

Agricultural Knowledge and Information System



Presentation by:

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Grootste industriële sector van NL

- € 48 miljard directe toegevoegde waarde
- 9.2% bijdrage aan totale BBP
- 9% van totale werkgelegenheid

Nederland is het op één na grootste exportland voor Agro&Food producten

- Meer dan 80% van de export gaat naar andere Europese landen, vooral buurlanden

Hoge mate van efficiency in primaire productie

- Efficiency bijna 5 x Europees gemiddelde
- Hoogste toegevoegde waarde per FTE in Europa

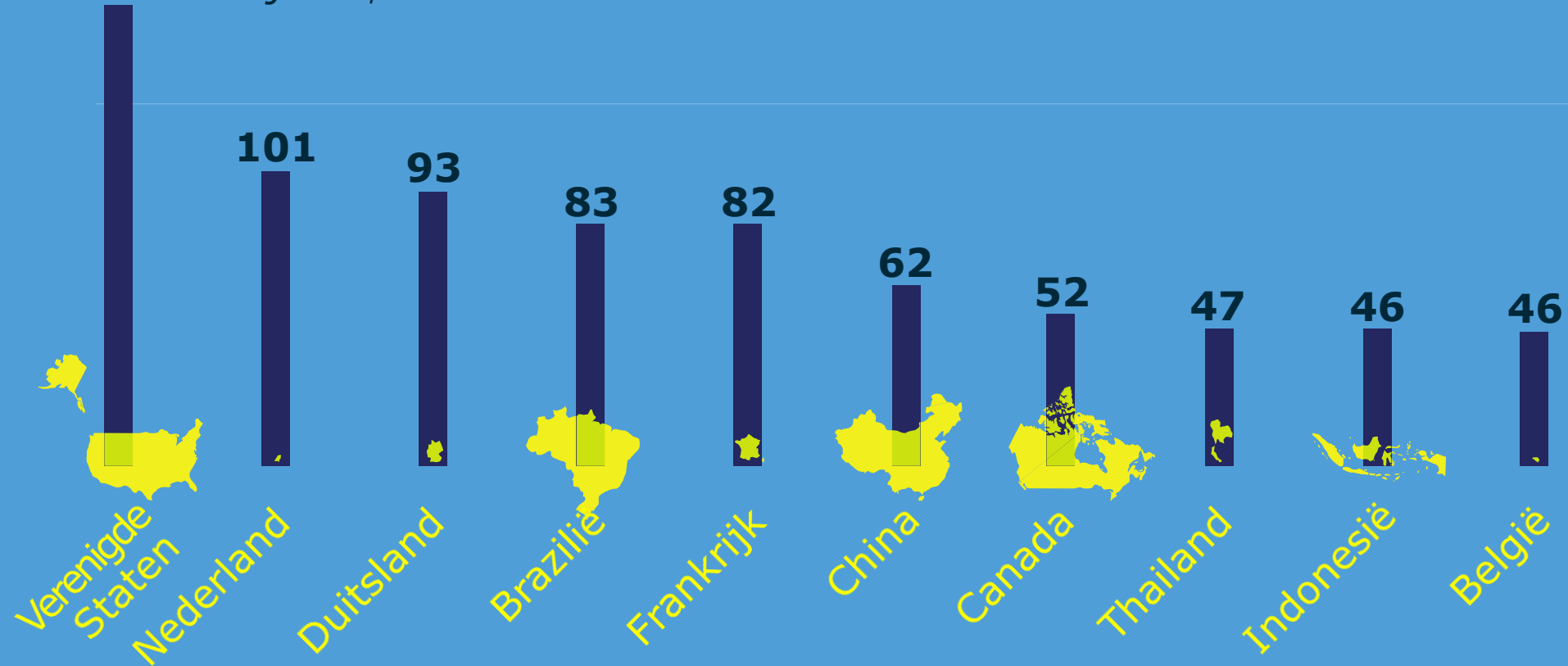
Kennisintensief

- Private R&D investeringen nummer 2 in Europa
- 12 van wereldwijde top 40 Food & Beverage bedrijven hebben belangrijke vestiging en/of R&D afdeling in Nederland
- 11 universiteiten in top 200 ranking van 2011

Nederland na VS grootste landbouwexporteur

هولاندا ثاني دولة في العالم في تصدير المنتجات الزراعية بعد الولايات المتحدة الأمريكية

