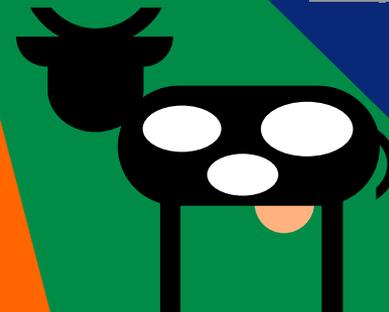
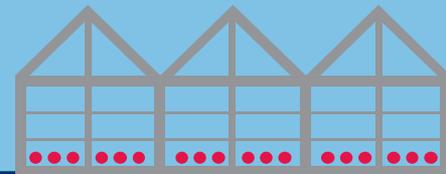


Agrifood clusters - focusing on Wageningen

20 September 2018

Lody Embrechts

Ambassador of the
Kingdom of the
Netherlands





The Netherlands and Agrifood

Holland





Pioneers in international business



- Population 1,700 million
- GDP \$ 770 billion
- Per Capita Income \$ 53,000

- Land 41,543 km²
- Average temperature 8.6° C (Korea 11.1 °C)
- Sunlight 1,480 hrs (Korea 2,420 hrs)
- Precipitation 804 mm (Korea 1,200mm)
- 4 seasons

Agriculture comparison KR and NL



(2014/2015)

	Korea	The Netherlands
Farm land size	1,679,000 ha (16.7%)	1,840,000ha (48.0%)
Land size per farm	1.5 ha	28.0ha
No. Agricultural Employees	1,345,000 (5.2%)	190,000 (2.1%)
No. Farms	1,089,000 (5.8%)	65,507 (0.4%)
Avg. age farmers	64	54
Farm income	\$ 33,130 - Agri : \$ 10,020 - Non-agri: \$ 23,100	\$ 77,937 - Agri : \$ 57,672 - Non-agri: \$ 20,263
Agrifood Total added value	\$ 29 bil. (2.1%)	\$ 53 bil. (8.3%)
Agrifood trade	Export : \$ 7.2 bil. (1.5%) Import: \$ 31 bil. (7.9%)	Export: \$ 100 bil.(19.0%) Import: \$ 58 bil.(14.0%)



Agrifood in the Netherlands

- No. 1 Global Food Index country (Oxfam, 2014)
- No. 2 largest exporter of Agrifood worldwide
- Wageningen University – No. 1 in Agricultural/forestry university (QS World University Ranking)
- 8.3% of GDP
- 22% of total Export (65% of the nation's trade surplus)
- 10% employment contribution
- Three out of the world's top-25 food and beverage companies are from the Netherlands



Top 5 Agrifood exporters in the world



Nation	Export value(billion \$, 2016)
The US	144
The Netherlands	100
Germany	77
Brazil	71
France	63



Source: WTO

University ranking for Agriculture



# RANK	UNIVERSITY	LOCATION	COMPARE
2018 ▾	University search <input type="text"/>	By location ▾	↓
1	 Wageningen University More		<input type="checkbox"/>
2	 University of California, Davis More		<input type="checkbox"/>
3	 Cornell University More		<input type="checkbox"/>
4	 Swedish University of Agricultural Sciences More		<input type="checkbox"/>
5	 University of California, Berkeley (UCB) More		<input type="checkbox"/>
6	 University of Reading More		<input type="checkbox"/>
7	 University of Wisconsin-Madison More		<input type="checkbox"/>
8	 Michigan State University More		<input type="checkbox"/>
9	 Purdue University More		<input type="checkbox"/>
10	 Agro, ParisTech More		<input type="checkbox"/>

