Case study 14:
Why is soybean (*Glycine max*) cultivation a story of success in south-west Germany?

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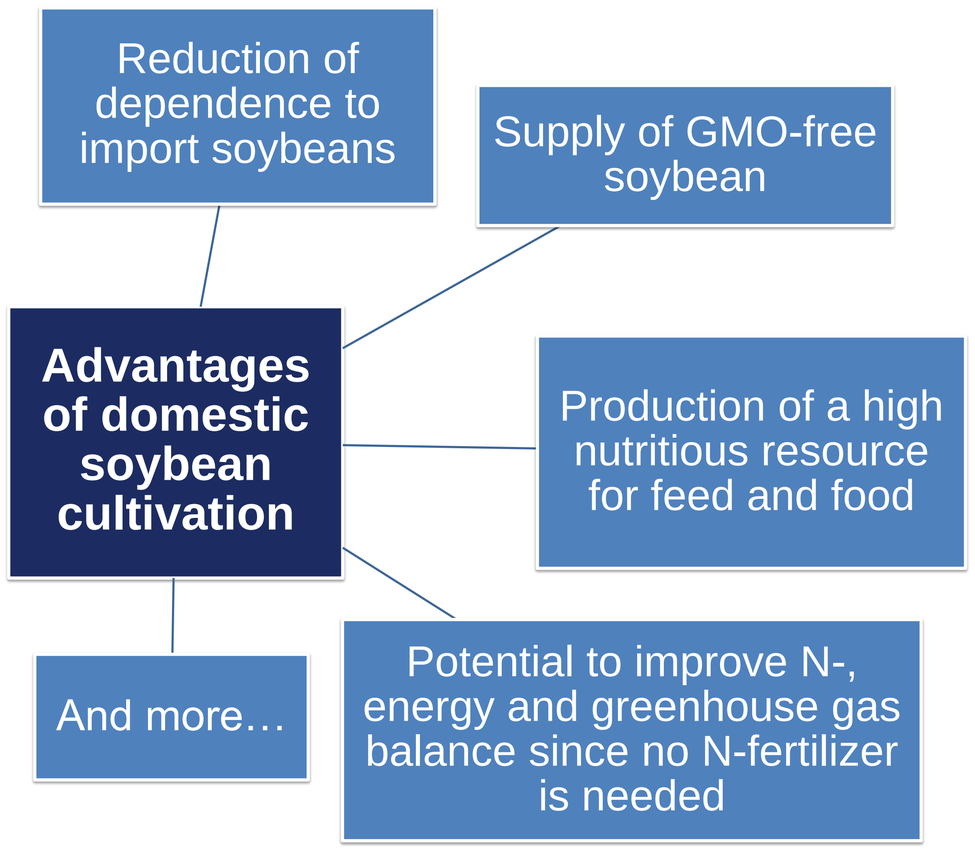
Background

Soybean production in Germany

- Self-sufficiency rate of soybean protein is only 4 % and of all plant-based protein approximately 40 % in Europe (Bernet et al. 2016)
- Imported to EU: 36 million tonnes soybean equivalents in 2014 (EC 2016)
- To increase the self-sufficiency rate of protein crops the Protein Plant Strategy (Eiweißpflanzenstrategie) of the German government supports research and development activities for soybeans since 2013
  - ➢ Improved soy varieties adapted to cooler climates
  - ➢ Set-up of soy supply chains, on-farm trials, extension services, knowledge transfer
- **Result**: In 2016 16,000 ha cultivated with soybean in Germany (Destatis 2016)
  - ➢ ca. 73 % of this area is located in the federal states of Bavaria and Baden-Württemberg (southern Germany)

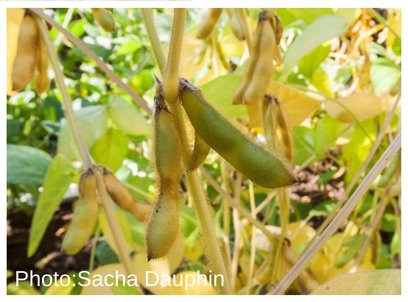


Objectives of the case study

- Determination of the status quo of soybean cultivation in Baden-Württemberg (south-west Germany)
- Identification of agronomic factors which contribute to the success of soybean cultivation in south-west Germany
- Identification of farmers' motivation and obstacles regarding cultivation and marketing
- Illustration of new approaches which can help to stabilize, optimize and expand the soy cultivation in central Europe


Photo: Jonas Weber


Photo: Sabine Zikeli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Methodology

1. Questionnaires, literature review and data processing of existing data

- Data collection regarding:
  - ➢ Location
  - ➢ Agronomy (e.g. yield, varieties, tillage, sowing and harvesting time, inoculation, pest management)
  - ➢ Utilization and marketing of the soybeans (feed, food, market channels etc.)
- Analyses by using descriptive statistics

2. Semi-structured interviews

- Focus on personal motivation and obstacles
  - ➢ Decision process
  - ➢ Current cultivation
  - ➢ Future development
- Transcription and qualitative content analysis

3. Netchain analysis

- Netchain = set of networks as a combination of vertical supply chain networks and horizontal ties between actors linked to a specific part of the value chain (Fig. 1)
- Focus on producers and their direct and indirect connections to other actors
- Composition of a netchain for soybean in south-west Germany

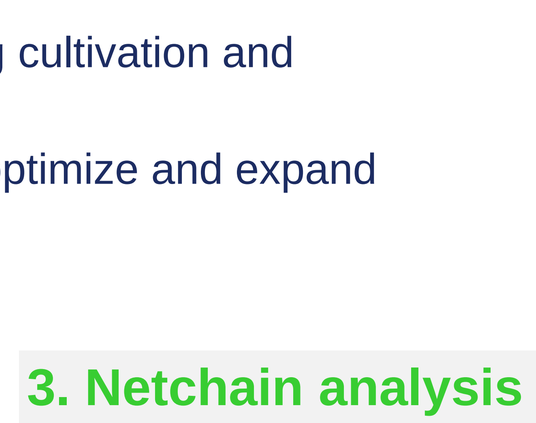

Fig. 1*: Illustration of a general netchain* (Lazzarini et al. 2001)

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