

About

This case study highlights a 40+ farmer from the Freiburg region who chose to change his farm's production system without converting to organic or abandoning farming. Instead, he adopted a hybrid farming model that reduces pesticide use, expands crop rotation (now eight crops), and employs lighter machinery such as harrows and spring tine harrows. Inspired by his grandfather's diaries and supported by modern test farm results (LTZ BW), he describes his method as "farming the way my grandfather did." In 2020, his approach was recognized with the "Arable Farmer of the Year" award.



The Challenge

The main issue was the black-and-white thinking in agriculture, which often views farming as either fully organic or fully conventional. The farmer sought a middle ground that balanced sustainability and economic efficiency.

Key challenges included:

- -Moving beyond conventional three-field crop rotation with intensive tillage.
- -Expanding crop rotation to eight crops to improve resilience.
- -Reducing pesticide use and reliance on heavy machinery.
- -Continuously adapting to external pressures such as weather variability and climate change while keeping the system economical.



THE SOLUTION



The farmer implemented a hybrid approach:

- -Light machinery (harrows, spring tine harrows) for soil cultivation, reducing compaction and pesticide need.
- -Legume-based grassland cultivation on 50 hectares to eliminate the need for purchased protein-rich feed.
- -Step-by-step transition, guided by historical family records and modern test results.
- -Continuous optimization and willingness to compromise to adapt practices over time.

IMPACT AND RESULTS



The transition brought measurable benefits:

- -Soil health: Improved soil life expected to deliver more stable yields under drought and heavy rainfall.
- **-Reduced inputs:** Significant reductions in pesticide use, diesel, and heavy machinery.
- **-Feed independence:** No additional protein-rich feed required thanks to legume grassland.
- -Recognition: Awarded "Arable Farmer of the Year" in 2020
- **-Yields:** Initial decline in the first five years, but stabilization afterwards.

The farmer's experience shows that hybrid farming requires patience, compromise, and a long-term perspective. Mechanical methods such as hoes and harrows enabled the complete elimination of glyphosate, benefiting both soil and environment. Healthier soils are already proving more resilient to extreme weather, and the farmer intends to continue refining the system to secure a sustainable and economical farm for future generations.

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