

# Dutch Agro & Food: Linking Science, Industry & Government!

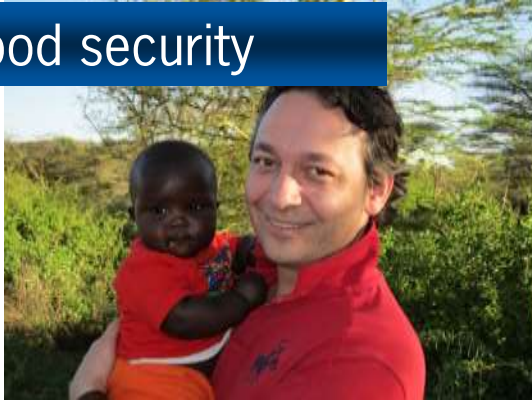
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Dr. Arjo Rothuis, Account Manager Asia, Wageningen International.



# Global challenges

Food security



Climate change



*Agri - Food*



Governance

Food and health



Biobased Economy

# Netherlands Agro-Food

Facts and Figures

## Bits & bites

Dutch production efficiency is high. In the Netherlands the added value per hectare is up to five times higher than the European average.



**654,000,000 kg**  
of cheese exports, the 4th-largest worldwide.



The Netherlands is the **second-largest**

exporter of agri-food products in the world, surpassed only by the US (which has a surface area 296-times greater).



**Global top 40**

4 Dutch companies are included in the global top 40 food & beverage companies: Unilever, Heineken, VION and Royal FrieslandCampina.

**80%**

More than 80% of exports are destined for Europe, primarily Germany and other neighbouring countries.

**4,100**

supermarkets serve around 17 million Dutch inhabitants.



Amsterdam is the **largest cocoa port** in the world.



**Academic**

2 Dutch universities feature in the European top 10 with regard to the number of publications related to the agri-food sector.



**R&D**

Number 2 (as a % of GDP) in Europe for private R&D investments made by companies located in the Netherlands.

www.hollandtrade.com



**1.5 million dairy cows**

occupy 19,200 farms (2011).



**€ 48 billion**

added value for the Dutch economy

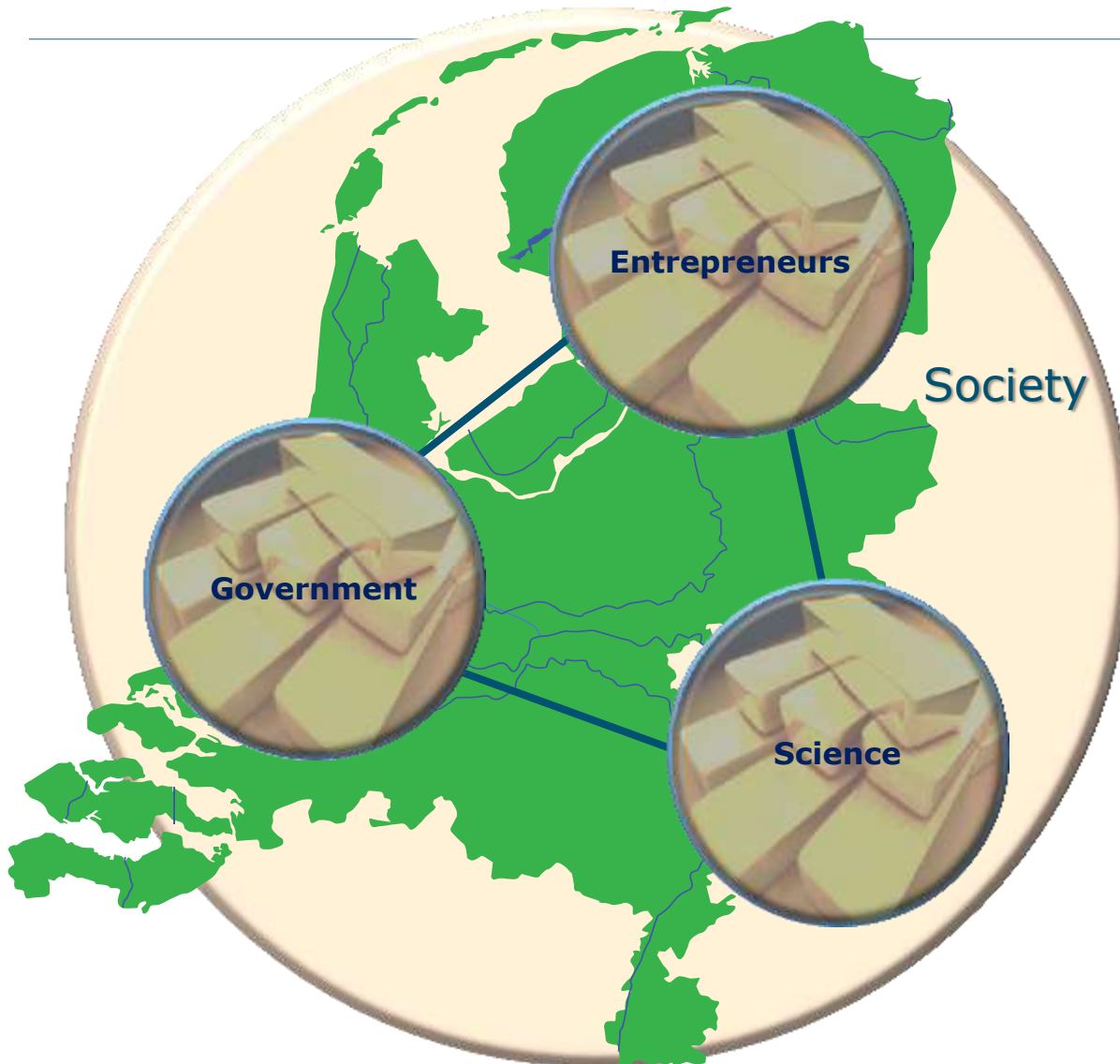


- Agro-Food
- Horticulture
- Water
- Chemistry
- Energy
- Life Sciences
- HighTech
- Logistics
- Creative Industry

