

Production Cost of Tulip bulbs in Japan and the Netherlands

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Introduction

• Recently tulip bulb production has greatly decreased in Japan because of huge import of cheap bulbs from the Netherlands. **The production volume of Japanese tulip bulbs is around one third of that in the last peak, 1993, and the market share of Dutch bulbs in Japan reaches 80%.**

• In 2007 Toyama prefecture investigated production cost of tulip bulbs in Japan. In the Netherlands the agricultural economics research institute (LEI) has an official data of production cost of tulip bulbs. In November 2009, I made interviews with some Japanese and Dutch bulb farmers.

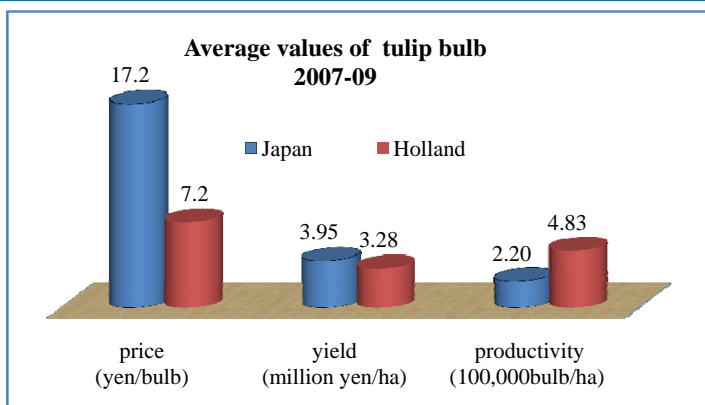
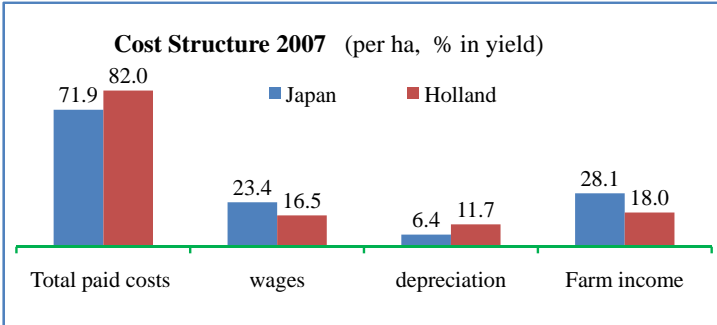
• I compare their farm management conditions and find some comparative features of production cost of tulip bulbs in Japan and the Netherlands.

Main results

1. The average price of tulip bulbs produced in the Netherlands is less than half of those produced in Japan.
2. The production per hectare(ha) in the Netherlands is more than two times of that in Japan.
3. The farm scale of the Netherlands is more than 4 times of that of Japan.
4. The production system of the Netherlands is more mechanized with bigger tractors and machines. For example, Dutch farmers plant tulip bulbs by 3 ha a day. On the other hand Japanese farmers do by 0.3 or 0.4 ha a day.
5. The wage share in production cost of the Netherlands is less than that of Japan.
6. The capital depreciation share in production cost of the Netherlands is more than that of Japan.
7. The farm income share in the production price of the Netherlands is less than that of Japan.

Outlook of farms 2009		Japan		Holland		
Farm		A	B	C	D	E
main workers	(man)	2	3	2	1	1
full-time employment	(man)	4	4	1	2	5
part-time employment	(man days)	500	0	625	1,500	1,250
own land	(ha)	1.2	1	4	5.8	34.7
rental land	(ha)	14	20	16.6	16.8	34.1
total land	(ha)	15.2	21	20.6	22.6	68.8
crops						
tulip bulbs	(ha)	3.8	5	11	16	33
tulip cutflowers	(1000)	100	430	2,800	8,300	7,500
green house for flowers	(ha)	0.1	0.08	0.27	0.58	0.48
rice	(ha)	10	14	0	0	0
grass for dairy farming	(ha)	0	0	0	6	35
1) Farm A: 4 tractors (80ps, 75ps,...)		3) Farm C: 4 tractors (115ps, 84ps,...)				
2) Farm B: 4 tractors (75ps, 50ps×2,...)		4) Farm D: 4 tractors (180ps, 105ps,...)				
		5) Farm E: 9 tractors (165ps, 130ps,...)				

Yield Structure 2007	(per ha, % in yield)	
	Japan	Holland
tulip bulbs	88.2	61.9
tulip cut flowers		32.1
contract work		4.0
growth of plant stock		-3.1
others		4.5
income subsidies	11.8	0.3
taxes (VAT) on yields		0.3



Planting bulbs with machine in Japan

Problems, Strategy, and Yields					
	Japan		Holland		
	A	B	C	D	E
problem 1	low price	ageing of machines	fungi	good workers	good soil
problem 2	more labor	ageing of workers	virus	fungi	disease
future strategy	low cost	combination of bulbs and cutflowers	good variety	good quality and color	good water
yields (average 2007-09, per farm, 1,000yen)					
tulip bulbs	14,833		73,846		
tulip cutflowers	12,250		84,016		
rice	15,960				



Planting machine in Holland