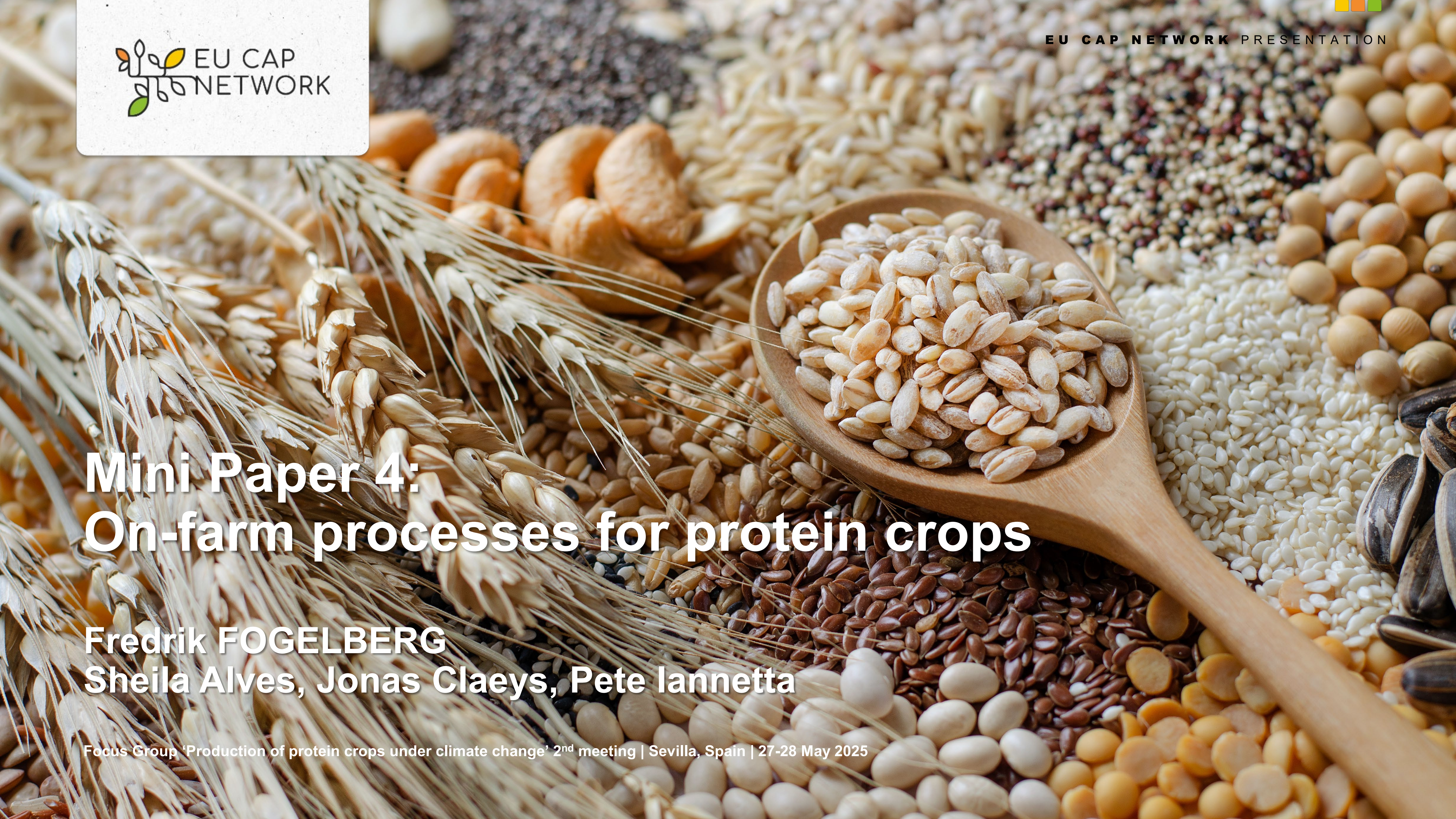
Focus Group ‘Production of protein crops under climate change’

Sevilla, Spain
27-28 May 2025



Mini Paper 4: On-farm processes for protein crops

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Focus Group 'Production of protein crops under climate change' 2nd meeting | Sevilla, Spain | 27-28 May 2025

Background

- Taking the need for increased plant protein production in consideration and the need for a transition of EU-grown animal-based feeds to plant-based foods, and that this transition should be done with an engagement of the agricultural sector in Europe, there is a need and challenge, to use the full potential of farms.