Source: QS World University Ranking 2018

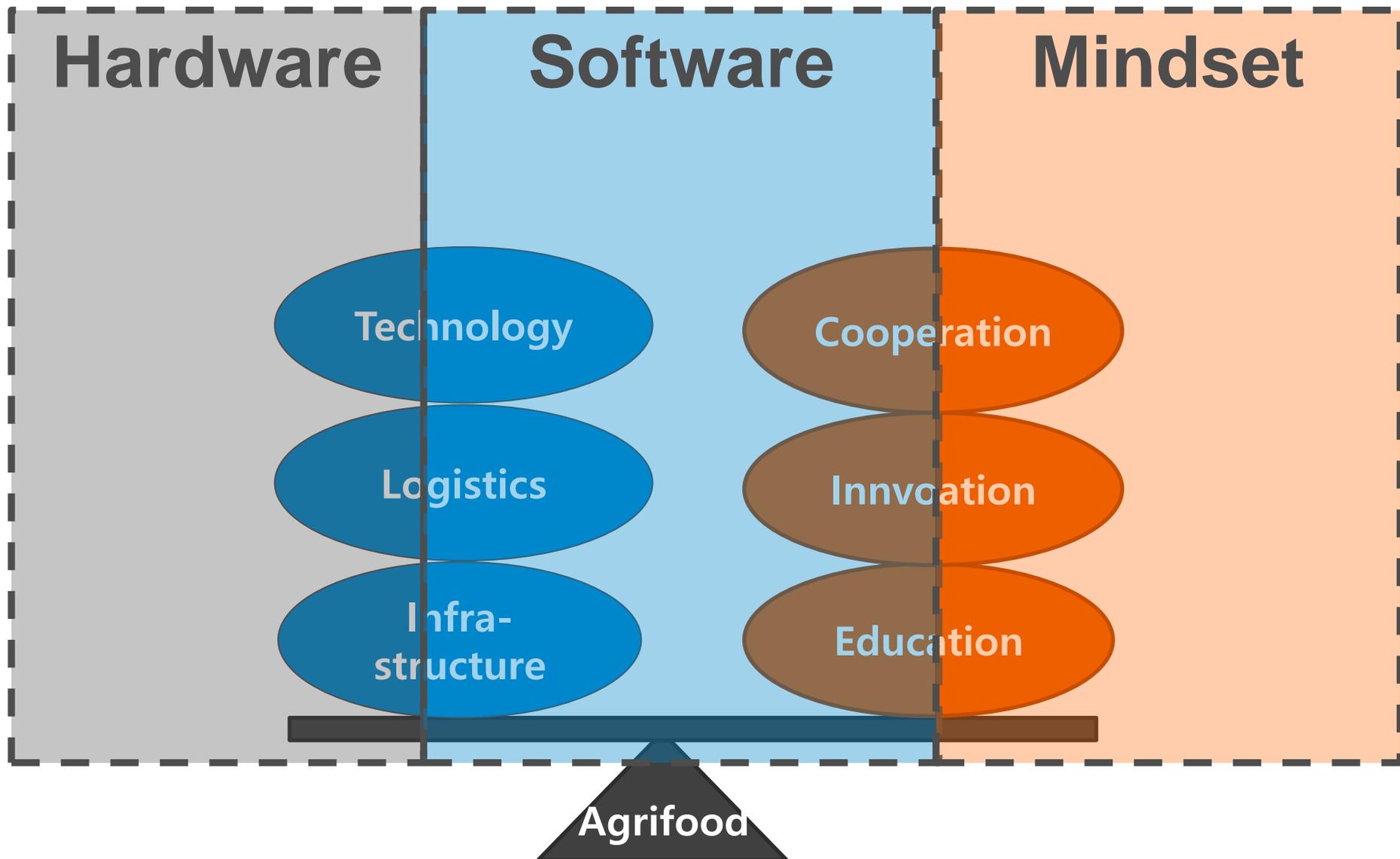
Reason of success



- High level Education/Innovation
- Balanced development
- Consistent / Efficient policy
- Golden Triangle
- Efficient logistics
- Integrated Chain Management
- Corporate Social Responsibility
- Free trade