157 x miljard \$



Megatrend: Productiviteitsverhoging

ميجا اتجاه : زيادة إنتاجية

Grondproductiviteit

■ إنتاجية ارضية

x 5 - 6

Arbeidsproductiviteit

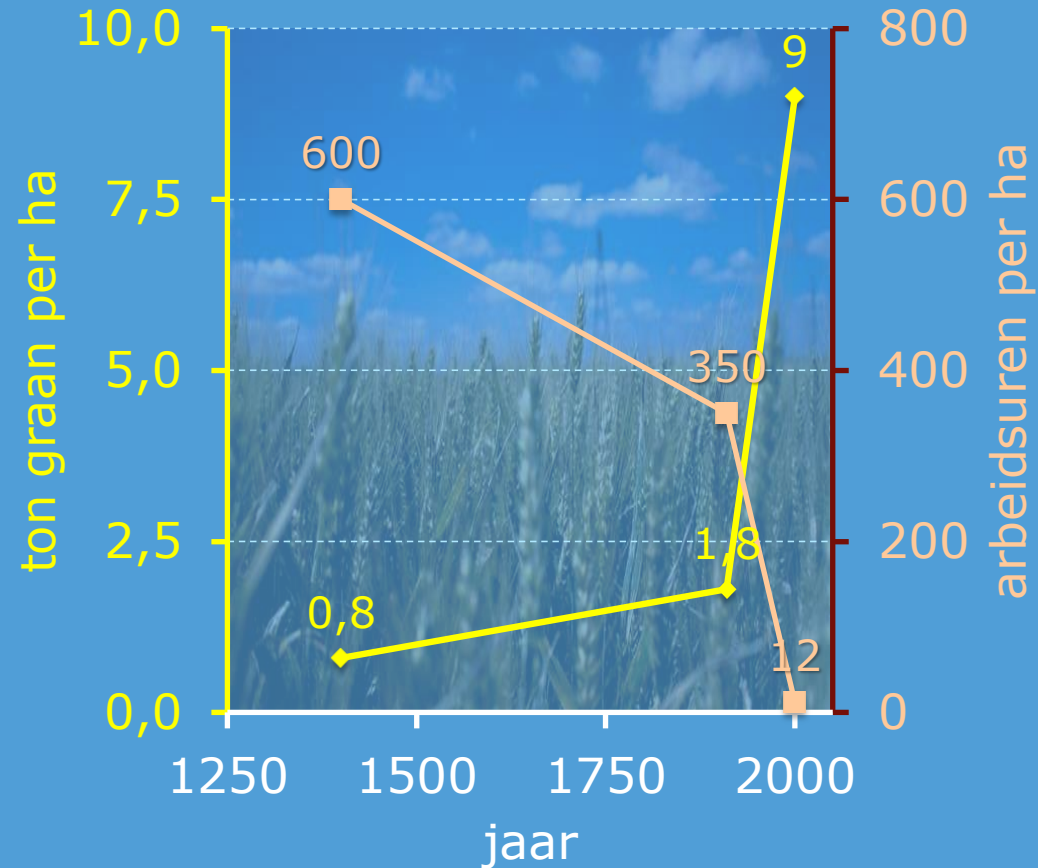
إنتاجية عمالية

