# Multi-actor research – strengths and weaknesses

Danish organic research with stakeholder involvement

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International Centre for Research in Organic Food Systems

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I Ekologisk Jordbrug og Fødevaresysteme

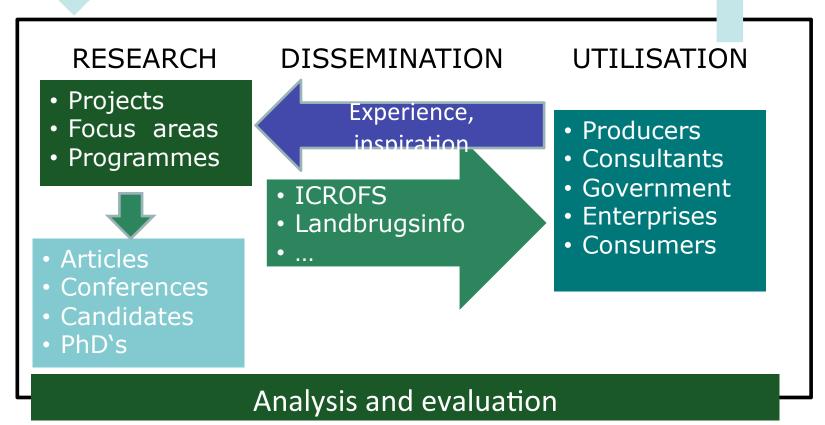
### 1996 – 2010: 15 years' of organic research

- 3 Danish organic research programmes: FØJO I, II & III
- 1 International Core Organic programme
- Funding: about 500 mio DKK.



#### Action plan I & II

IDEAS AND PRIORITIZATION – User /Programme committé, The Organic Food Council, consultants





### Number of research projects 1996 - 2010

Subject area	Forskningsprogrammer, antal projekter og aktionsplans anbefalinger					
	FØJO I	FØJO I Act.P. I FØJO II Act.P. II		FØJO III/	Total	
		Recom.		Recom.	<b>CORE Organic</b>	
Cattle/dairy	1		7	2	4	12
Pigs	5	1	4	1**	2	11
Poultry/Egg	1	1	1	*	0	2
Fish					1	1
Plant production	7	1	13	7*	5	25
<b>Cropping systems</b>	14	*)	10	3	3	27
Bio energy					1	1
Consumption			1	2	2	3
Society and environment	2	2	7	9	4	13
Total 8	30	5	43	23	22	95



#### Triangluar analysis method

- Interviews with representatives of different types of end users of R&D results on sector challenges and solutions developed in R&D projects.
- Assessment of the R&D project results in different thematic areas (dairy, pigs, crops etc.) in relation to end users and the challenges at the time
- Documentation of R&D dissemination of results in realtion to themes and challenges



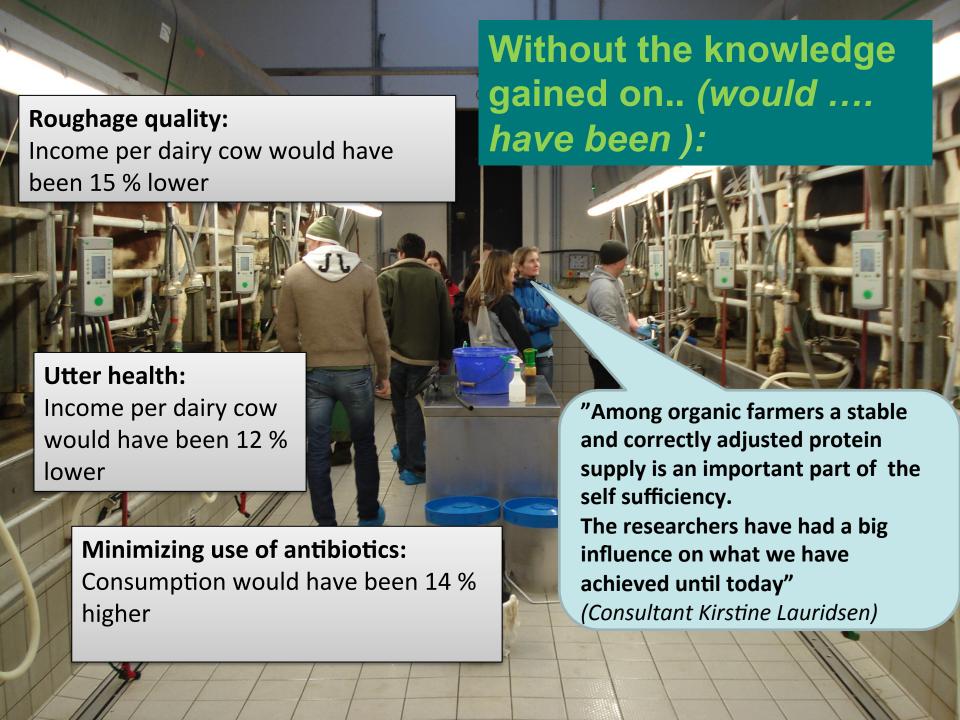
## Challenges, research and dissemination: Results in plant production

