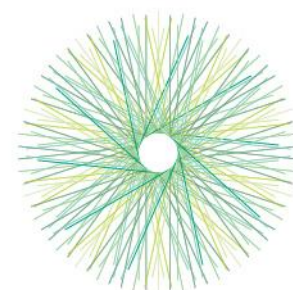


# Inspirational ideas

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AGRICULTURE & INNOVATION

## Harvesting grasslands

**Milan Kouřil, Operational Group coordinator, says that climate change is impacting the quality of grasslands in the Czech Republic: "There has been a change in the composition of grasslands (and indirectly on microbiological soil activity), increased photosynthetic activity and a longer growing season." Milan is part of an Operational Group developing methods of monitoring grasslands to determine suitable harvesting times and ensure quality fodder for cattle breeders.**



Grasslands have been affected by the changing climate and grassland management techniques have not adapted to the new situation. Milan explains that a drought in the Czech Republic in 2015 seriously affected the crop, farmers had to buy in much of their forage, increasing the cost per unit of production. This type of situation is occurring more and more. Milan continues "Over the past twenty years, the quality of grassland management has decreased significantly in the Czech Republic, which is reflected in a decline in the production and quality of forage."

A group of farmers, who were very active and interested in this issue, established a cluster with the help of a Local Action Group in order to tackle this problem. Milan Kouřil had been trained as an innovation broker by the Ministry of Agriculture in the Czech Republic. He supported the cluster to set up an Operational Group on monitoring the quality and quantity of grasslands. For this project, the cluster teamed up with Mendel University in Brno, Agricultural Research Troubsko, as well as other partners.



"Results of crop monitoring are really valuable for farmers" says Milan. The project aims to come up with a simple field method of monitoring the state of grasslands which would enable cattle breeders to determine the quality of the grassland and its suitability for harvesting. This type of method is not currently available to Czech farmers. Known methods of grassland monitoring require taking samples to the laboratory. Our innovative method of grassland assessment by measuring the Leaf Area Index (LAI) directly in the field will provide a relatively simple and very practical tool for choosing the right time for grazing on grassland" explains Milan.

The Operational Group will test ways to sow and restore grasslands, apply the grassland quality assessment method and take fodder and soil samples in order to develop a methodology to determine the optimal harvest time. The methodology will also include ways to restore grasslands. The Operational Group will also modify an existing field device for LAI measurement, which will be connected to software. The software will compare data from the farm (on humidity, fiber content, and more) with correlation equations and this will allow farmers to identify the best harvest time to ensure maximum production and quality of forage. The methodology will be certified and disseminated to other cattle farmers through workshops, field days, presentations during relevant conferences and press articles.

## Operational Group members

Lead partner: ZEOS, s.r.o., milk production farm

Research partners:

- Mendel university in Brno
- Agricultural Research, Ltd. Troubsko
- DLF Seeds

Advisory partner:

- AgroKonzulta – advisory, ltd.

Other farmers:

- Farma Kaliště, s.r.o.
- Jamenská a.s.
- KLAS Nekoř a.s.
- Jaromír Šeda
- ŽIVA zemědělská obchodní, a.s.

Project coordinator: Milan Kouřil, [milan.kouril@centrum.cz](mailto:milan.kouril@centrum.cz)

**Content and photos:** Milan Kouřil