

Forty years of research – what happened until now, and where are we going?

Ilse A. Rasmussen,
ICROFS, Denmark

**Fyrtio år av forskning
– vad har hänt och
vart är vi på väg?**



Invitation til afskedsreception for Ilse Ankjær Rasmussen

40 years!

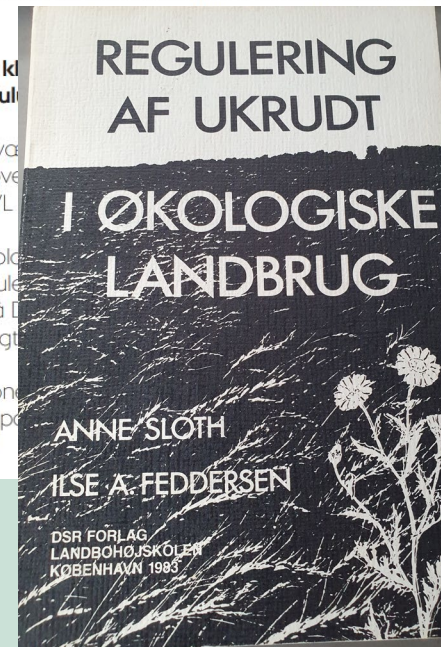
Efter 40 år i økologiens tjeneste har Ilse valgt at gå på en meget velfortjent pension. ICROFS vil derfor gerne invitere Iles danske netværk til hendes afskedsreception.

Mandag d. 22. august 2022 kl. 18.00
ICROFS, Blichers Allé 20, Foulum

Ilse Ankjær Rasmussen har været i økologi i 40 år. Hun allerede i 1982 skrev hove "Økologiske landbrug" ved KVL.

Siden har hun undervist i økologi på Højskolen, været økologikonsulent i Statens Planteavlsforsøg, så til smut hos Miljøstyrelsen tilbragt.

Vi håber at se dig til receptionen. Ilse, som har lovet at sige et par ord om sine planer for sit otium.

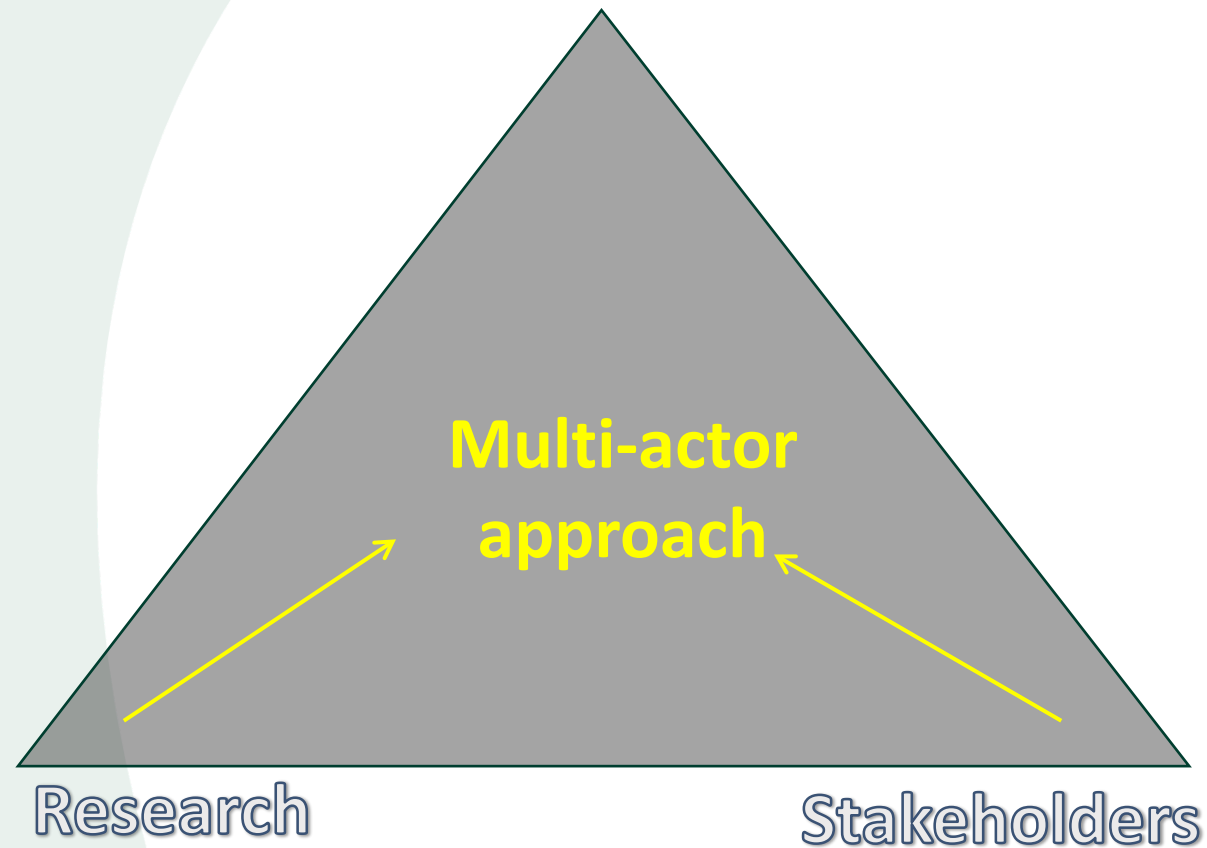


Fyrtio år av forskning – vetenskapen driver ekolantbruket
framåt. Ilse A. Rasmussen, ICROFS, Denmark

Agenda

- How did research in organic agriculture start?
- How has research in organic agriculture been funded?
- How have the themes of research been decided?
- How has research been part of development of organic farming?
 - How has conventional farming benefited?
- What will the future look like?