x 200 - 300

energie, andere inputs

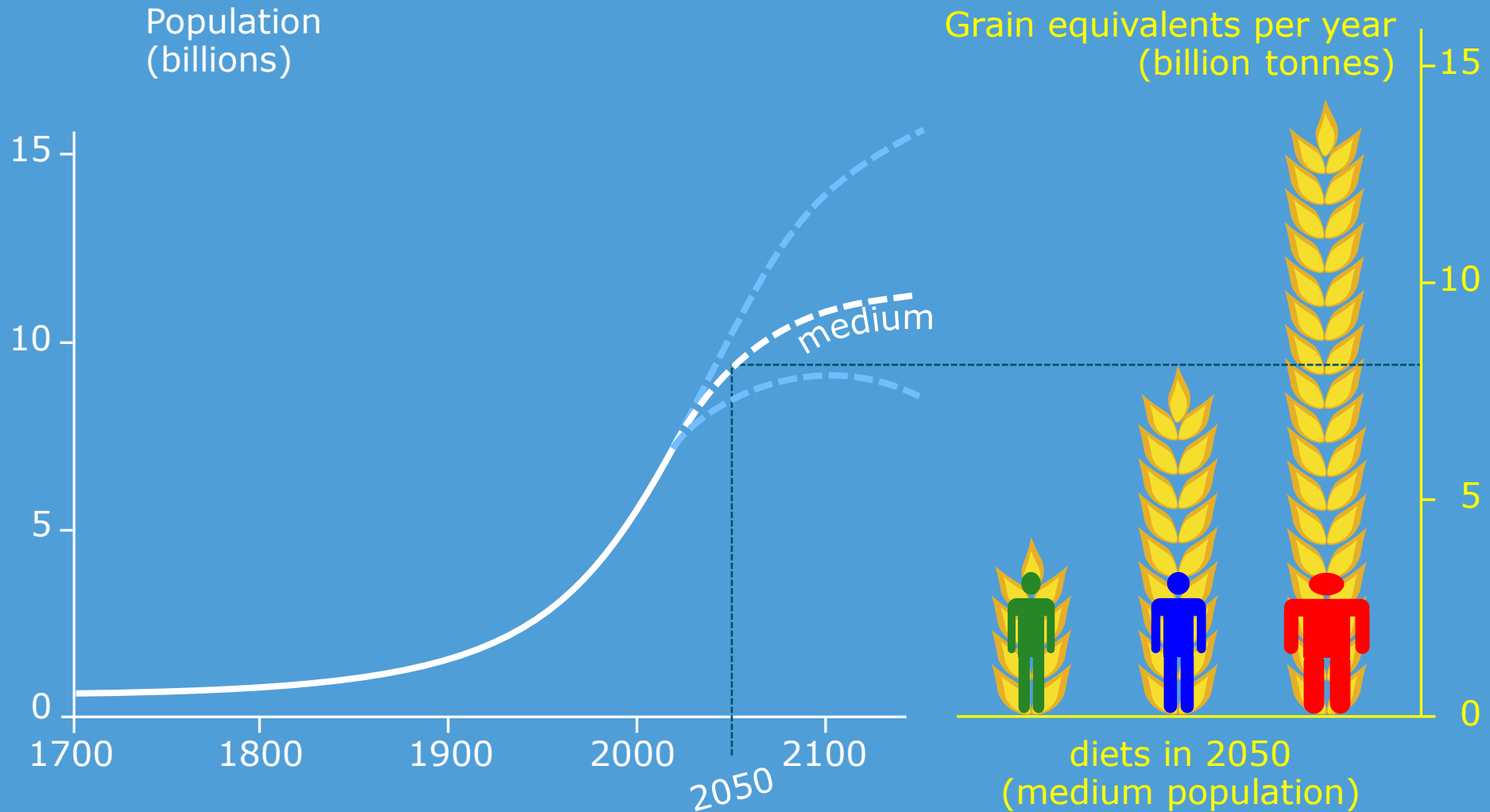
الطاقة، و مداخلات اخري

x 2 - 4



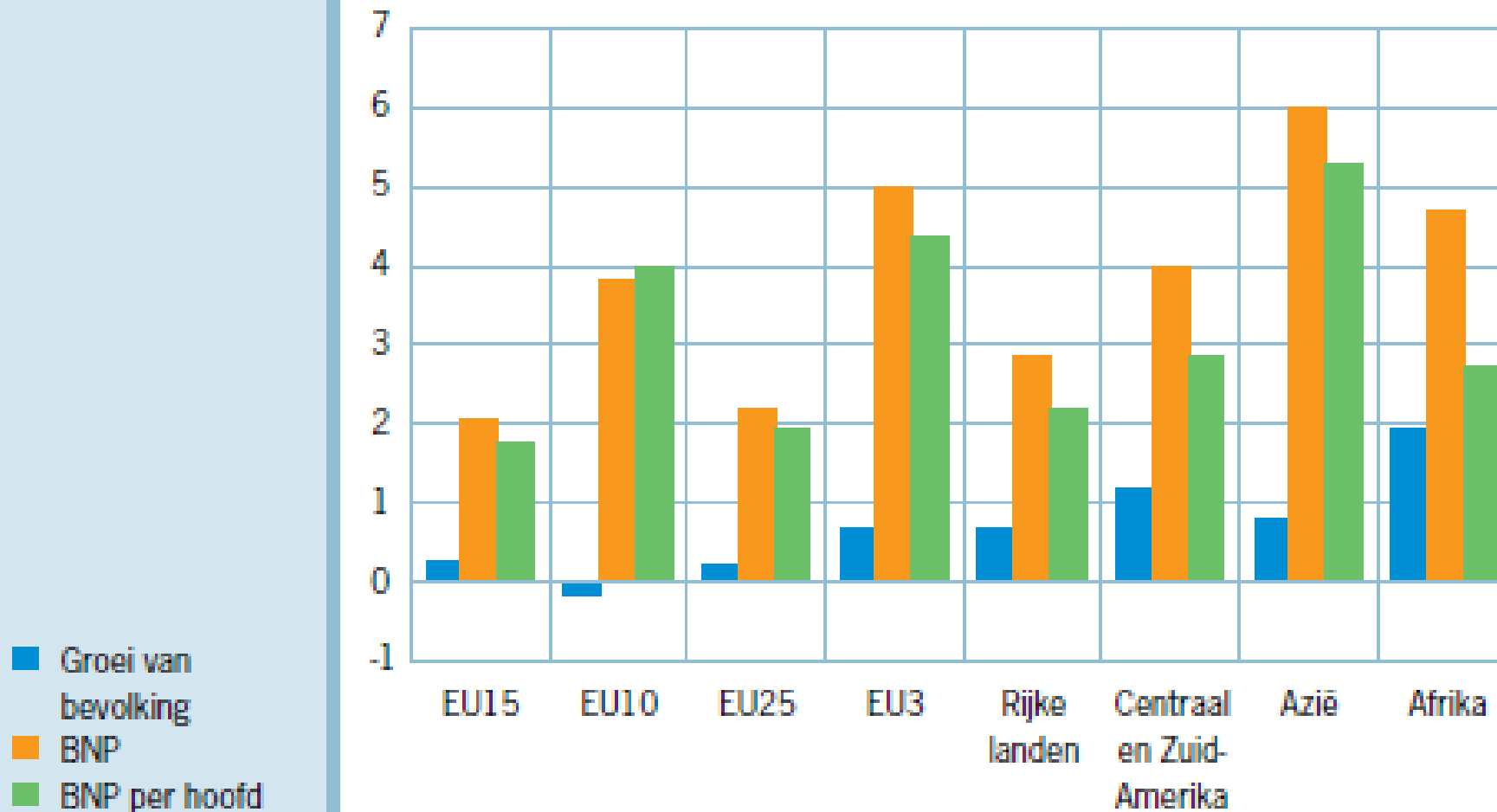
$$\text{Demand} = \text{Population} \times \text{Diet}$$

