

Working Paper

No.254

**Ornamental Bedding Plants Industry in Japan: Changes
in Production, Distribution and Consumption after the
Gardening Boom of 1990's**

Kazuyuki Miyabe Yasutaka Niisato

October 2010

FACULTY OF ECONOMICS
UNIVERSITY OF TOYAMA

3190 Gofuku, Toyama
930-8555 JAPAN

Ornamental Bedding Plants Industry in Japan: Changes in Production, Distribution and Consumption after the Gardening Boom of 1990's

Kazuyuki Miyabe^a Yasukata Niisato^b

Abstract

The ornamental bedding plants in Japan experienced a gardening boom that peaked in 1999. The gardening boom of 1990's had a profound effect in the bedding plants market in Japan, which historically had tended to increase gradually, increased dramatically both in quantity and quality.

However, supply and demand shifted to the saturated condition after the gardening boom. Established diversity and the variation were demanded at the boom. The accumulation and use of joint ownership type information concerning new items became important as correspondence of the grower. We clarified that it was important that the production management have the network structure with the flexibility for the accumulation and use of joint ownership type information concerning new items and varieties.

Keywords: ornamental bedding plants, gardening boom, network, flexibility, joint ownership type information, Japan

JEL Classification: Q11

^a College of Bioresources Sciences, Nihon University, Japan, 1866 Kameino, Fujisawa, Kanagawa 252-8510, Japan, e-mail: miyabe@brs.nihon-u.ac.jp

^b Faculty of Economics, University of Toyama, 3190 Gofuku, Toyama 930-8555, Japan, e-mail: niisato@eco.u-toyama.ac.jp

INTRODUCTION

The 1990s saw a gardening boom. This boom qualitatively and quantitatively expanded the ornamental bedding plant market, the consumption of which had been gradually growing. The growers reacted sensitively to the radical increase in consumption. All indexes of ornamental bedding plant growers, acreage and shipping volume showed increasing tendencies. However, in 2000, after the boom went away, the supplies of ornamental bedding plants became saturated. The ornamental bedding plant industry and growers received a large impact. The prices of ornamental bedding plants remained sluggish, and the growers increasingly moved away from the production.

Under this condition, it became necessary for the ornamental bedding plant growers to accumulate and utilize information shared with seedling producers, plant breeders, gardening centers, and home centers in order to create a new market and demands for their survival.

MATERIALS AND METHOD

We will organize the impacts that the gardening boom had on the Japanese ornamental bedding plant industry and focus on the relevant countermeasures that the growers are taking after the gardening boom, in particular. The current countermeasures after the gardening boom is how they keep flexible(Mott,1972) in coping with the problems. This means to clarify the network structure of the ornamental bedding plant growers for the purpose of accumulating and utilizing their shared information.

RESULTS AND DISCUSSION

Gardening Boom of the 1990s and its Implications

The gardening boom that started in 1995 and peaked in 1999 was a social phenomenon, where the demands for ornamental bedding plants, which had tended to increase, dramatically expanded(Miyabe,2001). The average expense for gardening per household increased from ¥7,148 in 1990 to ¥11,726 in 1999, and the percentage accounting for the total household expenses increased from 0.19% to 0.30% (Figure 1).

The boom greatly boosted not only consumption, but also distribution and production, and it brought about an effect to prompt new market entries, and as a result, the advent of the boom greatly contributed to the development of the domestic ornamental bedding plant industry.

Effect on the Ornamental Bedding Plant Growers

A lot of farmers participated in the production of ornamental bedding plants in many areas, and some of them had switched from vegetable production to ornamental bedding plants. In this way, the number of farm households participating in ornamental bedding plant production increased from 5,700 in 1993 to 7,540 in 2000(Figure 2).. The increase of the growers was especially rapid in the areas other than major areas such as Saitama Pref. and Kanagawa Pref. In this way, the ornamental bedding plant growers regionally expanded. The increased rate of the acreage was greater than that of farm households participating in this industry, and the acreage per farm household increased from 14.1 a in 1993 to 22.4 a in 2000. In many regions, many small and medium sized growers and a small number of large growers coexisted and formed a cooperative structure.

Current Countermeasure that Ornamental Bedding Plant Growers are taking after the Boom

After the boom went away, the demands of ornamental bedding plants changed from a decrease to stagnation. The prices of ornamental bedding plants hovered at low levels and many growers were in the condition where the prices could not offset the decrease in shipping volume. What is most important for the growers after the boom was how they kept flexible in management, and their countermeasures appeared as defense and attack

The countermeasure for defense was to partly stop the productions of ornamental bedding plants as a correction phase. The number of growers decreased from 7,540 in 2000 to 6,710 in 2006(Figure 2), and the acreage also decreased from 1,768 ha in 2002 to 1702 ha in 2006. However, only a defense countermeasure was not enough when the demands and supplies were in the saturated condition. The growers were required to take the countermeasure of attack to find a new market and demands utilizing their diversity formed during the boom period.