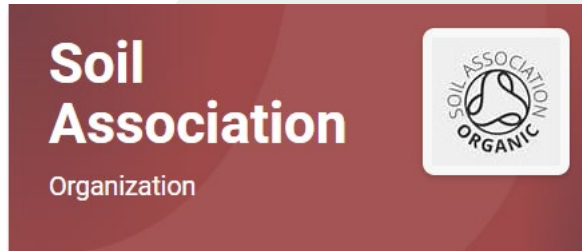
The significant focus



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The beginning of research in organic agriculture



1946
UK



1981
DK



1990
DK



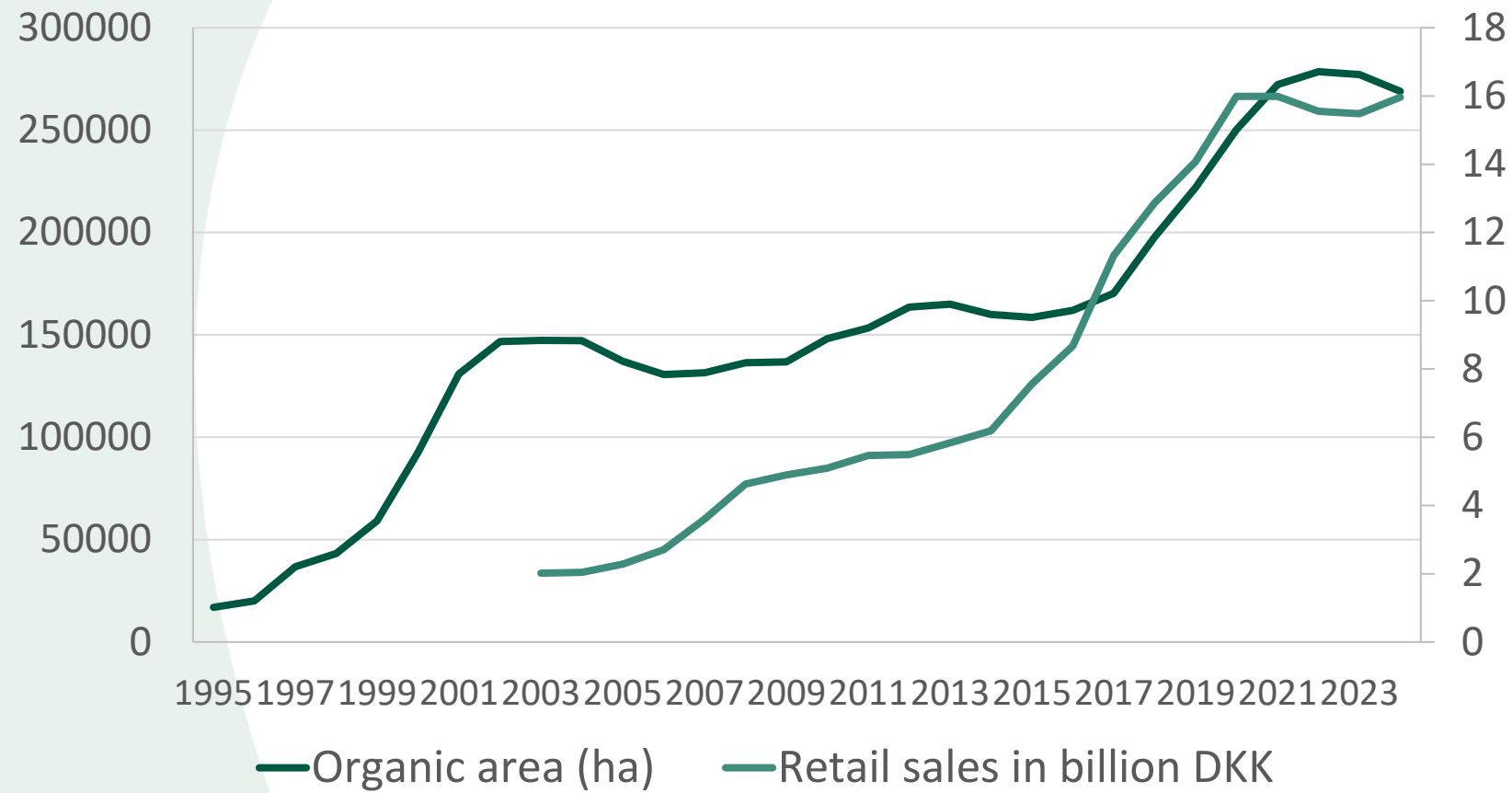
The DOK trial has been comparing conventional and organic farming for over four decades. (Photo: FiBL, Thomas Alföldi)

1978
CH



2010
EU

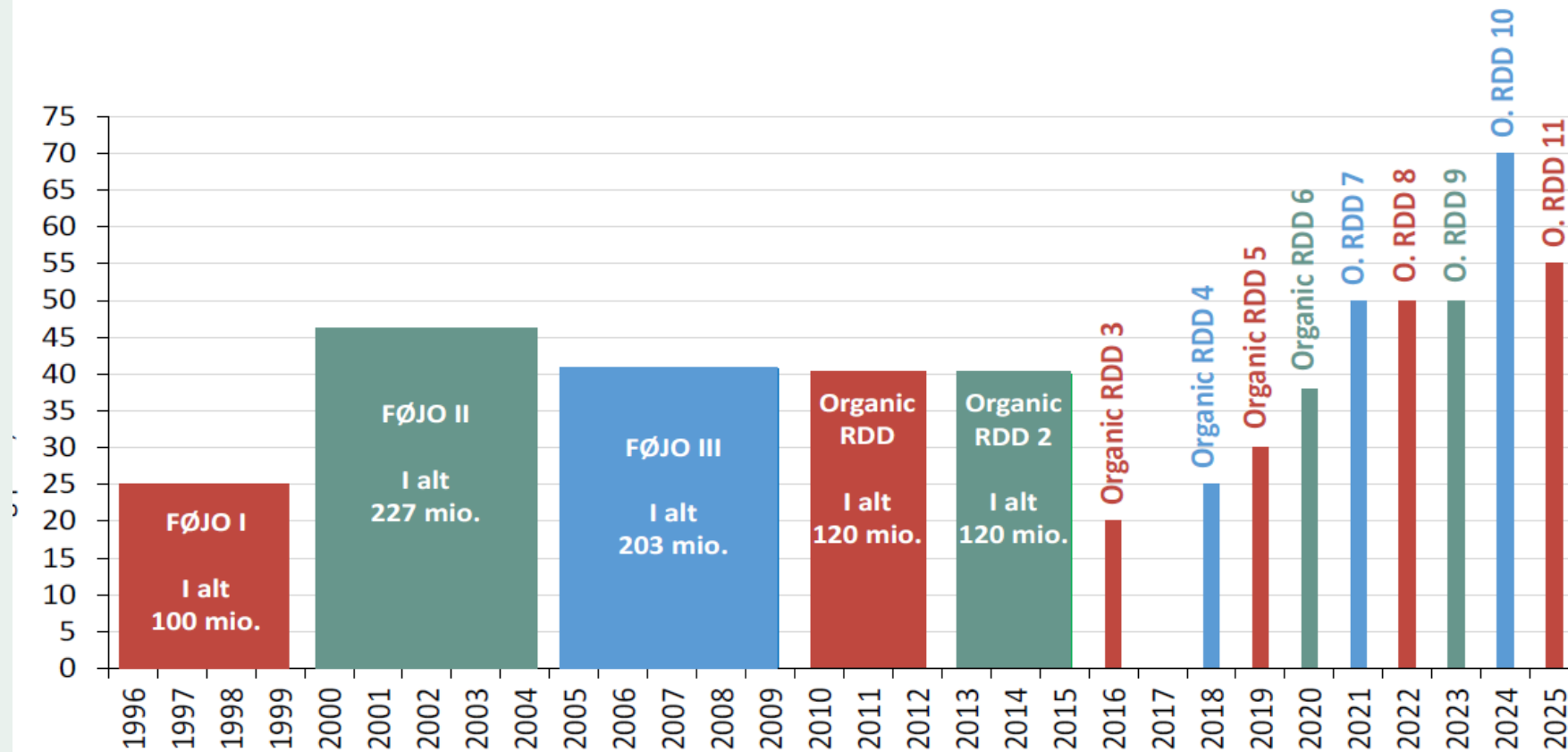
Development in area and sales of organic in Denmark