الطلب = العدد السكاني × الحمية



Figuur 3.1

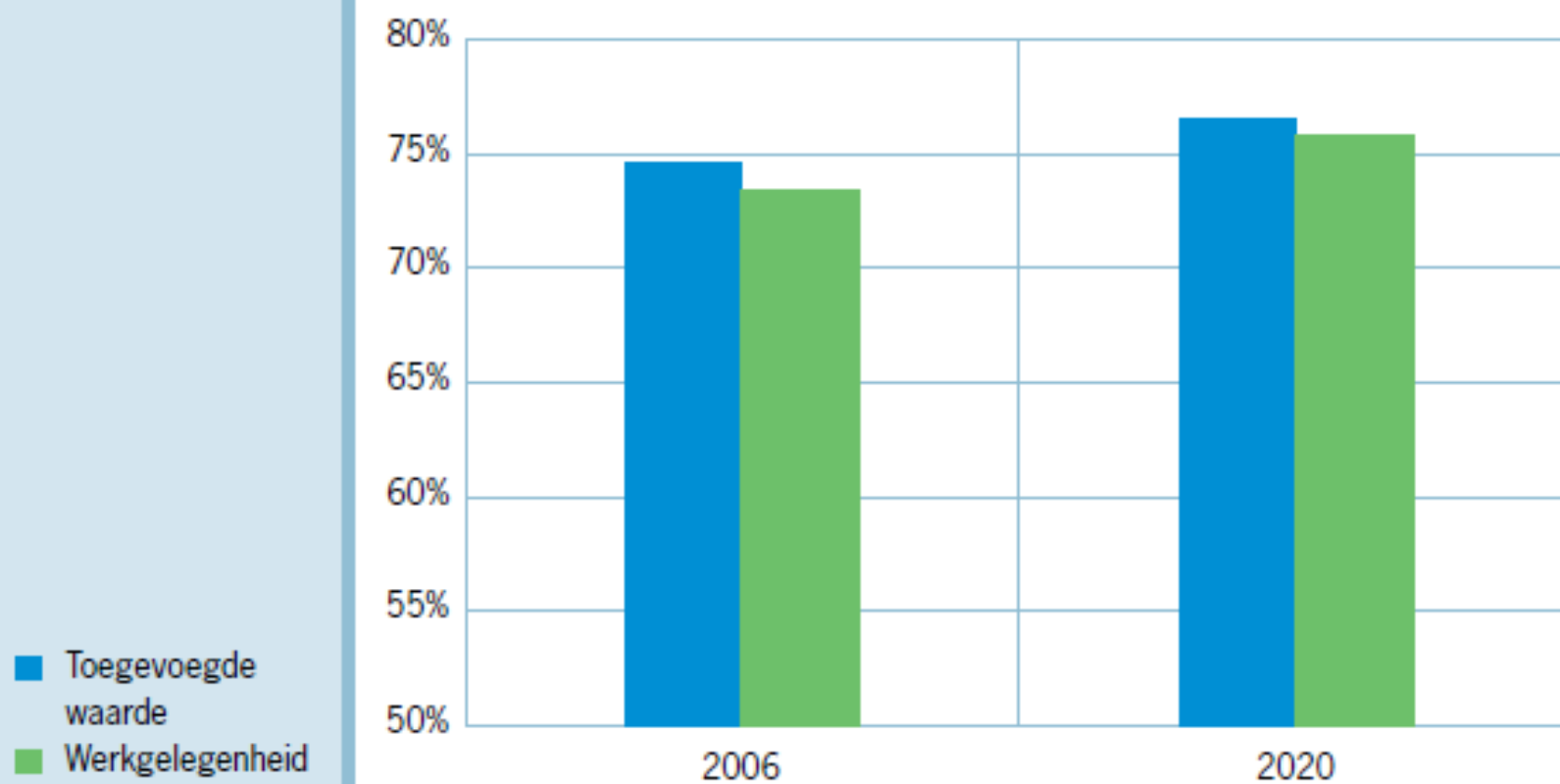
Groei van bevolking, BNP en BNP per hoofd (% per jaar), 2005-2020



Bron: OECD.

Figuur 4.2

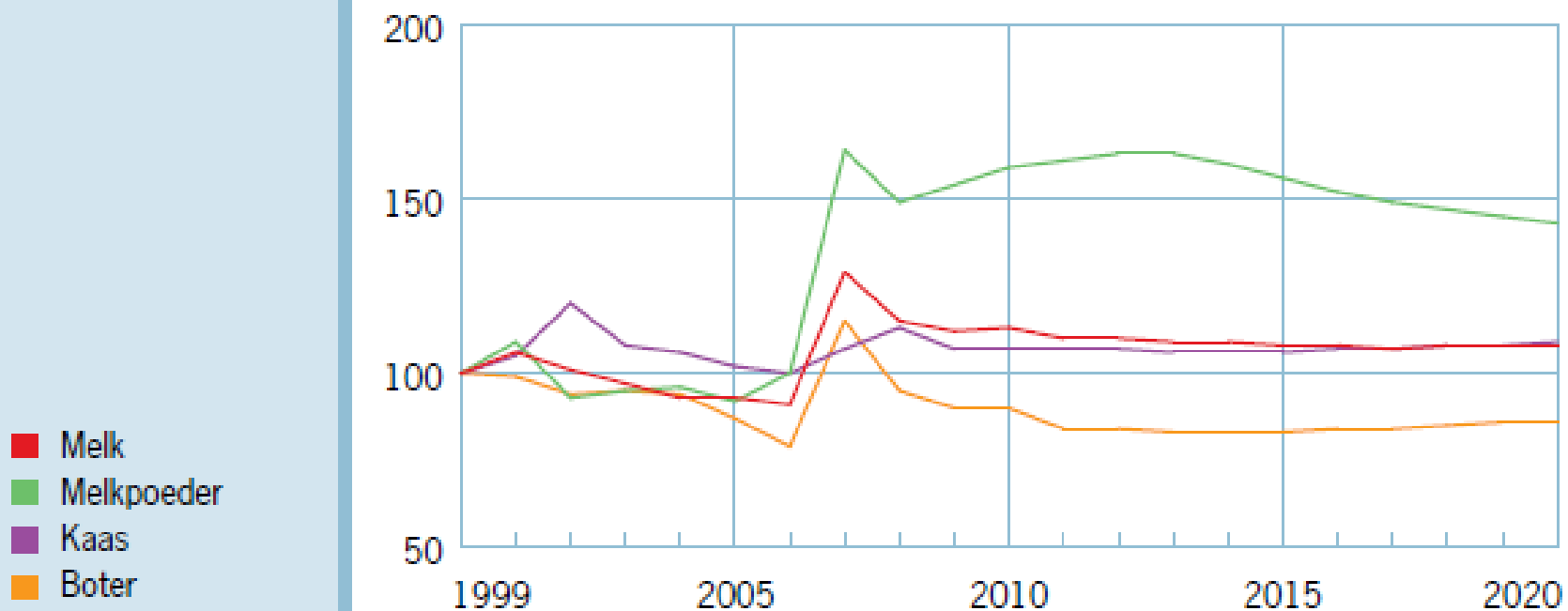
Exportafhankelijkheid van het agrocomplex (binnenlandse agrarische grondstoffen) in 2006 en 2020



Bron: Input-outputmodel van LEI.

