



# The future of organic grassland farming in mountainous regions of Central Europe

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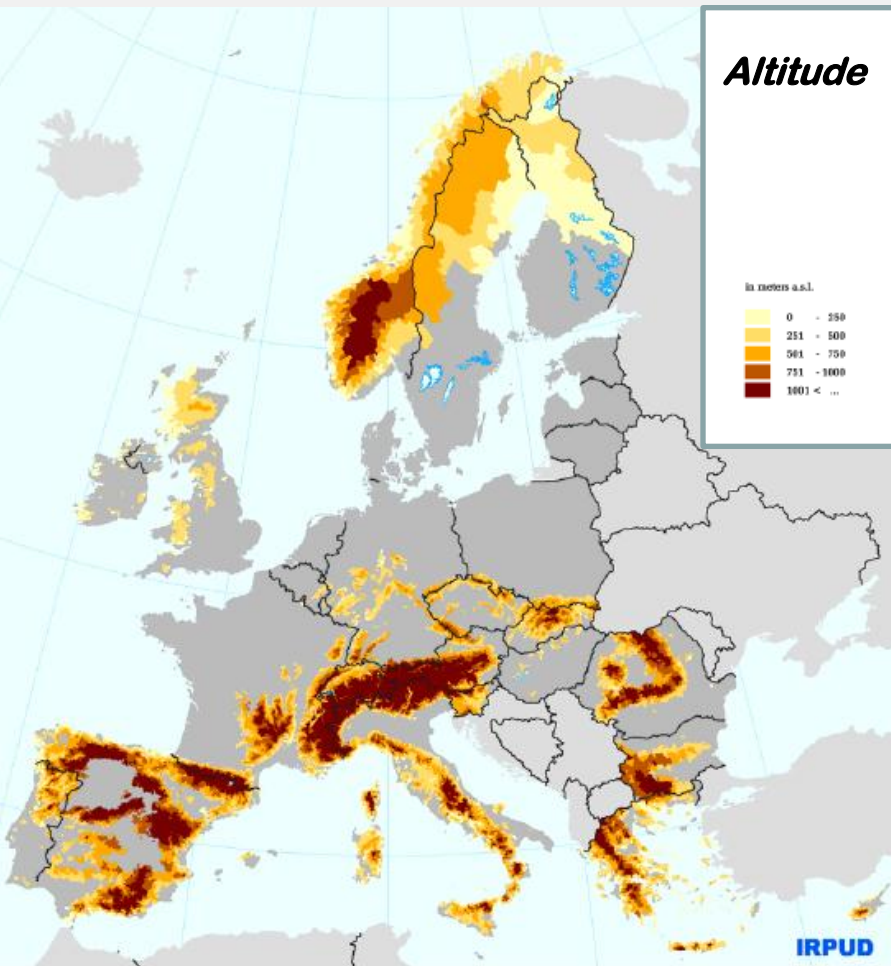
- **Agriculture in Mountainous Regions** and in the Alps
- **Organic farming** in Alpine Regions
- **Opportunities and risks** for organic farming and **tasks for research**
- **Conclusions**



