

Consumer and import trends of potential of tropical superfruits in Korea

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1. Introduction

◆ Six main fruits in Korea



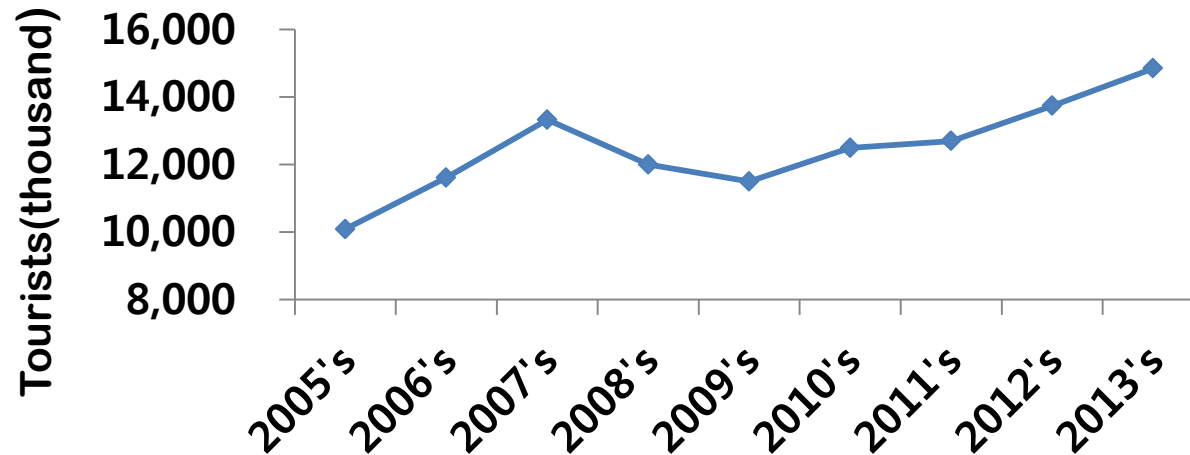
◆ Fruit Market was opened by FTA

Year	FTA
1991	Imported fruit market opened (banana & Pineapple)
1997 -2004	MMA : import tariff 84.3% → 50% Oranges were imported as sub-tropical fruits
2004. 4	Korea- Chilli FTA : grape & kiwi
2011. 7	Korea- EU FTA : Italia kiwi
2012. 3	Korea-USA FTA: orange, grape, cherry
2014. 3	Korea-Canada FTA
2014. 11	Korea-New zealand FTA
2014. 12	Korea-Austrailia FTA , Korea-Vietnam FTA