**MADE IN HOLLAND AGRI-FOOD**

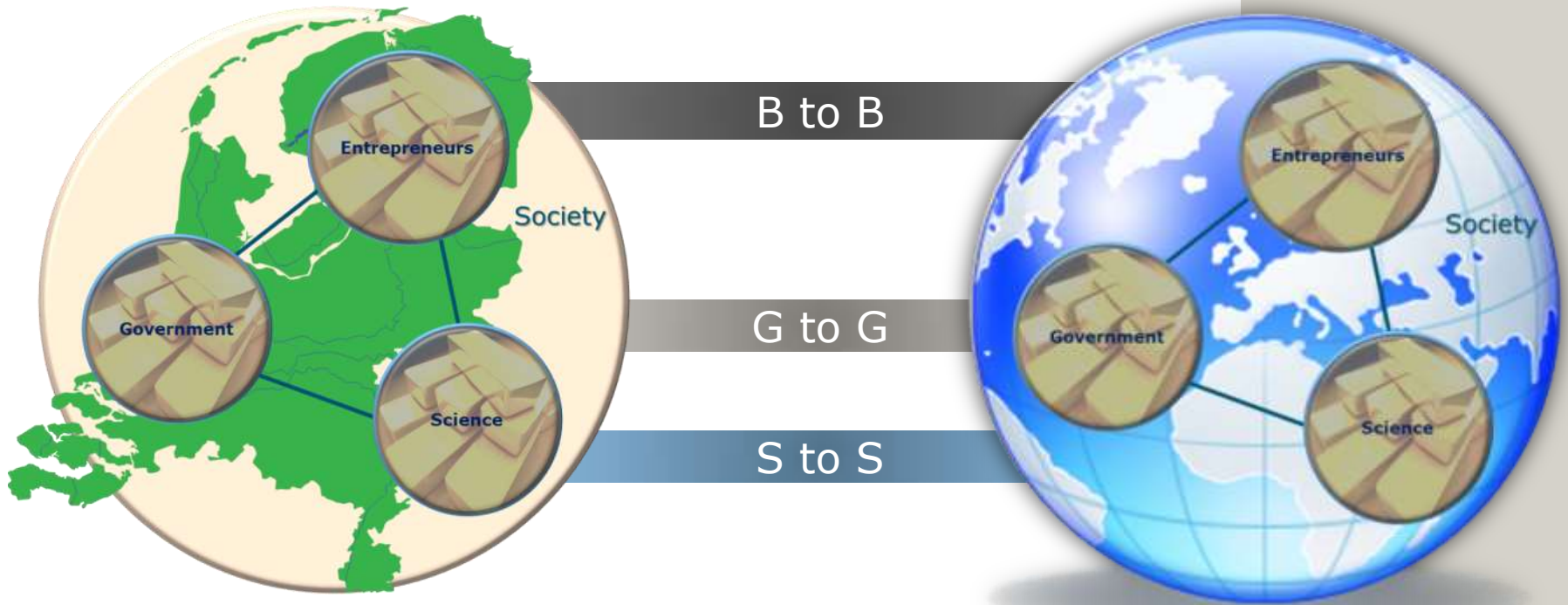


# The Golden Triangle



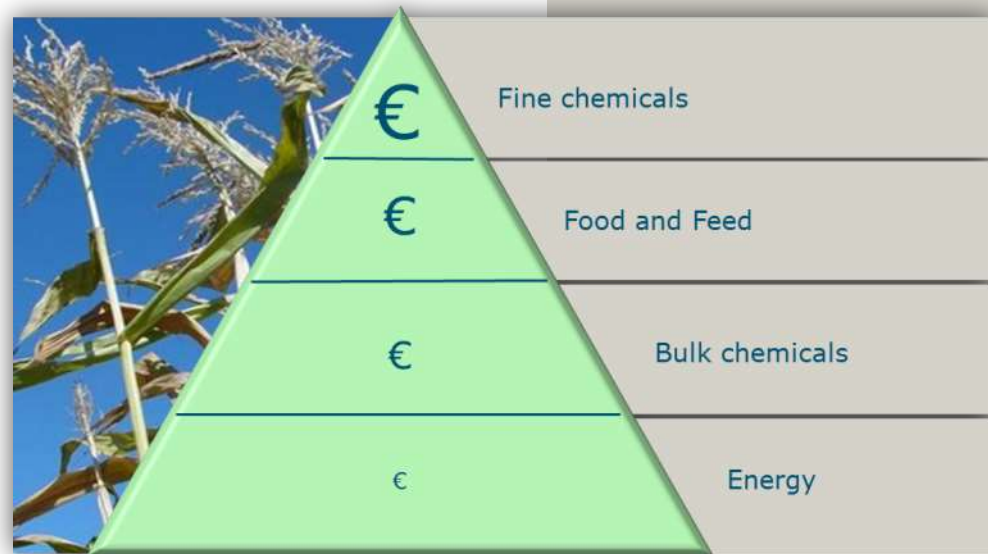
# The golden triangle

*...Science with impact...*



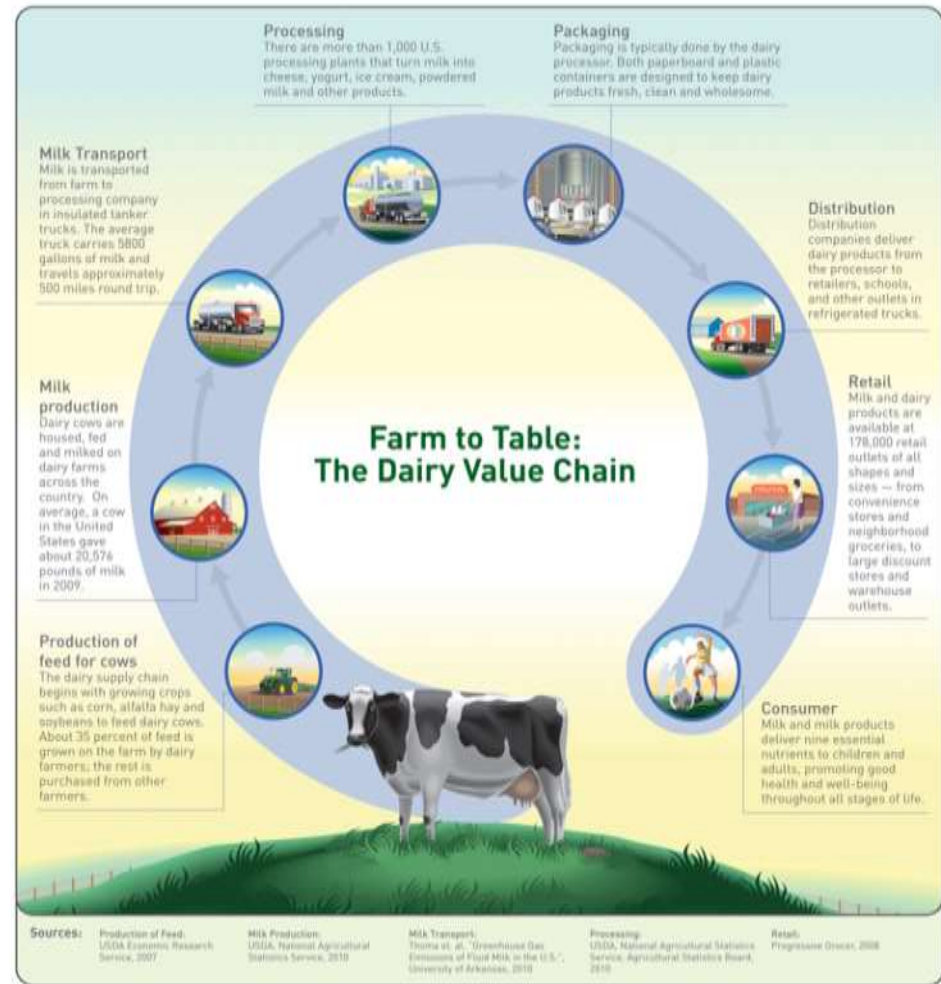
# Dutch strength: added value

- Added high value
- Bio-refinery
- Horticulture, Dairy, Food & nutrition
- Focus on quality (healthy food)
- Resource use efficiency



# Dutch strength: Chain management

- Logistics
- Tracing and tracking
- Certification
- Animal welfare
- Corporate Social Responsibility





# Dutch strength: Integrated systems

- Metropolitan Food Security
- Reduction and valorization of waste
- Combine agro-activities
- Chain integration





