



Agribusiness 2015

12 November 2014



Growing the sustainable agrisupply chain
www.agindustries.org.uk

**Can sustainability provide
a European and business
advantage?**

Ruud Tijssens

FEFAC President

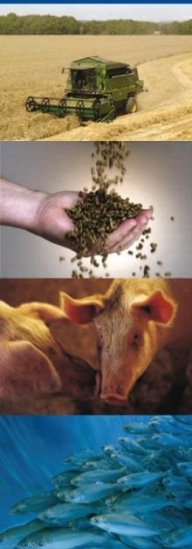
Director Corporate Affairs, Agrifirm

Animal feeding in a challenging environment: Can sustainability provide an European and business advantage?

Ruud Tijssens - President of FEFAC

Agribusiness 2014

November 12th, 2014





FEFAC in a nutshell

- Created in 1959 – 50th Anniversary in 2009
- Represents industrial compound feed and premixtures manufacturers
- 29 Members:
 - 23 Member Associations from 22 EU Member States
 - 2 Observer Members (Serbia, Russia)
 - 5 Associate Members (Switzerland, Norway, Turkey, EMFEMA, EFFPA)
- 154 mio. t of industrial compound feed in EU-28 in 2013
- 7 Technical Committees to assist the FEFAC Council
 - Animal Nutrition
 - Industrial Compound Feed Production
 - Premix & Mineral Feed
 - Feed Safety Management (former EFMC)
 - Fish Feed
 - Milk Replacers
 - Sustainability

AIC-members
Have a valuable
contribution

FEFAC Membership 2014

Active Members

| | | |
|---------------|-----------------|-------------|
| VFÖ | Austria | 1995 (1964) |
| APFACA/BEMEFA | Belgium | 1959 |
| BFMA | Bulgaria | 2013 |
| CFIA | Croatia | 2013 (2008) |
| CFA | Cyprus | 2004 (2003) |
| CMSOZZN | Czech Republic | 2004 (2000) |
| DAKOFO | Denmark | 1973 |
| FFDIF | Finland | 1995 (1993) |
| SNIA | France | 1959 |
| DVT | Germany | 1959 |
| HGFA | Hungary | 2012 |
| ASSALZOO | Italy | 1959 |
| IGFA | Ireland | 1973 |
| LGPA | Lithuania | 2005 |
| NEVEDI | The Netherlands | 1959 |
| IZP | Poland | 2004 (2001) |
| IACA | Portugal | 1986 (1976) |
| AFPWTC | Slovakia | 2004 (2003) |
| GZS | Slovenia | 2004 |
| CESFAC | Spain | 1986 |
| FS | Sweden | 1995 |
| LANTMÄNNEN | Sweden | 1995 |
| AIC | United Kingdom | 1973 |

[observer as from ...]

Observer Members

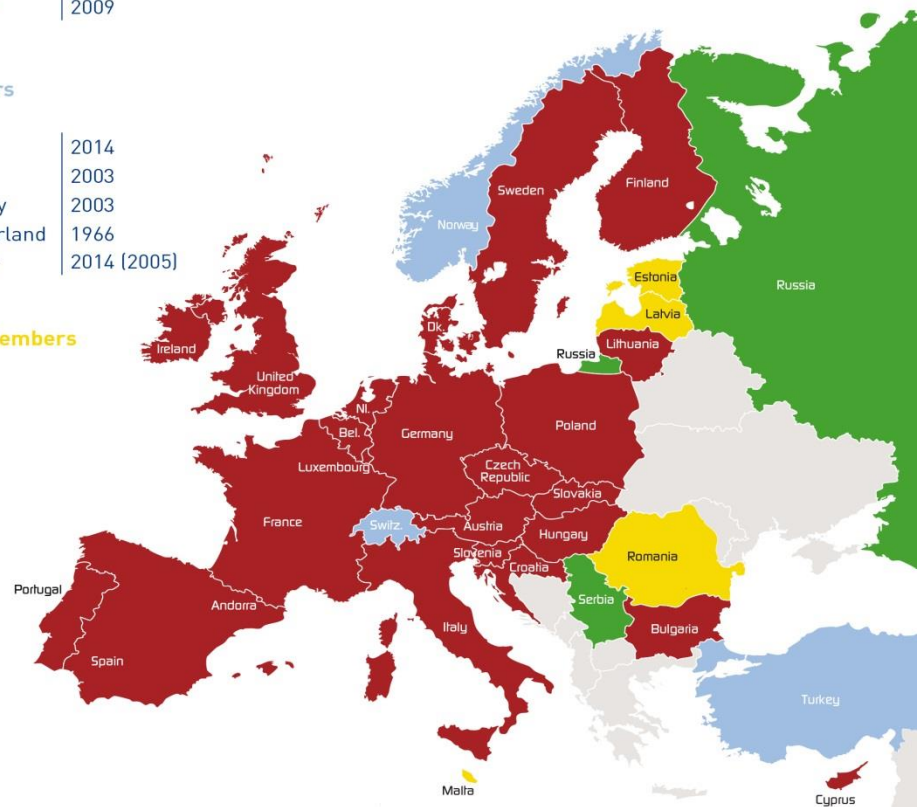
| | | |
|------|--------|------|
| RUFM | Russia | 2010 |
| SFMA | Serbia | 2009 |

Associate Members

| | | |
|----------|-------------|-------------|
| EFFPA | | 2014 |
| EMFEMA | | 2003 |
| FHL | Norway | 2003 |
| VSF | Switzerland | 1966 |
| TURKIYEM | Turkey | 2014 (2005) |

