

#### Session 13. Animals in extreme environments

### Experience from sheep in mountain environment

Drago KOMPAN

University of LJUBLJANA, Slovenia



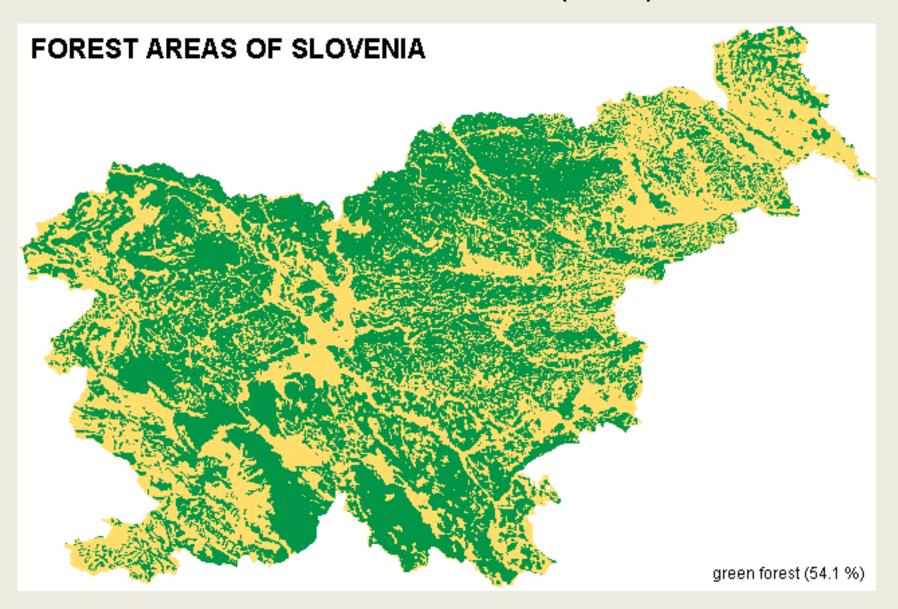
#### Main characteristic Slovenian lands

- More than 60 % of forest
- Harsh relief for agriculture land (70 %)
- 3 different climate region (Alpine, Mediterranean, Central)
- Agriculture structure (small farms)
- Main production in agriculture: livestock

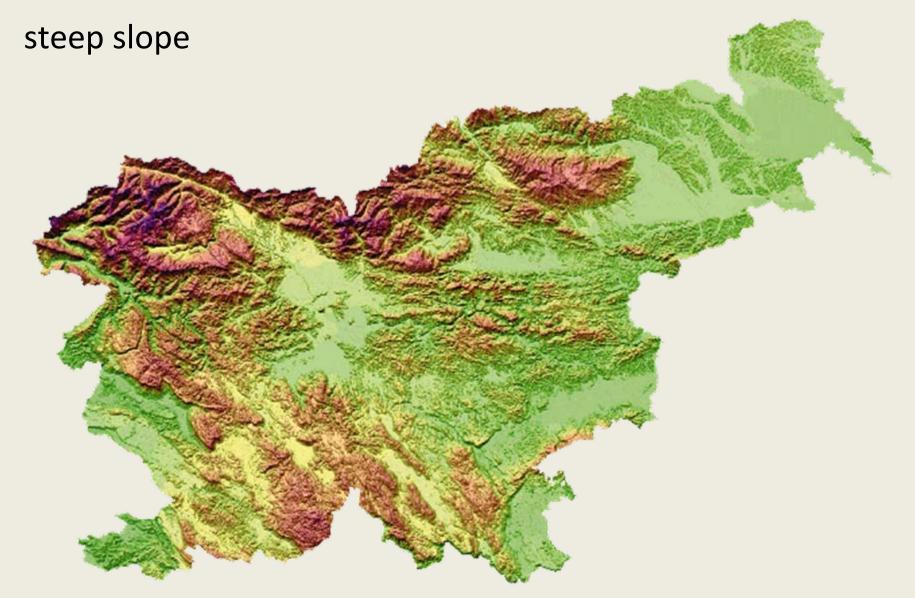




#### Slovenian forest (2001)



#### relief



#### Salient characteristic Slovenian lands

- In last 50 years the forest increasing (from 48 % up to 60 %)
- Increasing rate is 25 %!
- The Alpine region and Karst region have in the past traditional way of pasture (Short and long Transhumance)





#### Transhumance

#### Long Transhumance)

 From Karst region Long Tranhumace was operate (from Pivka in Karst up to Padua (Italy) on flat land during the winter seazone





#### **Short Transhumance**

Is a seasonal migration between valley and high pastures (or seasonal mountain pasture)

is a traditional practice that

has shaped much of the landscape in the Alps



#### Transhumance

Is a traditional practice that has shaped much of the landscape in the Alps, as without it, most areas below 2000 m would be forests.