# Trends



Medieval or First Generation University

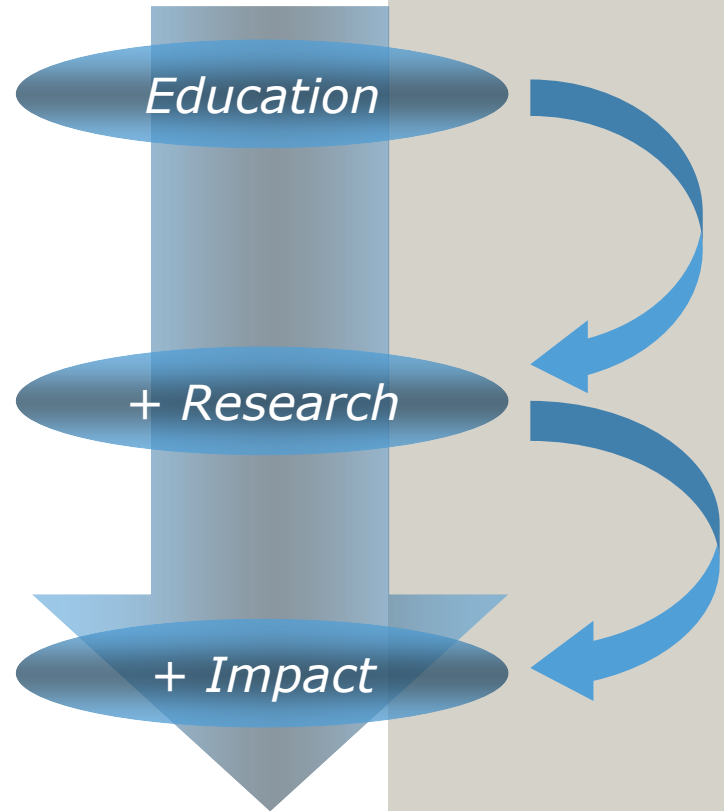


Humboldt or Second Generation University



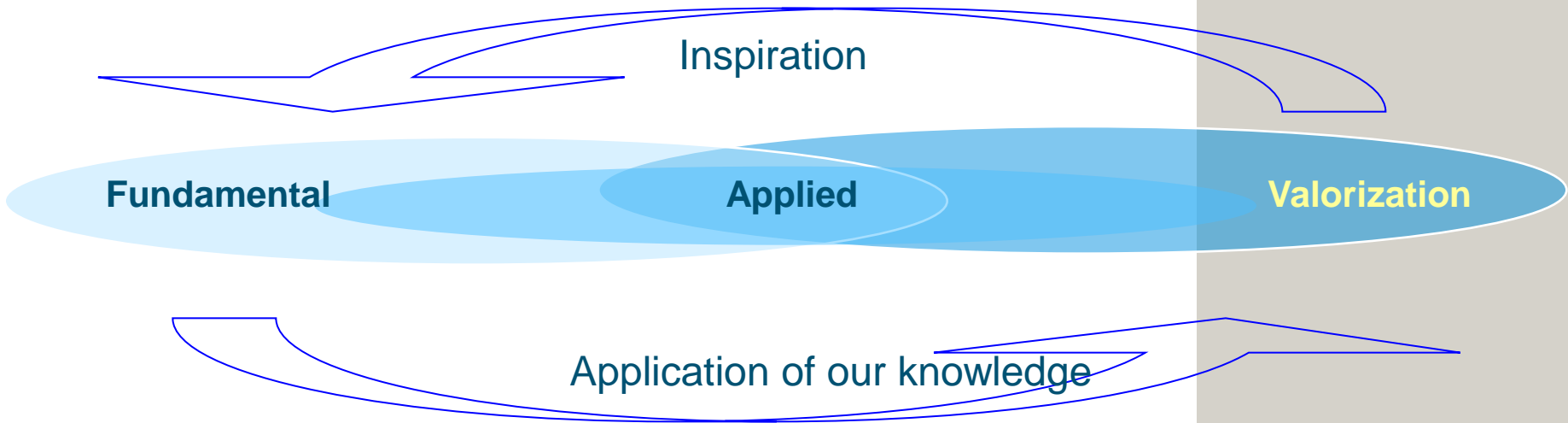
Third Generation University

*...Science with impact...*



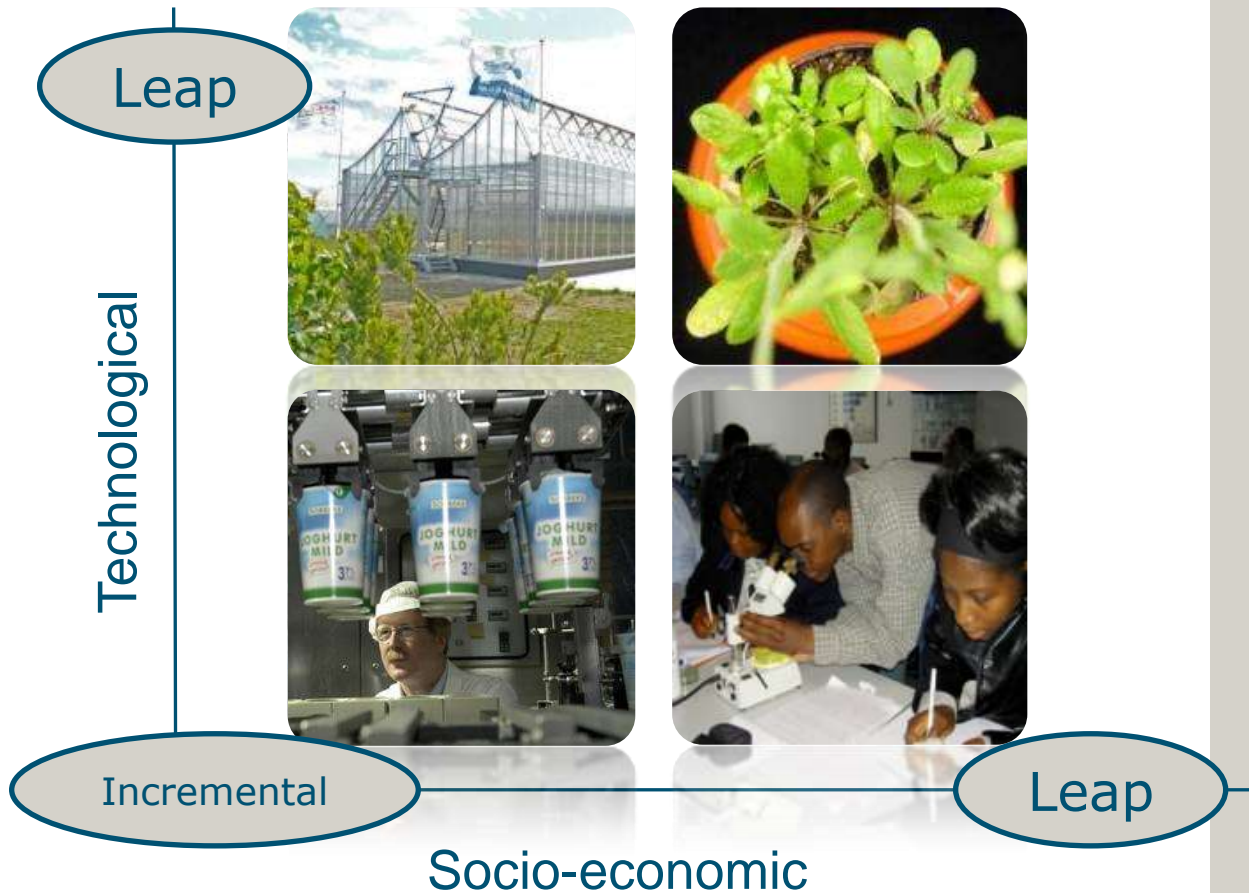
# The entire knowledge chain

*...Science with impact...*




# Technological *and* Socio-economic

*...Science with impact...*







*...To explore the potential of nature,  
to improve the quality of life...*

