History of (dairy) farming in the Netherlands & lessons for developing countries

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DUTCH FARM EXPERIENCE

TradiNova Livestock

SIVTRO meeting
Perugia – 28 September 2012

Background

- Doctor in Veterinary Medicine (NL)
- MSc Management of Agricultural Knowledge Systems (MAKS)
- 1985-1997 Latin America - projects with smallholders, (dairy) farmer organizations, government, educational centres
- 1998-2007 Consultant ETC/Compas: endogenous development
- Since 2005: Endogenous Livestock Development (ELD) network
- 2007-2011: ETC Sustainable dairy projects in NL
- Now: independent consultant sustainable livestock: TradiNova Livestock and Dutch Farm Experience

DUTCH FARM EXPERIENCE

Of intensieve landbouw, of honger

Opinion Wageningen University: intensification or hunger?

Actively supported by (international) agri-business, research, policies

2 ways of intensification & more sustainable livestock keeping

Scale enlargement + higher inputs

Optimization of farm system + lower inputs

Actively supported by NGO's and – to limited extent - agri-business

Where do we want to go?

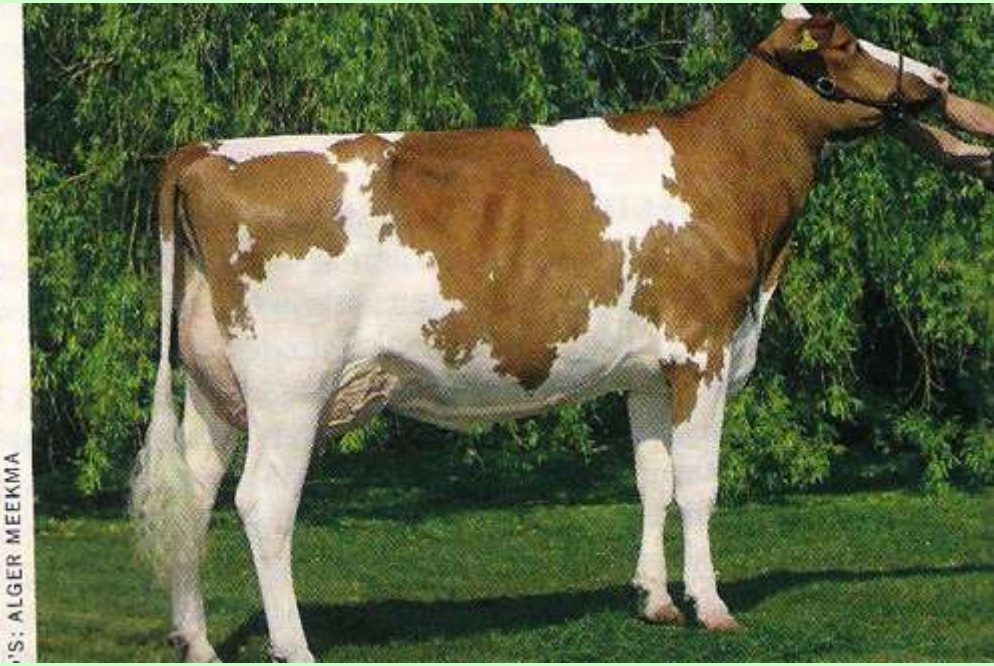
History of NL dairy farming
Only 60 years ago…

Since 1960's:
scale enlargement and intensification

Conducive policies in agriculture 1950-1960's

- Market protection - fixed prices
- Easy access to credit for farmers
- Support to education-extension-research
- Rigorous disease control programs
- Subsidies for chemicals