# Various definitions of mountainous regions

on regional, national and international level

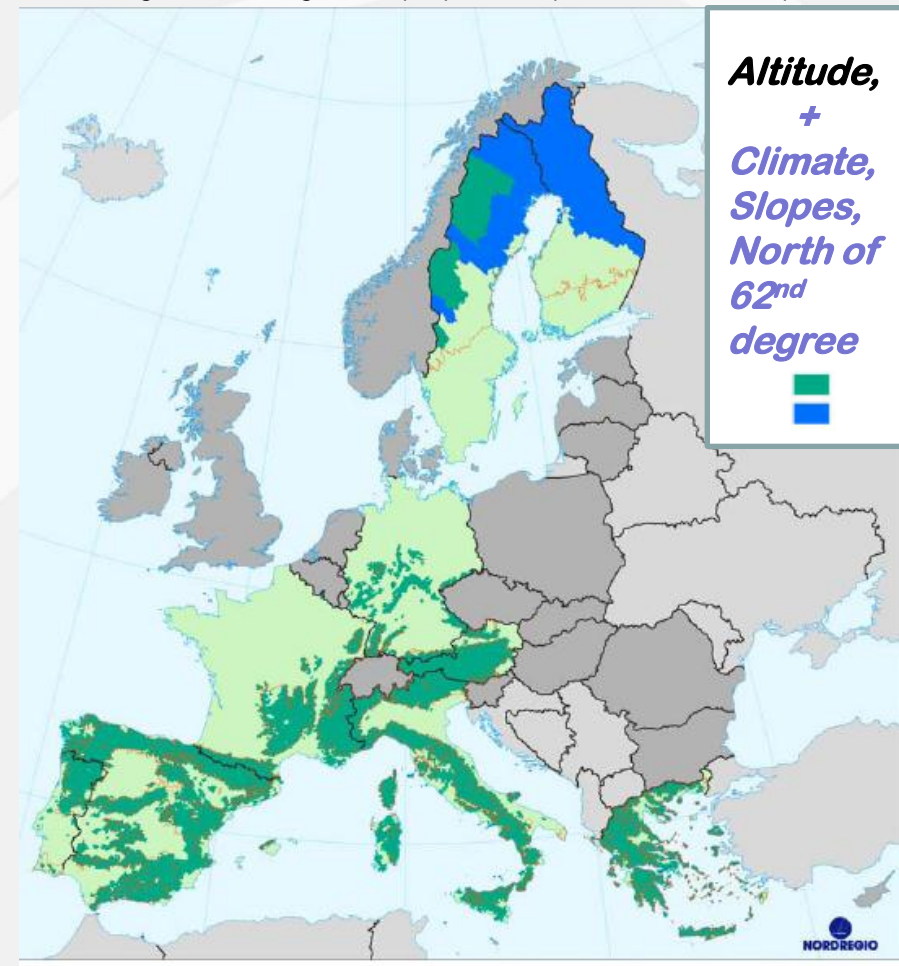
## Altitude of mountainous municipalities



Mean altitude of mountainous municipalities

## Mountainous and less favoured areas

according to Art. 23 regulation (EC) 950/97 (mountainous areas)



Mountainous municipalities and less favoured areas according to Art. 23 of the regulation (EC) 950/97 (mountainous areas)

# Mountainous regions

- **39.5 million people (8%)** of the total EU population live in mountainous regions
- Relative **importance** at the national level **varies** strongly
- **Economic development is below the EU-27 average**
- **Gross Domestic Product per capita at a level of 77% of the Union's average (2006)**  
→ gap tends to widen slightly (1.6 % in 5 years )



# Agriculture in mountainous regions



**High cost (labor) production**

**Harsh climatic conditions** – short vegetation period

**Permanent grassland** and meadows with **low stocking** density and **dairy farming** and **beef production dominating** today

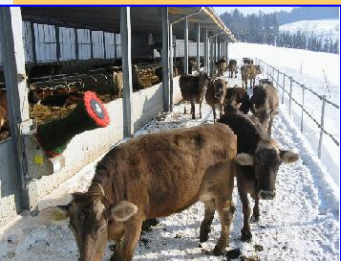
**Sensitive ecosystems** with **high biodiversity**

**Low population density, little infrastructure** – remote areas, small markets, expensive to maintain

**Small farms and enlargement limited** – many “part-time farmers”

**Drastic changes** in the agricultural structure and land use systems

- migration and land abandonment
- decrease of livestock densities (farms at high altitude)
- agricultural intensification in valleys
- decrease of traditional farming methods



