

NDA Denmark

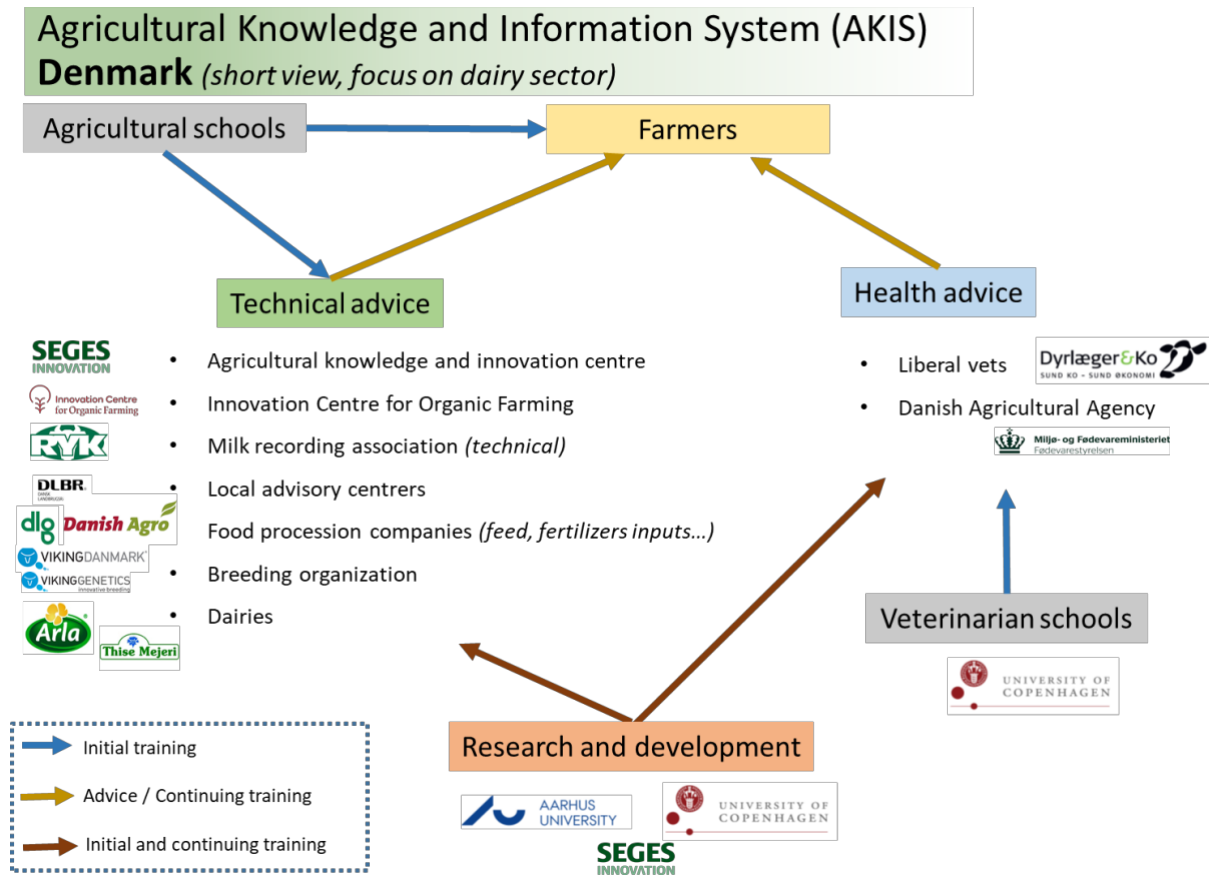


Figure 7. Dairy Agricultural Knowledge & Information System (AKIS) in Denmark

Denmark has a national dairy AKIS that consists of 12 members (Figure 8):

- 6 pilot farms
- 1 Cattle advisor at KvaegXperten, DLBR
- 1 Veterinarian, Dyrlæger og Ko
- 1 Senior manager, animal welfare at Arla
- 1 Breeding advisor at VikingDanmerk
- 1 Cattle farming consultant, Innovation Centre for Organic Farming
- 1 Senior specialist at SEGES Innovation



Figure 8. The Danish dairy AKIS of Denmark consists of 6 pilot farms and 6 non-farmer institutions each with their own expertise.

Below, each member will be described into more detail.

Pilot farms

The 6 pilot farms are spread over Denmark and are depicted in Figure 9.