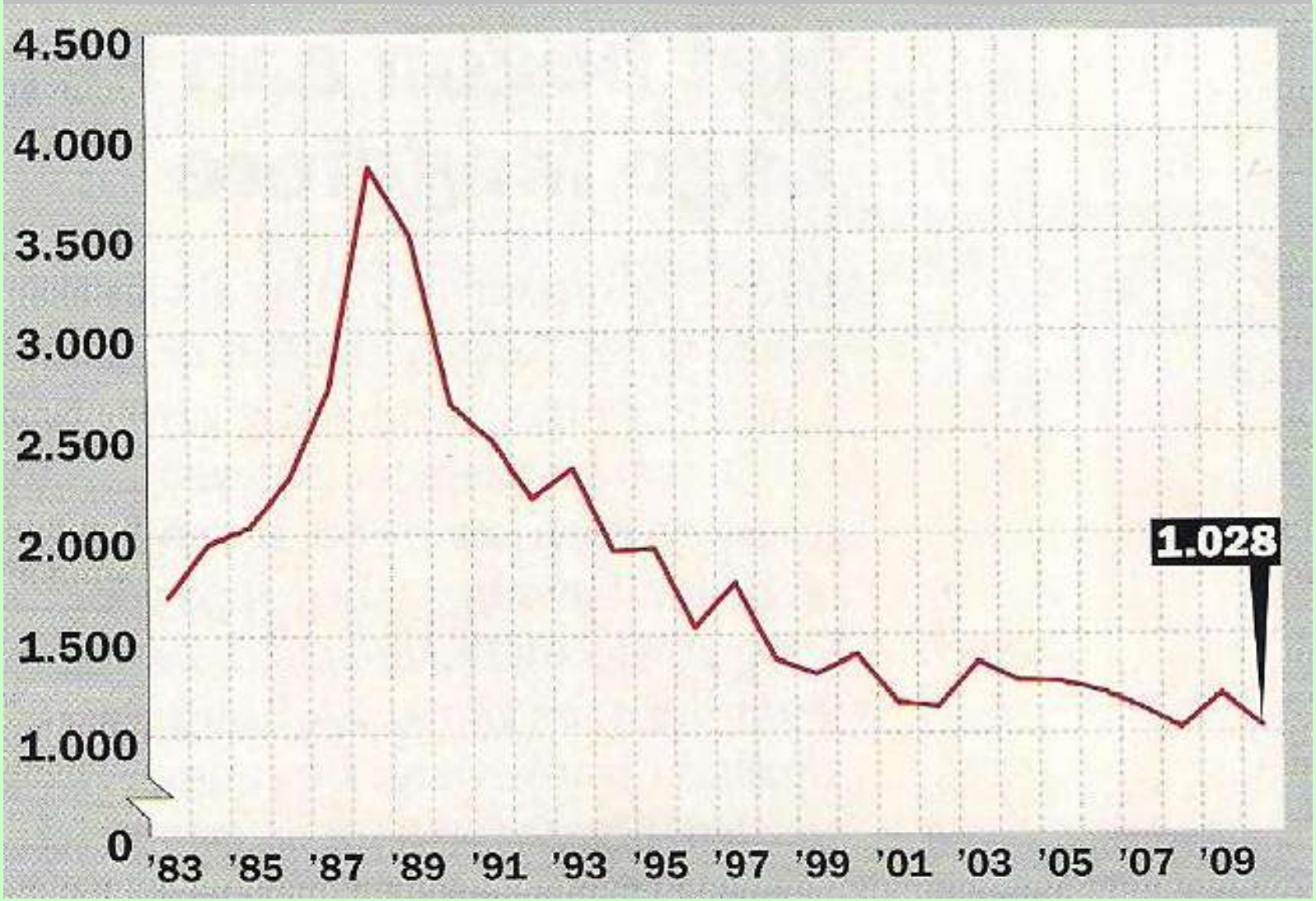
Artificial insemination & breeding policies



Gaining land by making more ‘polders’ & enlarging existing plots for mechanization

Millions of EU subsidies to NL

GLB income Netherlands – rural development excluded – x € million.
(nominal amounts, not corrected for inflation) Source: LEI