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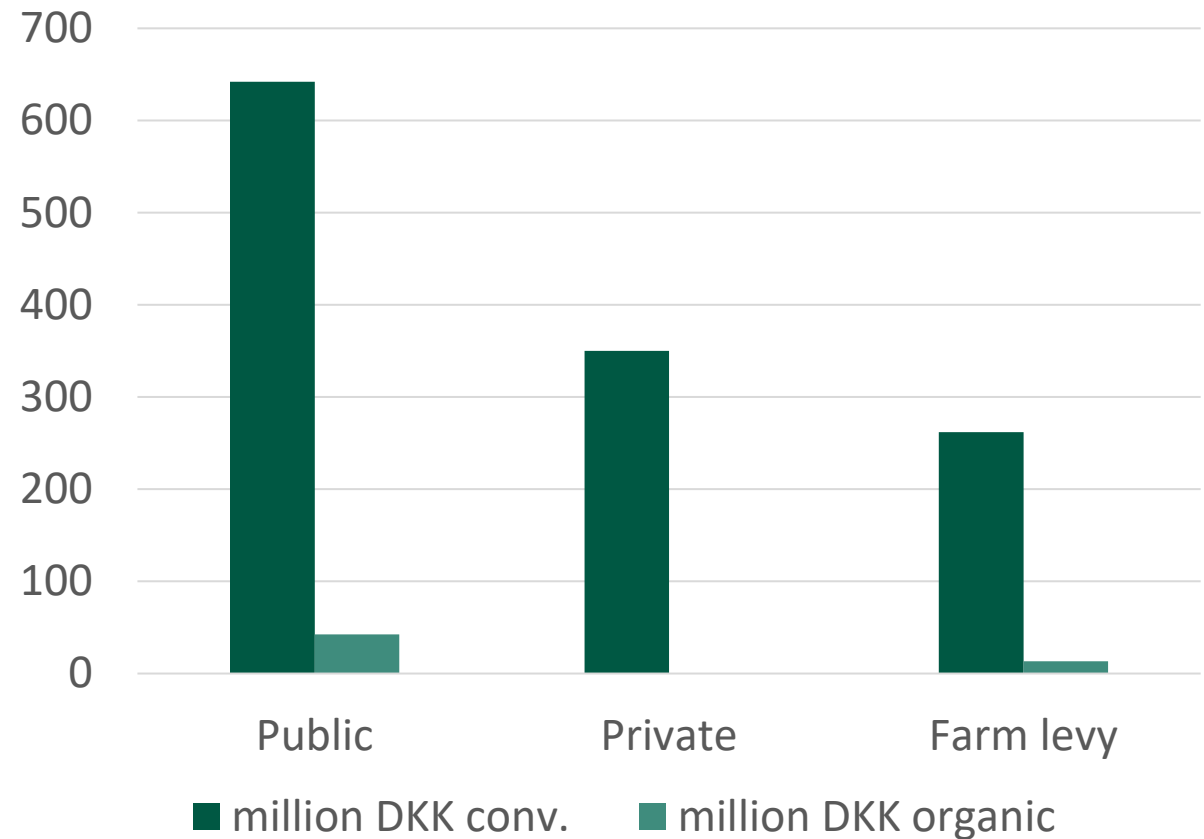
Annual funding in million DKK for the Danish organic research programmes 1996-2025



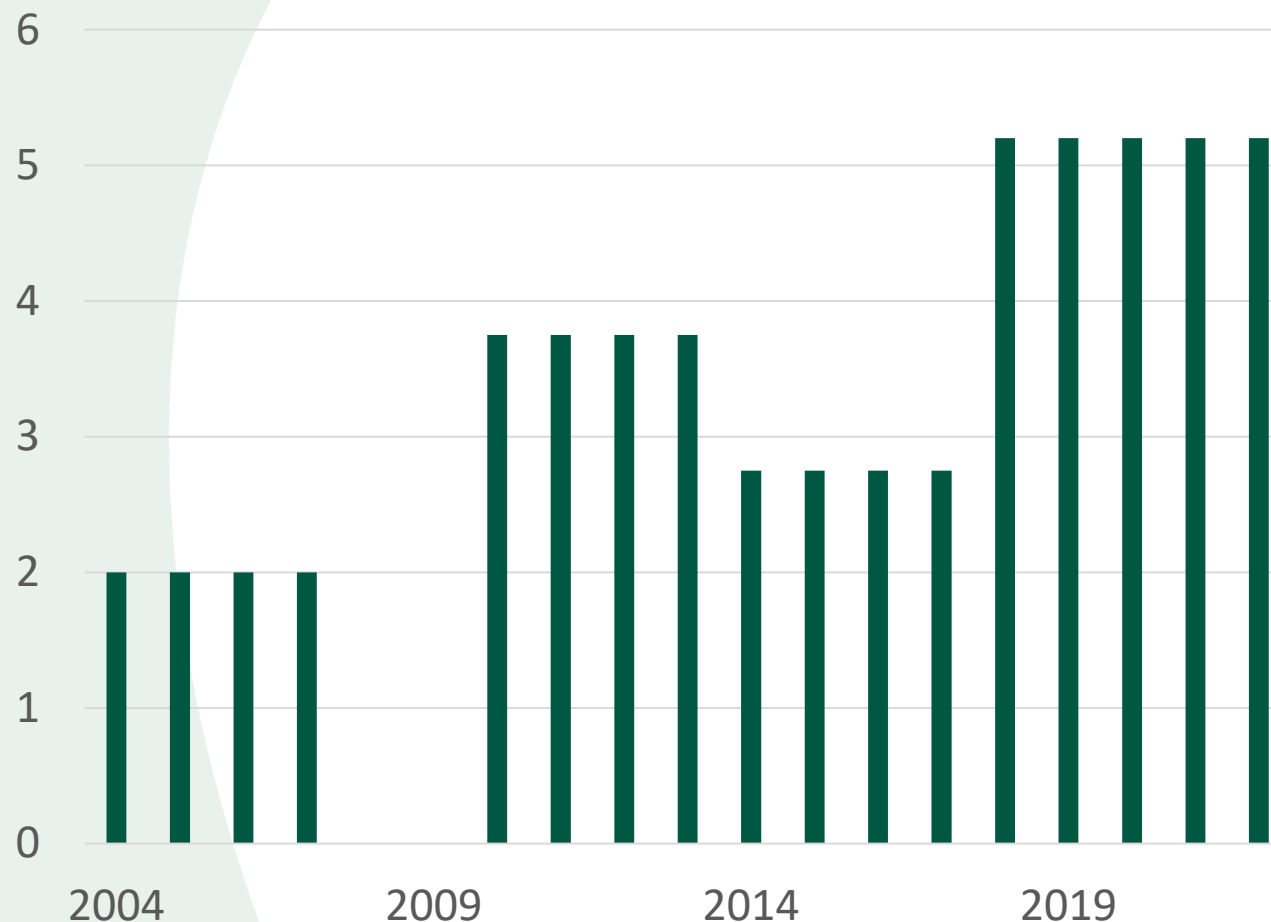
Note: Årene 1996 til 2015 er inklusive bevillinger til drift af sekretariat