**Clusters/valleys
integrated based
on knowledge,
sustainability and
logistics**

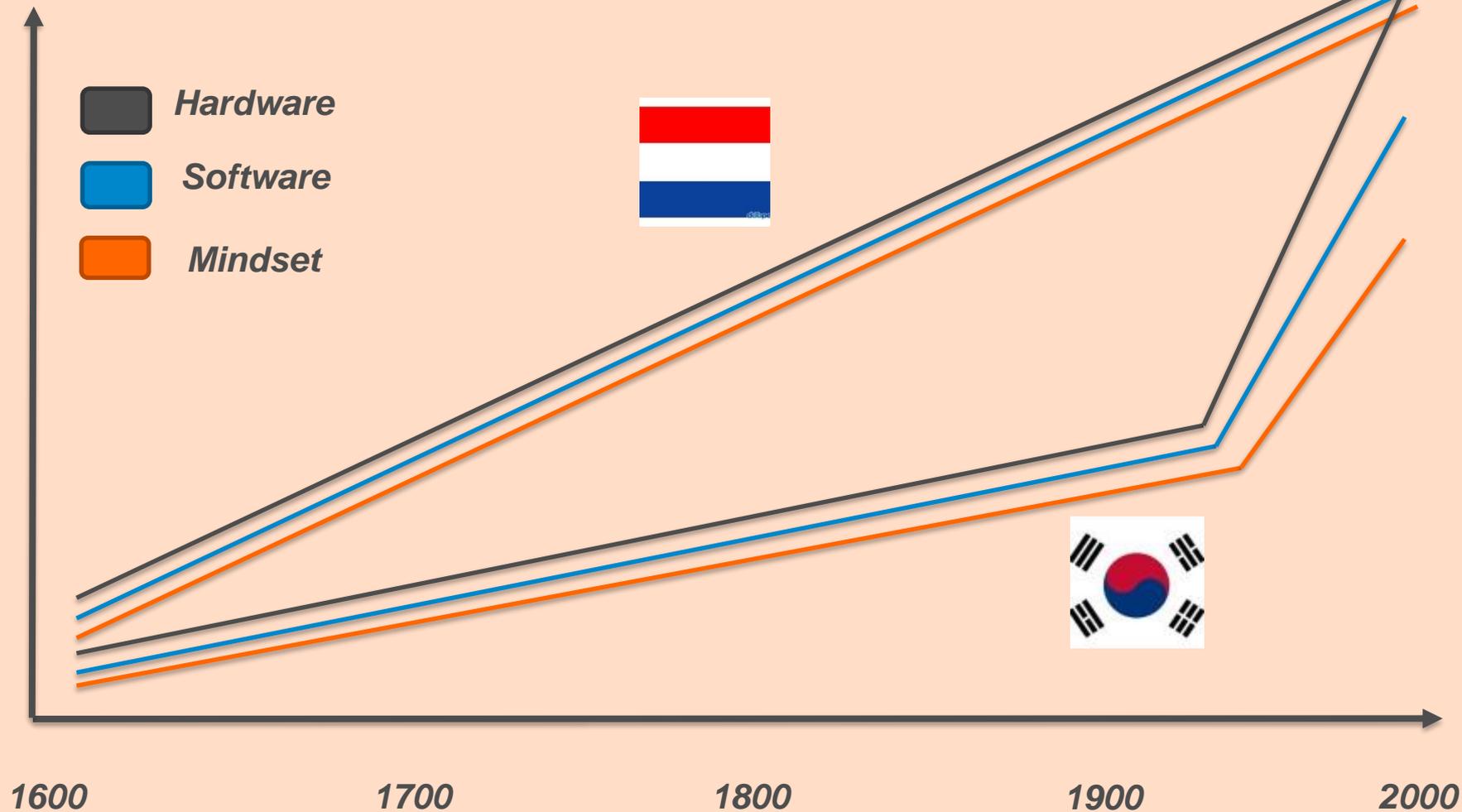
Balanced development



Development of Korea



Development



Consistent / Efficient Policy

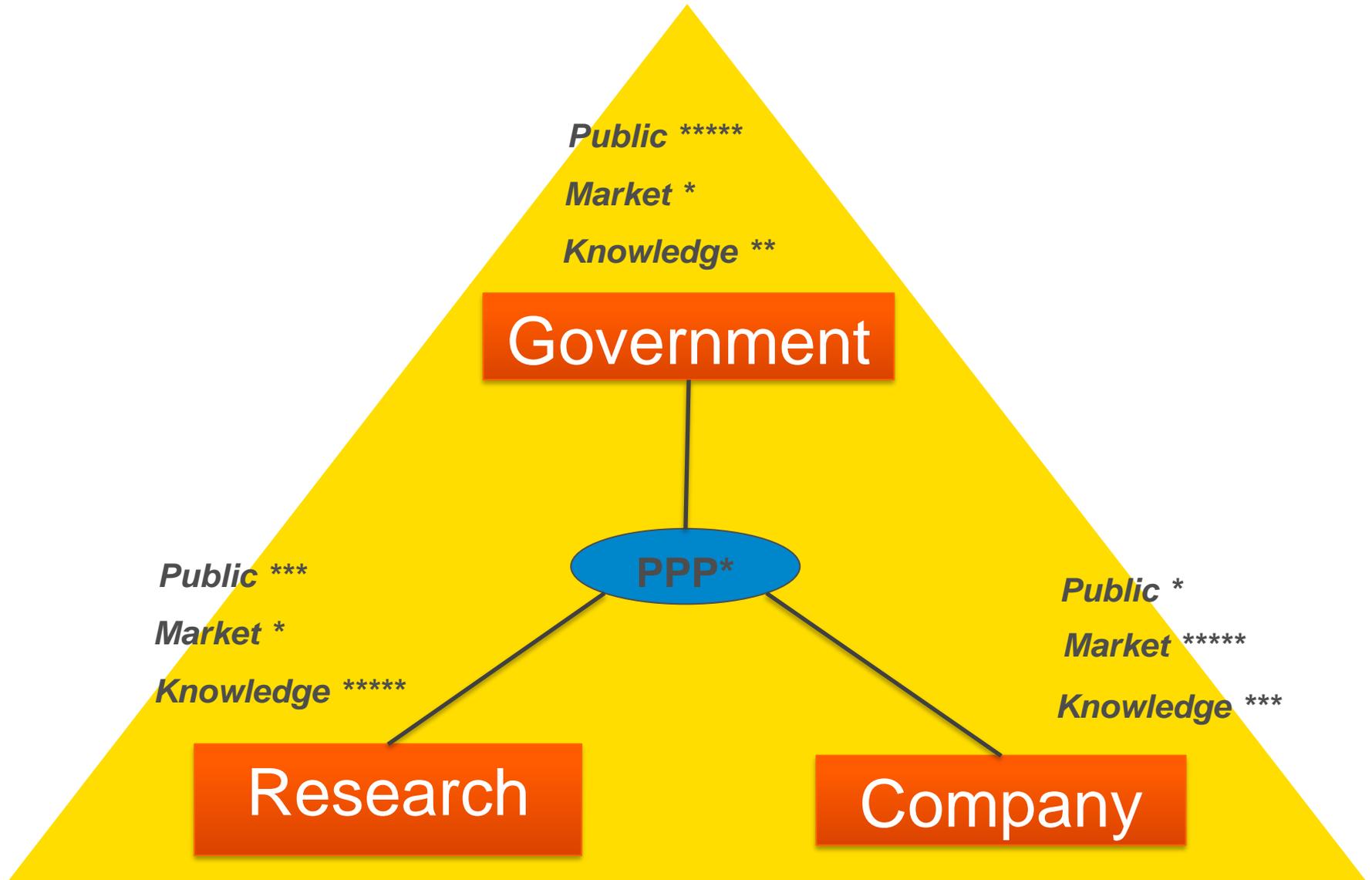


Land Consolidation Project



- Consistent policy for efficient use of land: 1945 ~ Now
- Cooperation between government, farmers and regional organizations for water and tourism

Golden Triangle



*PPP: Public Private Partnership

Difference agrifood and other industries



	Other industries	Agrifood
led by	Companies	Government, farmers and research institutes
Difficulty in Innovation	Already industrialized Focusing mainly on Profit	Difficult to industrialize Not only profit but also welfare and food security
Role of government	Limited: public interest	Very important: should lead the development
R&D	Mostly Self R&D	Support by government and research institutes
Requirements for development	Hardware or Hardware +Software	Hardware, Software, Mindset are all very important