While tourism and industry contribute today much to Alpine economy, seasonal migration to high pastures is still practiced in the Alps,



but,

## The history of pasture or presence of human in the Alps

There is evidence of transhumance economy in the Alps dating to the 4<sup>th</sup> millennium BC (Neolithic Europe).

Research found evidence for transhumance in the Northern Limestone Alps dating to the Late Bronze Age Halstatt culture (17<sup>th</sup> to 10<sup>th</sup> centuries BC),

with pastures above the tree line at 1500 to 2100 m



The transhumance system in the alps has remained virtually unchanged since at least the High Middle Ages, with a document referring to a summer pasture from 1204

More development on the sheep and goat alpine pasture was in 18th and 19th centuries, when hundreds of mountain pastures were alive in Slovenian Alps At that time the products from milk (cheese and salt curd) were produced mostly for self consumption for farmer's family in the winter time.



In the past migration between valley and high pastures were traditional practice that has shaped much of the landscape in the Alps, as without it, most areas below 2,000 m/AS would be forests

Today tourism and industry contribute much to Alpine economy, seasonal migration to high pastures is still practiced and the products are directly sold.



The strategy of rural development in Slovenia is aimed at strengthening the multifunctional role of agriculture in Slovenia

preservation of environment ecological sustainability, environmentally friendly production





The people are becoming to aware the importance of ecological sustainability, environmentally friendly production and the multifunctionality of agriculture For these reason they are accepted high prices on farms (like agro tourism)

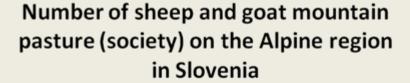
The products on farm are directly sold for good money in the mountains from walkers or travelers (mountain visitors)

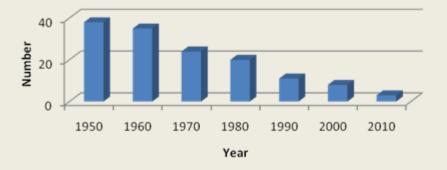




#### But

In the last 20-30 years we loss 85 % of the traditional alpine pasture





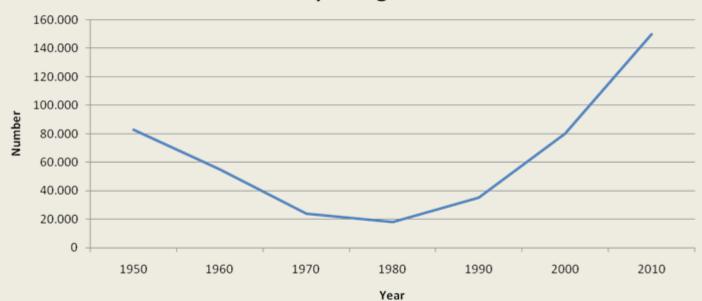




# The sheep and goat production is increasing from 1980



#### Number of sheep and goats in Slovenia



In the mountain region the sheep and goat production still exist on family farms, which are located up to 1.500 m, but without moving (transhumance)

There are hard conditions to, but the pasture and feed production is around the farm

The sheep milk production is located in west part of Slovenia

Old farmer (over 65)! 10-20 sheep, traditional farming, finish the production (no successor!

Some young farmer are coming, extend the production (150-200 sheep) good perspective, hard work

All sheep milk is processed to cheese and sold direct on farm.



- Sheep (lamb) production is based on pasture and hay – mostly similar to organic production
- (36 % of farmers have legal status of organic production)
- Lot of sheep and goat farm are hobby farm (employed out of farm) ->50 %
- In many farms stop the cattle production and change to sheep and goat farming
- Is this the last step before the farm stop the production??

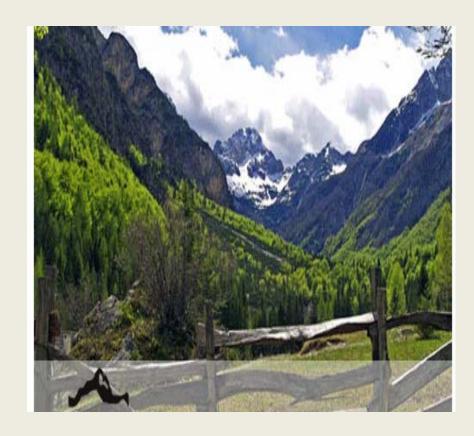


In many cases -yes

The buildings are sold or change to weekend houses

The land become overgrowing with bushes and shrubs ...

Who can change this?
More subsidies?
More what ???



### Thank you!