Resulting in:

impressive increase in milk and labour productivity

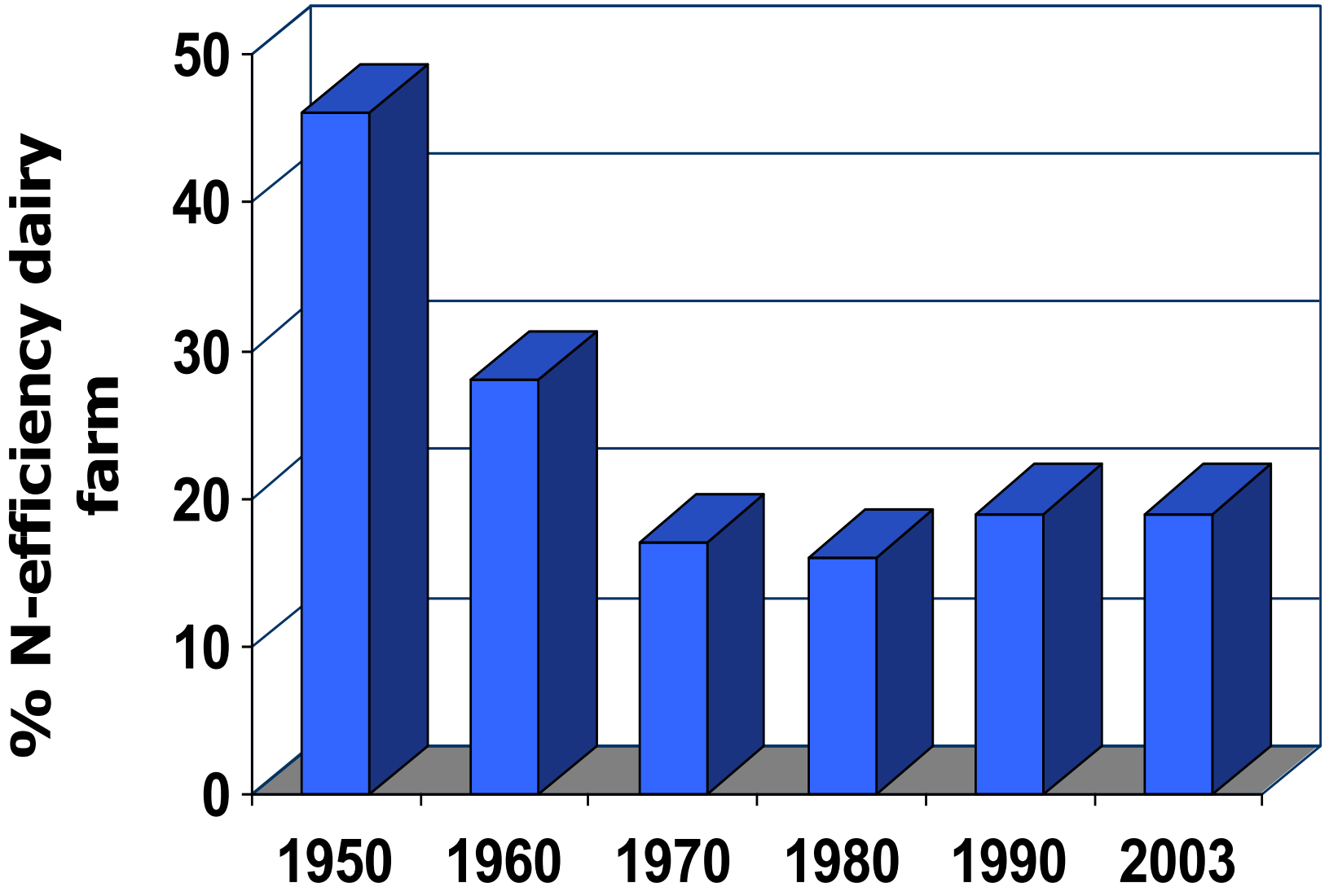
+

loss of nearly 90% of family dairy farms

	1960	1975	1985	1995	2000	2005	2007
Dairy farms (x1000)	180	91.5	58	37.5	29.5	23.5	21.3
Total milkproduction (x1000)	6.721	10.286	12.525	11.280	11.155	10.827	11.134
Dairy cows (x1000)	1.628	2.218	2.367	1.708	1.504	1.433	1.413
# of dairy cows per farm	9	24	41	45.5	51	61	66
Milkproduction/farm (x1000)	37	112.5	216	301	379	460	522
Milkproduction (kg/cow/year)	4.200	4.650	5.300	6.610	7.420	7.550	7.880
Milkproduction (kg/ha/year)	5.500	8.864	12.512	12.018	12.340	12.560	12.980
Labor productivity (kg milk/hour)	8	37	72	89	108	128	141