WUR and Food Valley

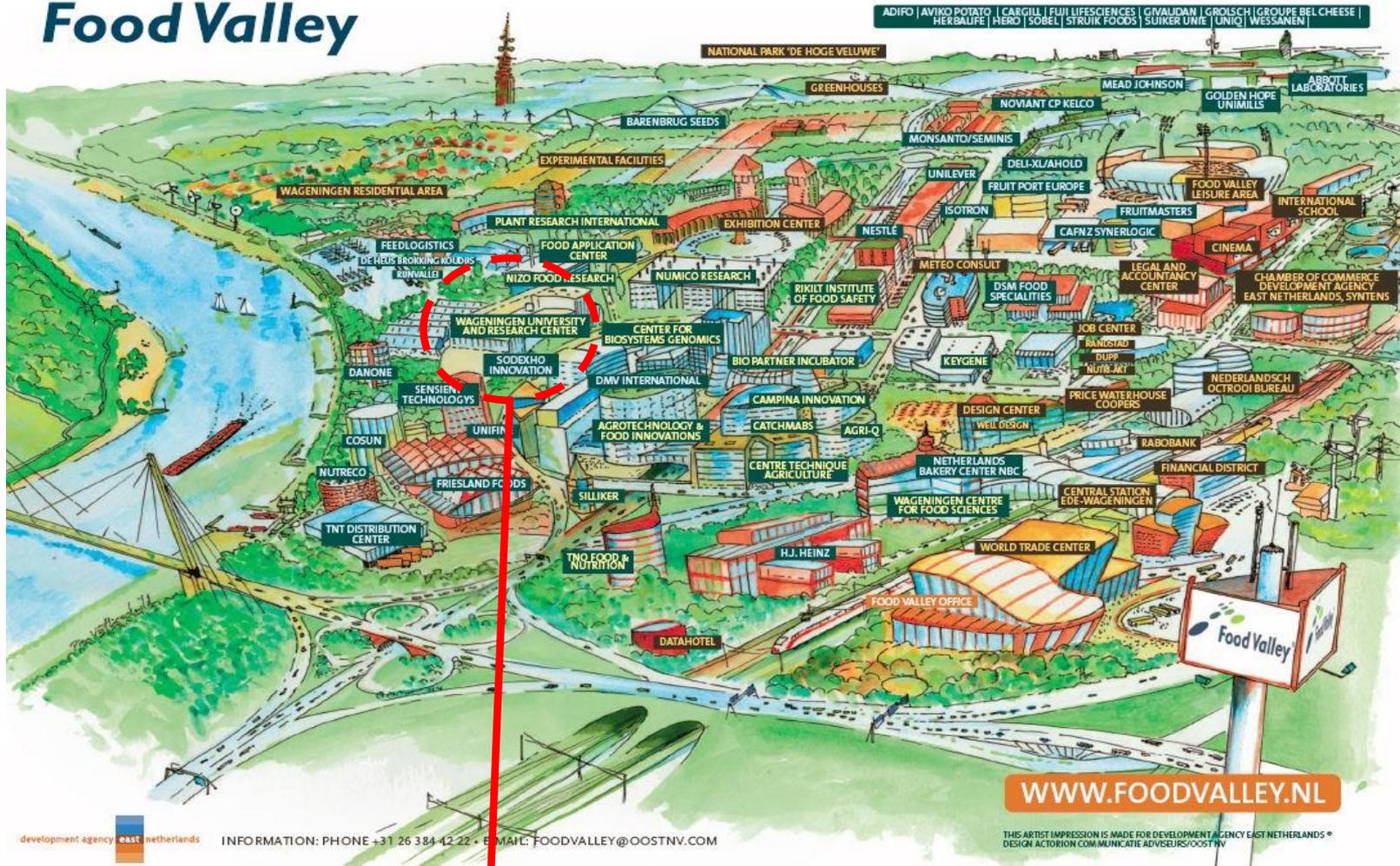
Holland



Food Valley



Food Valley



Wageningen University and Research Center

An example of cooperation in WUR

FrieslandCampina

- No. 5 dairy company in the world
- No. 1 cheese production in the world



Made a research center in WUR in 2012

News

FrieslandCampina coming to Wageningen Campus

October 8, 2010

By Wageningen UR

The international dairy company FrieslandCampina will build a new Research & Development Centre on the Wageningen UR campus.