# The Wageningen UR domain: healthy food and living environment





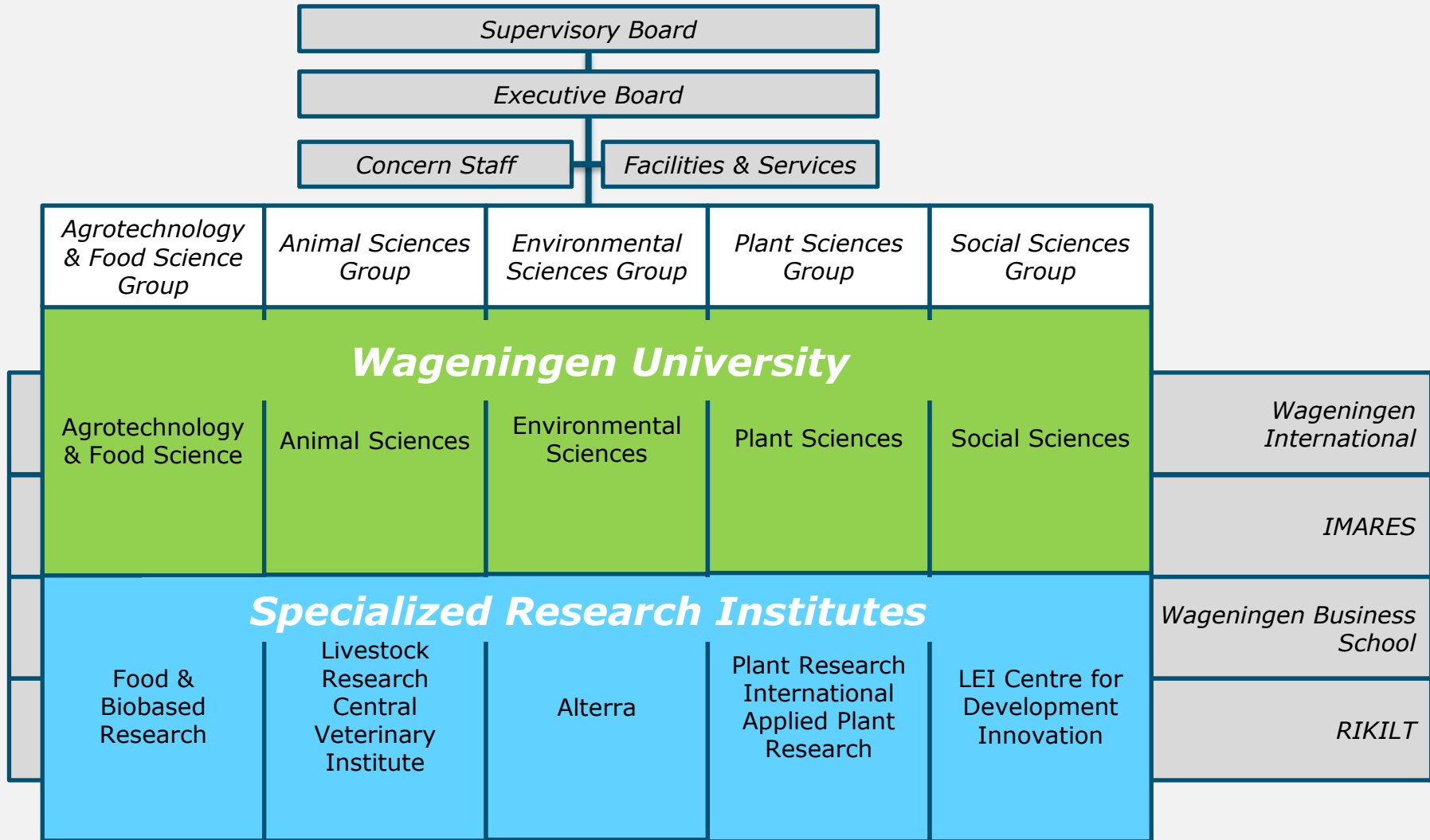
# Wageningen UR (University & Research centre)

- 2 organisations: Wageningen University & 9 research institutes
- Turnover € 700 mln
- 6,000 employees
- 10,000 stud. (> 100 countries)
- Top 3 in our domain
- 30 locations in The Netherlands
- Center of Excellence in Chile
- Representative Office in China & Ethiopia
- Project offices in Bangladesh & Zambia