As well as: reduced manure quality and soil fertility

In turn resulting in: reduced farm efficiency….



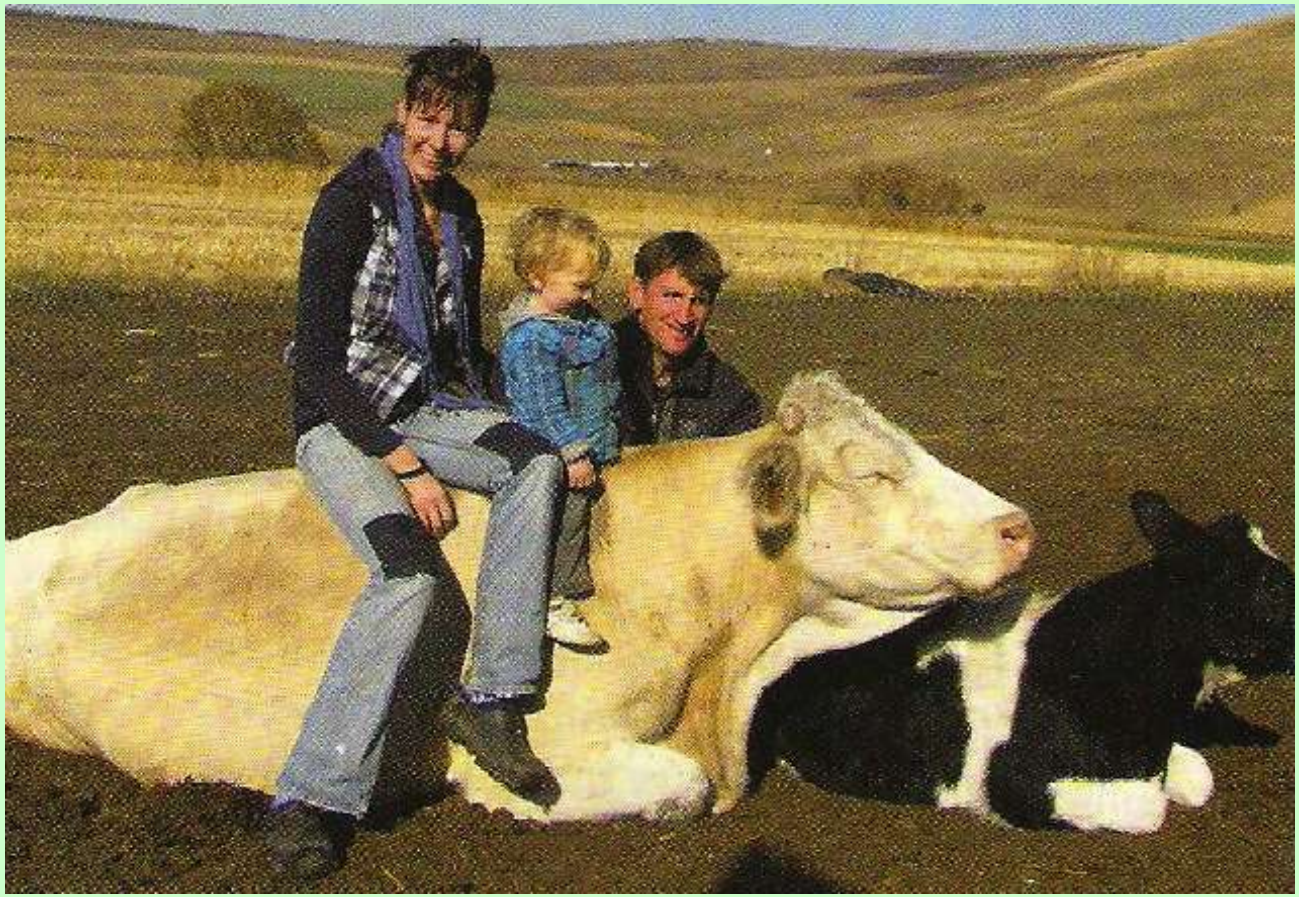
EU farm policy still harms poor countries – it's high time for change