Figuur 4.7

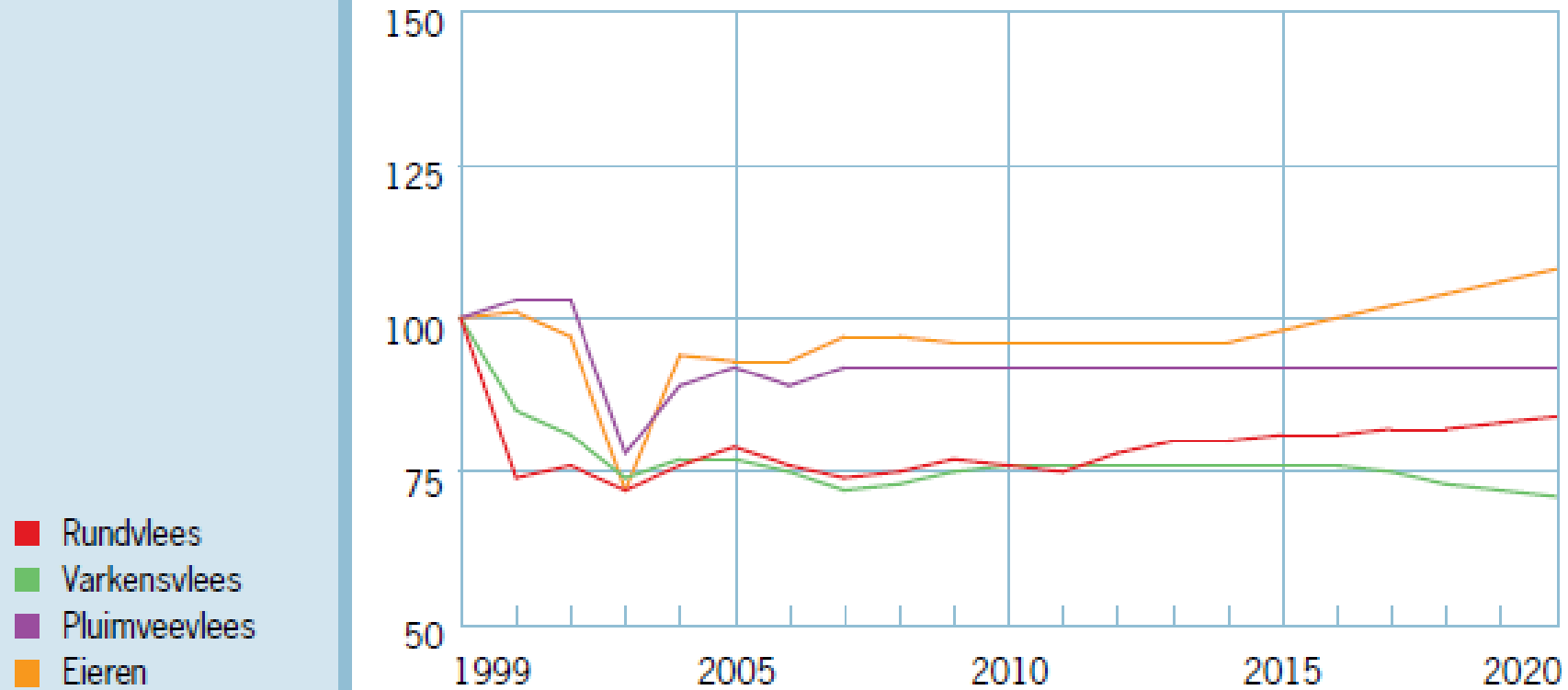
Prijzontwikkeling (index, '1999' = 100) van zuivelproducten in het referentiescenario, '1999'-2020



Bron: ESIM/AGMEMOD.

Figuur 4.10

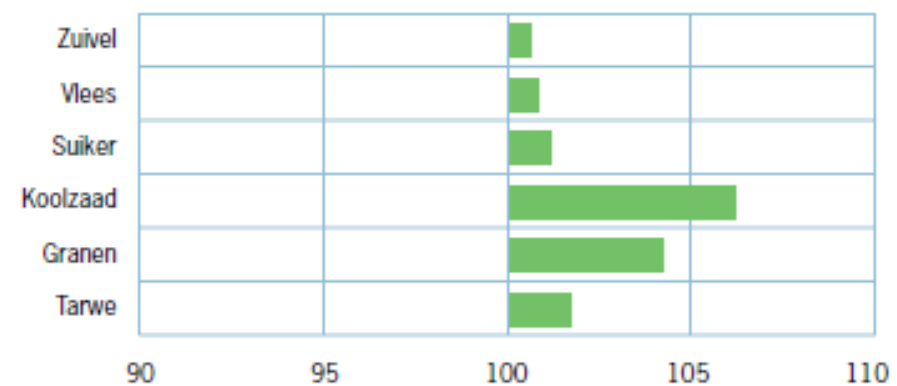
Hoeveelheidsontwikkeling (index, '1999' = 100)
van veehouderijproducten in het referentiescenario, '1999'-2020



Bron: AGMEMOD.