Funding for research and innovation in Denmark 2020

- Funding in total: 4% organic
- Farmland: 12% organic



Annual funding in million EUR for the EU CORE organic research programmes 2004-2022



CORE Organic projects with Swedish partners

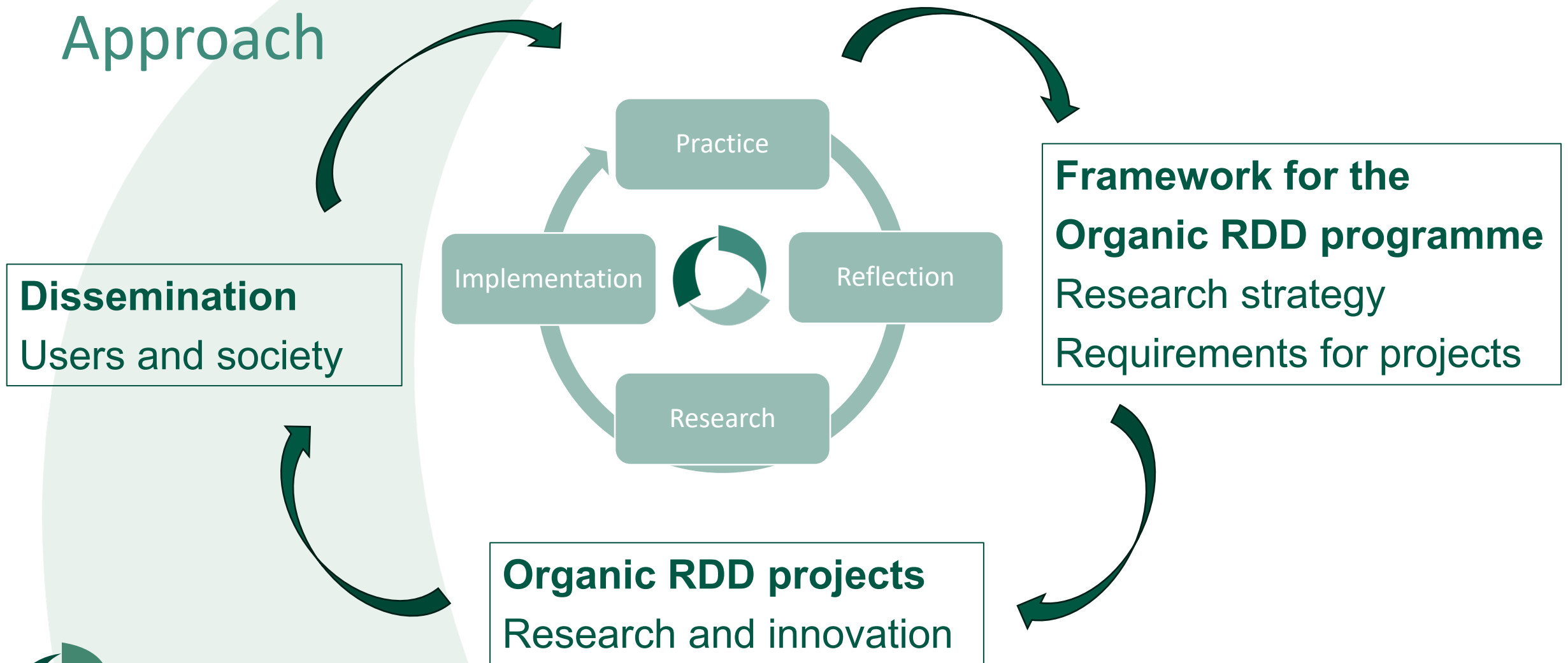


Find them at: <https://projects.au.dk/coreorganiccofund/core-organic-cofund-projects>

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Research themes are a part of the MultiActor Approach