# Examples of problems

1890



2001



1930/40



2005



Source: CIPRA Deutschland, 2008 from Streifeneder, 2009

→ Forestation

→ Land-use conflicts

# Examples of problems – intensification → animal breeding...



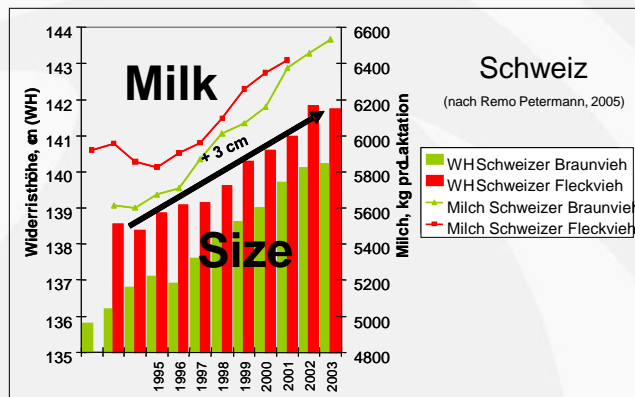
- Size and weight of dairy cows increases
- Milk yield per year and cow increases



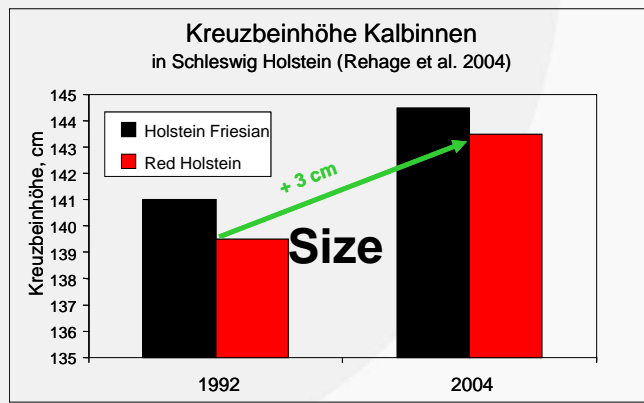
*More and more problems for (organic) farms, especially in mountainous regions*

*→ energy supply, grazing, concentrate input, health, longevity, forage efficiency, ...*

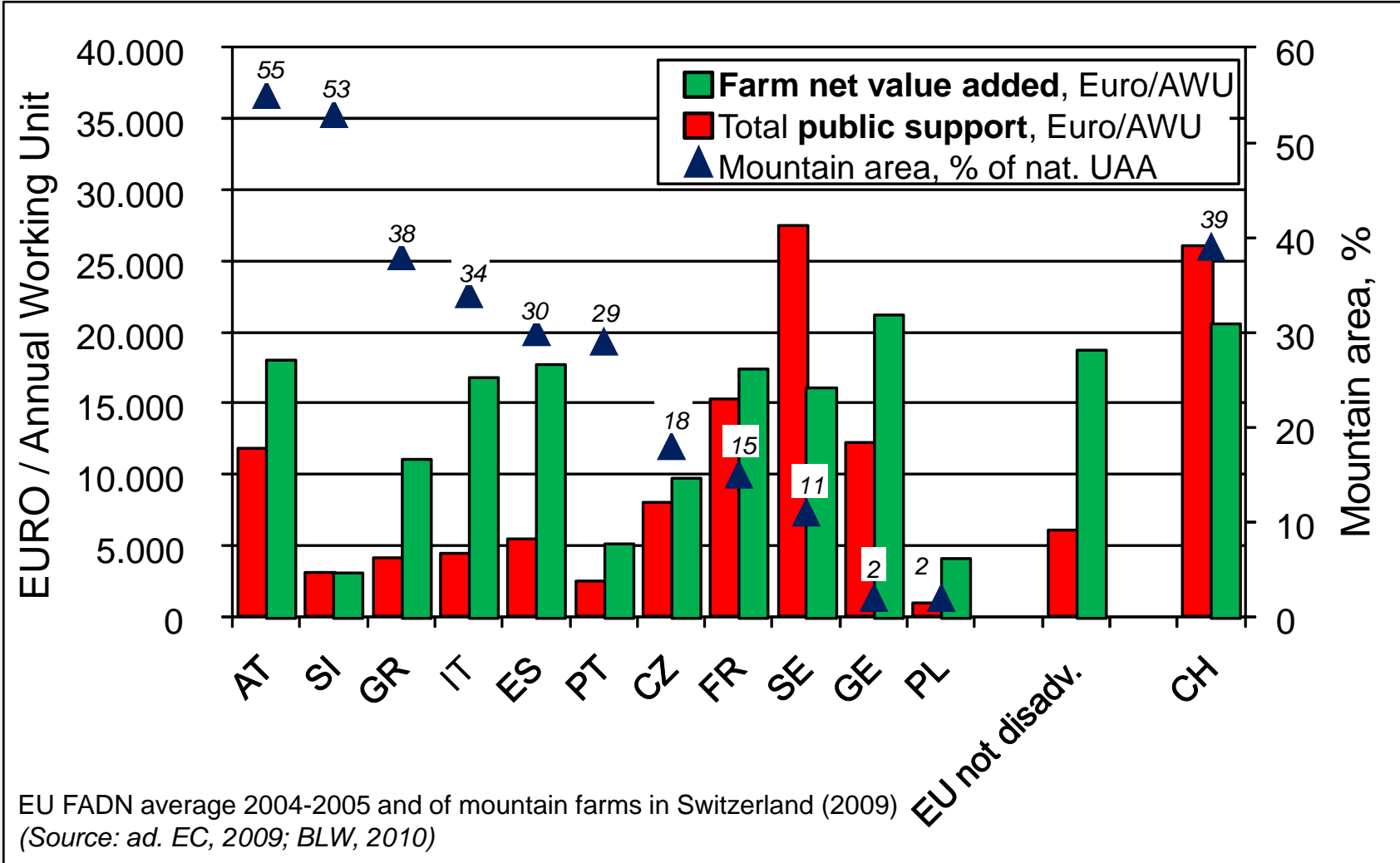
## Switzerland (+ ~ 3 cm/10 years)



