



TRansition paths to sUustainable
legume-based systems in EEurope

The diversity of business cases and opportunities for grain legumes in food

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Legumes Translated online, Nov. 2, 2020



TRUE – Transition paths for sustainable legume-based systems in Europe, 2017-2021



Contribute to more sustainable legume-based agro-food and feed systems through research, experimental case studies, and stakeholder involvement;

Stimulate market uptake of legumes by addressing policy, business, farmers and academia;

24 partners from 11 EU countries and Kenya;

Boreal, Atlantic and Mediterranean clusters;

Coordinator Dr. P.P.M. Iannetta, James Hutton Institute, Scotland



Diversity of pulse-based products



Seasonal fresh produce – cut and ready-to-use

Pre-cooked pulses

Dried pulses

Ready-to-use hummus, falafel and veggie-steaks

Frozen or canned peas and beans

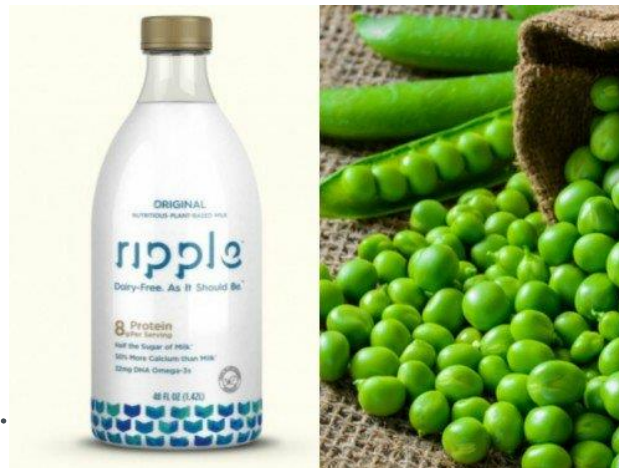
Ready meals with pulses (soups, stews, fillings etc.)

Vegan options

Dairy alternatives

Sweet or baked goods

Beverages



New opportunities for pulses



Lentil yoghurt, Israel



Oggs (vegan eggs) made from aquafaba, UK



Consumer trends as drivers



Motivation to reduce meat and dairy consumption = very strong driver for plant-based products

Vegetarian diets seem more appealing to mainstream consumers

Veganism, gaining foothold in the mainstream market but still a very small market

Healthy food, easy to cook => demand for plant-based convenience products

Curiosity about new foods and ingredients





Consumer trends in the Nordic countries 2018

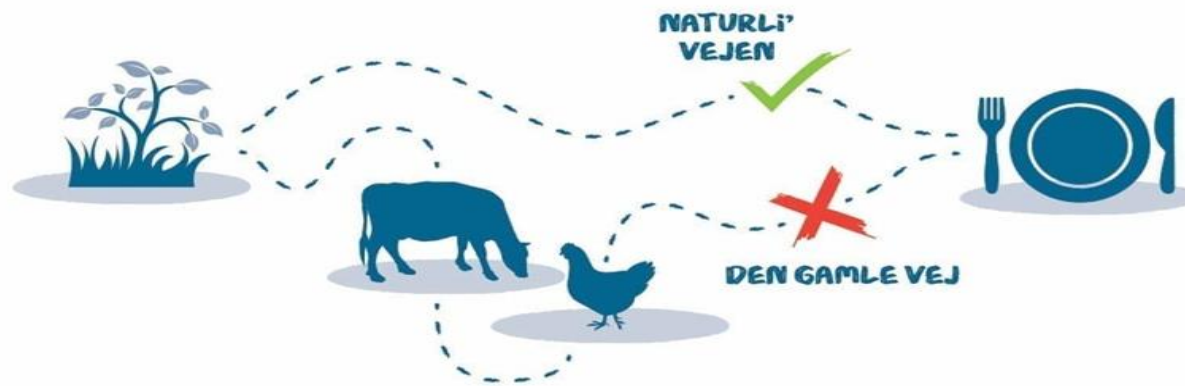
	Denmark	Sweden	Finland
Have you reduced meat consumption?	60 % Yes	60 % Yes	50 % Yes
Did you have a meat-free day last week?	60 % Yes	66 % Yes	42 % Yes
Why?	Economy	Environment	Environment
Do you eat more organic food?	40 % Yes	40 % Yes	20 % Yes

