

## SoildiverAgro project

Adoption of new management practices to increase crop production and quality



### THE WHAT AND WHY

## Organic cultivation outperforms conventional economically in intensive versus extensive vegetable production

To make vegetable cultivation more sustainable, growers may switch to organic practices and/or extensify by introducing cover crops and reducing tillage. A field trial at PSKW in Belgium compared four cultivation systems:

- T1: Conventional & intensive
- T2: Conventional & extensive
- T3: Organic & intensive
- T4: Organic & extensive

All strategies were applied to the same crop rotation: leek, celery, and cauliflower (2020 - 2022).

Extensive organic cultivation (T4) showed the best environmental performance, but what about the economics of the system?

### Results

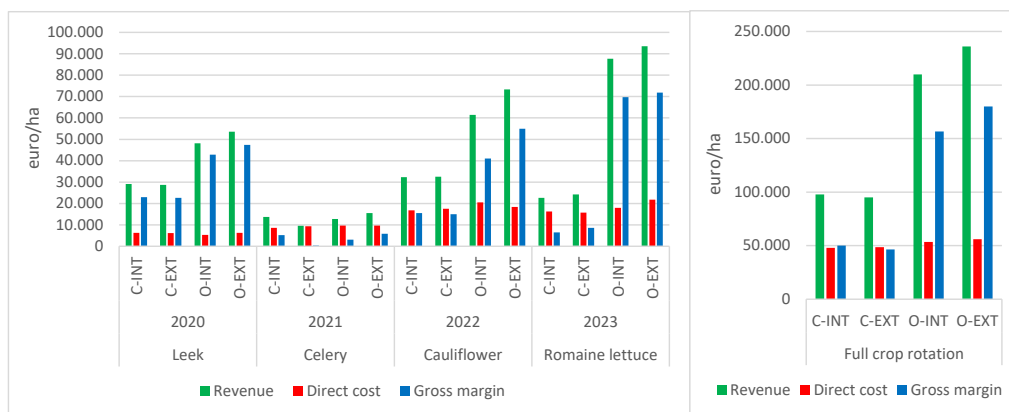
The costs for extensive cultivation were usually slightly higher

than those of intensive cultivation. Differences in revenue varied over the years. The total gross margin for conventional-extensive (T2) was 10% lower than for conventional-intensive (T1). For organic-extensive (T4) it was 10% higher than for organic-intensive (T3). Differences were thus inconclusive.

Over the whole four year rotation the most significant differences were found between conventional and organic cultivation. Although not consistent over the years and crops, the total revenues of organic cultivation were more than doubled compared to conventional. Direct cost for the organic systems were also higher, but only 12-17%. The total gross margin of organic thus was more than three times that of the conventional cultivation.

### Conclusion

Whether intensive or extensive, organic vegetable cultivation obviously showed the best economic performance.



1. Revenue, direct cost and gross margin (euro/ha) per growth season / crop and the totals over the four year rotation

### KEYWORDS

Economic profitability, gross margin, intensive, extensive, conventional, organic vegetable cultivation

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