# Organisation Structure



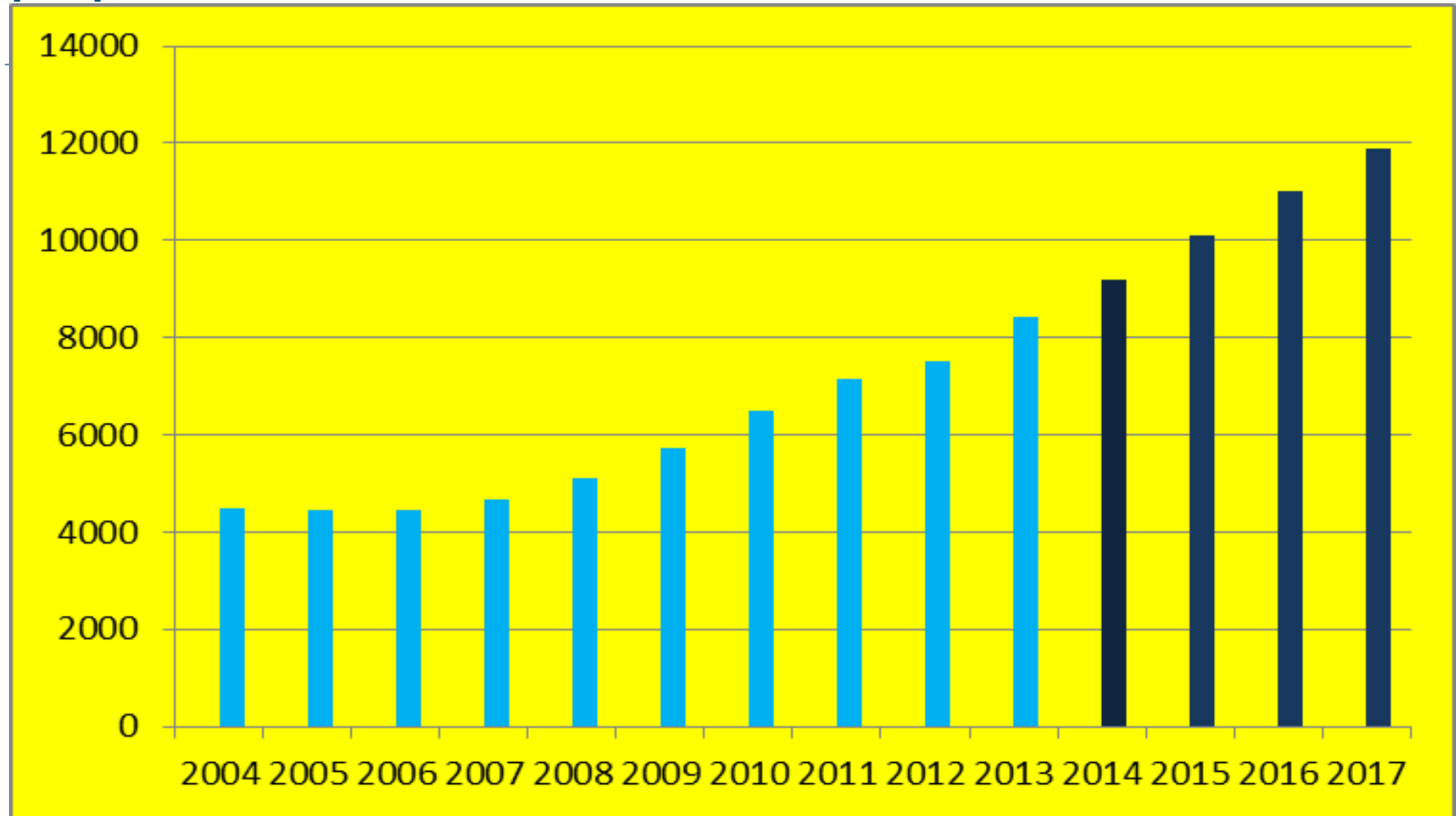
# Education: International context



4,200 Bachelor students – 10% international  
4,200 Master students – 45% international  
1,700 PhD students – 60% international



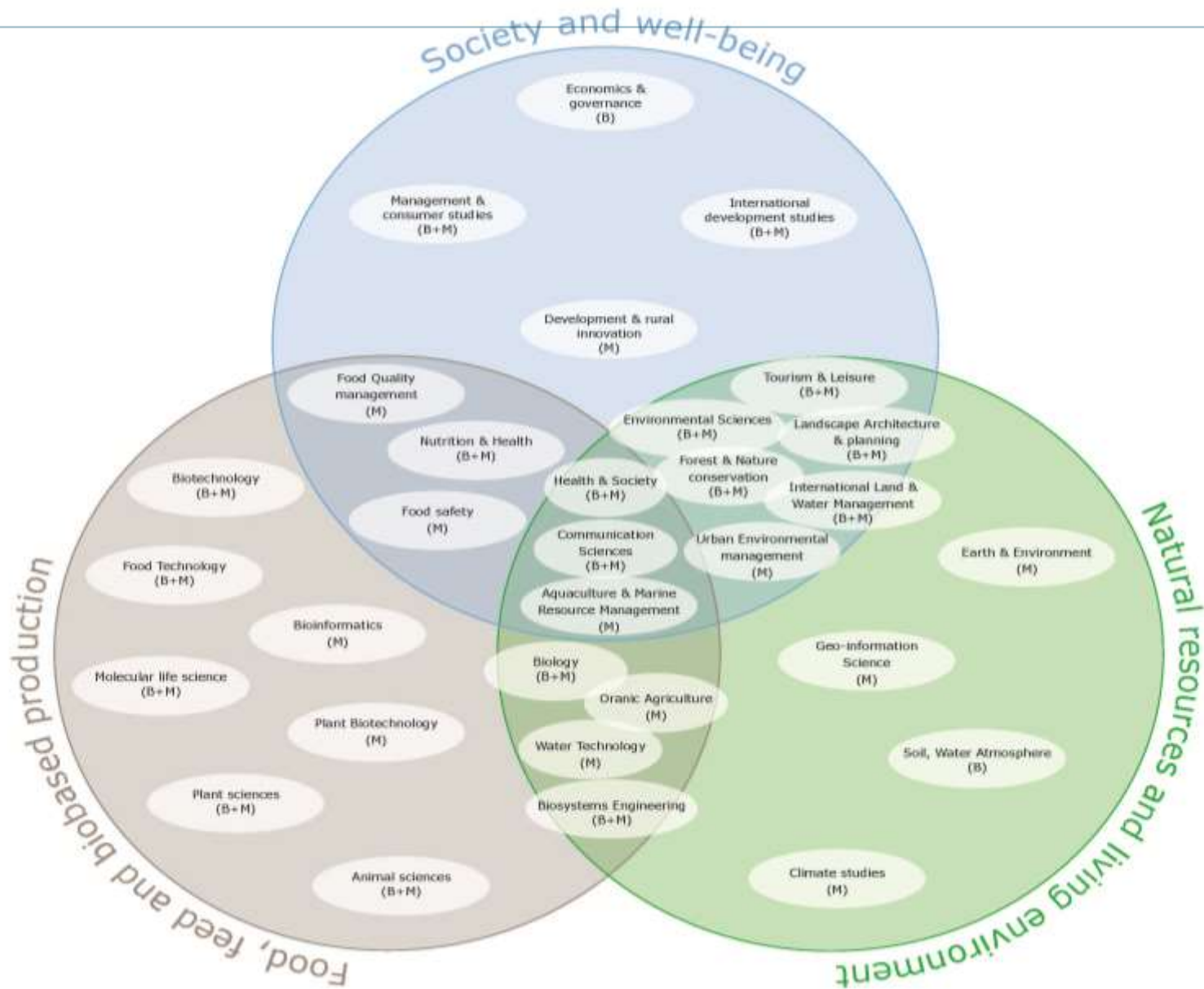
# Wageningen UR: Increasing student population (BSc/MSc)