- ▶ After FTA, tariff reduction, import cost reduction, fruit import expansion

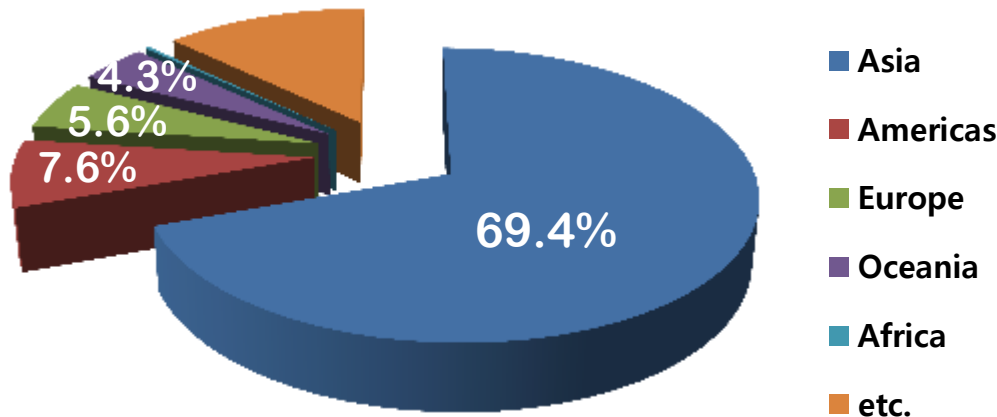
1. Introduction

◆ Increase of international tourists



◆ Increase of tourists to Southeast Asian

➡ Consumption increase of tropical fruits



1. Introduction

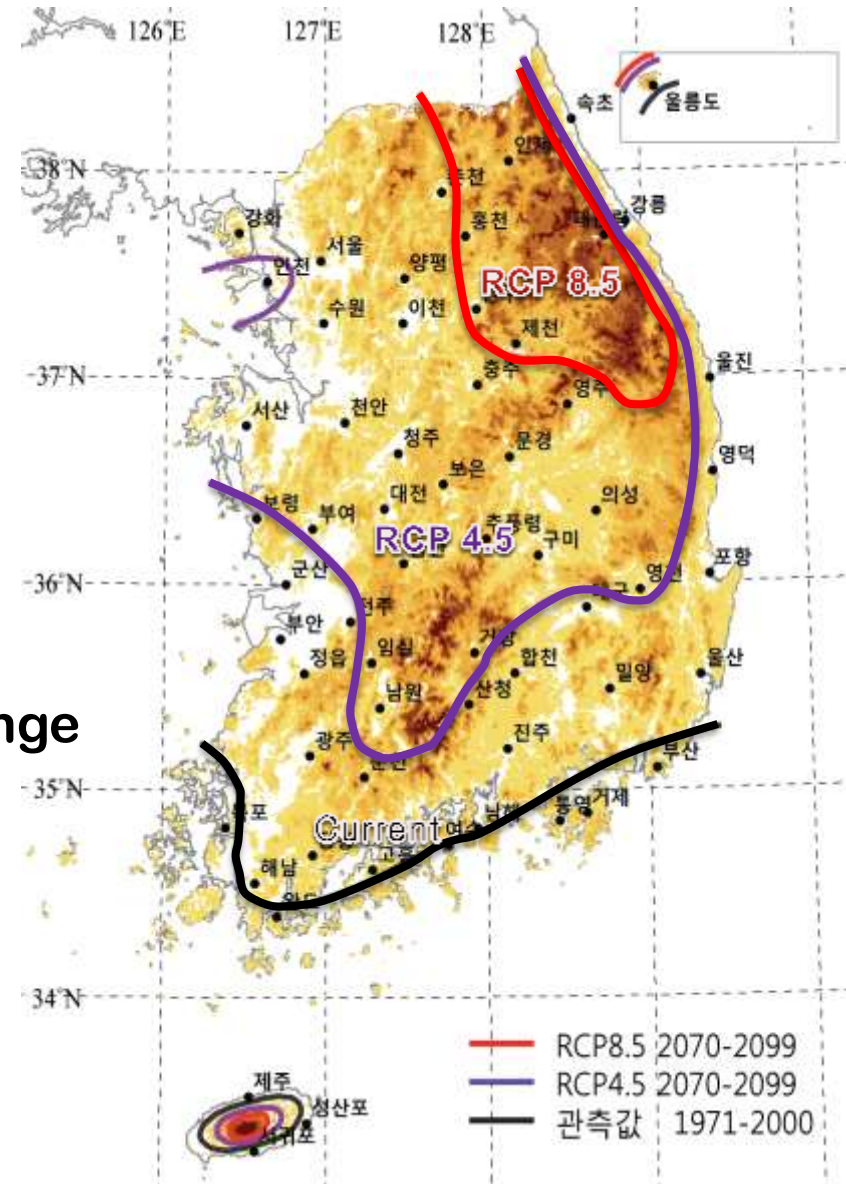
◆ Tropical fruits were not popular in Korea earlier



1. Introduction

◆ Jeju coast of Korea has already begun to move into the subtropical region due to climate change

- ▶ agro-environmental change
- ▶ cropping season change
- ▶ site-suitability, yield and quality change



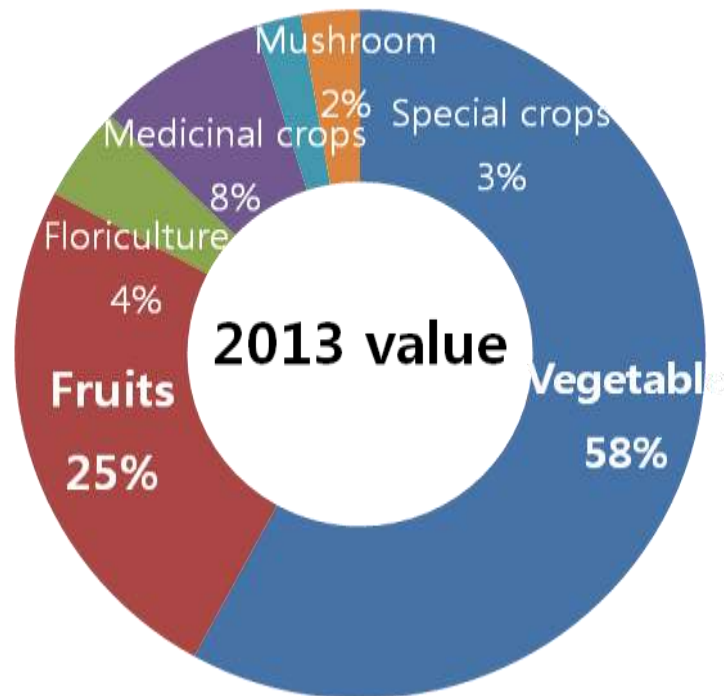
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Fruit industry of Korea

2. Fruit Industry in Korea

- Total agriculture production value in Korea(2013)

Total Agriculture production value	44,608 (M US\$)	
Food crops	10,254	23%
Horticulture crops	16,616	38%
Tobacco	942	2%
Poultry	16,233	37%



