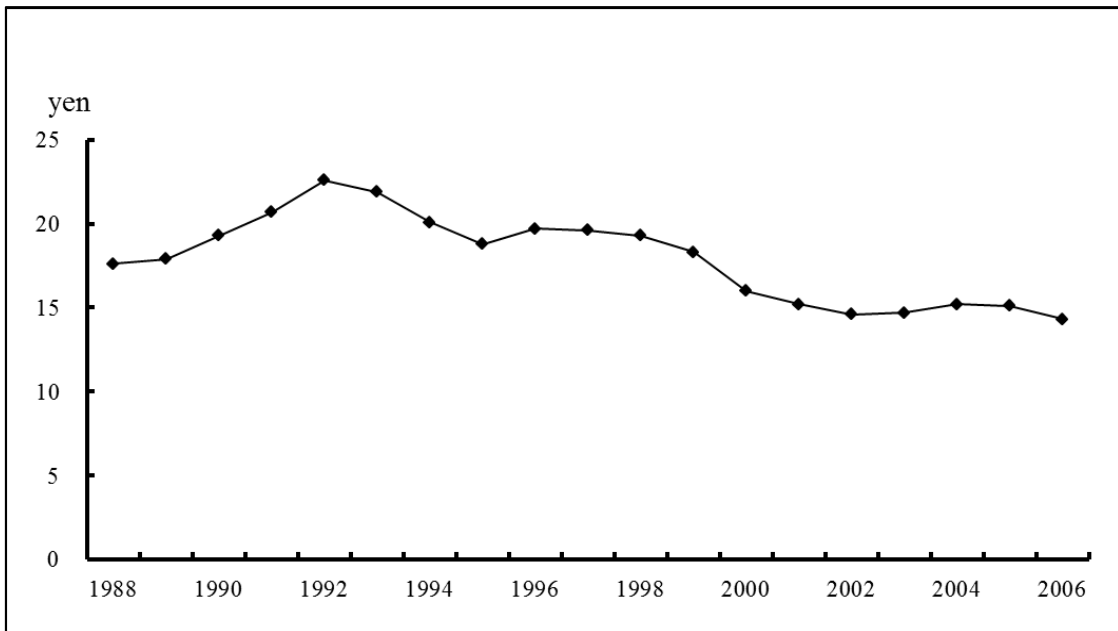
DEFRA. Survey of Vegetables and Flowers-England 2008.

Japan Hana-Fukyu Center. Japan Flower Data Book 1993, 1995, 2002 and 2006-10.



Source: Niisato(2009).

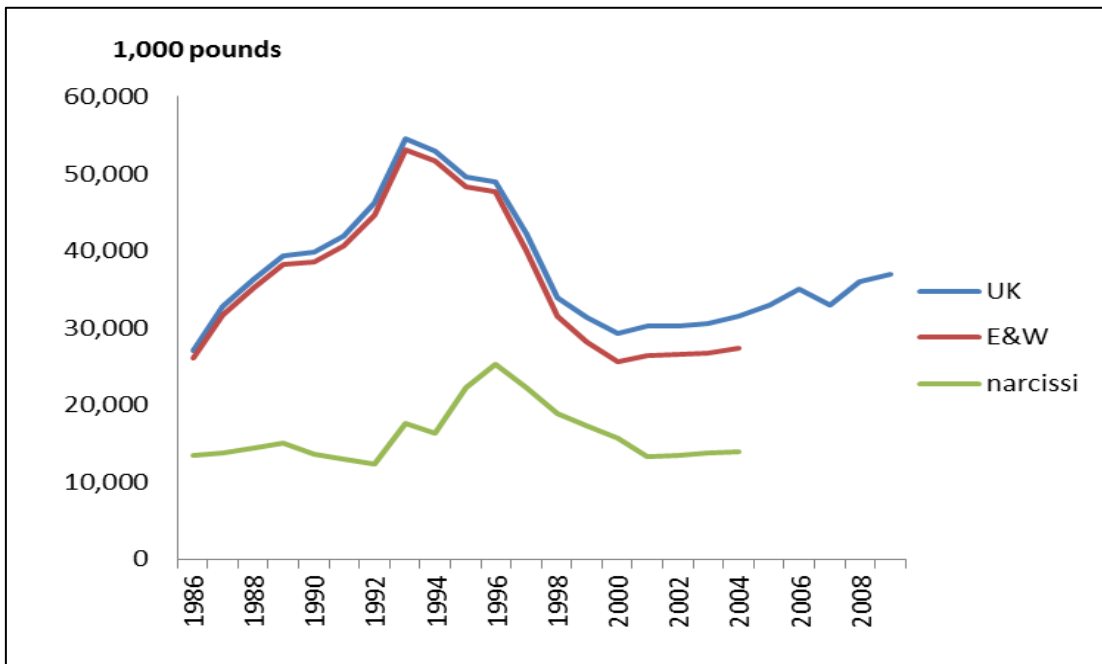
Figure 1. Production, import, and consumption of tulip bulbs in Japan



Source: Niisato(2009).