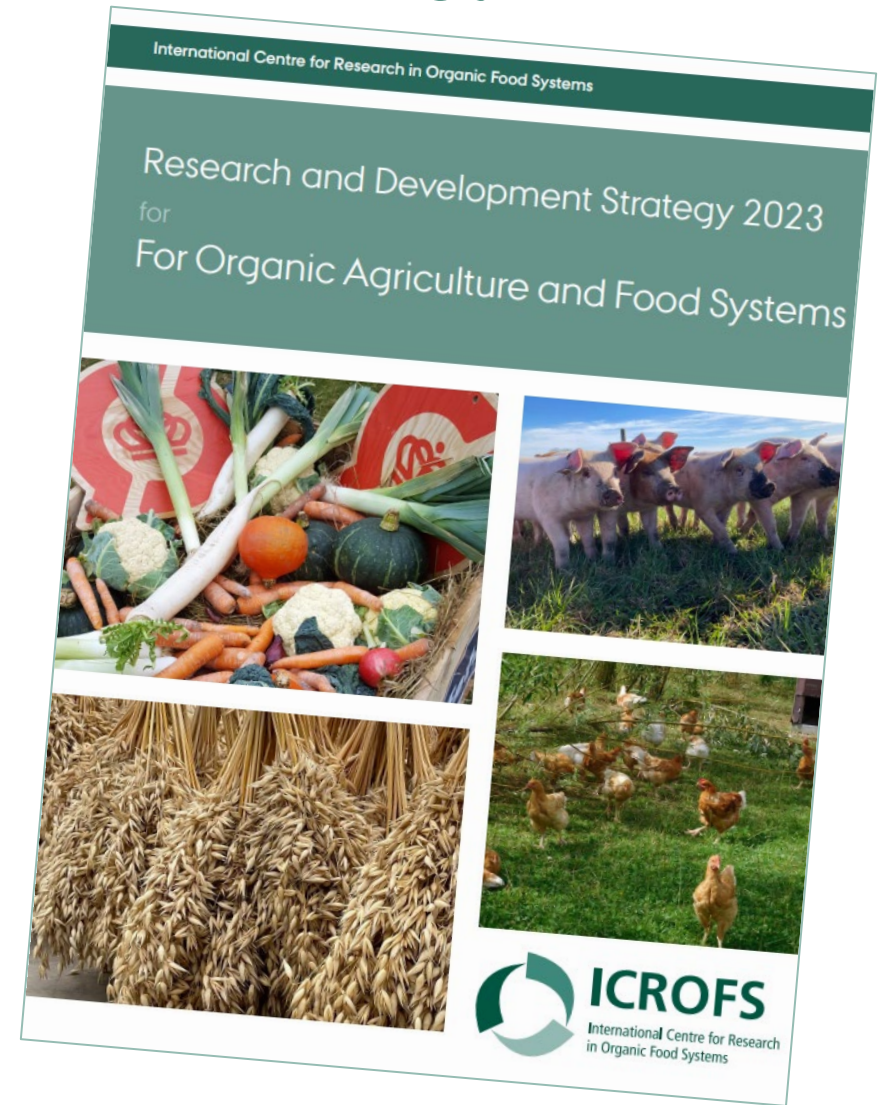
ICROFS' Research and Development Strategy

Focus areas

- Circular Bioeconomy
- Climate & Environment
- Biodiversity
- Health & Welfare
- The Organic consumer of the future
- Organic farming - for a living



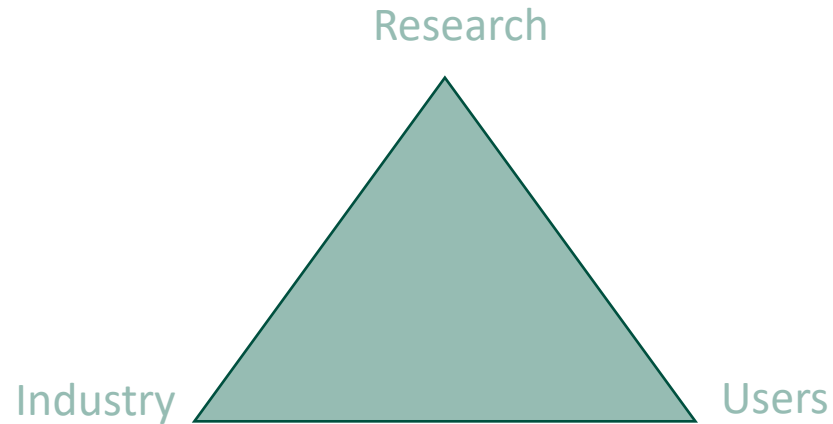
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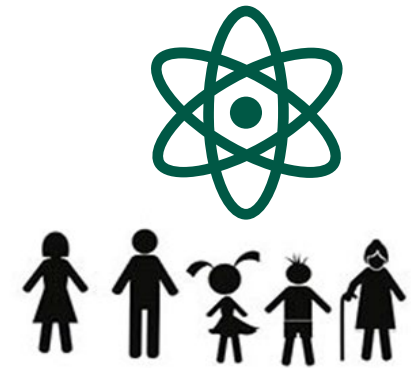
Unique about Organic RDD projects