- The vision seeks to establish greater levels of protein self-sufficiency on-farm and seeks to the knowledge and capacities for farm-based feed production and processing

Origin of our paper

- At the Berlin meeting, we discussed important questions such as:

- *Technical solutions for small-scale cleansing/packing/sorting of crops from farm to food industry*
- *Focus on quality production by farmers and fair price for their jobs*
- *The right crop on the right place. Cultivation of crops on places where they are (economically) feasible*
- *Facilitate on-farm seed (legume grain/pulses) processing and biorefining capabilities*
- *Support the development of tools to process protein crops more effectively for feed production in fodder production*

The ”mini-paper work”

- The group returned home and interviewed farmers to gain knowledge on the processes present at different types of farms.

- Four farms/”farmers” representing Scotland, Ireland, Belgium and Sweden were chosen.

- Our ambition was to look into the current on-farm processes and what the farmers need to do to establish a higher level of protein self sufficency.

Some examples

- Going forward, integrating new on-farm processing capacities, such as a grain dehuller, would be a game-changer for the farm. This would enhance the farm’s ability to process homegrown beans and peas and could also be applied to oats, wheat, and any future crops (Scotland)

- The farm has an ongoing discussion about investments in dehulling machines and possibly an optical sorter, but these types of equipment are expensive and should perhaps be owned jointly by more than one farm (Sweden).

Some examples

- On-farm processing relies on availability of machinery fit to purpose that is often expensive but also on new solutions to known issues such as on-farm grain drying, de-hulling and storage (Ireland).

- To ensure this, targeted investments were made in machinery. This provides the necessary independence, as availability of contractors and machinery is a challenge for innovative crops, which consequently cover limited areas and volumes. Buying a second-hand combine for example, allows more control to harvest at the right time, thus getting the highest quality product from the field (Belgium).

General conclusions

- There are not any ”one-size fits all solution” that will increase protein self suffiency.
- There is a need for affordable, smaller scale machines for various on-farm activities such as toasting, hulling, milling, packning.
- Additional advisory service on equipment, machine chains on farm is needed.
- We need to take climatic conditions into account regarding production.

Karel Dewaele

- 55 ha of farmland in Belgium

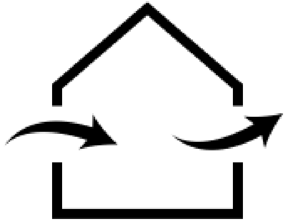
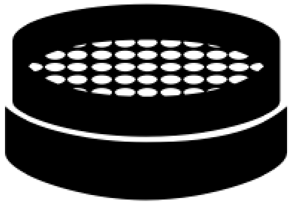
“Consciously switching to organic production and adding value in local chains”

- Introduction of protein crops, both pure and mixed crops

“Mixtures are also a way of dealing with changing climatic conditions, they are a form of risk diversification”

Karel Dewaele

- Targeted investments for own situation

“Focus on quality rather than quantity”

“The Farmer needs an entrepreneur mindset, and as innovating is challenging, it’s not an easy solution, but a forward-looking one ”

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2nd meeting | 27-28 May 2025 | **Sevilla, Spain**

All information on the Focus Group is available on the webpage:
https://eu-cap-network.ec.europa.eu/events/focus-group-production-protein-crops-under-climate-change-2nd-meeting