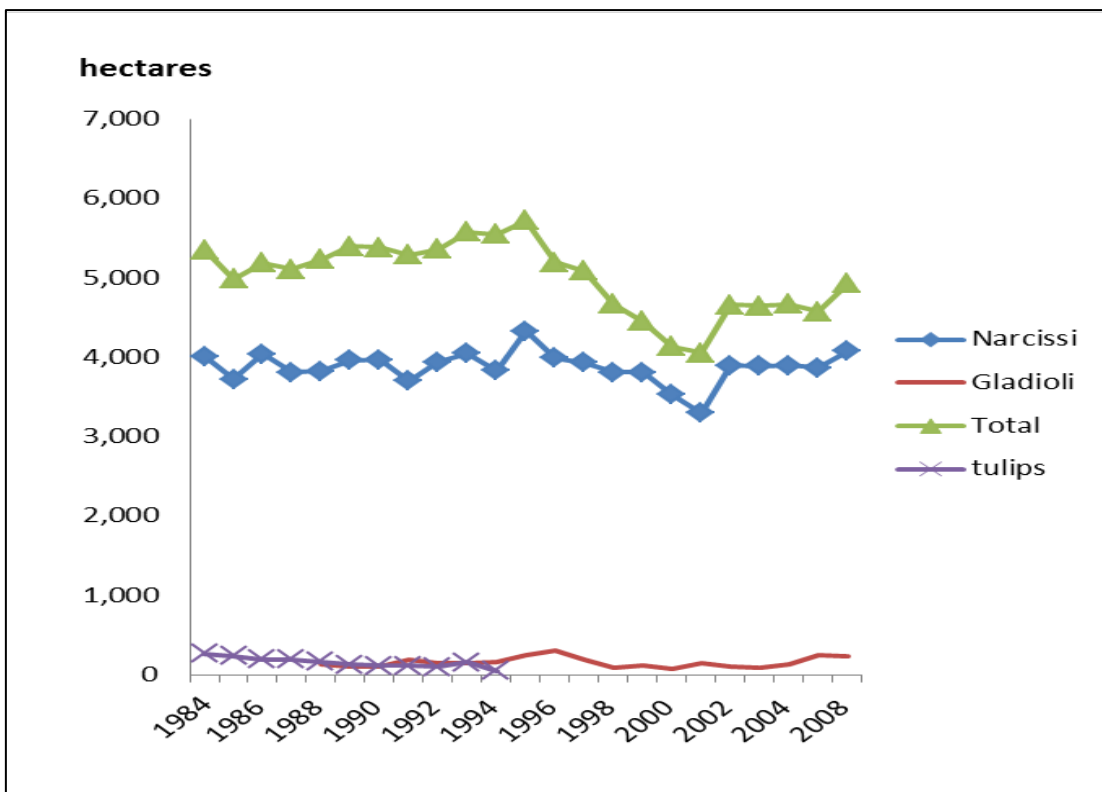
Figure 2. Price of tulip bulbs in Japan





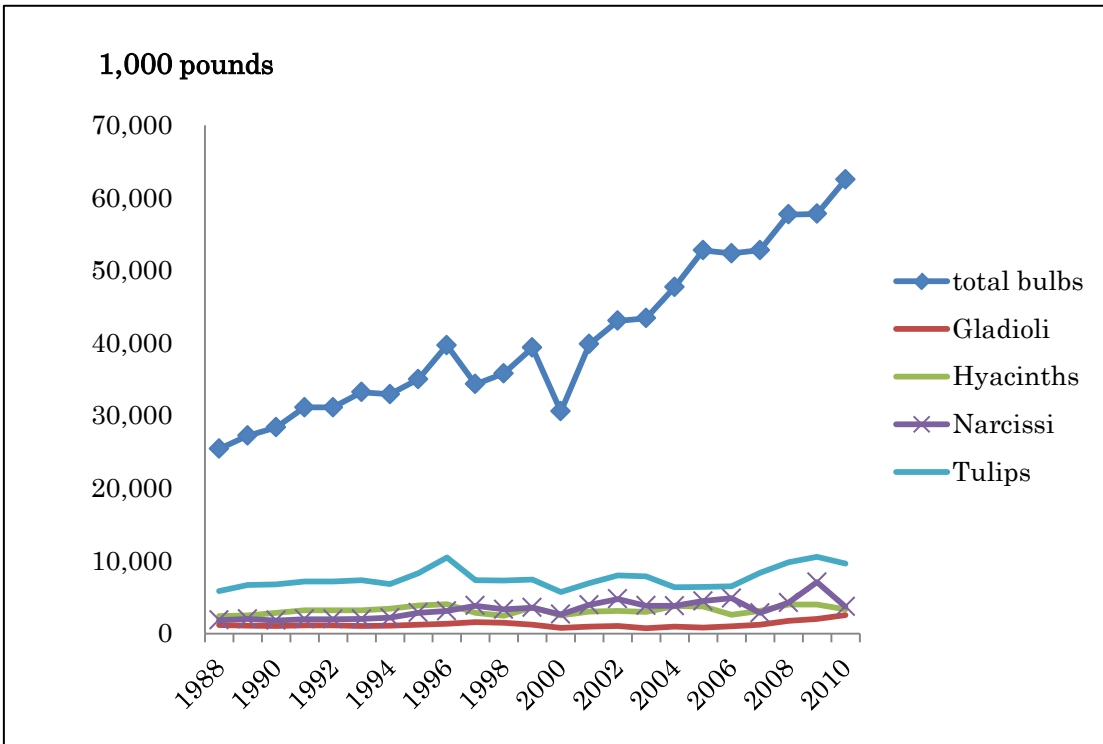
Source: DEFRA. Basic Horticultural Statistics, Agriculture in the UK.