Network of projects



Interdisciplinary and cross sector projects



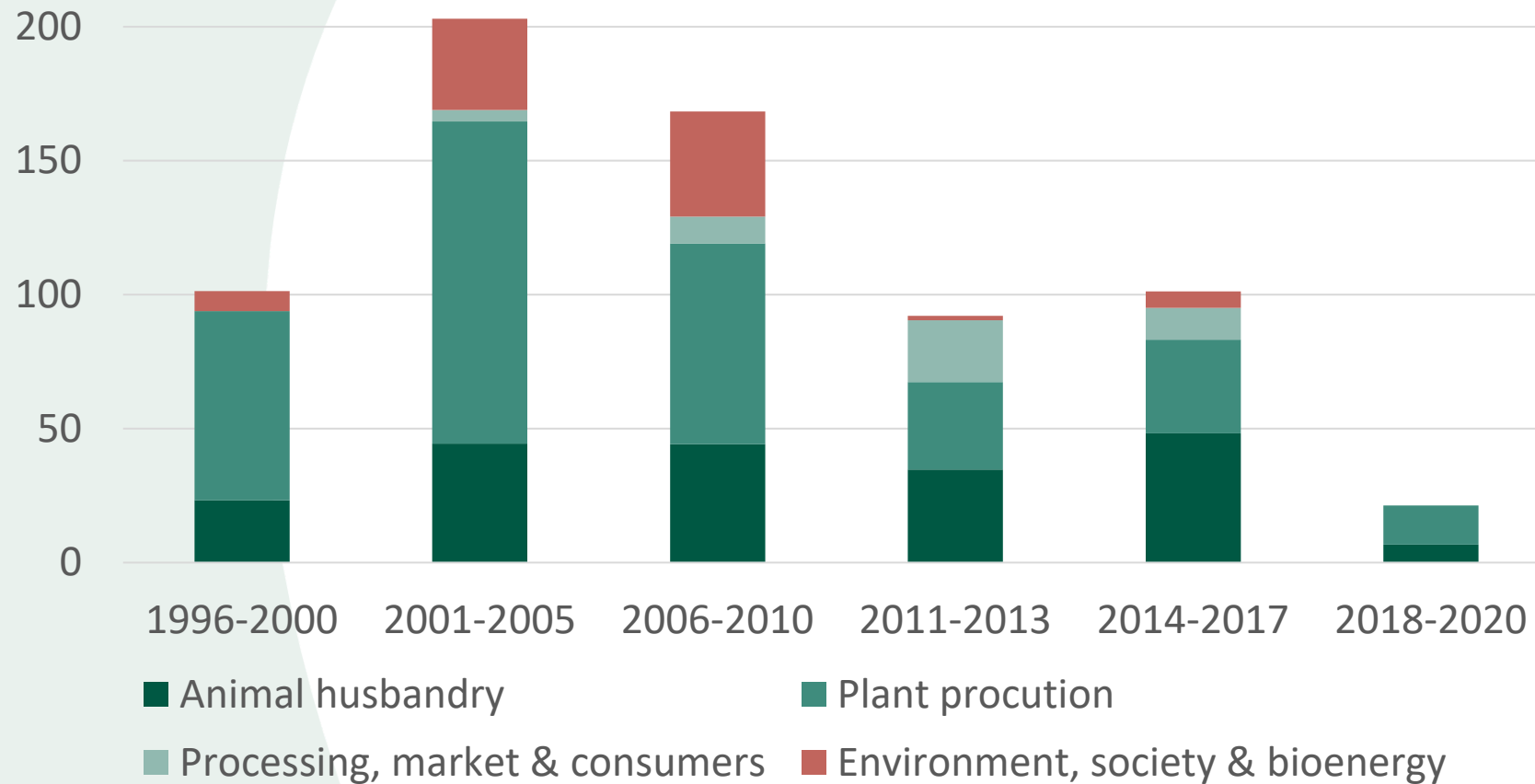
Holistic projects



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ICROFS' secretariat follows the projects closely

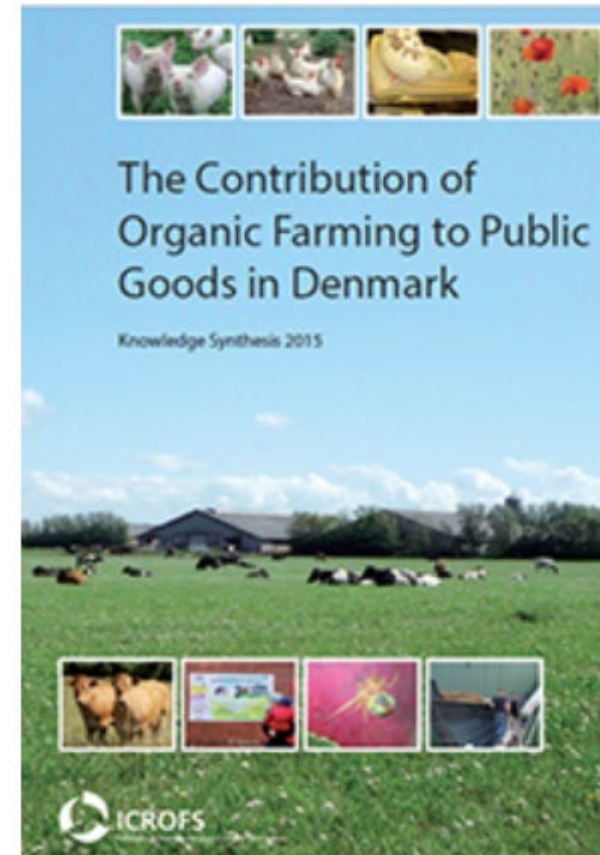
Danish funding for different research areas within organic agriculture 1996-2020, million DKK



Knowledge Syntheses

Since 1998, ICROFS/FØJO has published 18 knowledge syntheses about key areas within organic farming and food systems

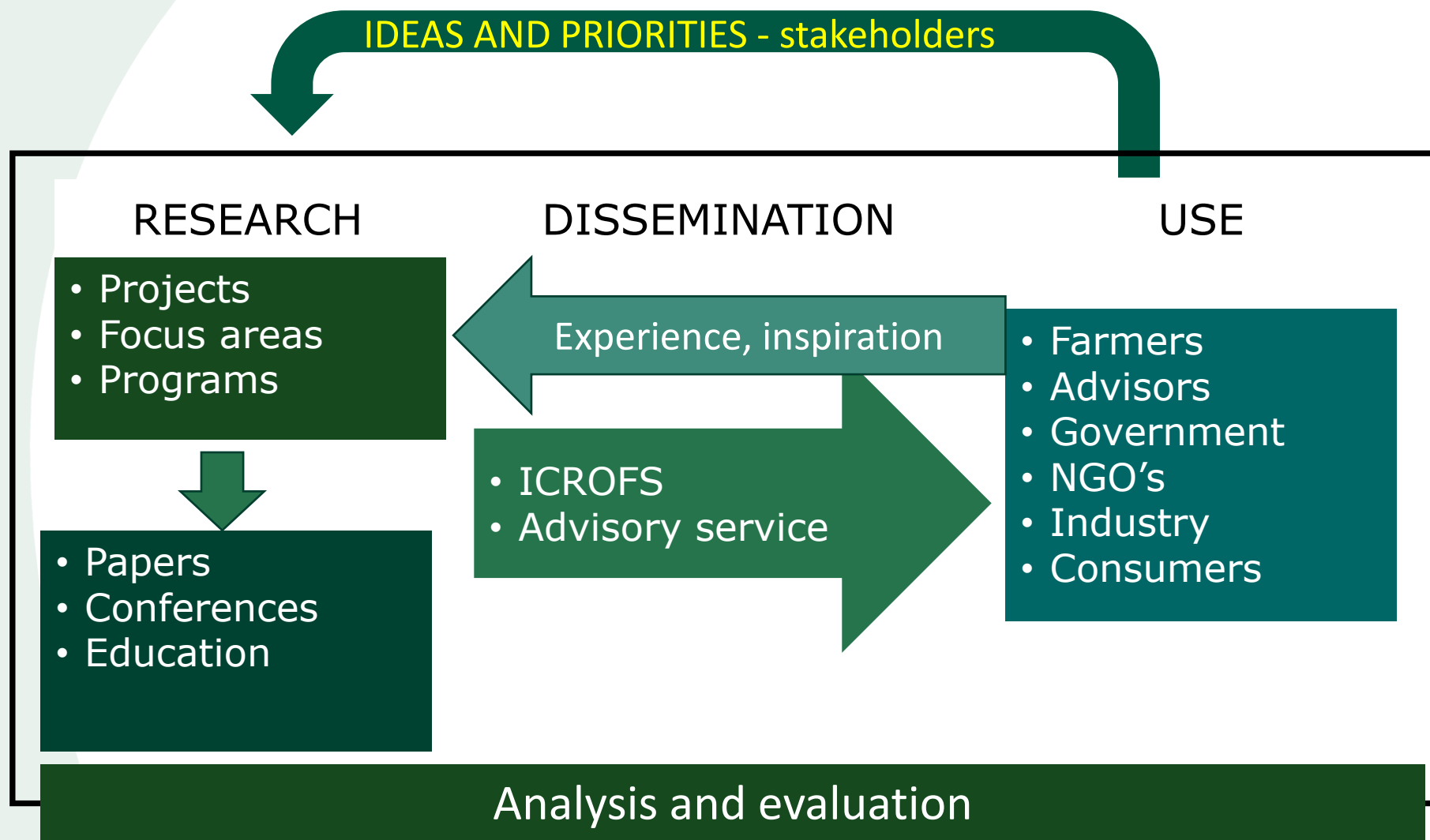
- Most recent:
 - The market for organic products in 2023
 - Nutrient supply and recirculation in organic agriculture (2023)
 - The contribution of organic farming to public goods in Denmark (2015)
 - You can find them here:
 - <https://icrofs.dk/en/publications/knowledge-syntheses>