Potential Active Members

| |
|---------|
| Estonia |
| Latvia |
| Malta |
| Romania |

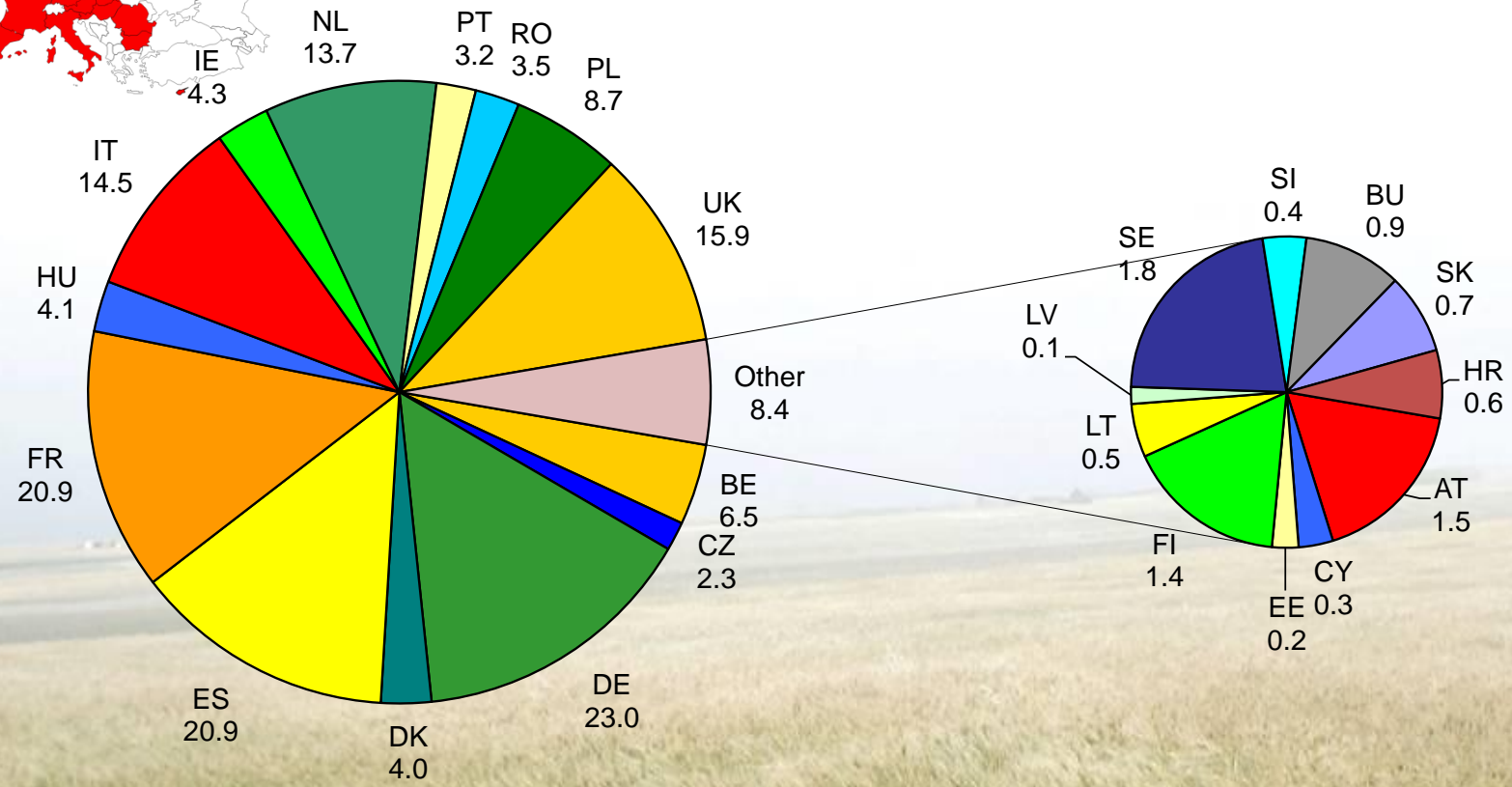
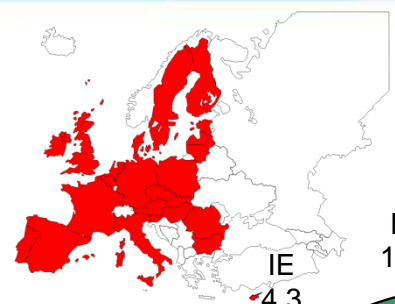


Situation on 1 January 2014

Industrial compound feed production per country

153.8 mio. t in 2013 in the EU-28

Source: FEFAC



Some current topics

“Jobs & Growth” :

- key priority of new EU Commission: EU food chain policy recommendations how to foster innovation in the EU ‘s largest economic cluster (30 Mio jobs, 3,5% of total gross value added)

Market access :

- FEFAC jointly with COCERAL&FEDIOL is lobbying for timely GM import approvals (soy& maize) in the face of the “de –facto” EU moratorium (no new EU approvals for more than a year)

Some current topics

Public Health & Animal Health (AMR) :

- FEFAC supporting new Commission proposal to keep medicated feed as a safe distribution channel for treatment of sick animals under veterinary prescription
- FEFAC public campaign highlighting Animal Nutrition as “solution” to reduce need for antibiotics in livestock farming

Feed safety :

- implementation of FEFAC vision on feed safety management to stay “ahead of the curve”
- FEFAC calling for risk-based monitoring by suppliers (Mycotoxins, Dioxins),

