



Transition paths to sustainable legume-based systems in Europe

Organic diets with home-grown feed sources for lactating sows and fattening pigs - Denmark

In Denmark, the main protein source for organically farmed pigs is imported organic soya cakes. To mitigate climate impact and better accommodate the principles of organic farming, it is important to identify home-grown alternatives to these imported protein feed. Such alternatives could be fava beans, peas, lupines, or mixed crops (e.g. pea/barley or lupine/spring wheat).

Organic farmers are keen to grow more legumes and mixed crops due to the nitrogen-fixating properties of leguminous plants and to improve self-sufficiency with feed protein. Fava beans are the most important protein crop in Danish organic pig farming, and the cultivation area of fava beans and other legumes has increased in parallel with an expanding organic sector.

The amino acid composition of legumes does not match that of soybeans and their protein content is also lower. However, nutritionally optimised diets can be formulated by using Danish crops only. Diets for organic pigs could be made from a combination of organic grains (wheat, oats, or barley), fava beans and other pulses, rapeseed cake, vitamins and minerals. Organic lactating sows can be fed a diet of 68 % organic grains, 13 % fava beans and 5 % lupines, resulting in a diet containing 15 % protein (130 g digestible protein per kg). Diets for fattening pigs could have 35 % organic grains, 29 % de-hulled oats, and 24 % fava beans, resulting in a diet containing 17.5 % protein (146 g digestible protein per kg).

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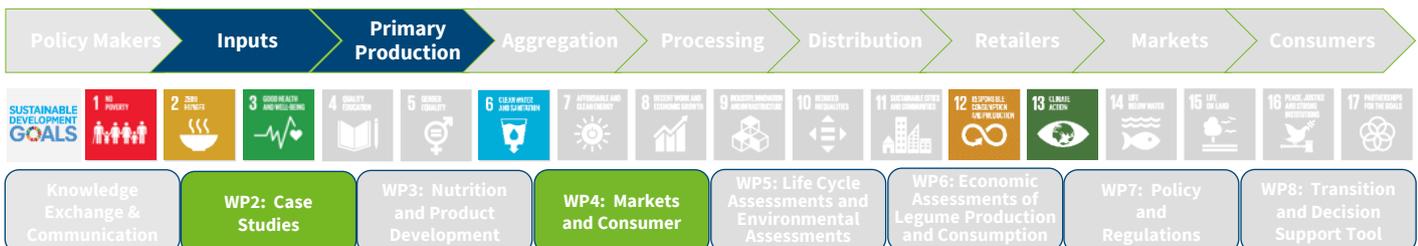
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All Practice Abstracts prepared by the TRUE Project in the EIP-Agri common format can be found here: <https://ec.europa.eu/eip/agriculture/en/find-connect/projects/transition-paths-sustainable-legume-based-systems>





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Figure 1. Various legumes and pulses . Photo credits ©: Mariana Duarte



About TRUE

The EU funded project "TTransition paths to sUustainable legume based systems in Europe" (TRUE) is a balanced practice-research partnership of 24 institutions, which aims to identify the best routes, or "transition paths" to **increase sustainable legume cultivation and consumption across Europe** and includes the entire legume feed and food value chains.

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