Figuur 6.3

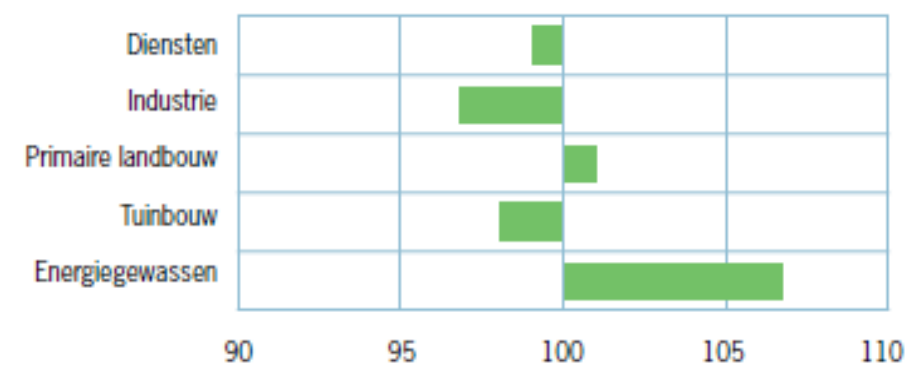
Effect van hoge olieprijsen op de wereldmarktprijzen van agrarische producten (index, 2020 in referentiescenario = 100)



Bron: LEITAP.

Figuur 6.4

Effect van hoge olieprijsen op de productie van Nederlandse sectoren (index, 2020 in referentiescenario = 100)



Bron: LEITAP.

- \uparrow World price oil 43% \rightarrow \uparrow World price grain 4 %
 \uparrow World price rape seed 7 %
 \uparrow World price sugar 2%

Because: \uparrow Wp inputs + \uparrow profitability bio fuels

In The Netherlands: agriculture = energy extensive

\uparrow p bio fuels \rightarrow \uparrow p agricultural products

How did we get there?

Historisch overzicht

- 1875: Eerste Internationale Agrarische Crisis
- WO I: blokkades
- Interbellum: Tweede Internationale Agrarische Crisis
- WO II: algehele verwoesting
- Marshallplan
- 1970 - → : huge surplusses



- 1786 – 1876: Priests, teachers and private initiatives
- 1876 - → : Government
 - Research (O)
 - Extension (V)
 - Education (O)
- 1900: Cooperative movement
- 1912: ↗ tropical agriculture
 ↘ Dutch agriculture
- 1918: 9th of March → Dies Natalis WUR
- 1954: Realottment schemes

Research (O)

- WUR → fundamental research
- DLO → applied research
- Dairy Campus → basic research
- Dairy Valley → private research / contract research

Extension (V)

- Government → < 1990
→ > 1990: subsidies & funds
- Local farmers → Study groups, excursions, demo's, lectures, trial fields
- Private companies → Private industries
→ Coops
→ Veterinarians
→ Private consultants



Extension (V)

- Accountants → Income tax & financial economic advice
benchmark
- DLV, private consultants → Technical & economic advice
i.e. business plan, maize variety advice,
hoof care, nutritionists, courses
- LTO Advice = private consultant → Social-economic advice
i.e. planning commission permits
i.e. mediation

PRIVATE CONSULTANTS → SPECIALISATION

Extension (V)

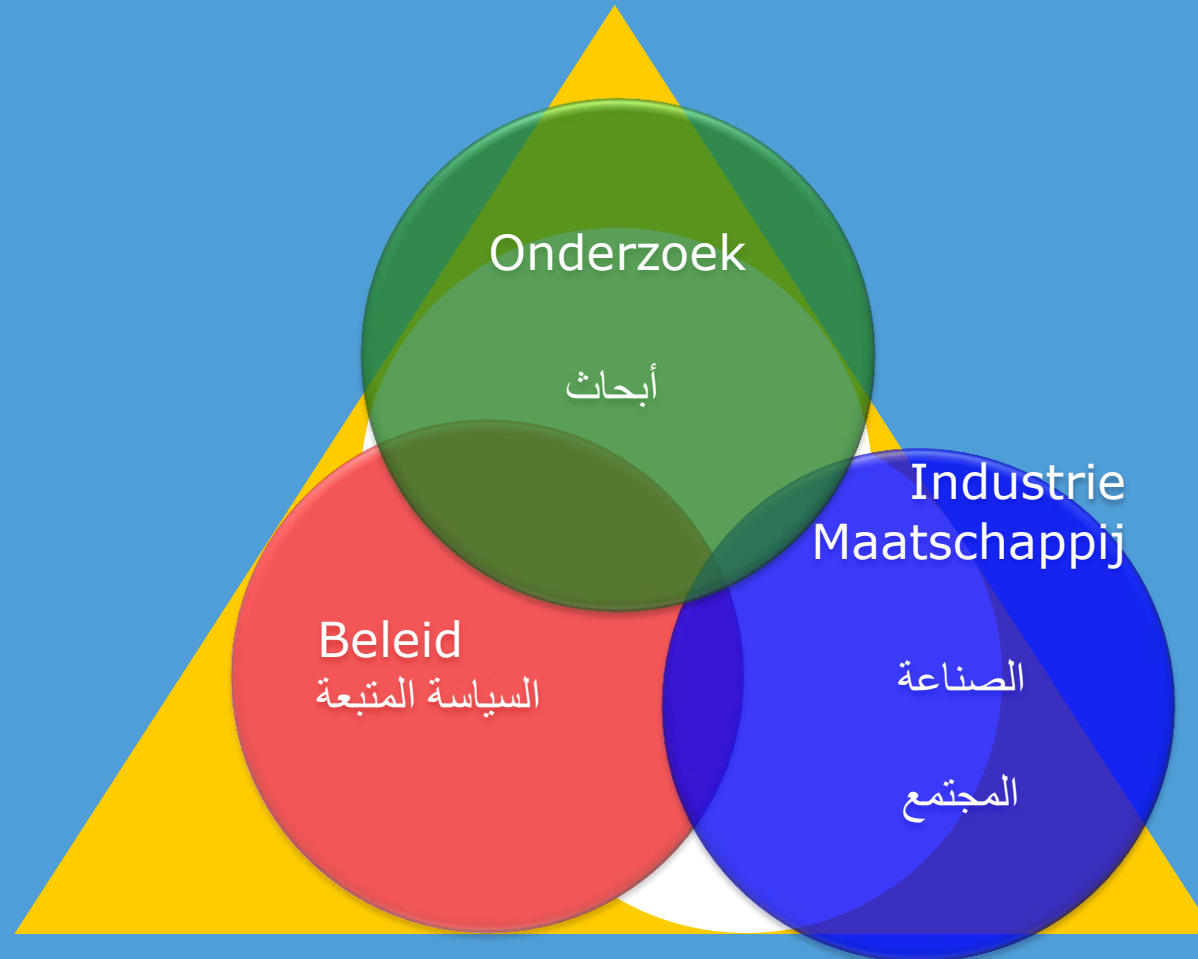
- Veterinarians → Animal health, fertility, animal nutrition
from curative → preventive
- Private industries → i.e. fertilizer, banks, concentrate,
milking equipment, study courses =
technical advice & product oriented