Some current EU topics

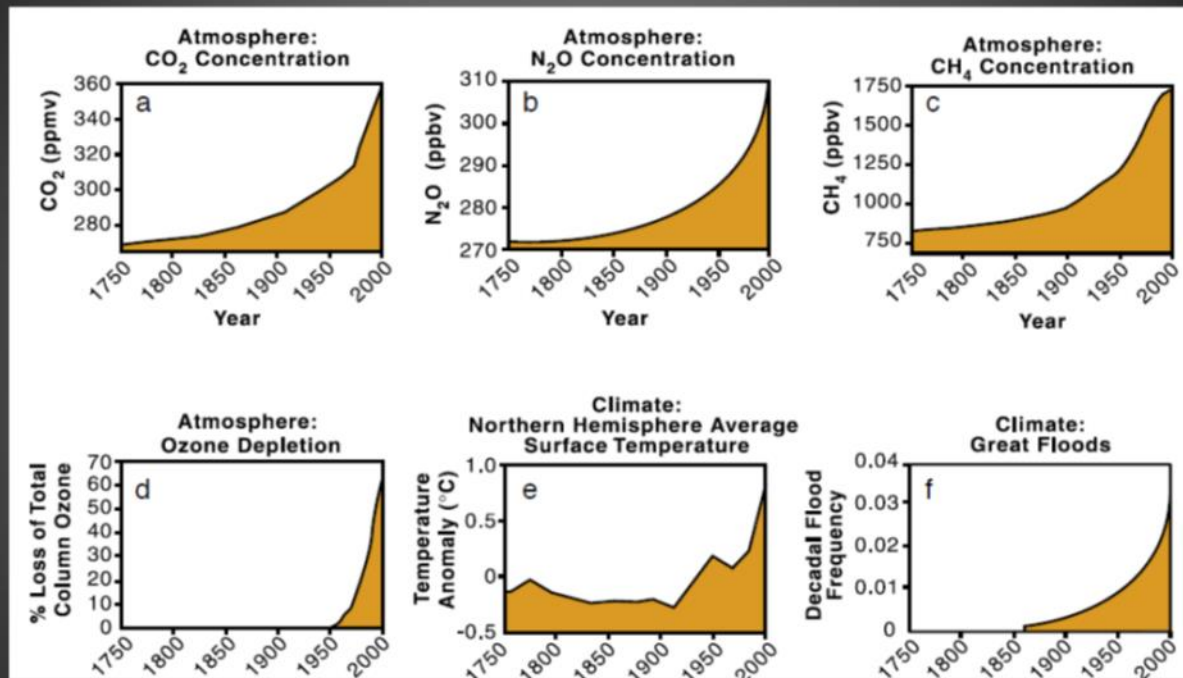
Feed labelling :

- final adoption of EU code on good labelling practice for compound feed including section on claims to ensure level playing field



All climate change indicators show the same pattern ...

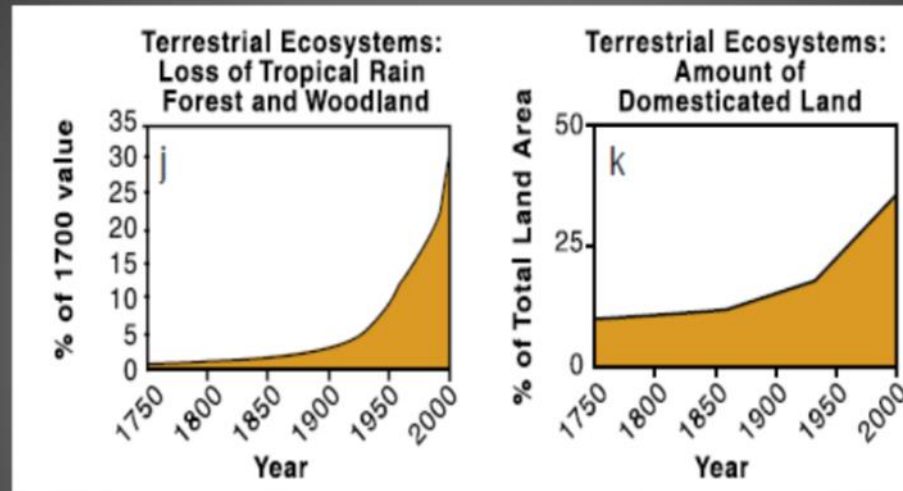
Climate Change



Source: IGBP synthesis: Global Change and the Earth System, Steffen et al 2004, taken from
 (a) Etheridge et al. (1996) *J. Geophys. Res.* 101:4115-4128; (b) Machida et al. (1995) *Geophys. Res. Lett.* 22:2921-2924; (c) Blunier et al. (1993) *J. Geophys. Res.* 20:2219-2222; (d) J.D. Shanklin, British Antarctic Survey; (e) Mann et al. (1999) *Geophys. Res. Lett.* 26(6):759-762; (f) Milly et al. (2002) *Nature* 415:514-517

And scarcity of land use is also on the agenda ...