Overall picture Dutch dairy:

- Social problems – over 90% has stopped since 1960's
- Low income due to low profit rate per kg of milk and high debts
- Income prospects difficult – also due to abolishing milk quota in 2015
- Young people moving out of farming
- Criticism of general public – especially on animal wellbeing and climate change

Way out #1
Stop farming

Way out #2
Start farming abroad



Way out #3
further scale enlargement:
megastables and agro-production parks

Views on future of pig production

Way out #4
diversification of income

Way out #5

increasing soil fertility
& reducing costs

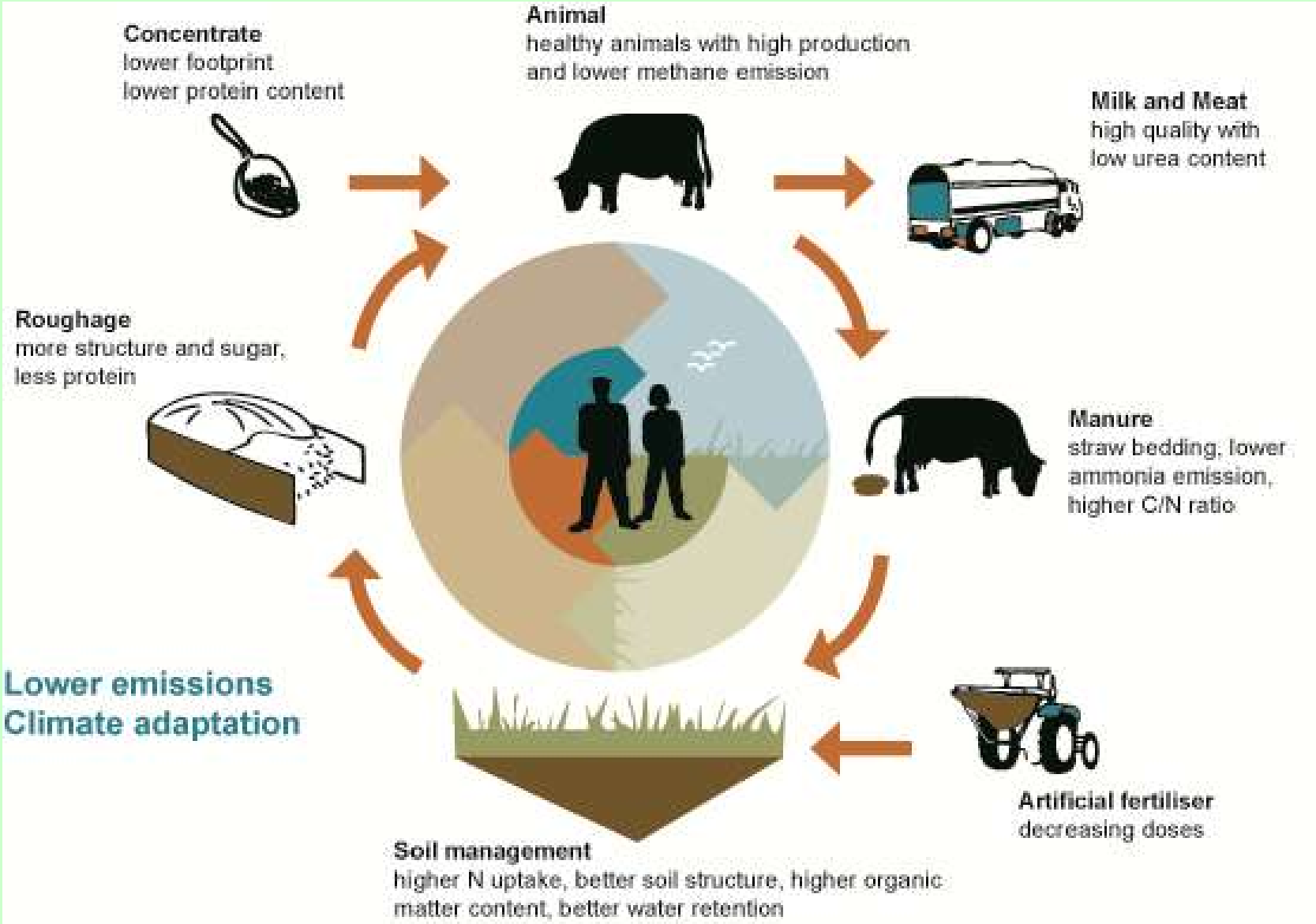
Sustainable dairy farmer programme

Farmers ‘study groups: new thinking & joint learning

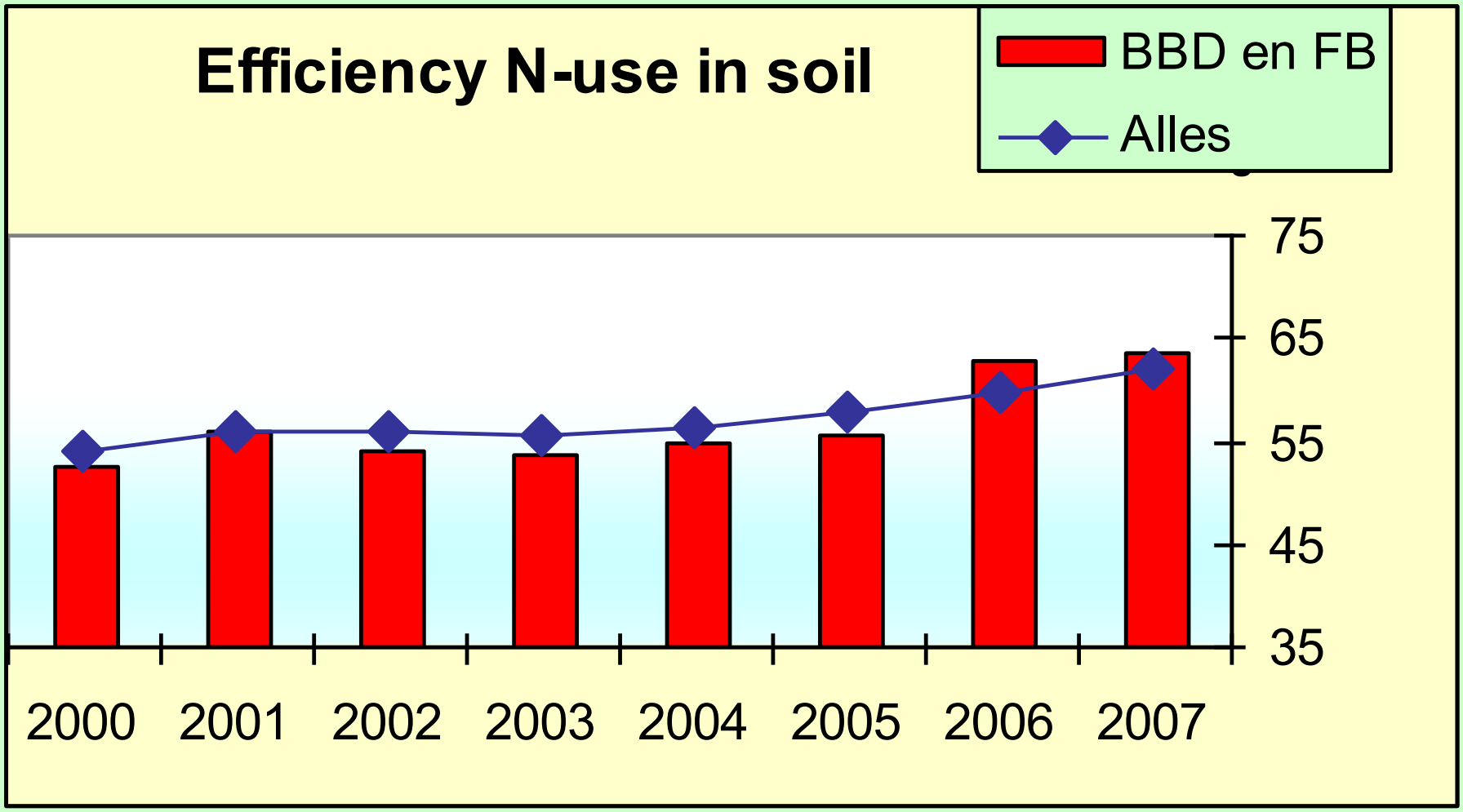
Sustainable dairy farmer programme

Closing the nutrient cycles

Sustainable dairy farmer programme



Monitoring of results: environment and farmer income



Sustainable dairy farmer programme

Rewards for most sustainable dairy farmers

Sustainable dairy farmer programme

Lessons learnt in the Netherlands (1):

Potential of building on farmers' knowledge and experience – with support of research

