Some considerations for the future of grassland use in Austria

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Land use worldwide, in Europe and in Austria

**Agricultural area**

- **Worldwide**: 4.88 mrld. ha
- **Austria**: 2843 tsd. ha

**Arable and permanent crop land**

- **Worldwide**: 1,530 mi. ha
- **Austria**: 1,389 tsd. ha

**Managed grassland**

- **Worldwide**: 3,360 mi. ha
- **Austria**: 822 tsd. ha

**Exensive grassland**

- **Worldwide**: 115 mi. ha
- **Austria**: 562 tsd. ha

**Grassland**

- **Worldwide**: 57 mi. ha
- **Austria**: (453) tsd. ha

Source: BMLFUW, 2010
Need of fodder protein for the production of 1 kg of animal protein

Source: Shalloo, Kennedy, Wallace; Rath und Dilloon, 2004
Perspective of the society:
Function of grassland in connection with tourism

Kapfer and Ziesel, 2010
Perspective of the society:
Function of grassland in connection with biodiversity

Kapfer and Ziesel, 2010
Perspective of the society: Function of grassland in connection with cultural heritage

Kapfer and Ziesel, 2011
Perspective of the farmer: Costs* of grassland use

*without consideration of costs for land

Data base: LfL Bayern, 2011
Perspective of the farmer: Costs* of provision of fodder

Data base: LfL Bayern, 2011

*without consideration of costs for land

energy density

MJ ME/kg DM 8,4 8,5 9,0 9,7 10,3 10,4 10,9
Land use and site quality

Modeled after Heißenhuber et al., 2000
Future market and policy developments

Common agricultural policy
- regionally uniform payments
- greening of the first pillar

Commodity markets
- increasing price volatility
- rising demand for agricultural commodities

- decreasing transfer payments
- rising market prices (medium to long term)
Land use and site quality

Resulting land use:
- intensive production
- extensive production
- fallow

Modeled after Heissenhuber et al., 2000
Greater market orientation: Land use and site quality

Modeled after Heißenhuber et al., 2000
Greater market orientation: Land use and site quality

Modeled after Heißenhuber et al., 2000
Intensification of grassland management

Kapfer und Ziesel, 2010
Abandonment of extensive grassland

Kapfer und Ziesel, 2010
Future sustainable grassland use: Differentiated system of state intervention

Modeled after Heissenhuber et al., 2000
Conclusion

- Grassland is important for the supply of food
- (Extensive) grassland use has many other functions
- As a consequence of market and policy developments
  → extensively used grassland is tend to be abandoned
  → intensively used grassland is tend to be used even more intensive
- A sustainable grassland use needs a differentiated system of state intervention
Thank You!

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