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The centre will consist of research facilities, laboratories, a pilot plant and offices. From the second half of 2012, over 350 people will work in the knowledge and innovation centre. Cees' t Hart, CEO of FrieslandCampina: "Wageningen will become the centre of our R&D activities."

About WUR



History

1876: Start of agricultural education in Wageningen

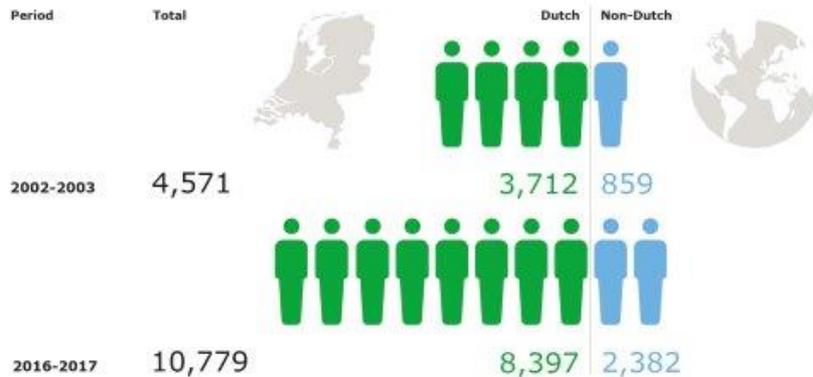
1877: Establishment of DLO (the national agricultural research institute)

1918: Official start as Wageningen University

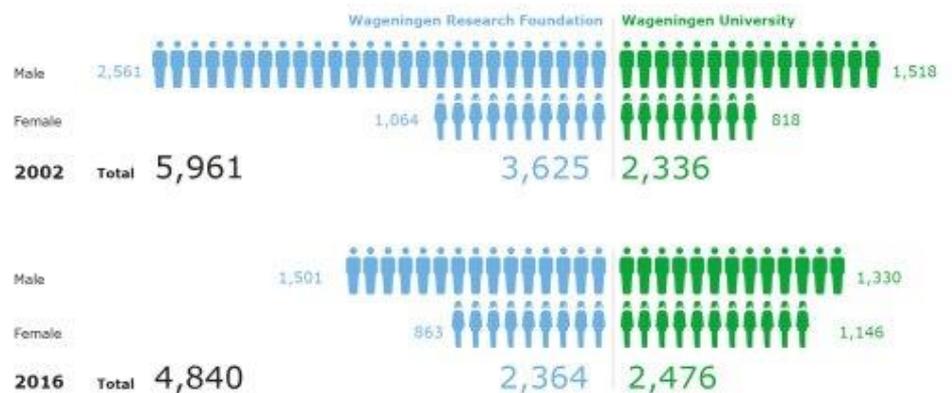
1997: Merger Wageningen university and DLO - Wageningen UR