Lessons learnt in the Netherlands (2):
Restoring soil fertility and organic matter is highest priority (by closing N and P nutrient cycles)

Lessons learnt in the Netherlands (3):

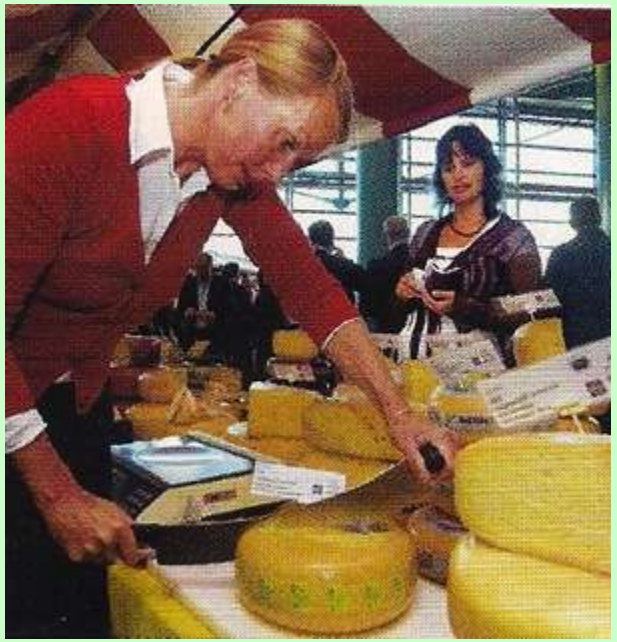
It is better to focus on optimization of farm as a whole rather than maximization of one single product (milk or meat per year or lactation)

Lessons learnt in the Netherlands (4):

Diversifying farmer's work and income (now 40% of farmers)

Lessons learnt in the Netherlands (5):

Potential of direct marketing (now 10% of farmers)



