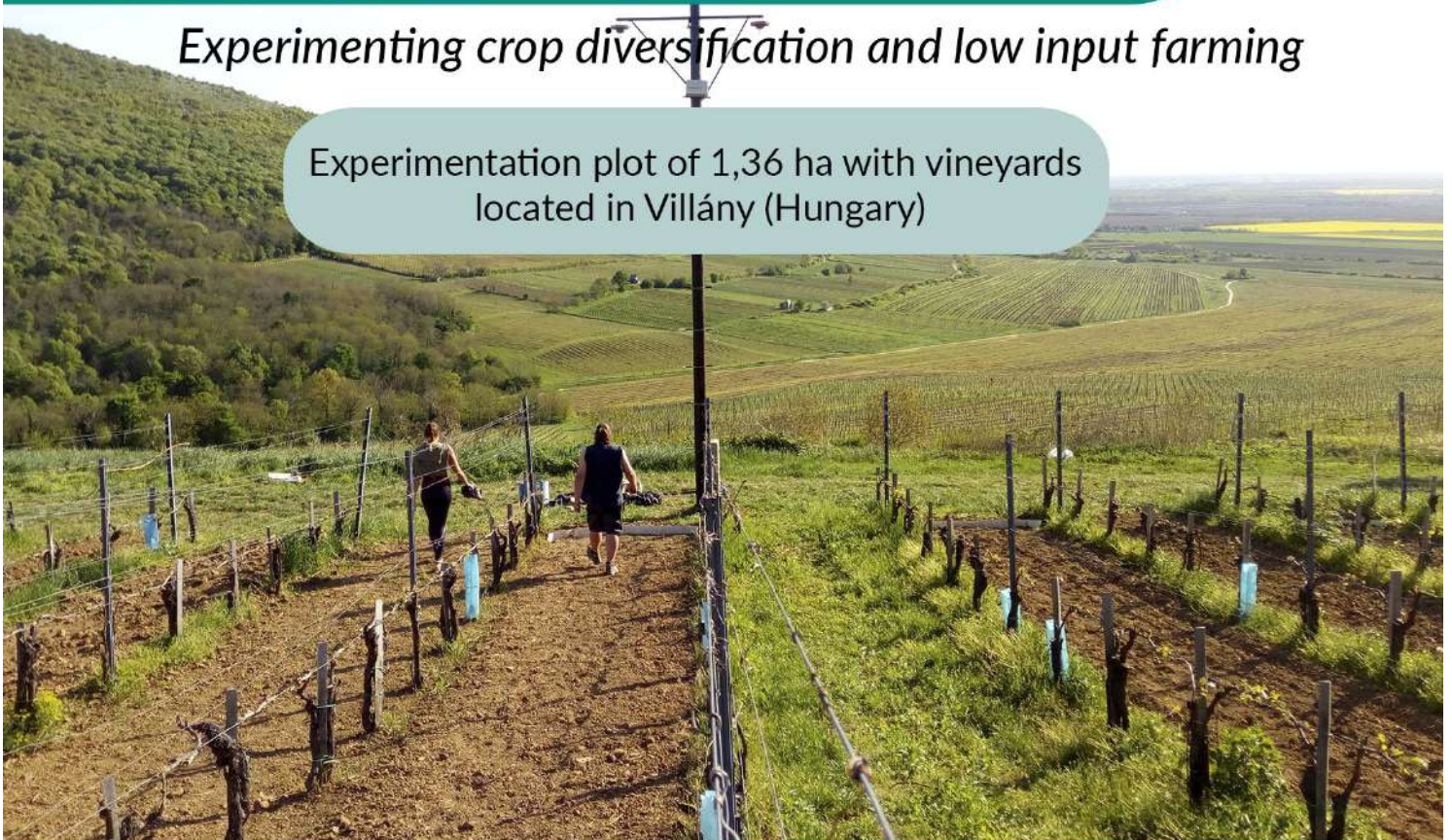


Vineyard in Hungary

Case Study 11

Experimenting crop diversification and low input farming

Experimentation plot of 1,36 ha with vineyards located in Villány (Hungary)



2 TYPES OF INTERCROPS WERE TESTED AND COMPARED WITH MONOCROP

1 Vineyard + yarrow

2 Vineyard + grass (mixture)

AGRONOMIC BENEFITS

1. Diversification provides well-balanced soil moisture conditions
2. Cover crops and their living macrofauna community help in the degradation of the raw residues

ENVIRONMENTAL BENEFITS

1. Increasing soil microbial variability
2. Soil erosion control
3. Development of the root zone for Achillea and grass mixture provides aggregate stability

SOCIOECONOMIC BENEFITS

1. Diversification provides basic materials for valuable cosmetic products
2. Extension of seasonal work period

WHY IMPLEMENT CROP DIVERSIFICATION?

The motivation of wineries lies primarily in the prevention of erosion damage by means of cover crops, which is mandatory in organic farming.

If this task is implemented through the use of medicinal plants, in addition to fulfilling the above task, products closely linked to wine tourism and beauty industry are also created.



AGRONOMICS DRAWBACKS

1. **Cu-based spraying of vine can cause Cu-accumulation in sidecrop (herbs)**
2. **20-30% of intercrop is damaged or weakened due to the main crop fieldwork**
3. **The harvesting of intercrops requires specialized machinery**

ENVIRONMENTAL DRAWBACKS

No environmental drawbacks

SOCIOECONOMIC DRAWBACKS

1. Organising the season works becomes more complex
2. Lack of labour and specialists to manage the herb plants
3. Pure organic essential yarrow oil is not in itself a cosmetic, but a raw material to be marketed to a small circle of interested people



DIVERFARMING