## Germany (+ ~ 3 cm/10 years)



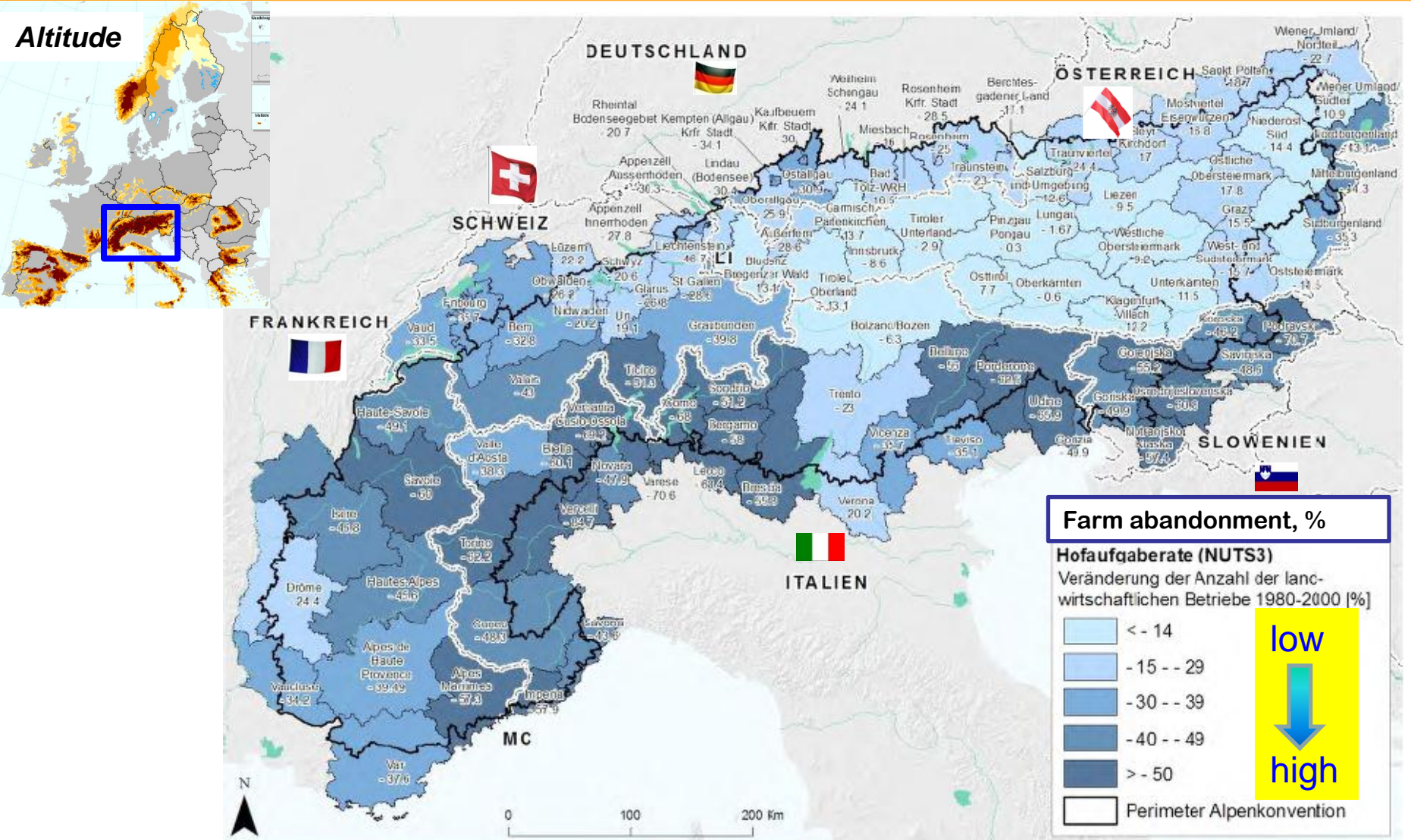
# Mountainous areas, total public direct support and farm net value added per Annual Working Unit