Land Scarcity



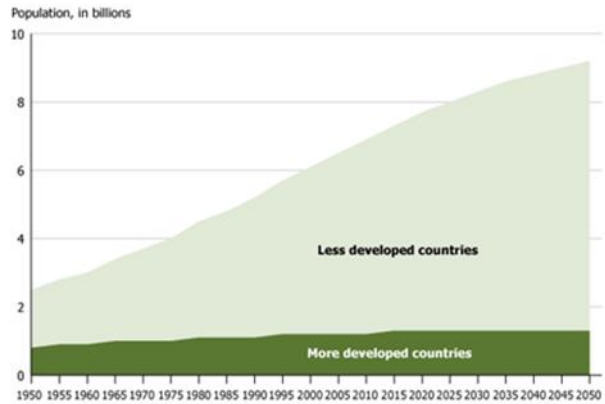
Over the past 50 years:

World's cultivated area +12 % / Agricultural production x2.5

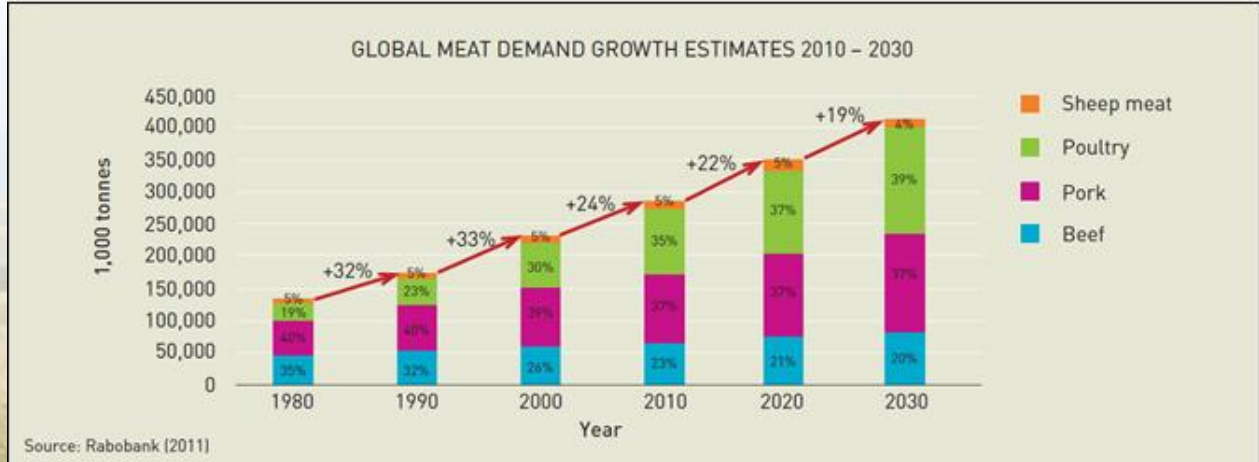
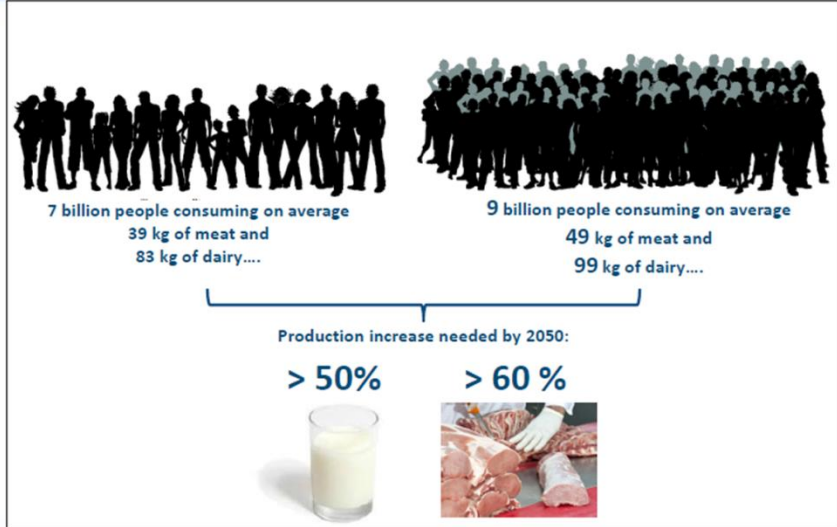
Source: IGBP synthesis: Global Change and the Earth System, Steffen et al 2004, taken from
 (j) Richards (1990) In: *The Earth as transformed by human action*, Cambridge University Press; WRI (1990) *Forest and rangelands*; (k) Klein Goldewijk and Battjes (1997) *National Institute for Public Health and the Environment (RIVM). Bilthoven, Netherlands*