Associations by profession: PE programs

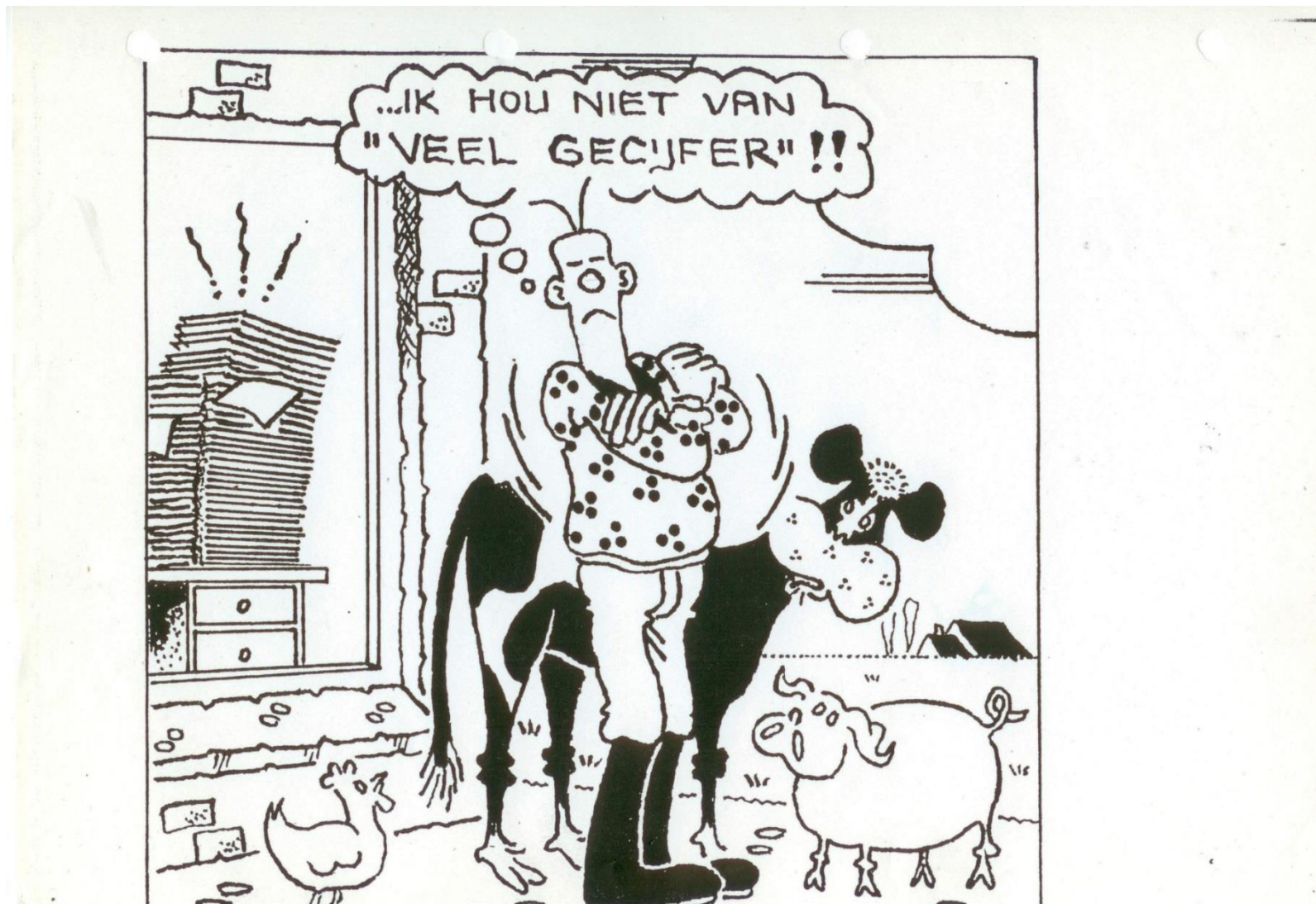
- Association of Agricultural Advisors (VAB)
- Royal Dutch Society for Animal Health (KNMvD)
- Dutch Institute for the promotion of sales of potatoes (NIVAP)
- Agricultural & Horticultural Organization (LTO)
- Organization for entrepreneurs in green, soil and infra (CUMELA)

publiek-privaat partnerschap

تعاون الدولة و الشركات الخاصة



Proces of advising (1)