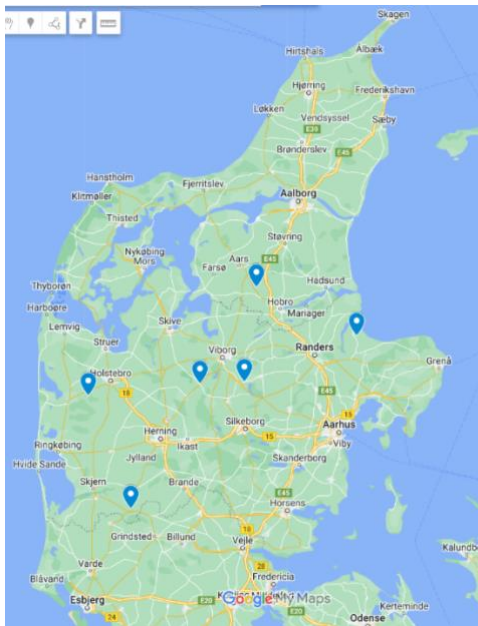


Figure 9. Location of the 6 pilot farms in Denmark.

1. Brian Fruergaard-Roed (Nørager)
 - Volume of milk production: 4.660.032 kg per year
 - Dairy cows: 416
 - Reason to include this farm: Modern Danish conventional farm using crossbreeding.
2. Sjoerd Ydema (Rødkærsbro)
 - Volume of milk production: 5.255.451 kg per year
 - Dairy cows: 417
 - Reason to include this farm: Modern Danish farm with a focus on international collaboration among dairy farmers.
3. Meie Peters & Hendrik Helmig (Tarm)
 - Volume of milk production: 1.370.174 kg per year
 - Dairy cows: 151
 - Reason to include this farm: Organic farmer. Housing of calves together with cows.
4. Hanne Line Revsbech (Ørsted)
 - Volume of milk production: 4.219.754 kg per year
 - Dairy cows: 329

- Reason to include this farm:
Modern Danish conventional farm. Young female owner.
- 5. Jacob Seiger Stensig (Holstebro)
 - Volume of milk production:
6.685.880 kg per year
 - Dairy cows:
590
 - Reason to include this farm:
Modern Danish farm. High milk yield. Focus on welfare among employees.
- 6. Lars Kristensen (Karup)
 - Volume of milk production:
11.691.930 kg per year
 - Dairy cows:
906
 - Reason to include this farm:
Modern very large Danish conventional farm.

Non-farmer stakeholders

Education:

See Researchers

Advisors:

1. Niels Martin Nielsen, KvaegXperten, DLBR
Cattle advisor within a broad area of cattle production
2. Iben Alber Christiansen, Innovation Centre for Organic Farming
Cattle advisor within a broad area of organic cattle production

Enterprise:

1. Lasse Kruse Ledet, VikingDanmark
Expert and advisor with cattle breeding

Researchers:

1. Margit Bak Jensen, Aarhus University
Professor in Animal Welfare
2. Søren Østergaard, Aarhus University
Professor in Animal Health Economy

Farmer based organisation:

1. Anja Juul Freudendal, SEGES Innovation
Experts and advisor in Cattle Housing

Dairy industry:

1. Peter Stamp Enemark, ARLA
Senior specialist in animal welfare

Liberal vets:

1. Anne Juul, Sønderjysk Kvægpraksis, Dyrlæger og Ko Specialist Cattle Veterinarian

Facilitation methods

What have we done?

- Recruiting of NDA members
- Questionnaire to all NDA members on aspects of 'resilience'
- Visit all farmers.
- Retrieving farm data
- Interview farmers on resilience problems and solutions
- Interview and description of solutions implemented on the farm. Including interview on dilemmas between climate, animal welfare and economy.
- Assessments of 6 R4D solutions. One from each farm. The effects of each solution on the economic, animal welfare and environmental domains of resilience of the system was subsequently assessed by the farmer and experts in the field (non-farmer NDA members), followed by a comparison with scientific literature.
- First NDA meeting. Held by one of the pilot farmers. Meeting agenda:
 - R4D introduction
 - Introduction of farmers & experts
 - Results of survey on interest levels of solutions
 - Assessment of solution of Lars Kristensen
 - Farm visit
 - Assessment of other 5 farms
 - Identify at least 2 possible solutions per person for future resilience.
- Research practical at Aarhus University by student Coenraad van Zyl from WUR.

What was easy?

All NDA members were positive and enthusiastic on working with resilience of dairy cattle systems. The meetings were very interactive, and we got a lot of input.

What was difficult?

The COVID-19 situation made it difficult to bring the group together. It was difficult to plan the collaboration with the NDA according to the instructions from the project organisation.