The Agricultural business: unprecedented growthpotential

World Population Growth, 1950–2050

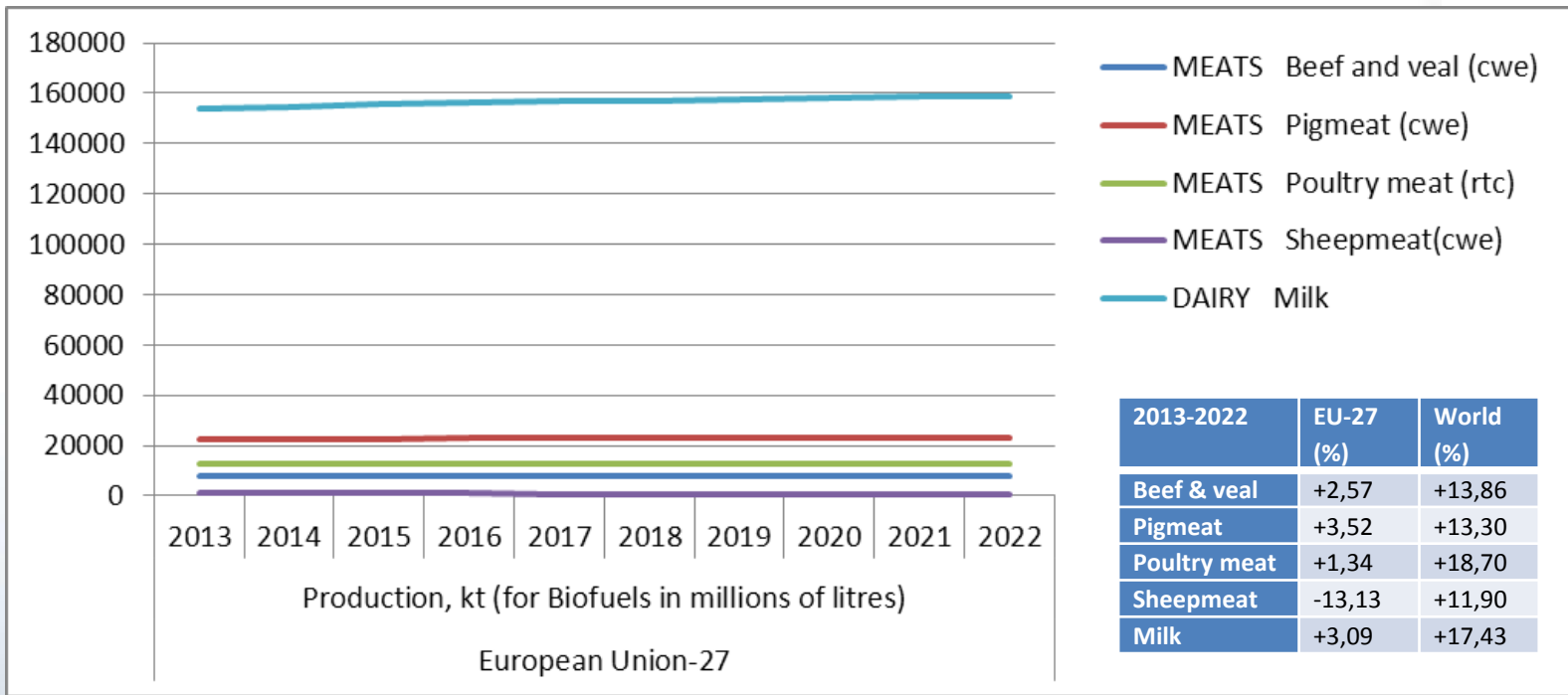


Source: United Nations Population Division, *World Population Prospects, The 2008 Revision*.



Source: Rabobank (2011)

But, in Europe growth expectations are limited





Key trend: Agricultural activities in densely populated area's



Range around major cities:
- appr. 100 km

Agricultural activities in densely populated areas

And the list of subjects is endless:

- Animal welfare
- Genetic modification
- Pesticides
- Methane emission
- Responsible raw materials
- Closing mineral cycles
- Smell emission
- Natural behavior
- ESBL
- Child labor
- Illegal deforestation
- Antibiotics
- Ammonia emission
- Husbandry systems
- Transport movements
- Castration
- Slaughter techniques
- Green house gas emission

These subjects are fueled by NGO's



Over de BMF

De Brabantse Milieufederatie (BMF) is een stichting die opkomt voor een schoon milieu, een vitale natuur en een gevarieerd landschap. Zij overkoepelt rond de 110 vrijwilligersgroepen op het gebied van natuur, milieu en landschap in Brabant en maakt deel uit van de natuur- en milieubeweging in Nederland.

- Contact
- Vacatures
- Over de BMF
- BMF organisatie
- Beleidsplan 2012 - 2016

16.5 Bijlage 5 Bij de BMF aangesloten Natuur- en Milieugroepen, eind 2012

| NR. | ORGANISATIEID | AANGESLOTEN GROEP | WOONPLAATS |
|-----|---------------|-----------------------------------|------------------|
| 1 | 8996 | Stichting Stadsbomen Tilburg e.o. | TILBURG |
| 2 | 9007 | Brabants Landschap | HAAREN |
| 3 | 9259 | IVN Asten-Someren | ASTEN |
| 4 | 9260 | IVN Bernheze | HEESWIJK-DINTHER |
| 5 | 9261 | IVN Best | BEST |
| 6 | 9263 | IVN Geldrop | GELDROP |
| 7 | 9264 | IVN Grave | ESCHAREN |
| 8 | 9265 | IVN Laarbeek | AARLE-RIXTEL |

| | | | |
|-----|-------|------------------------------------------------|------------------|
| 91 | 10203 | Stichting Belangen Buitengebied Steenberg | STEENBERGEN |
| 92 | 10237 | Vereniging Het Groene Hart | DEN DUNGEN |
| 93 | 10261 | Stichting De Brabantse Wal | OSSENDRECHT |
| 94 | 10325 | STICHTING MENS, DIER & PEEL | GEMERT |
| 95 | 10464 | Altenatuur | ALMKERK |
| 96 | 10465 | Milieuvereniging Oosterhout MVO | OOSTERHOUT |
| 97 | 10467 | Bossche Milieu Groep | 'S HERTOGENBOSCH |
| 98 | 10613 | Stichting Behoud Erfgoed Oirschot | OIRSCHOT |
| 99 | 11180 | Natuur- en Landschapsvereniging Gilze en Rijen | GILZE |
| 100 | 11281 | Vereniging leefmilieu Veghel - Erp | ERP |
| 101 | 11312 | Vereniging Stop de Stank | DEURNE |
| 102 | 11377 | Vereniging Buurtschap Baarle-Grens | BAARLE-NASSAU |

Also in the UK



Underlying: unease with modern livestock production



Slow Food® Texel



Summary so far ...

1. Further increase of production
2. Take into account:
 - environmental impact and scarcity of raw materials
 - societal acceptance, with specific attention for public health



So, where to go?