For that purpose, it was important to accumulate and utilize information concerning new ornamental bedding plants, new item goods and new varieties of plants. Therefore, the growers have been required to construct a network structure with the various parties, such as breeders, material suppliers, home centers and consumers, as a current countermeasure.

Classification of ornamental Bedding plant Growers and structure of Network

In order to know what network structure these business entities construct, we established five classification indexes with a farm form, locations, production system, consumption form and sales channel, and classified them focusing on the number of networks(N1), their geographic and spatial ranges(N2) and their types of networks(N3)(Table1). It helps us to know what networks the growers construct in order to accumulate and utilize the information of new products and new varieties.

Case Study of I farm

I farm is a medium-sized farm (A2) located in urban area(B1) (Table 2). Its annual shipping volume is 600,000 pots. The production system is C3 with more than 120 original species for home consumption(D1). It has two sales channels of wholesale(E1) and retail sales(E2).

The shipping volume increased from 450,000 pots before the boom to 1,200,000 pots during the boom, which was approximately 400% increase. However, it decreased to 600,000 pots after the boom. This greatly increased the numbers of items and new varieties during the boom. However, after the boom, it decreased them and specialized in original species. It was dealing in the E1 grade through the wholesale channel, but now it is dealing in the E2 grade.

The number of its networks for business contacts for the information of new items and species includes not only those in Japan, but global networks(Nishiguch,2007) are constructed including plant seed breeders and seed breeding companies in Germany and Italy. The number of networks and their geographic and spatial ranges have been expanding after the gardening boom. As the type of network, the number of random networks is increasing and rewiring is also being performed. In case study I, it is

presumed that the legal entity has random business contacts through global networks and has constructed the structure to accumulate the information of new items and varieties by rewiring.

Case Study of K farm

K farm is a family farm (A1) located in intermediate and mountainous area (B2). Its annual shipping volume is 300,000 pots. It produces many items in small quantities(C3), with more than 100 varieties for home consumption. It has three sales channels of wholesale(E1) , retail(E2),and consumer(E3). .

The shipping volume had increased until the boom ended, and decreased after it. However, the items and varieties have constantly increased, and its original species have been increasing dramatically. Their networks are slightly increasing. Its networks are local and fixed ones. However, there are random networks within the local ones and some re-wirings also can be observed.

As for constructing a network structure for accumulating and utilizing the information of new species, the following two points can be suggested; 1) With the advantage of the gardening boom, the number of networks and their geographic and spatial ranges have expanded, and 2) random networks are increasing, and as a result, the sharers of information can be changed and rewiring can be performed. In order to correspond to the gardening boom, it is important to be flexible in management. Therefore, for the accumulation and utilization of information, the network structures should be flexible rather than fixed. Not only regular networks, but also random networks become important. This means that whether or not the network structure has a rewiring system(Nishiguch,2007) is very important.

CONCLUSION

The gardening boom of the 1990s qualitatively and quantitatively expanded the ornamental bedding plant market, the consumption of which had been gradually growing. It greatly boosted not only consumption, but also distribution and production, and prompted new market entries. All indexes of ornamental bedding plant growers, acreage and shipping volume showed increasing tendencies in particular. However, after the boom went away, the demand and supply fell in a saturated condition and the diversity and variation established during the boom were required. Under the current consumer needs, with the countermeasures that growers are taking, the importance of the accumulation and utilization of shared information concerning new products and varieties is pointed out. This paper clarified how important it is for ornamental bedding plant growers to have flexible networks for the purpose of accumulating and utilizing shared information concerning new items and varieties.

The tasks that appeared to be unique to Japanese ornamental bedding plant growers as above explained can be applied to those of other growers in the world. In this regard, this study targeting Japanese growers can contribute to the study concerning other ornamental bedding plant growers in the world.

ACKNOWLEDGEMENTS

We would like to thank Managers of I and K farmer for interview and data collection.

Literature Cited

- Miyabe,K.2001.Gardening Boom and Farm Management of Ornamental Bedding Plants .Journal of the Japanese Institute of Landscape Architecture. 65(1): 33-36.
- Mott,E.P.1972. The Characteristics of Effective Organizations.Haper & Row.20.
- Nishiguch,T.2007.Global Neighbourhoods: Strategies of Successful Organizational Networks,NTT Pub,120-125.