Figure 3. Produce value of flowers and bulbs in open, the UK, England & Wales, and narcissi



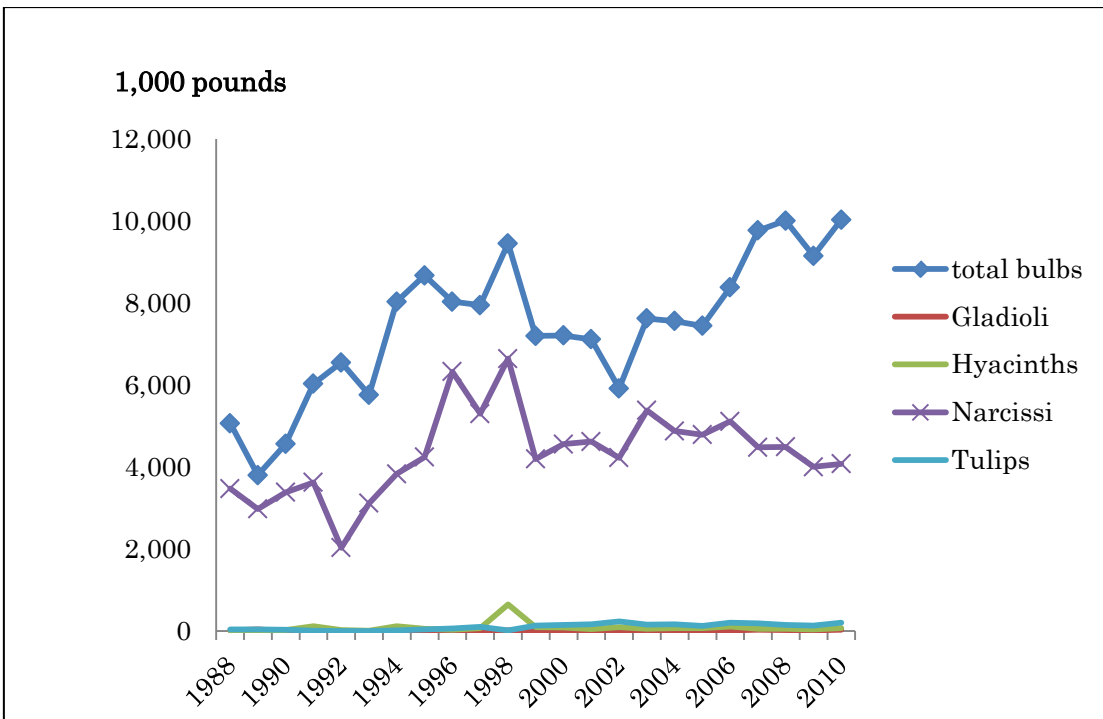
Source: DEFRA. Basic Horticultural Statistics in UK, and Survey of Vegetable and Flowers.