Three key subjects will guide us ...

1. Innovation
2. Securing supply chains
3. Culture (ethics)



Innovation (1)

Focus on efficient feeding

Feeding pigs with daily tailored diets reduced N and P intake respectively by **25% and 29%**, and the corresponding excretions were reduced both near **40%**

| | Feeding method | | SEM | <i>P</i> value | Δ , % |
|----------------------|-----------------------------|-----------------------------------|-------|----------------|--------------|
| | Three-phase feeding program | Individually daily tailored diets | | | |
| Feed cost/ADG, \$/kg | 1.022 | 0.974 | 0.006 | 0.0001 | 4.7 |
| N intake, kg | 5.69 | 4.29 | 0.050 | 0.0001 | 25 |
| N excretion, kg | 3.61 | 2.21 | 0.043 | 0.0001 | 39 |
| N retention, kg | 2.08 | 2.08 | 0.018 | 0.9090 | 0 |
| P intake, kg | 0.91 | 0.65 | 0.007 | 0.0001 | 29 |
| P excretion, kg | 0.49 | 0.30 | 0.005 | 0.0001 | 40 |
| P retention, kg | 0.35 | 0.35 | 0.003 | 0.9090 | 0 |

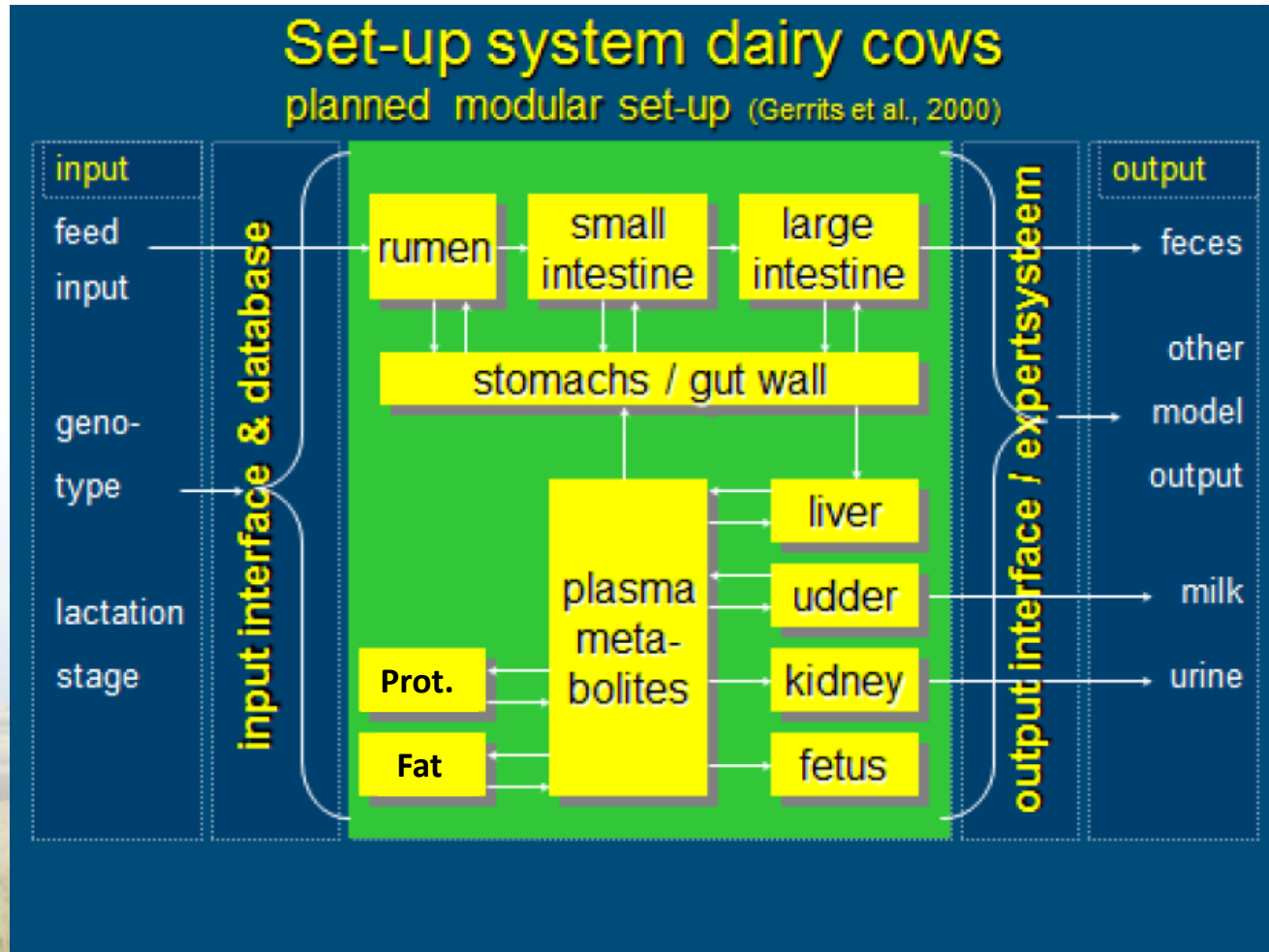
Innovation (2)