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Research, innovation, advice and practice are interconnected



"Advisers are certain about crop rotation and they know that from research"

"Research projects on organic agriculture have been outstanding with dissemination"



"We have learned a lot about perennial weeds and the methods we recommend give success with their weed control"

Without knowledge about:

Fodder quality:
The earning would have been 15% lower

Use of antibiotics:
Would have been 14% higher

Utter health:
The earning would have been 12% lower

"A stable and correctly composed protein supply is an important part of self-sufficiency. The research has had a great significance"

Practical guide for organic plant producers

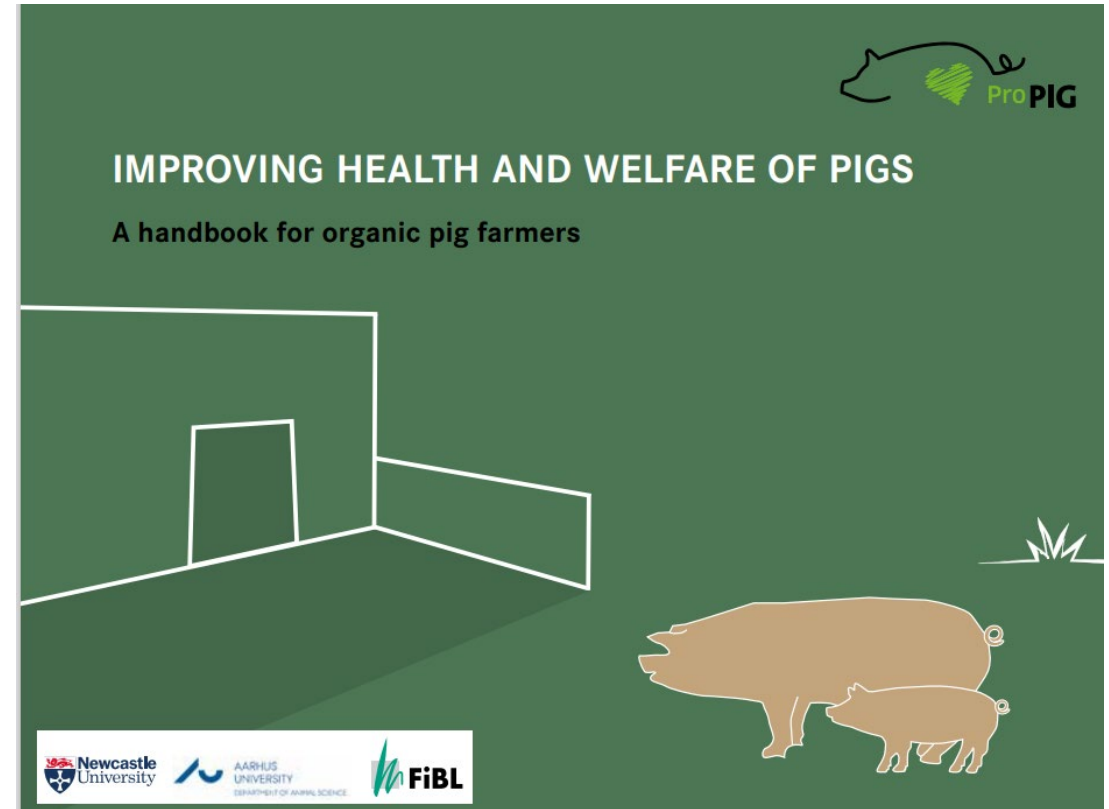


- Very practical
Basic knowledge:
- Crop rotations
 - Catch crops
 - Nutrients
 - Weeds
 - Soil tillage
 - Etc.

<https://projekter.au.dk/guideoekoplanteavl>

Handbook for pig farmers

- In the CORE Organic 2 project ProPIG, a handbook to help farmers improving health and welfare for pigs was produced
- It is printed on laminated paper with plastic binding, so it can be used in the stable
- Available in 8 languages!
- <https://organic-farmknowledge.org/tool/35307>



Examples of projects used in practise

- Increased crop production from plant based fertiliser made from grass-clover
- Protein feed from locally grown legumes



Examples of projects used in practise

- Cow-calf together for longer time
 - The goal is to increase health and welfare for calf and cow and still have good economy



Results easy to find and use

**Organic
eprints**



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Organic Eprints

- Research results
- Input from
 - Danish organic research projects
 - EU: CORE Organic projects
 - CH: FiBL
 - Norway: NORSØK
 - Many more countries
- Almost 40,000 publications!
- Free access for most
- <https://orgprints.org/>

Items affiliated to "Sweden"