Proces of advising (2)

Typology of farmers

- Machine lovers vs animal lovers
- Costs savers vs yield increasers
- Dominant character vs recessive character
- Clay soil vs sandy soil

Proces of advising (3)

Arriving at the farm → observations

Analyzing farm, animals, farmer and surroundings → SWOT → diagnosis

Establishing goals, plan of approach → solution → implementation

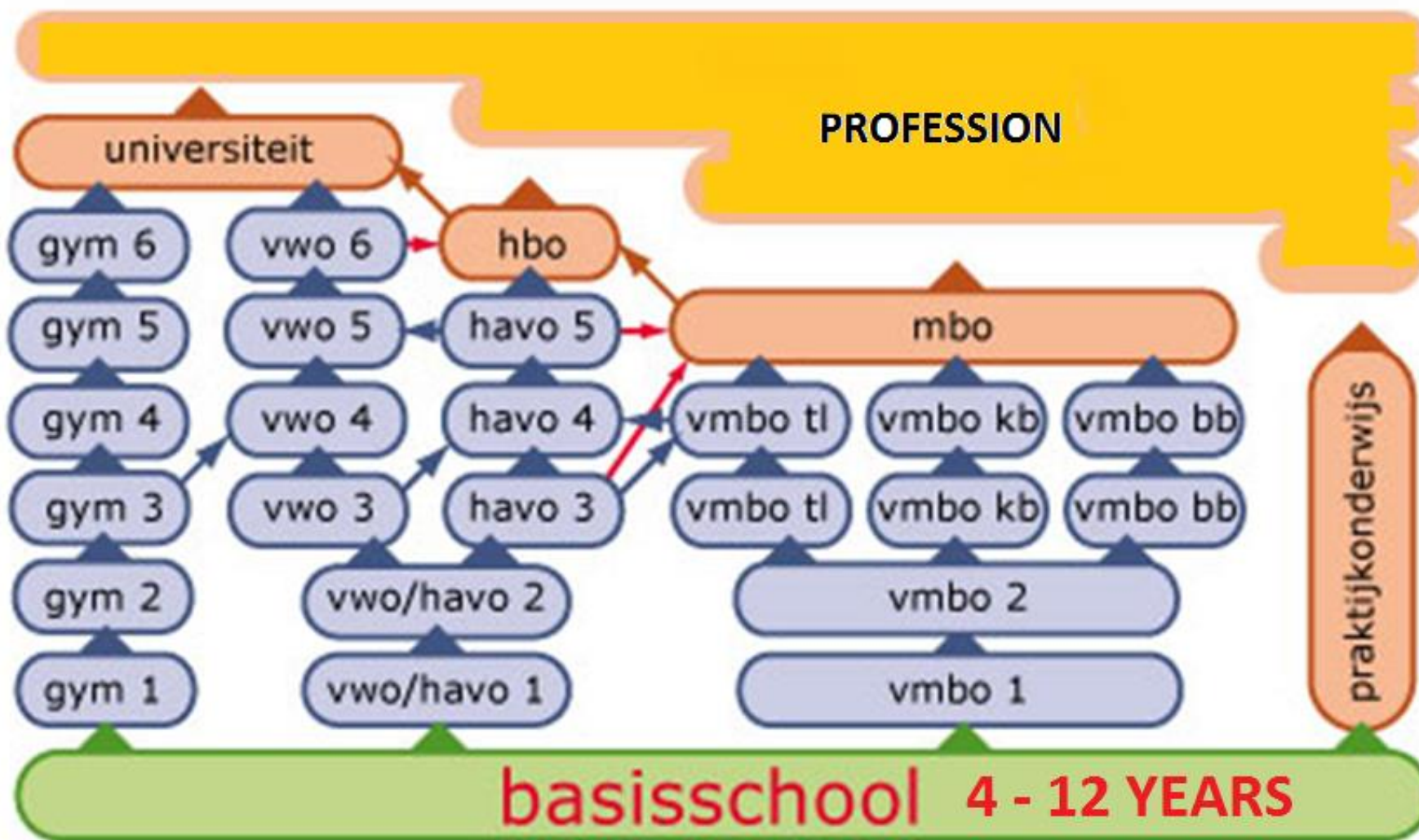
Consolidation & evaluation

Proces of advising (4)

Requirements extension officer

- Charisma
- Social intelligence
- Service minded
- Analytical capabilities
- Main issues vs details
- Flexibility
- Computer minded
- Knowledgeable
- Commercial minded
- Practical approach
- 24/7

Education (O)



Education (O)

- University = Wageningen University
- HBO = Higher education (i.e. Van Hall Leeuwarden)
- MBO = Middle level education (i.e. Nordwin College)
- VMBO Green = Lower education (i.e. Nordwin College)

Nederland telt 143 onderwijsinstellingen, waaronder 20 'groene' instellingen