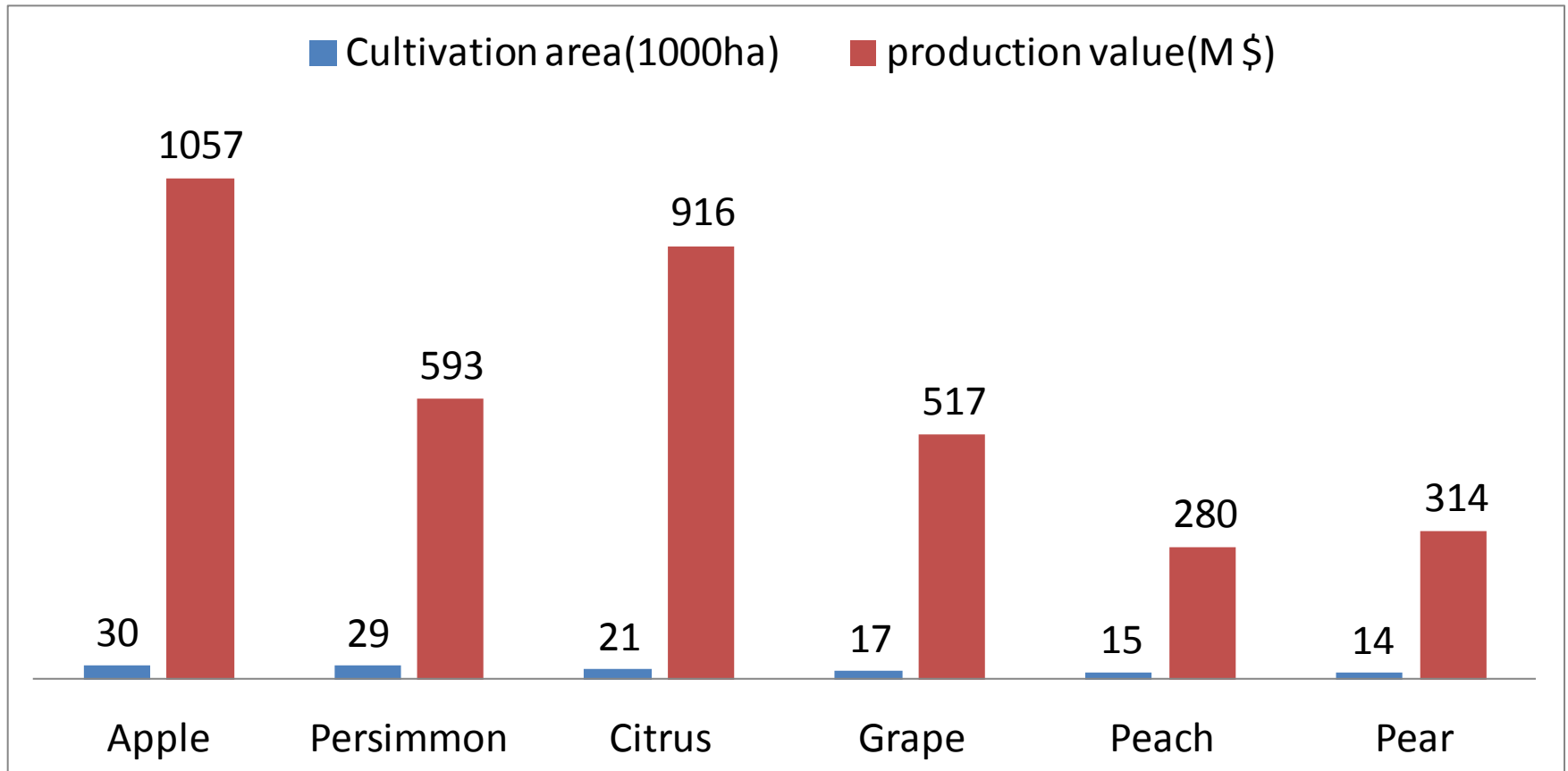
2. Fruit Industry in Korea

- Change of the total production of fruit industry in Korea

Fruits	2000	2005	2010	2013
Total production (1000 ton)	2,428	2,610	2,458	2,522
Cultivation area (1000 ha)	173	160	162	161
Total production value (M US\$)	2,581	3,082	3,584	4,114
Total processing performance (1000 ton)	130	206	183	180
Export value (M US\$)	45	120	195	233

2. Fruit Industry in Korea

- Comparison of 6 main fruits in Korea



2. Fruit Industry in Korea

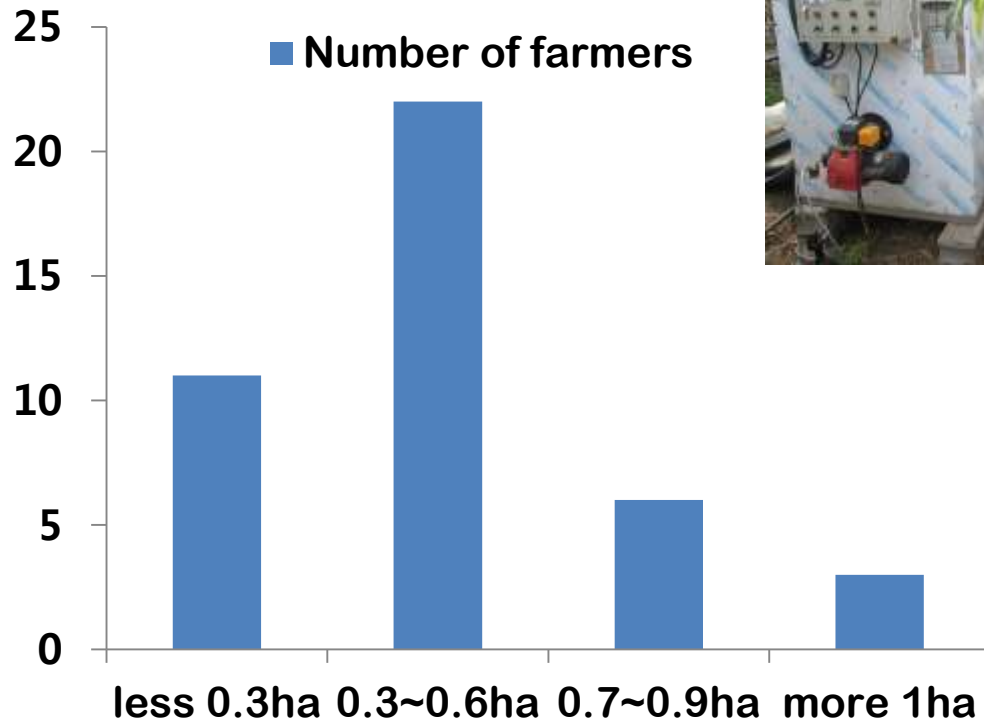
◆ Cultivation of tropical fruit in Korea