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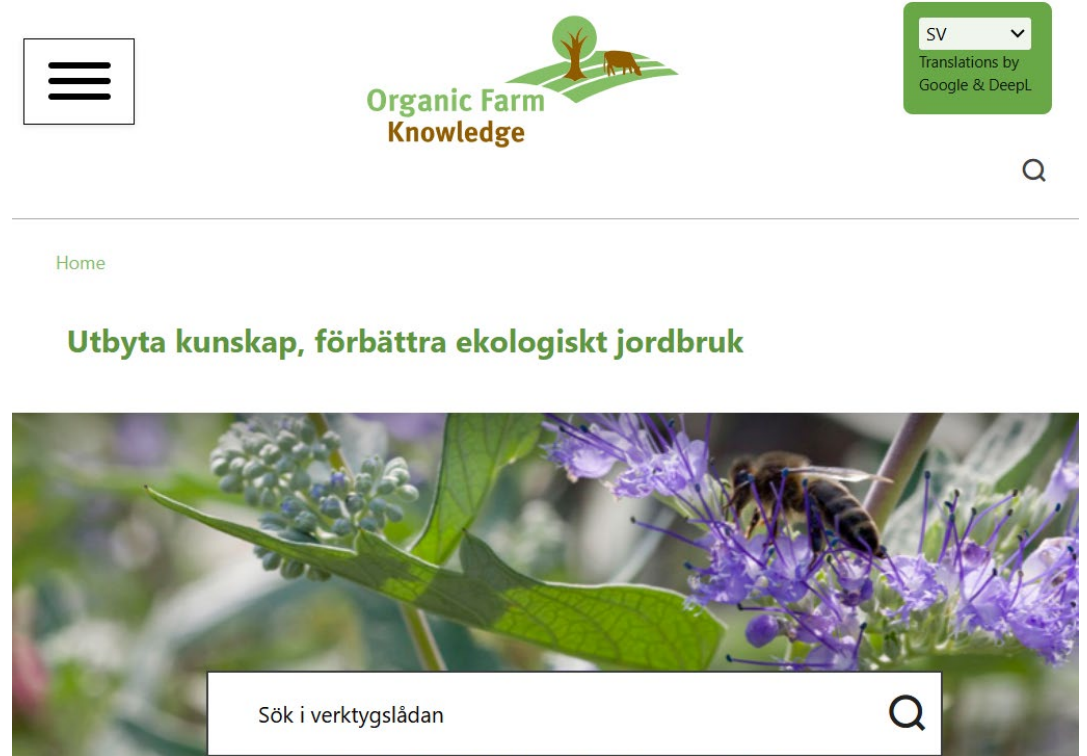
- **Country / Organization / Project** (543)
 - Sweden (543)
 - **Chalmers University of Technology** (7)
 - **Ekhaga Foundation** (3)
 - **Formas** (14)
 - **KTH Royal Institute of Technology** (23)
 - **National Veterinary Institute SVA** (7)
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 - **RISE Research Institutes of Sweden** (14)
 - **Swedish Board of Agriculture SJV** (7)
 - **Swedish Farmers' Foundation for Agricultural Research SLF** (3)
 - **Swedish Institute of Agricultural and Environmental Engineering JTI** (10)
 - **Swedish University of Agricultural Sciences (SLU)** (387)
 - **The Rural Economy and Agricultural Societies** (10)
 - **University of Göteborg** (3)
 - **University of Halmstad** (2)

Organic Farmknowledge

- Practical knowledge for farmers and advisors
- Available in 19 languages
- > 1000 publications
- 61 publications in Swedish!
- 99 publications in Danish
- 750 in English
- <https://organic-farmknowledge.org/>



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Benefits for conventional agriculture

- Organic agriculture has set the agenda for conventional farming:
 - Catch crops
 - Crop rotations
 - Mechanical weed control
 - Animal welfare



Photo: Henning C. Thomsen

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Nordic-Baltic organic scientific conference 2026



Nordic-Baltic scientific conference:

**'Organics as a response to the urgent
need for resilient food systems'**

Uppsala, Sweden, 15–17 June 2026

Organic Principles

Organic rules =
legal requirements

Organic production and
processing

+ ÷

Common goods

Nature and
biodiversity

Environment

Human
health and
welfare

Animal health
and welfare

Climate and
energy

Trade and
industry



Continuous funding in Denmark

- Ensuring funding for R&I
 - Denmark: instead of annual funding, from 2026 there will be funding guaranteed the next four years



**ØKOLOGIEN HAR BEHOV FOR EN STÆRK
OG KOORDINERET FORSKNINGSINDSATS**



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HEU Partnership Agroecology funding R&I until 2033



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European Partnership on accelerating farming systems transition through agroecology Living Labs and Research Infrastructures.

Annual funding opportunities for R&I in conventional and organic farming systems:

<https://www.agroecologypartnership.eu/>

Forty years of research

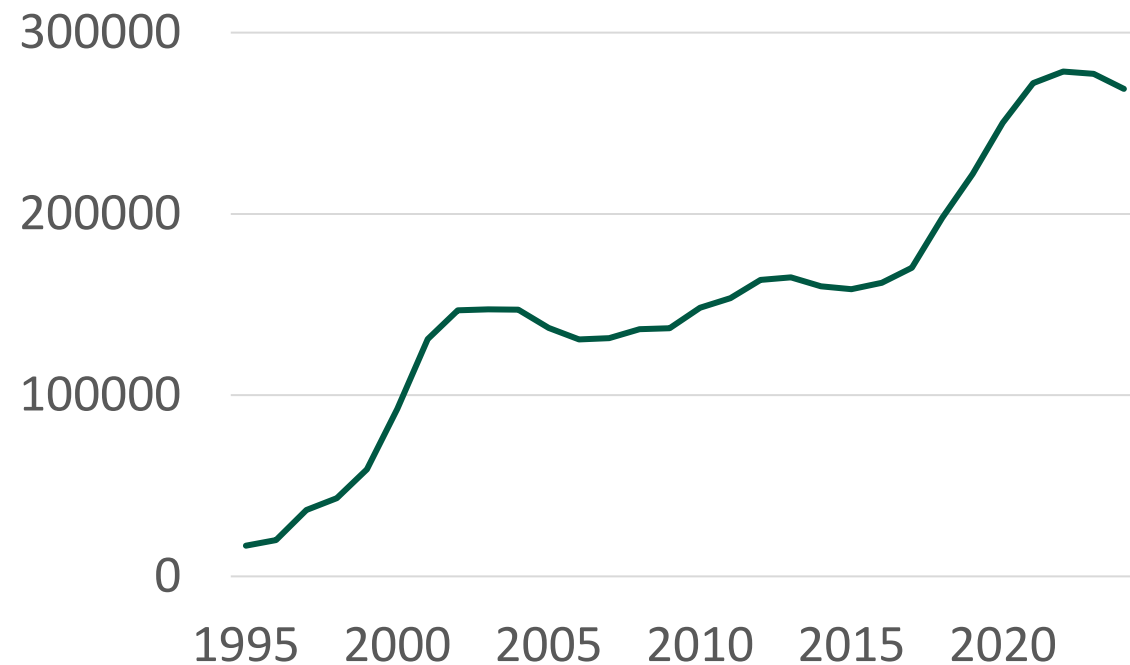
Multi-actor approach

Funding

Collaboration

Dissemination

Organic area (ha) in Denmark



Thank you for your attention!



**Organic
eprints**



<https://Orgprints.org/56412>



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<https://tporganics.eu/>

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https://icrofs.dk/fileadmin/icrofs/Nyheder_PDF/Notat/Notat_2025_version_NY_faerdig.pdf

<https://orgprints.org/view/projects/se.html>

<https://organic-farmknowledge.org/sv/>