Ref: Fazer Food Services, 2018





Naturli Foods – Communicating environmental impact to consumers



”Change to our *minced meat* and save as much water as if you were showering continuously for 2 days”

”Changing to a plant-based diet contributes to reducing CO2 emissions by 60%”



Meat alternatives – high growth market



Soya-based meat alternatives = not news, well-known in the vegetarian market segment, but:

Using pea protein or faba bean protein is big news => global market demand for pulse protein strong growth

Consumers look for convenience products, not ingredients => good business to market burgers, schnitzels and sausages made with pulse protein



Meat alternatives – examples of business cases



Naturli Foods (Denmark): Minced "meat" made with pulse protein: peas, beans, chickpeas and soy protein



Garden Gourmet (Nestlé brand): Convenience products (falaffel, burgers, meat balls etc.) with lentils, chickpeas, wheat and soy protein



Success factors:

- Scalable supply chains, exports
- Products for sale in supermarkets
- Strong marketing



Sweets and baked goods – examples from Denmark and UK



Denmark: Artisan baker –
making gluten-free brownies by
using faba bean flour



UK: Brake Foods - sweet and
savory snacks made from local
peas



From idea to success – an example of entrepreneurship from Greece: Dikotylon



Local pulse varieties: Vanilla bean from Feneos valley

PGI and PDO certifications (peas and beans)

Dried beans for sale via internet, farm shop and local supermarkets

Success is based on local collaborative approach to seed testing, cultivation, processing and marketing



From idea to success – an example of entrepreneurship from Germany: Alp Leisa



Cooperative, local production of green lentils (Baden-Württemberg), from 1 to 20 farmers, organic



Heritage variety found in gene bank, Russia

Lentils for sale via farm shop, local drugstores and sales to a few restaurants



Success is based on organization of production and scaling-up, and uniqueness of the variety



Example of successful business case: The vining pea industry in the UK



UK is the largest producer and consumer of frozen peas in Europe

35,000 ha of peas, Northern and Eastern England and Scotland

700 farmers, 7 factories (cooperatives), 150,000 T of peas

Success factors: Scale!! Traditional product with high demand in the UK

Growers paid on the basis of frozen pea outturn, not volumes delivered



Daloon factory (Denmark) – Pulses in the food industry



From mung bean sprouts to spring rolls



Food service plays a strong role for educating consumers and stimulating demand



- Restaurants, canteens for awareness raising
- School meals for educating children;
- Traditional food and modern cuisine;
- Chance to educate consumers – also adults;
- Consumers are curious and what to try new foods



Flexitarian and vegan - options in the restaurant scene



Options to choose from pescatarian, vegetarian, vegan menus;

Restaurants offering meat-free dining listed in the TOP-100 of the British restaurant scene

Vegan chained restaurants starting to appear: Universo Vegano in Italy



Pulses ARE relevant for fast food chains – Successful business case from Sweden



McDonalds Sweden launch of veggie-burger in 2017, Stockholm and Helsinki

Max Hamburgers (100 restaurants in Sweden) introduces 4 new veggie burgers



Concluding remarks



Global market demand for plant-based products
INCREASING!

MANY new products made from MANY types of pulses

Plant-based products are mainstream now, and expected by the consumers

Innovation and supply chain organization are key factors for success





Thank you for your attention

Karen Hamann

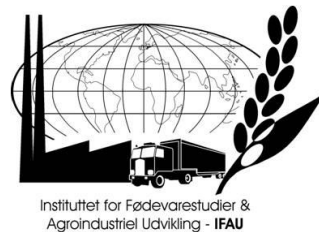
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Photos are from public websites including google.com





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TRansition paths to **sU**stainable legume-based systems in **E**urope (**TRUE**) has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 727973