Tropical fruits	Acreage(ha)/Number of farmers		
	2001's	2007's	2011's
Pineapple	18.1/54	6.1/16	0.3/1
Mango	7.2/10	18.1/37	22.6/42
Pitaya	2.8/9	9.5/22	4.6/15
Guava	1.0/2	5.7/15	3.6/16
Atemoya*	1.0/2	2.5/15	0.9/5
Banana	-	1.6/4	1.3/3
Papaya	0.4/2	0.4/2	0.1/1
Avocado	-	0.2/1	0.6/3
Passionfruit	-	0.2/2	0.2/2

*Atemoya is a hybrid between sugar apple and cherimoya

2. Fruit Industry in Korea

◆ Area of cultivated mango in Korea



2. Fruit Industry in Korea

◆ Strawberry Export status in Korea

	Export amount (ton)			Export value (1,000 \$)		
	2009	2011	2013	2009	2011	2013
Total	2,871	2,424	3,116	19,189	20,606	29,808
Hong Kong	722	794	1,096	5,018	6,687	11,226
Singapore	1,107	660	955	7,018	5,354	9,267
Malaysia	186	206	362	995	1,645	3,229
Thailand	45	126	240	305	1,209	2,573
Japan	738	491	309	5,216	4,486	1,788

* Strawberry Production season : Nov - May

2. Fruit Industry in Korea

◆ Apple Export status of Korea

	Export amount (ton)			Export value (1,000 \$)		
	2009	2011	2013	2009	2011	2013
Total	10,117	8,759	3,017	19,632	8,874	7,413
Taiwan	9,276	2,141	1,702	17,952	6,178	4,024
Russia	94	45	220	172	130	707
Vietnam	6	25	105	11	67	239
Singapore	183	410	369	377	736	879
Hong Kong	45	165	337	134	485	922

2. Fruit Industry in Korea

◆ Pear Export status of Korea

	Export amount (ton)			Export value (1,000 \$)		
	2009	2011	2013	2009	2011	2013
Total	27,222	17,998	20,120	53,734	47,261	54,869
Taiwan	13,371	7,702	9,670	24,731	19,166	25,742
USA	10,998	8,248	8,521	24,663	23,833	24,460
Indonesia	480	327	281	764	800	971
Canada	464	356	255	963	1,092	782
Hong Kong	138	230	344	193	426	641

2. Fruit Industry in Korea

◆ Persimmon Export status of Korea

	Export amount (ton)			Export value (1,000 \$)		
	2009	2011	2013	2009	2011	2013
Total	10,255	6,897	7,361	10,884	9,363	10,322
Malaysia	5,396	3,360	3376	4,790	3,995	4,308
Singapore	1,470	1,322	1221	1,543	1,694	1,605
Canada	1,097	728	730	1,640	1,308	1,211
Philippines	68	284	586	88	506	1,022
Hong Kong	1,089	645	606	1318	942	907

2. Fruit Industry in Korea

◆ Imported Korean fruits in Malaysia market



Big Pears and sweet persimmons



Star newspaper in Malaysia - Korean “Mahyang” strawberry good”

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Import trend of fruits in Korea