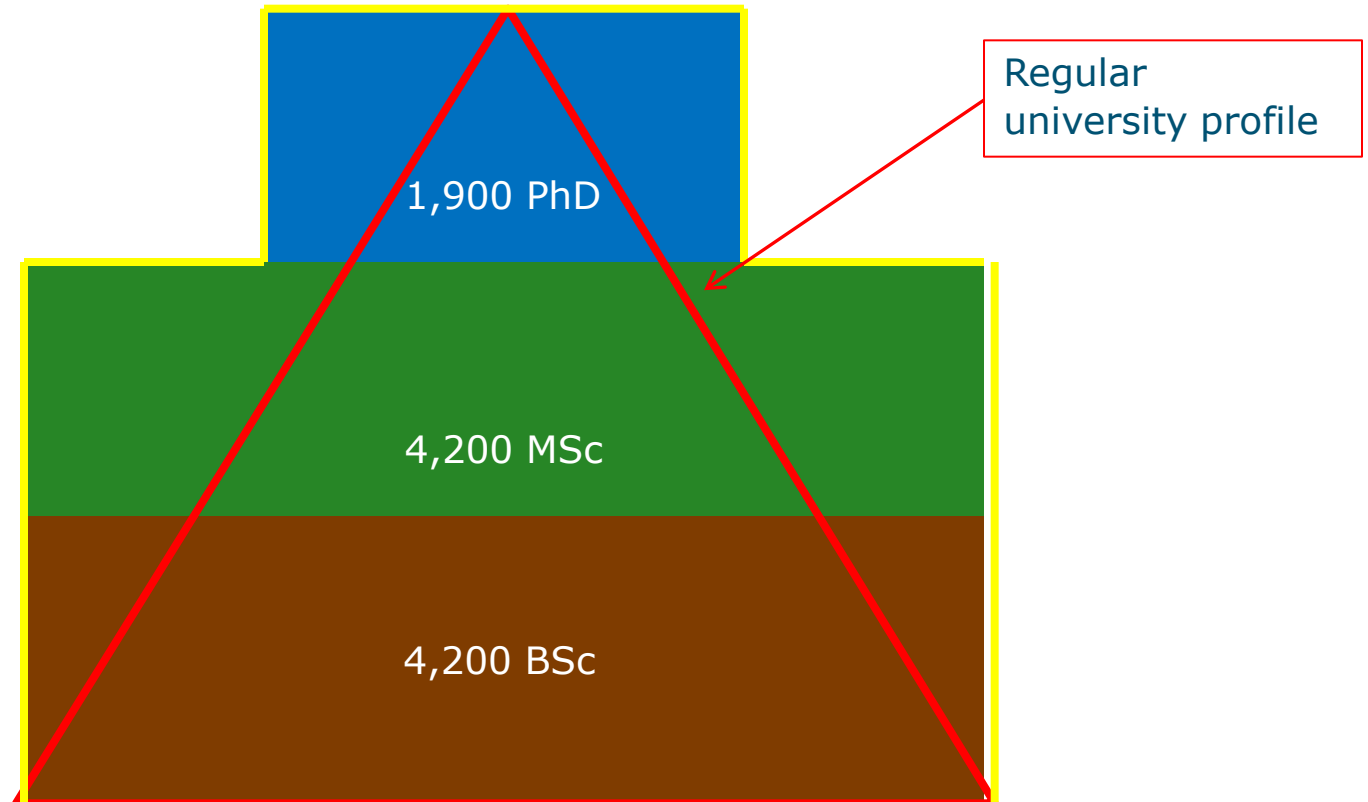
■ expected



# Bachelor and Master



# A research university



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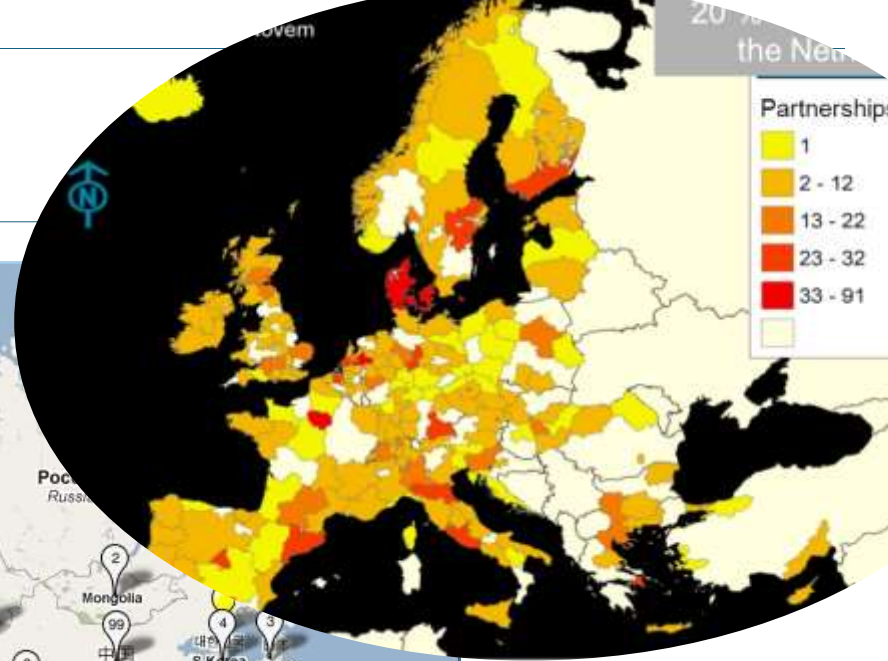
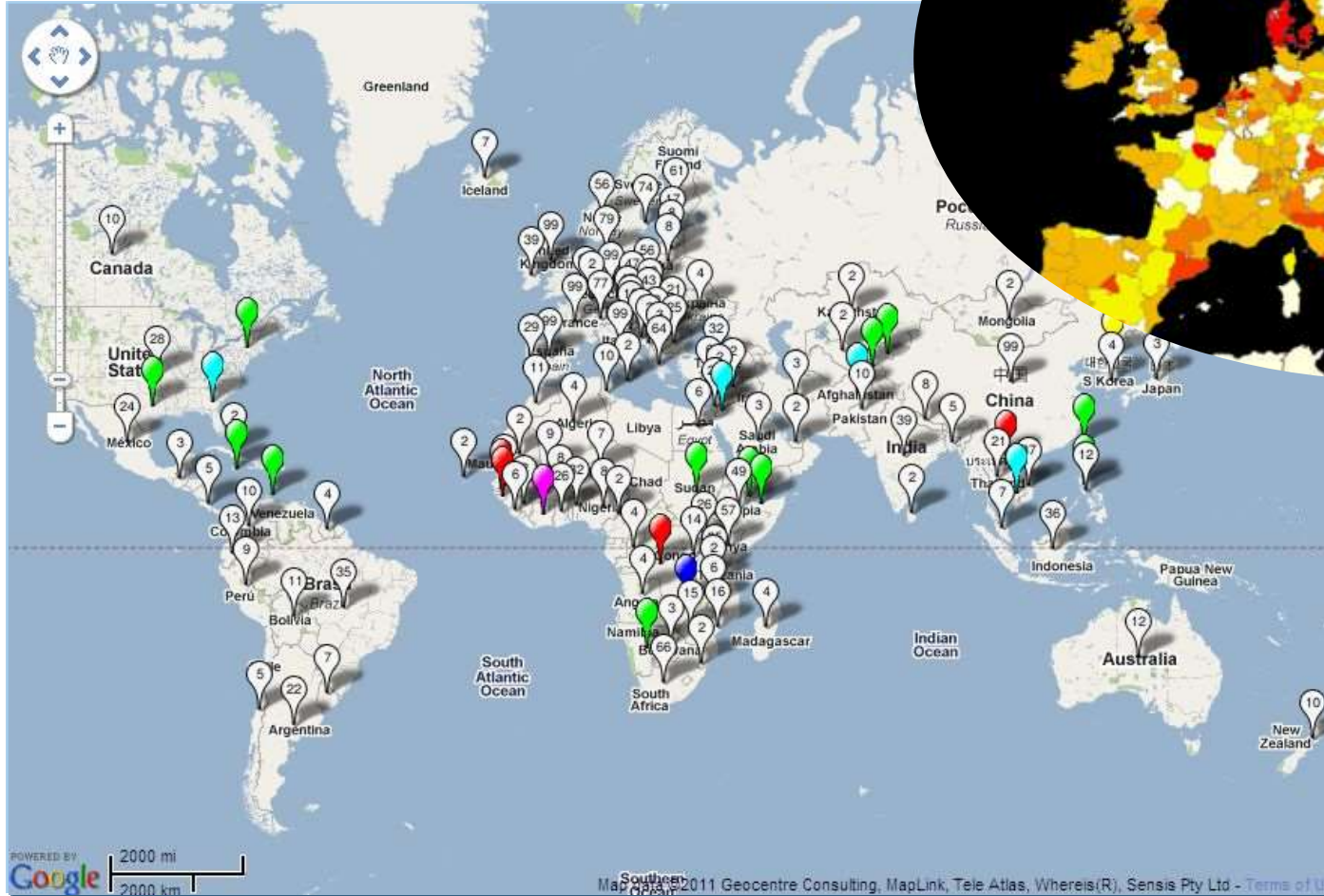
# Wageningen UR International Ranking

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- Times Higher Education (THE): 61-70 (overall)
- QS World Universiteit ranking: 151 (overall), 2 (agri sciences), 8 (environmental sciences)
- National Taiwan University (NTU) Ranking:  
Wageningen UR is No. 1.



# International projects









# Campus ecosystem

*...Science with impact...*

## University

- Education and training
- Fundamental and strategic research

## Research institutes

- Strategic and applied research
- Pre-competitive & confidential projects

## (Inter)national companies

- R&D departments
- Shared facilities
- Joint activities

## Spin-offs / SME

- Innovation
- Entrepreneurship
- New companies



# Wageningen UR International Strategy

- Collaboration with scientific organizations
  - Joint activities
  - Joint facilities
- Collaboration with Industry
  - Alliances
  - Public-Private Partnerships
- Collaboration with governments
  - Supporting national policies
  - Capacity building
- Triple Helix



# Wageningen UR International Strategy



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# Examples Collaboration

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## **University:**

- Education (student/staff exchange)
- PhD & Post-doc

## **Applied research Institutes:**

- Consultancy
- Contract research
- Capacity Building



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# Thank you !

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