

Barriers for developing more robust organic arable farming systems in practice

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ORGANIC RDD - HIGHCROP

A more robust system seen from an agronomic/scientific point of view

A system based on an optimal crop rotation and nutrient management - in respect of soil and climate conditions - to increase long-term productivity and stability.



Main question

- What are the barriers to develop more robust organic arable farming systems - seen from the farming systems perspective?
- Address this question based on interviews with 10 Danish organic arable farmers



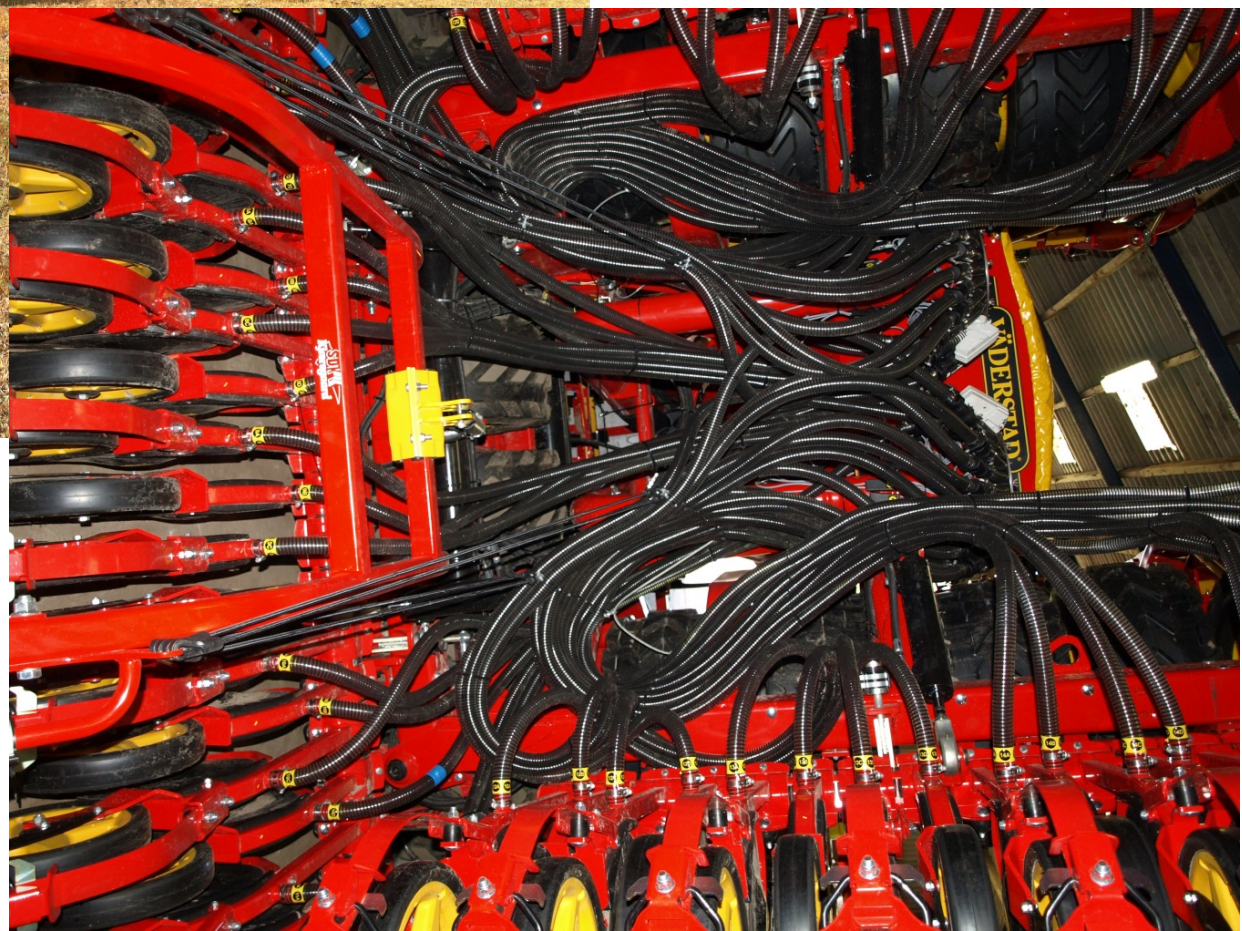
Dynamic market conditions call for a short term and flexible production strategy

- Winter wheat vs. rye
- Selling straw versus carbon in the soil



Management of time and equipment

- Often other elements on the farm play a stronger role in decision making than the concern for a robust crop rotation.
 - E.g the capacity of the combine harvester,
 - the available man power or
 - the storage capacity.





Crop production is not seen as a coherent system – decisions are mostly made at field level

- There is a strong tradition for partial optimisation in arable farming, both from the farmers perspective and from the advisory systems perspective





Barriers are related to farming styles

- The importance of these barriers varies from farm to farm, depending on the farming practice, values and flow of operations
 - Eg. winter wheat → productivity
 - Equipment → rationality



Ulv Hedeborg
MARKBOG
PLANTE & MILJØ
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Handwritten notes and diagrams on a sheet of paper, including a site plan and a table with columns and rows of text.

Area	Color	Notes
Area 1	Red	...
Area 2	Green	...
Area 3	Blue	...
Area 4	Yellow	...
Area 5	Purple	...

Lack of drivers and incitements

- No market incitements to go further than described by the rules (e.g import of conventional manure)
- No internal economical incitements due the fact that short term price fluctuations are seen as economically more important to deal with than less known long-term benefits
- Lack of expected benefits to be in the vanguard (e.g. biogas and recycling)

Conclusions

- It is not a simple question of dissemination of scientific knowledge
- Decisions to develop more robust arable crop rotations and practises has to be subordinated the strategy of the farm and flows of operations
- There is a lack of tools and skills (traditions) to support strategic development of robust organic farming systems
- There is a lack of normative and economic incitements and drivers to include these concerns in practise