EU FADN average 2004-2005 and of mountain farms in Switzerland (2009)  
 (Source: ad. EC, 2009; BLW, 2010)

# Farm abandonment in the Alpine Convention Area from the year 1980-2000

Source: add. Streifeneder, 2009



# Challenges for agriculture in mountainous regions



**Safeguarding agricultural production**

**Avoidance of intensification**

**Conservation of sensitive ecosystems**

**Development of innovative strategies to create robust and viable farms**

**Improvement in profitability (→ farm management, markets...)**

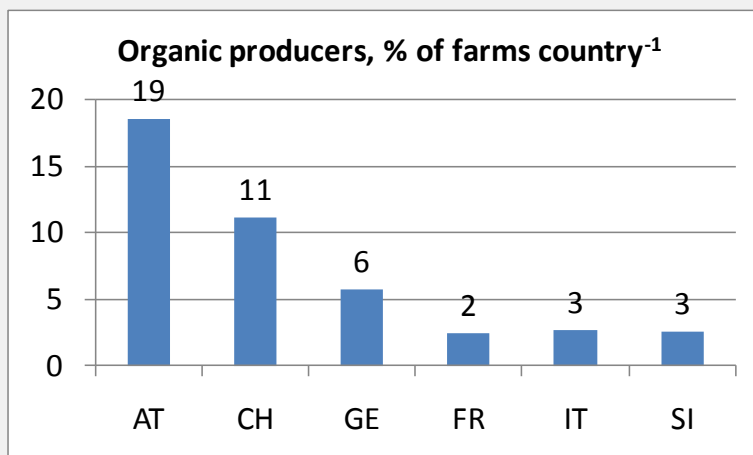
**Building up of regional partnerships**

**Opening up markets/sales**

**Guarantee for a reliable source of income → prevention of migration**

**→ Organic farming with typical regional quality products → “golden opportunity”**

# Organic farming - Alpine regions in AT, CH and GE



## Mountainous regions:

- Organic farming **higher proportion**
- **Number of organic farms increased** whilst number of all farms decreased

Austria (mountain farms with MFC points)	2002	2009	Change, %	Change year <sup>-1</sup> , %
Number of all mountain farms	75,066	67,485	-10.1	-1.3 all
Number of organic mountain farms	14,408	15,214	+5.6	+0.7 org.
Organic mountain farms, % of total m. farms	19.2	22.5		

Switzerland (mountain farms Zone 1-4)	1997	2009	Change, %	Change year <sup>-1</sup> , %
Number of all mountain farms (Zone 1-4)	29,812	24,801	-16.8	-1.3 all
Number of organic mountain farms (Zone 1-4)	3,350	3,982	+18.9	+1.5 org.
Organic mountain farms, % of total m. farms	11.2	16.1		



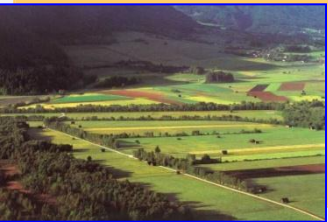
# Organic farming can...