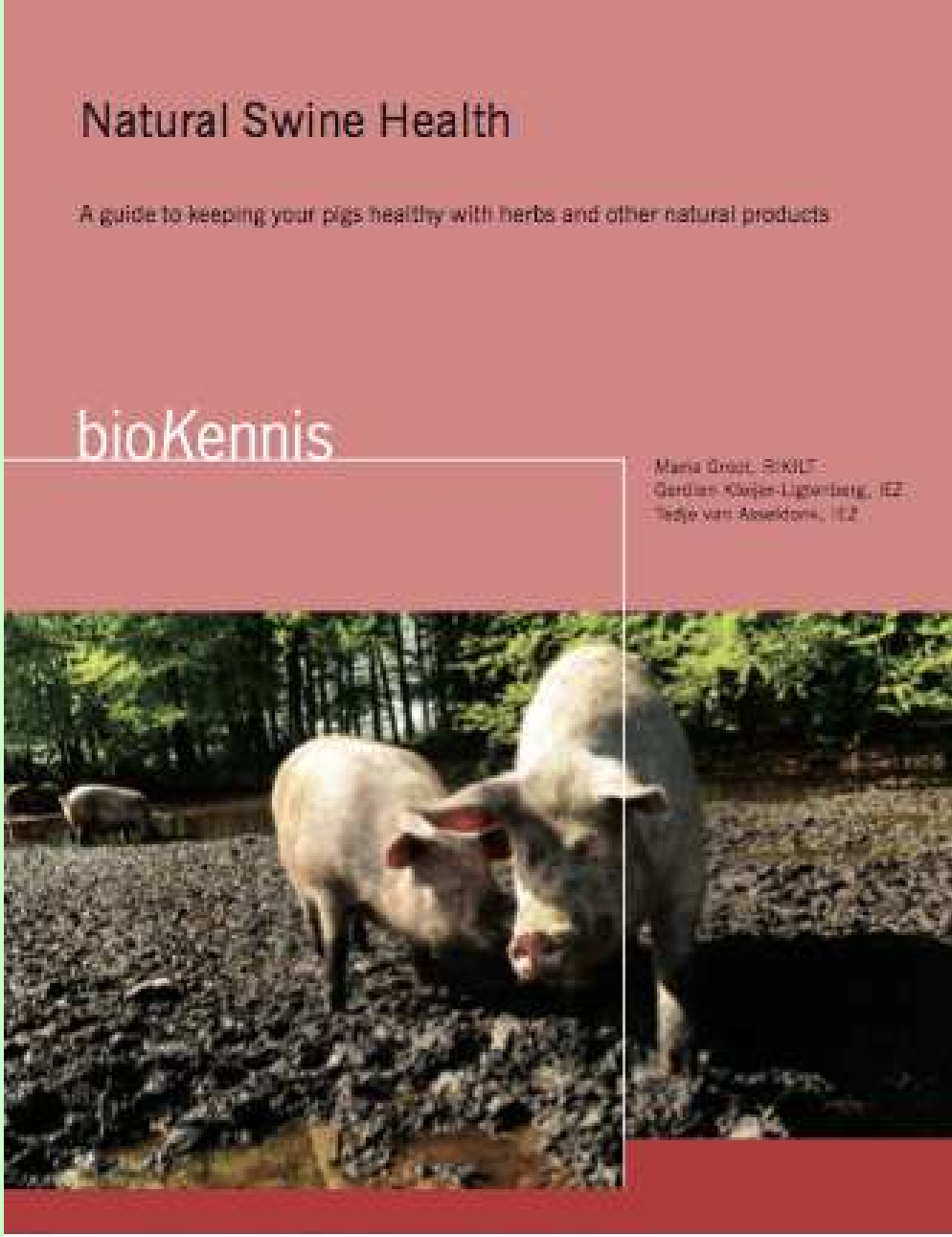
Lessons learnt in the Netherlands (7)
Re-value local and dual-purpose breeds

Lessons learnt in the Netherlands (6):
Need to re-establish link between farm and natural environment

Lessons learnt in the Netherlands (8)
Re-linkage between crops and livestock

Lessons learnt in the Netherlands (9)

Revaluing medicinal plants (to reduce antibiotic use)



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Some conclusions

- Dutch history shows that technologies based on ‘old’ practices are actually modern!
- The nine lessons learnt about side-effects of industrial livestock keeping need to be included into global livestock development policies
- Developing countries can learn from this experience and make ‘technology leap’ to effectively support their smallholder farmers
- Dutch farmers can also benefit from age-old knowledge that still exists in developing countries

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Thank you!

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Contact:

www.dutchfarmexperience.com