USERS	RESEA	DISSEMINATION			
Organic challenges	FØJO I	FØJO II	FØJO III/Core Organic	Total	Landbrugsinfo
Rotation ©	3	3	2	8	6
Nutrients ©	6	4	2	12	20
Root weeds ©		1	1	2	10
Marketing		3	3	6	1
Sowing seeds (©)	1	5	1	7	10
TOTAL: 5	10	16	9	<i>35</i>	47 (53)



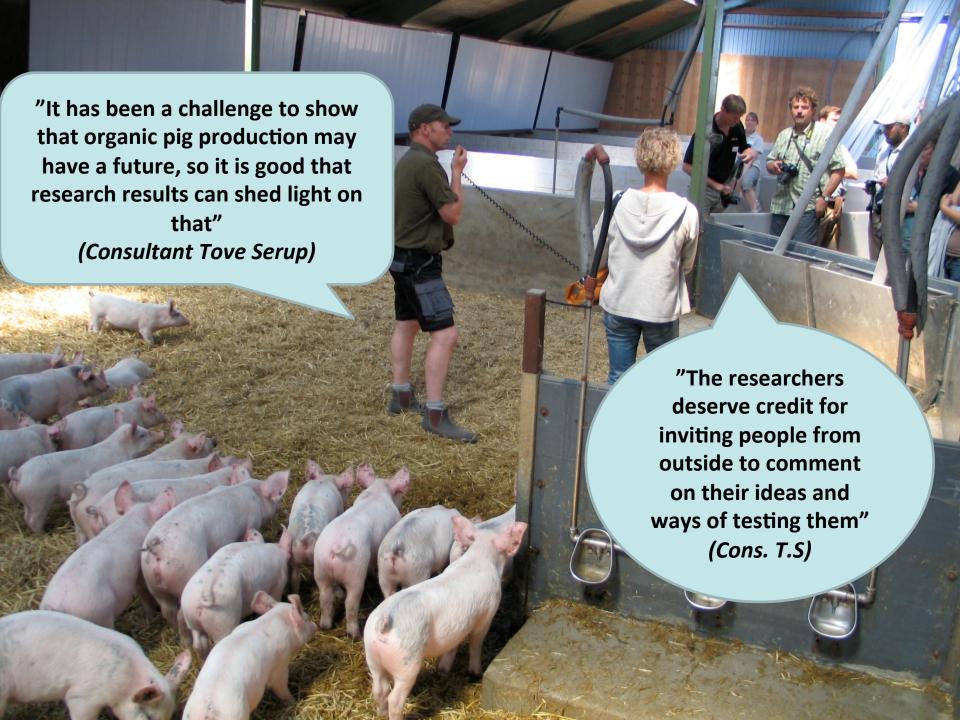
## Challenges, research and dissemination: Results in Cattle/Dairy:

USERS	RESEARCH PROGRAMMES and projects				DISSEMINATIO N
Organic challenges	FØJO I	FØJO II	FØJO III/Core O	Total	Landbrugsinfo
Death of calves ©		1		1	1
Roughage ©	1	1	2	4	2
Utter health ©		1	1 + *)	2+*	3
Protein supply ©	*		1 + *)	1+**	4
Consumption/ marketing		1		1	1
Grazing ©		*	*)	**	3
Quality milk/Meat ©		2	1	3	1
TOTAL 7	1	6	5	12	15



## Challenges, research and dissemination: Results in Pig production

USERS	RESEARCH PROGRAMMES and Projects				DISSEMINATIO N
Organic challenges	FØJO I	FØJO II	FØJO III/ Core Org.	I Alt	Landbrugsinfo
Welfare ©	2	2	1	5	1
Mortality ☺	*)	*)	*)	***	1
Environment 😊	1	1		2	1
Balanced feed ©	1	1		2	5
Product different. meat ©		1	1	2	
Security of feed supply	1	*)		1+*	1
Marketing	1			1	1
Labour					
I Alt 8	6	5	2	<b>13</b>	10 (15)