Tables

Table 1. Classification of growers

Index	Type
A. Farm form	1.Small-scale+Family farm 2.Medium-scale+Corporate farm
B. Location	1.City area 2.Intemediage and mountainous area
C. Production system	1.A little item/variety + a small amount 2.A little item/variety + mass 3.A lot item/variety + a small amount 4.A lot item/variety +mass
D. Consumption form	1.Home consumption 2.Business consumption
E. Sales channel	1.Wholesale channel 2.Retail channel 3.Consumer channel

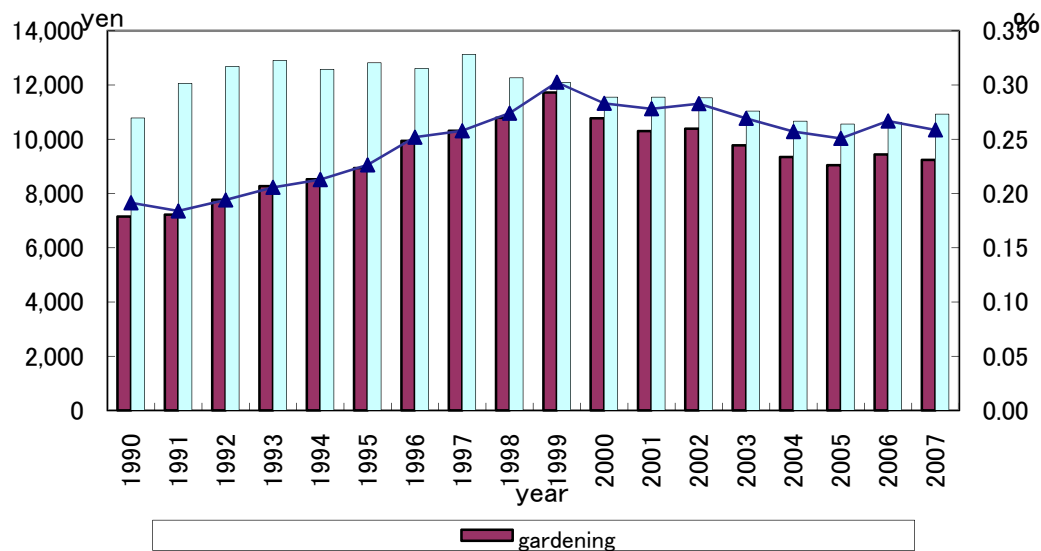
Table 2. Outline and network structure of Case I

Index	before boom (1996)	boom (1999)	after boom (2010)
1.Cultivation area(m ²) glass open field	7000 3000 4000	15000 7500 7500	17000 8000 9000
2.Shipment (pot)	450000	1200000	600000
3.Item/Variety Original Variety	50/180 0	150/600 0	30/200 120
N1.Number of network	8	8	21
N2.Geogrphic spatial range of network local domestic global	0 6 2	0 6 2	3 11 8
N3.Type of network regular random	8 0	8 0	8 13

Table 3. Outline and network structure of Case K

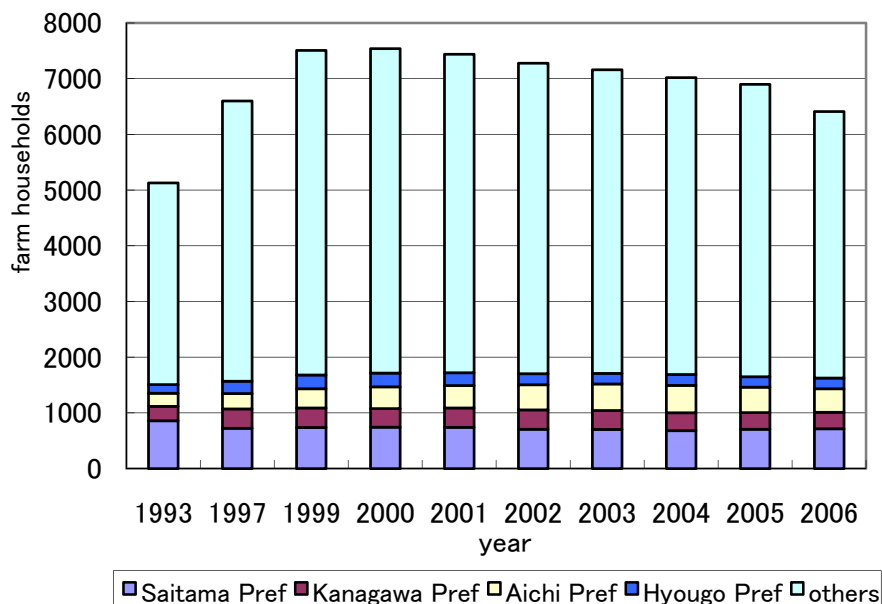
Index	before boom (1995)	boom (1999)	after boom (2010)
1.Cultivation area(m ²)	3500	4500	6700
glass	1500	1500	2700
open field	2000	3000	4000
2. Shipment (pot)	300000	400000	350000
3.Item/Variety	10/100	40/300	30/450
Original Variety	0	30	350
N1. Number of network	4	6	14
N2.Geographic spatial range of network			
local	5	4	7
domestic	0	2	7
global	0	0	0
N3. Type of network			
regular	4	5	12
random	0	1	2

Figures



Sources: annual report on the survey of household economy, Ministry of Internal Affairs and Communications. Statistics Bureau

Fig.1. Annual expense of gardening per household.



Sources: Institute of Nihon Hana Fukyu Center (Japan Flower Promotion Center)(2009), '09 Flower Databook, Institute of Nihon Hana Fukyu Center.

Fig.2. The number of bedding plants growers.