Figure 4. Produce area of flowers and bulbs in open, England & Wales



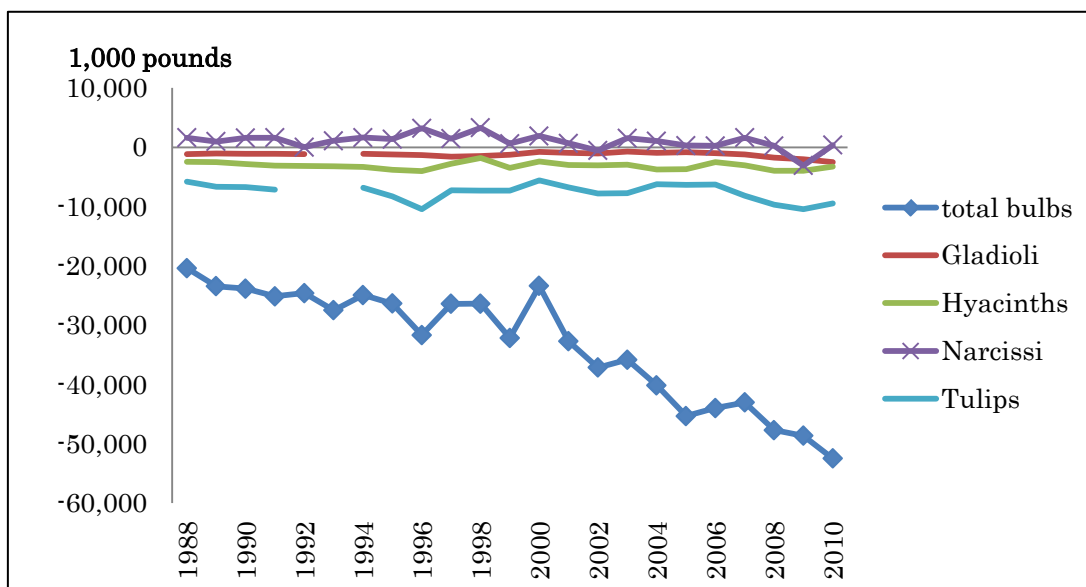
Source: DEFRA. Basic Horticultural Statistics in UK.

Figure 5. Imports of flower bulbs - value –



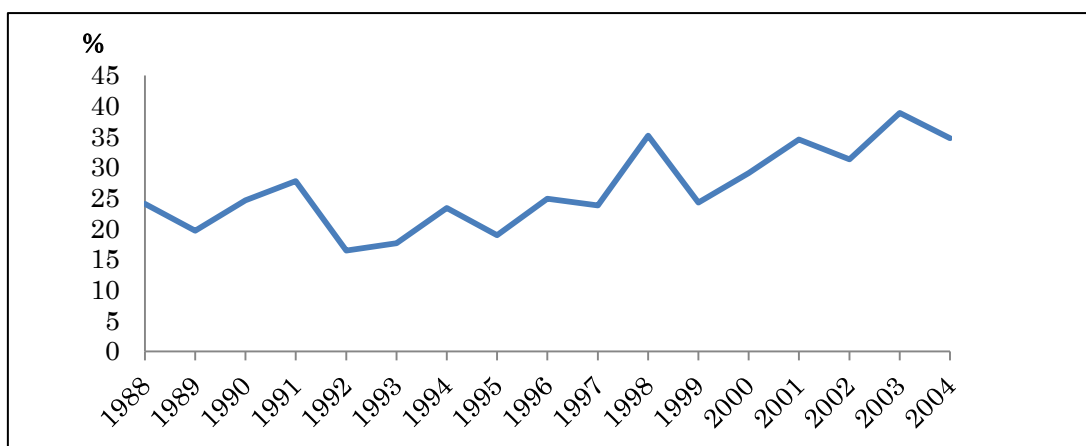
Source: DEFRA. Basic Horticultural Statistics in UK.

Figure 6. Exports of flower bulbs - value -



Source: DEFRA. Basic Horticultural Statistics in UK.

Figure 7. Net exports of bulbs



Source: DEFRA. Basic Horticultural Statistics in UK.

Figure 8. Export/production rate, narcissi

	unit	2005/06	2006/07	2007/08	2008/09
Cyclamineus	%	38.6	40.2	41.9	42.4
Double	%	13.5	13.2	13.3	13.1
Trumpet(yellow)	%	10.3	9.8	9.5	9.3
total Narcissi	ha	<b>1734.75</b>	<b>1695.43</b>	<b>1761.55</b>	<b>1570.32</b>

Source: data from a bulb company

Figure 9. Main varieties of narcissi in the Netherlands



Picture 1. Flower Parade 2011



Picture 2. Springfield Festival Garden



Picture 3. Springfield Outlet Shopping