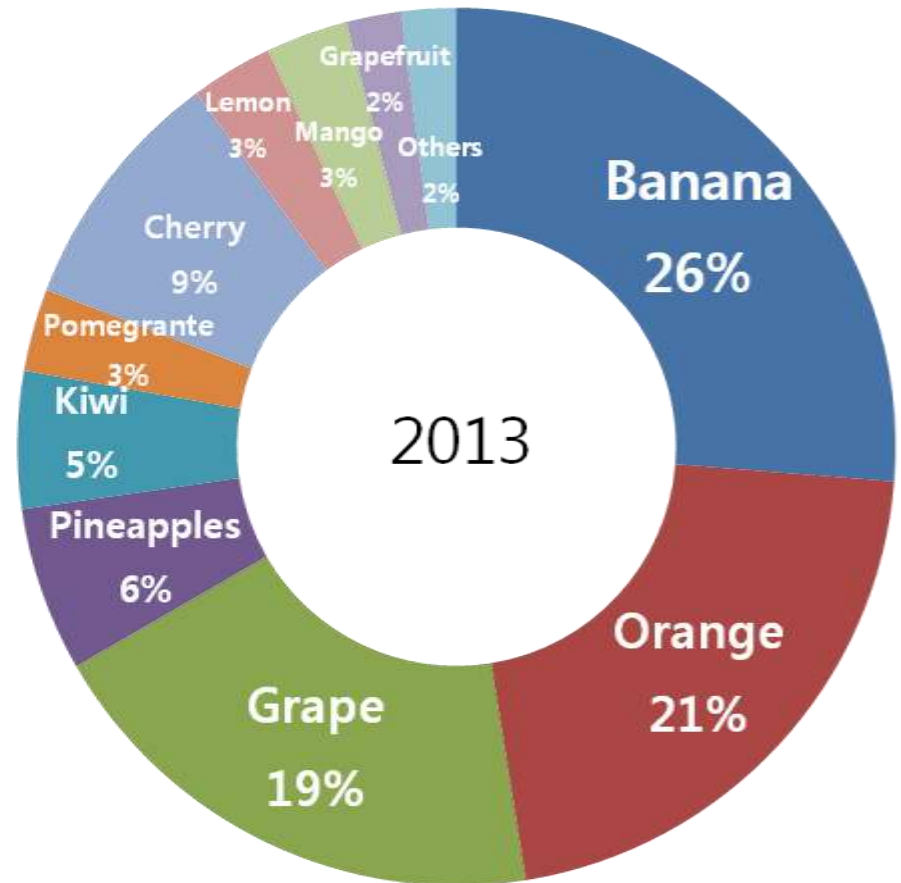
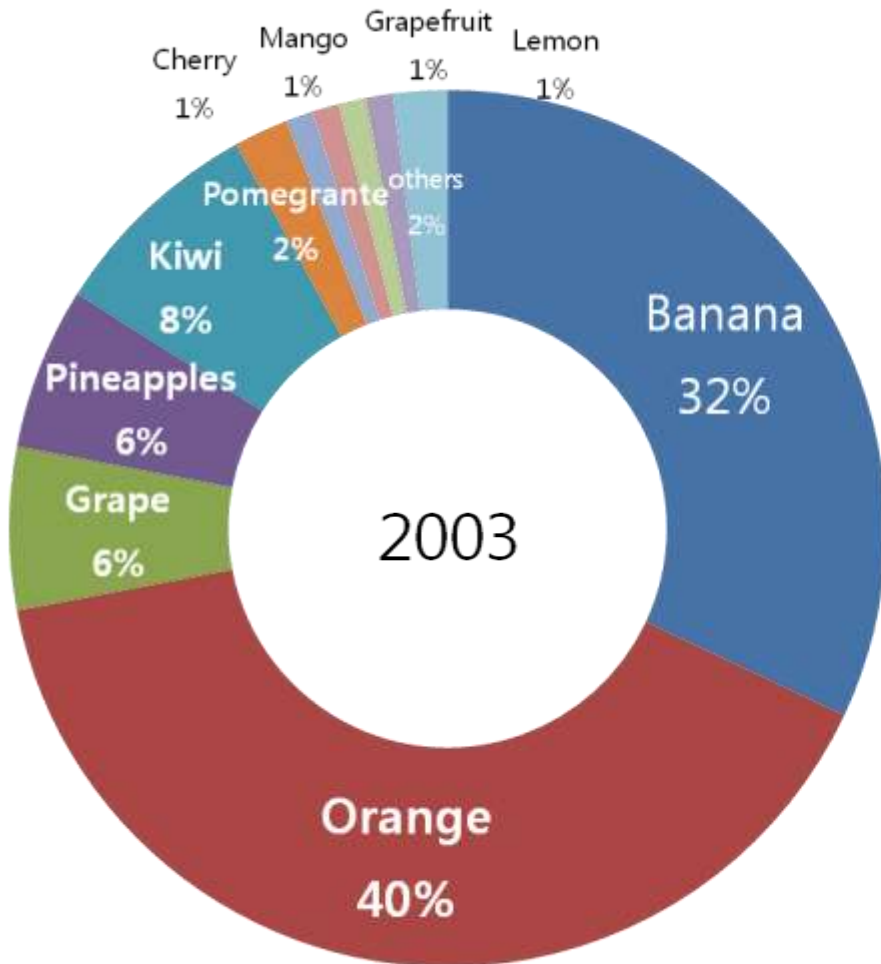
3. Import Trend of Fruit in Korea

◆ Export and import value of fruits

Fruit	2000	2005	2010	2013
Export value (M US\$)	45	120	195	233
Import value (M US\$)	43	120	945	1,498

3. Import Trend of Fruit in Korea

◆ Comparison of 10 imported fruits in Korea



3. Import Trend of Fruit in Korea

◆ The import status of tropical fruits (2013's)

	Import amount(ton)	Import value(1000\$)
Banana	230,771	188,207
Pineapple	54,907	43,583
Mango	5,128	19,188
Mangosteen	758	2,578
Avocado	528	2,287
longan	16	31
Jackfruit	35	35
Papaya	75	110
Passionfruit	170	218
Durian	408	837
Rambutan	1,086	1,240