... support agriculture to maintain (or become more) environmentally and economically sustainable in alpine regions!

? What is the **future** of organic farming in alpine regions and **how can it be developed** further ?



# Opportunities - organic farming in mountainous areas



- Increasing market for quality products which are typical for different regions → **trend “regionality” + “organic farming”**
- **Further product diversification on market**
- **Organic - high consumer (and taxpayer) acceptance**
- **Ecological targets in CAP** (common agricultural policy)
- **Different sources of income on farms** (tourism, forestry)
- **Cooperation's with non agricultural sectors increasing** (tourism, social welfare system etc.)
- **Organic farming well accepted and widespread in mountainous regions** → synergies and regional partnerships possible

# Challenges / risks/ constraints - organic farming in mountainous areas

**Higher (premium) price** for products important → **willingness to pay and consumer target group limited** → high returns not always realised

## MARKET

**Products + marketing** → to be available (identified) by the consumer

**Discrepancy between declaration of intent and real purchase behaviour of consumers** and some **confusing labels and indications**

**Money for rural development, agri-environmental programmes and organic farming ?** → “visible” public benefits necessary

**Sometimes evidence for ecological benefits in mountain grassland missing**

**Restrictions and regulations for organic farmers** → rules are adopted occasionally (and are getting stricter) → acceptance problems by farmers

## POLICY SOCIETY

# Challenges / risks/ constraints - organic farming in mountainous areas

**More standardized production systems** even in mountainous regions → traditional site specific systems become less important

## AGRI- CULTUE

**Intensification and “import” of non site specific agricultural methods** (breeds/seeds/feeding strategies...) → ecosystem burden, integrated holistic agric. ?

**Extensification and farm abandonment** → loss of valuable farmland, low competitiveness, wastage of resources

**Low efficiency** → waste of resources, high emissions



# to do - research, dissemination, marketing, politics ...

## MARKET



- **Focus on qualitative issues rather than quantitative expansion** → further development of the “quality leadership” of organic farming
- **Documentation of traditions** and know-how in special food production → basis for innovations, cross-regional marketing and merchandising concepts
- **Cross-regional and regional concepts** → production and marketing
- Further research to **quantify and value non-market “public benefits and goods”**
- **Trans-disciplinary research and innovation** must help the food sector to meet **consumer’s demand** and acceptance and to **build up (cross-)regional cooperation's**

## POLICY SOCIETY



- **Socio-economic research** to support decision makers and politicians
- **Rules** have to be **developed in cooperation with the organic stakeholders**

# to do - research, dissemination, marketing, politics ...

- **Region and site adopted farming** → a “one size fits all” approach - no good recipe
- Management measures to **species-rich farming** and **innovation to increase the efficiency** and to build up **nutrient recycling systems**
- **Alternative low-input livestock systems** are required and development of herd management guidelines to achieve a better **synchronization to local feeds**
- Due to **decreasing ruminant stocking rates** on mountain pastures, research activities to **reactivate grassland areas**

AGRI-  
CULTUE



# Conclusions - organic farming in mountainous areas



Organic farming can take a key role to support agriculture in mountainous regions to maintain (or become more) environmentally and economically sustainable.



- Focus on:
- 1) **Quality issues**
  - 2) **Site adopted** (typical) **agriculture**
  - 3) **Regional and cross-regional concepts**
  - 4) **Cooperation with non agricultural sectors**

**A further development of the “quality leadership” of organic farming needs targeted actions in research, dissemination, marketing and further financial support.**



# The future of organic grassland farming in mountainous regions of Central Europe

*Thank you  
for the  
attention!*

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