## The impact of research on the processing industry

#### Research has contributed to

- secure a stable supply of products of high quality from the primary production
- a general development of the market potential for organic products

creating focus on environmental aspects and animal welfare aspects





### "Research in and the resulting development of the primary production has contributed to the favourable competitive situation that we have now

- without doubt, it has contributed to trade and growth"

(Head of Office Randi Kok, Friland meat marketing company)





### Government and nongovernmental institutions

Carlotte State of the State of

- Indirect influence on development of organic regulation
- Continuous contribution with new knowledge
- High credibility of organic farming in areas such as animal welfare and environment
- Points at new possibilities for "green" conversion and increased growth in farming

## Spin-off to green conversion – Phasing out of antibiotics in dairy herds

 Research focus: Phasing out of antibiotics by means of improved health management

#### • Activities:

- Stable schools
- Research
- Documentation

#### Results:

- Avoid treatmet with little effect plus 'phasing out of disease'.
- Reduced consumption of antibiotics to 10 % of the level in conventional dairy herds
- Methods that can be used also in conventional dairy herds





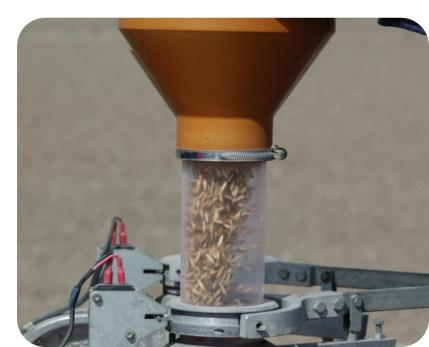
# Spin-off to green conversion – Healthy sowing seed without chemical seed treatments

• Research focus: (in the 1990'ies) Challenge that 30 % of organic wheat fields could not be used for flour and feed production because of too many Tilletia caries spores

 Test: Brush cleaning and introduction of treshhold for Tilletia spores

#### • Results:

- Problem solved healthy sowing seeds
- potential for phasing out of chemical
- seed treatment in conventional agriculture



ICROFS Dissemination

Dissemination product/activity	Number since 1996
Elektronic newsletters in Danish and English	75
Articles in FØJO/ICROFS newsletters (Danish and English)	450
Books and reports	49
Columns in Økologi & Erhverv (former Økologisk Jordbrug)	170
Faglige artikler i Landbrugsavisen	40
Short notes in Landbrugsavisen	200
Project folders	111
Fact sheets (English)	4
Knowledge syntheses	13
Organic congresses	6



**ICROFS** 

### Free access database on organic research http://www.orgprints.org



### Organic eprints

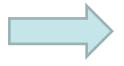
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Browse	Browse all eprints in the archive by: - subject area - country, organization and project - other browse views	See the latest additions.
Search	Keywords:  Authors:  More search options on the simple and advanced search page	Search the archive
Register	As a registered user you can deposit your papers in the archiv	and subscribe to email alerts on new papers. Go register.
ntact us	ICROFS	iBL Bundesprogramm Ökologischer Landbau

supporters

## Organic research and development in 15 years (1996 – 2010) - effects on business and society

#### • High agreement between:

- Challenges of the organic sector
- Focus areas of the research
- Dissemination of the results





Contribution of research to the development of the sector (directly and indirectly)



### Conclusion on organisation of R&D via FØJO/ICROFS:

- Close cooperation between researchers and the users by means of ICROFS Programme Committee with user representatives from the organic sector and via the Organic Food Council (Ministry for Food, agriculture, fishery and Environment)
- Organic Action Plans and Knowledge Syntheses
- Close cooperation between R&D, extension services/ consultants and practise.

#### **Result:**

 Combination of user oriented research and scientific level of high international standard



# ICROFS Knowledge syntheses: Expert knowledge and non-knowledge increases the overview, credibility and focus



Development, growth and integrity of the Danish organic sector, 2008.

NEW KNOWLEDGE SYNTHESIS 2015:

Contribution of organic farming to the common goods





#### Strengths of multi-actor research

PROBLEM: Success of researchers and end users is not measured in the same way. Therefore involvement of end-users in development of research programmes and in R&D projects is necessary to create impact on the sector. This secures:

- Research aimed at the main challenges of the sector
- Larger impact of the research in real life.
- Avoidance of pit falls when putting research results into practice.
- Engagement of the end-users of the results
- Innovation and development of the whole sector.

#### Weaknesses of multi-actor research

- Risk of unbalanced research efforts within different sectors and research areas. – e.g. farmer aspects ctr. consumer aspects.
- Long time research needs may not be addressed therefore Knowledge syntheses are important



### Thank you for listening!

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