Focus on efficient feeding



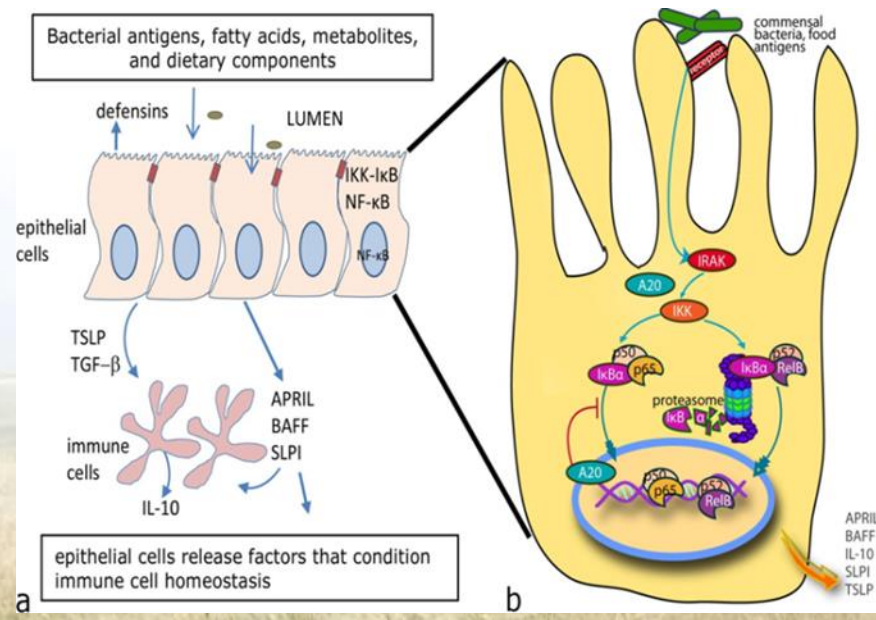
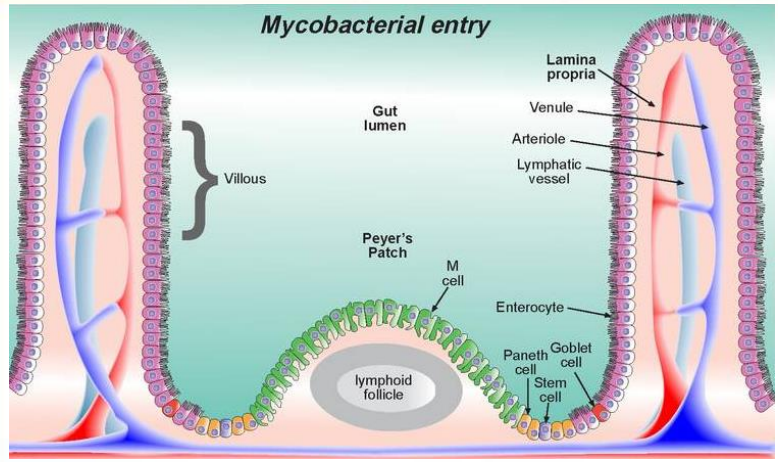
Innovation (3)

Focus on efficient feeding



Innovation (4)

Focus on healthy animals



Innovation (5)

Focus on sensor technology



Dairy cows

Weight

Milk yield



Activity

Concentrate feeding (fed)

Rumen

Rumen



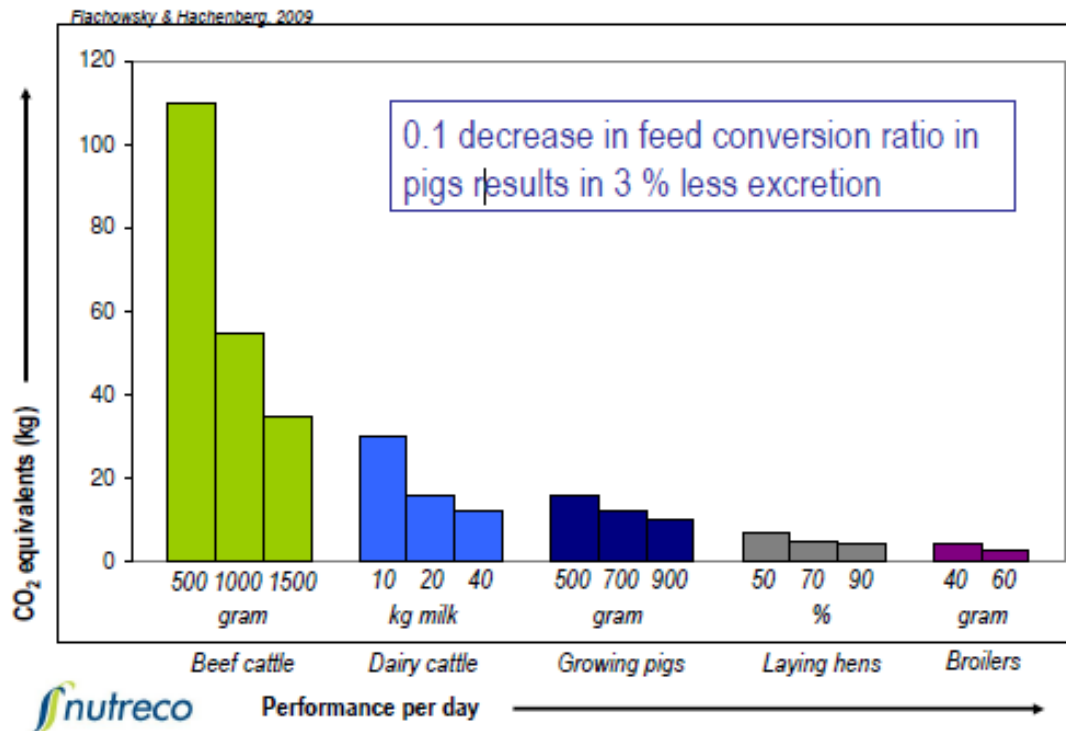
Concentrate (residual)



Eating time

Increased efficiency & health reduces environmental footprint

Emissions per kg edible protein



Societal acceptance will lead to new production chains ...