3. Import Trend of Fruit in Korea

◆ Banana import

	Import amount (ton)				Import value (1,000 \$)			
	2007	2009	2011	2013	2007	2009	2011	2013
Fresh	311,698	255,672	324,585	230,740	172,373	162,387	243,904	181,340
Frozen	104	213	62	31	67	190	50	35
Total	311,802	255,885	324,647	230,771	172,441	162,387	240,954	181,376

3. Import Trend of Fruit in Korea

◆ pineapple import

	Import amount (ton)				Import value (1,000 \$)			
	2007	2009	2011	2013	2007	2009	2011	2013
Fresh	77,549	54,551	73,063	54,770	53,478	38,347	52,728	43,406
Frozen	569	826	343	136	726	887	483	176
Total	78,118	55,377	73,406	54,906	54,205	39,235	53,212	43,583

3. Import Trend of Fruit in Korea

◆ mango import

	Import amount (ton)				Import value (1,000 \$)			
	2007	2009	2011	2013	2007	2009	2011	2013
Fresh	1,788	893	666	4,984	6,528	3,589	8,889	18,867
Frozen	286	272	1,913	143	653	579	1,429	320
Total	2,075	1,165	2,579	5,127	7,181	4,168	10,320	19,188

3. Import Trend of Fruit in Korea

◆ rambutan import

	Import amount (ton)				Import value (1,000 \$)			
	2007	2009	2011	2013	2007	2009	2011	2013
Fresh	-	-	-	-	-	-	-	-
Frozen	1,174	622	1,394	1,086	1,182	607	1,546	1,240
Total	1,174	622	1,394	1,086	1,182	607	1,546	1,240

3. Import Trend of Fruit in Korea

◆ Main importing countries of tropical fruits to Korea

	Main Importing Countries(ton)
Banana	Philippines(213,230), Guatemala(3063), Peru(1575), Ecuador(477), Sri Lanka(385), Colombia(164), Vietnam(120), Thailand(3)
Pineapple	Philippines(54,402), Costa Rica(287), Taiwan(40), Panama(19), Vietnam(2), Thailand(0.1)
Mango	Philippines(2,384), Thailand(1,865), Taiwan(722), Pakistan(11)
Rambutan	Vietnam(1,028), Thailand(59)
Mangosteen	Thailand(339), Philippines(2)

3. Import Trend of Fruit in Korea

◆ Import of tropical fruits(Banana, Mango)



3. Import Trend of Fruit in Korea

◆ Import of Tropical fruits from Thailand- fresh & frozen



◆ High import potential of mangosteen and pitaya



Mangosteen



Pitaya Function : carotenoid,
unsaturated fatty acid

3. Import Trend of Fruit in Korea

- ◆ For import, It's allowed only phytosanitary certificate of export country

	Exporting Countries
Durian	Thailand
Avocado	American(exclusion: Hawaii, Texas, Florida), New Zealand
Pineapple	World Areas
Coconut	World Areas
Unripen Banana	World Areas

3. Import Trend of Fruit in Korea

- ◆ Exporting countries of tropical fruits have to do specific postharvest treatments

Tropical fruits	Country	Conditions
Mango	Taiwan	<ul style="list-style-type: none">- Hot water treatment(45.5°C, 30min) in production area- Quarantine on-site by Korean quarantine officer
	Philippines	<ul style="list-style-type: none">- Hot water treatment(45~47°C, 10~20min) in production area- Quarantine on-site by Korean quarantine officer
	Thailand	<ul style="list-style-type: none">- Hot water treatment(45~47°C, 10~20min) in production area- Quarantine on-site by Korean quarantine officer
	Australia	<ul style="list-style-type: none">- Hot water treatment(47°C, 15min) in production area- Quarantine on-site by Korean quarantine officer

3. Import Trend of Fruit in Korea

Tropical fruits	Country	Conditions
Papaya	Philippines	<ul style="list-style-type: none">- Hot water treatment(45°C, 70min) in production area- Quarantine on-site by Korean quarantine officer
Papaya	Taiwan	<ul style="list-style-type: none">- Core of fruit must be 47.2°C during hot water treatment (humidity over 90%)- Quarantine on-site by Korean quarantine officer
Avocado	Mexico	<ul style="list-style-type: none">- Clear area from mediterranean fruit fly- Quarantine on-site by Korean quarantine officer
Pitaya	Vietnam	<ul style="list-style-type: none">- Hot water treatment(45.5°C, 40min) in registered farm- Quarantine on-site by Korean quarantine officer
Mangosteen	Thailand	<ul style="list-style-type: none">- Hot water treatment in registered farm- Quarantine on-site by Korean quarantine officer