1990~2000: Privatization of research institutes in Wageningen UR

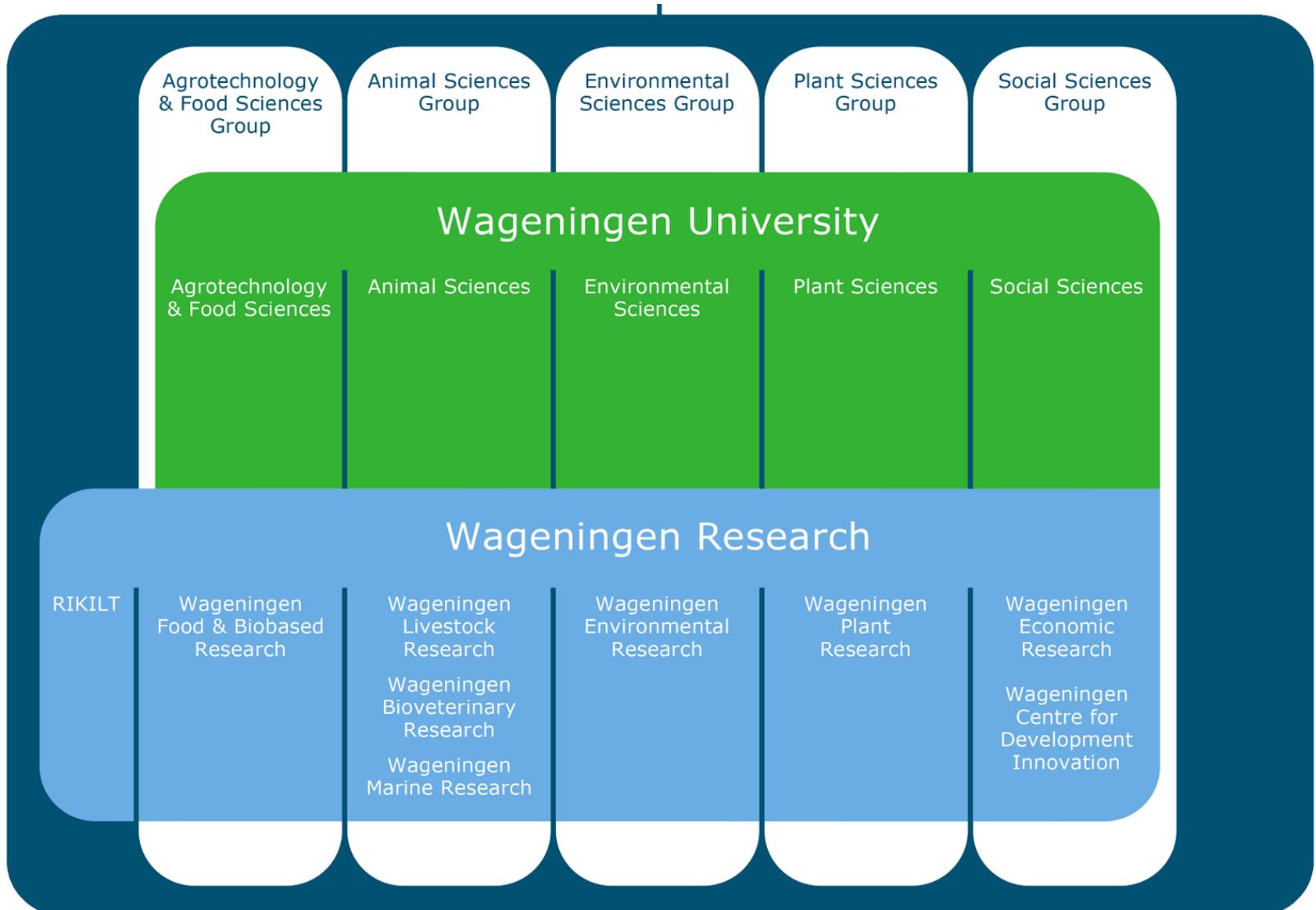
Number of students excluding PhD students



Number of employees in fte



Organization of WUR



Key points about WUR

- Government-led innovation
 - established, integrated and privatized
- WUR has high quality knowledge/students, and researches are practical
 - attractive enough to business
- Universities and research institutes are integrated for synergy in R&D
 - WUR (Wageningen University and Research Center)
- Strong confidence on the benefit of cooperation
 - Companies are gathered to WUR naturally: Food Valley
 - Connected physically and virtually to WUR and between companies
- Privatized for better efficiency

KR's Strength and weakness for agrifood clusters



Strength

- Dynamic, active and hard-working
- Sacrifice for company/organization
- Smart and creative

Weakness

- Lack of cooperation (G/B/R don't respect each other)
- Short-term/overlapping policies, researches and business
- Still focusing on Hardware

Thanks

Holland