Vitrine

Nummer 3 • november 2012



2 'De buitenlandse markt voor duurzaamheid is nog klein'

3 'Schaalvergroting is de opening naar de toekomst'

4 'Niemand kan zonder techniek'

De kip van morgen komt eraan

Voor hoerastemming is het nog te vroeg, maar het initiatief van de pluimveesector en de supermarkten om in gezamenlijkheid te komen tot een heldere definitie en afspraken over de duurzaamheid van pluimveevlees, wordt breed toegejuicht. De eerste oriënterende besprekingen zijn inmiddels gevoerd. 'De Kip van Morgen' is een kwestie van tijd.

'De Kip van Morgen' is in zekere zin een voortzetting van het convenant Tussensegment Pluimveevlees, waarin de pluimveesector en de retail afgesproken hebben om het tussensegment tussen gangbaar en biologisch te vergroten. In dat tussensegment van vlees met een dierwelzijns-plus is inmiddels voorzien met producten als de Volwaardkip en het Gildehoen. De consument kan kiezen. De supermarktketens hebben nu uitgesproken dat ze in 2020



in beweging komen', tekent Dellaert hierbij aan. Resultaat voor de Nederlandse markt is snel te boeken. Zelfs zonder extra investeringen. 'De bezettingsgraad bijvoorbeeld zou zo naar beneden kunnen. Nu gebeurt dat niet, omdat retailers niet aangeven dat ze dat willen. Alleen komt dan wel het bedrijfseconomisch rekenmodel er heel anders uit te zien. De pluimveehouder

Innoveren in duurzaamheid

Een begrip als duurzaamheid is een mooie prikkel tot vernieuwing. Duurzaamheid is een uitdaging. Een doel om na te streven. Een uitnodiging tot innovatie. Dat geldt in zekere zin ook voor de uitspraak van onze retailers, dat in 2020 alle vlees in het schap duurzaam moet zijn. Duurzaamheid is een complex begrip. Zeker in de veehouderij. Het gaat hierbij in essentie immers om de borging van dierenwelzijn, een voedselveilig eindproduct én een rendabele productiewijze met een lage milieudruk. De combinatie dierenwelzijn-milieu is een moeilijke. Klezen voor het ene, is (een beetje) verliezen op het andere.



Hoe krijg je een kip die maximaal scoort op alle aspecten van duurzaamheid? Dat is een vraag aan de sector die alleen met een geïntegreerde aanpak te beantwoorden is. Innovaties zijn daarbij onontbeerlijk. Vanuit die doelstelling zal uitgezocht moeten worden wat precies nodig is. Ander voer? Andere stalssystemen? Andere ras-

New sustainable chicken:

- 25% Dutch market
- Slow growth
- Low in antibiotics
- Responsible Soya
- Long term: increase European raw materials

Societal acceptance will lead to new production chains ...



Securing Supply Chains

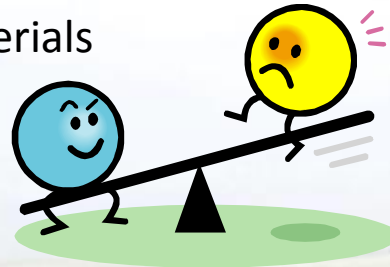
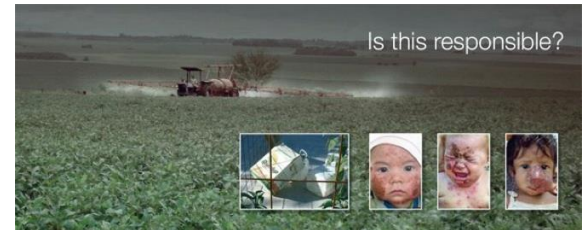
- Three main drivers:
 - Responsible raw material production
 - European protein production
 - Raw material sourcing in the global context



Securing Supply Chains



Feed legislation
GM policy
Responsible materials

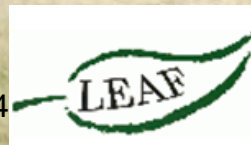
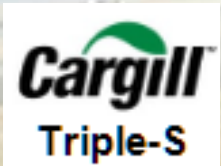


International Feed Industry Federation
Global Harmonisation




Sourcing Guidelines

Securing Supply Chains: Responsible soy production



As FEFAC we realize the movement in the markets

ISCC+ ISCC ProTerra SNIA & Coop de France Dakofo Soy Program RTRS Book & Claim Mass balance Non-GM Femas Consumer Goods Forum Zero Net Deforestation Bemefa MV soja





European Protein Production
Danube Soy

Aapresid ISCC 2BS Pro-S Triple-S CRS RTRS

SSAP Proterra Fairtrade International

November 12th, 2014

Agribusiness 2014

Securing Supply Chains: Responsible soy production

- Sourcing Guidelines
- System for benchmarking
 - International Trade Center
- Verification based on region based risk analysis



Underlying: unease with modern livestock production



Slow Food® Texel



Ethics is on the agenda

- Courage to ask the question:
 - Is this explainable?





Finalizing

- Exciting times
- Focus on:
 - Innovation
 - Securing supply chains
 - Courage to ask questions



Thank you for your attention



FEFAC

Fédération Européenne des
Fabricants d'Aliments Composés

Europäischer Verband
der Mischfutterindustrie

European Feed
Manufacturers' Federation





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