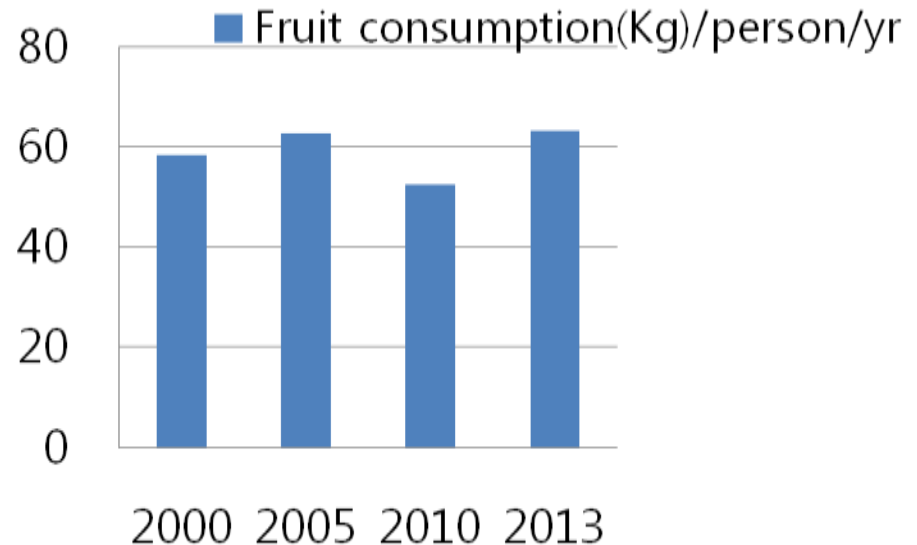
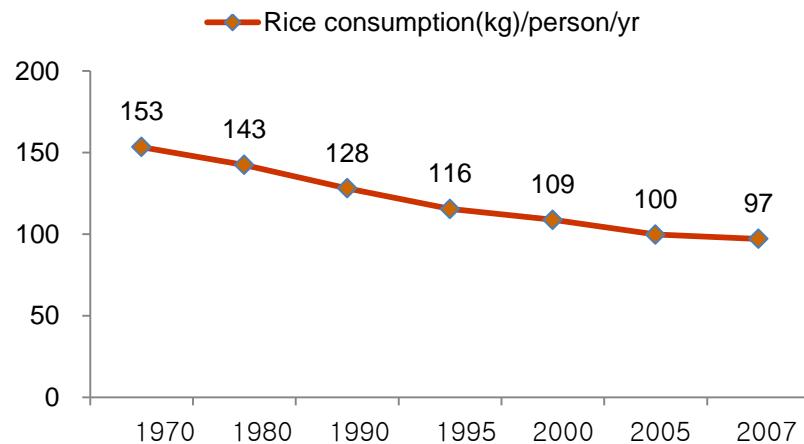
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Consumer trend of fruits in Korea

4. Consumer's Trend of Fruit in Korea

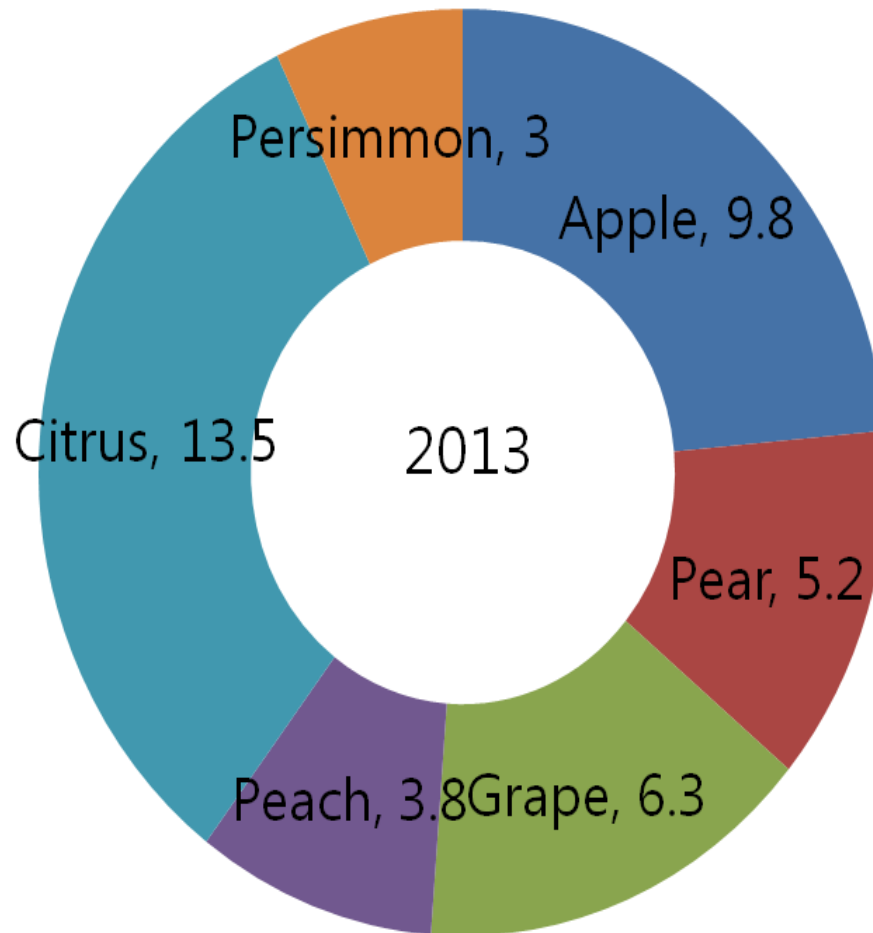
◆ Consumption amount of agri-food kg/per capita/year

	Food crops	Vegetables	Fruits	Meat
Consumption Kg/capita/year	119.4	170	63	42.7



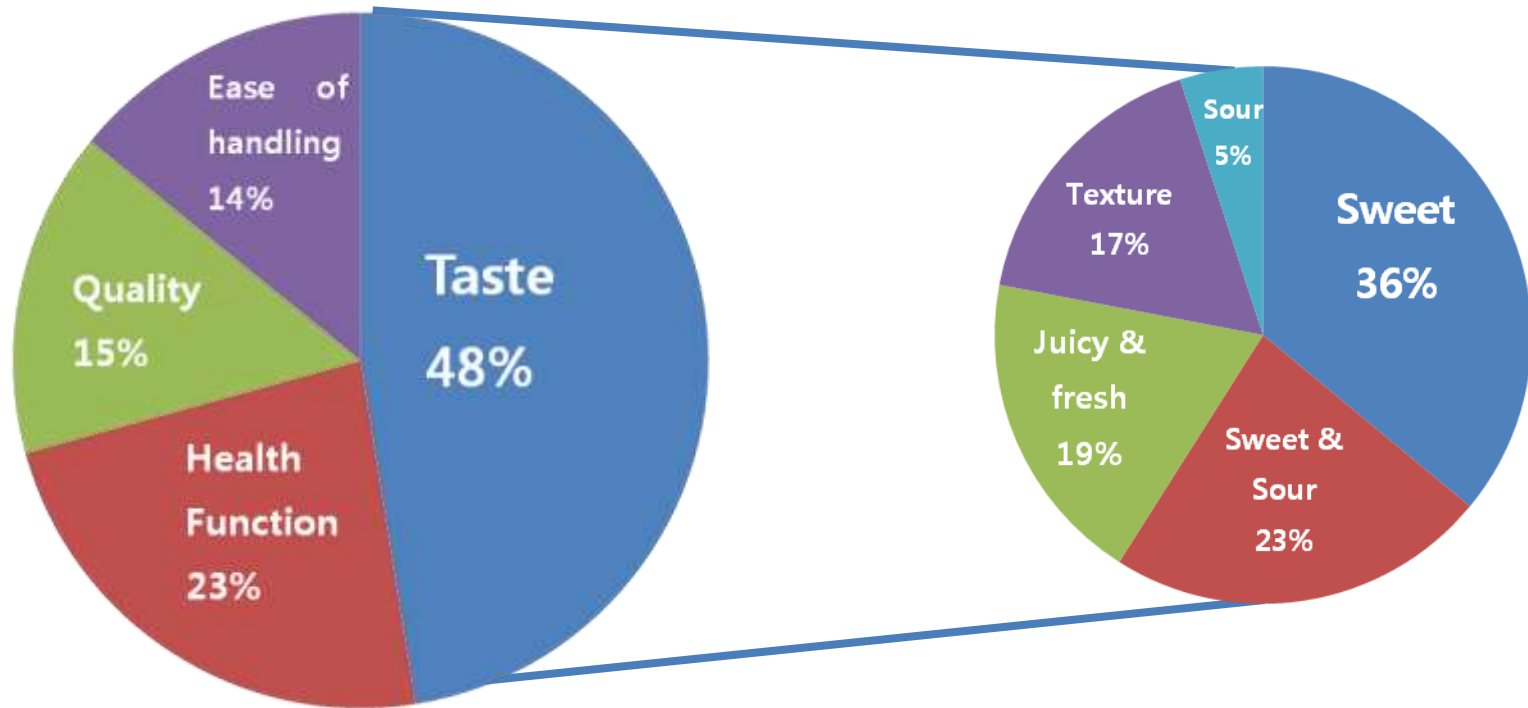
4. Consumer's Trend of Fruit in Korea

◆ Consumption amount of main fruits per capita/year



4. Consumer's Trend of Fruit in Korea

◆ Consumer's preference of fruits



- ✓ Seniors are focused on antioxidant fruits – red color fruits(dragon fruit, mangosteen)
- ✓ Juniors are interested in different color and soft fruits
- ✓ Females like to eat sweet and sour fruits

4. Consumer's Trend of Fruit in Korea

◆ Main usages of fruit

- ▶ Gifts : at hospital and house visiting (Good quality)
- ▶ Culinary : grinding kiwi and pear for meat soften
pineapple for meat sauce
- ▶ Beverage : Juices, smoothy and milk shake
(fresh and frozen)
- ▶ Dessert : fresh cutted seasonal fruits
- ▶ Pray for their ancestors at memorial day (Big size)
- ❖ Eating habits of fruit is **fresh** status in Korea
Apple : Gold apple in the morning(half part)

4. Consumer's Trend of Fruit in Korea

◆ Sales of tropical fruits in Korea



in cold condition for presents in department store

5. Conclusion

◆ Korea will be high potential import country of tropical fruits

<Present>

- Not popular
- Few demand
- Few information
- Main imported fruits are banana & pineapple
- Small market
- Expensive price

<Future>

- Popular
- Many demand
- Much information
- Main imported fruits will be diverse
- Big market
- Cheap price

- Promotion & Advertisement as mass media(drama, CF)
- Sales promotion event
- Supply information of nutrition & effects

Thank you
for your attention!

