## LPIS –Land Parcel Identification System – the baseline for Common Agriculture Policy legislation

- essential for both CAP Pilars
- for the first -direct payments
- for the second Piliar- focused on environmental aspects – RDP –Rural Development Plan

### LPIS – land parcel identification system – soil register



- Basic informatic layer on soil utilization
- one of the essential elements of IACS Integrated administrative and control system
- Soil Science and Conservation Research Institute authorized by MoA SR for creation and update of LPIS from the 4. April 2002

# Soil Scien

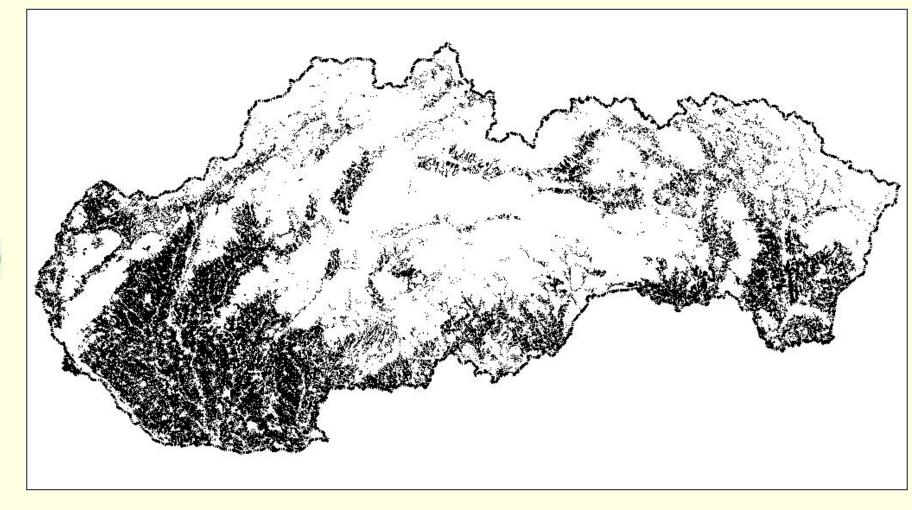
# LPIS – register of production agriculture parcels





- LPIS is created on digital ortophotomaps a physical blocks bounded by natural lines. Utilization not owner relations, verification specification directly with users.

## LPIS – division according to cultivation arable land





# Soil Science and C

## LPIS – division according to cultivation arable land









# Special registers in LPIS

### Orchads register



- till 2004 created by ÚKSUP (Central and Testing Institute in agriculture) based on digital orthophotomaps 2002/2003 integrated in LPIS
- since 2004 actualisation of text parts not integrated in LPIS
- since 2009 actualisation of geographical localisation integrated in LPIS

## Se

### Vineyards register



- till 2004 created by ÚKSUP (Central and Testing Institute in agriculture) geodethical measurement with GPS integrated in LPIS
- since 2004 actualisation of text parts not integrated in LPIS
- since 2009 actualisation of geographical localisation integrated in LPIS

# Soil Scien

### Hop – gardens register



- till 2004 created by ÚKSUP (Central and Testing Institute in agriculture) geodethical measurement with GPS integrated in LPIS
- since 2004 actualisation of text parts not integrated in LPIS
- since 2009 actualisation of geographical localisation integrated in LPIS

# Soil Science

### Legislative framework

- Cross compliance is summary appellation for Statutory Management Requirements (SMR) according to Article 5 and Annex II of Council Regulation (EC) No 73/2009 and standards of Good Agricultural and Environmental Conditions (GAEC) according to Article 6 and Annex III under the same Regulation
- Legislative basis for Cross compliance is Council Regulation (EC) No 73/2009 of 19 january, amending Regulation (EC) No 1290/2005, (EC) No 247/2006, (EC) No 378/2007 and repealing Regulation (EC) No 1782/2003

### New GIS layer creation for **GAEC:**

#### Retention of landscape features

- ensure a minimum level of maintenance and avoid the deterioration of habitats - don't disturb landscape features such as row of trees, windbreaks and solitary trees
- retention of landscape characteristics, including, where appropriate, hedges, ponds, ditches, trees in line, in group or isolated and field margins

#### > Terraces

- destruction of existing terraces is prohibited

#### Buffer strips along water courses

Protection and management of water – in the new draft of Directive – creation of buffer strips along water courses







# Cross Compliance and RDP Issues -Special protection areas — SPA (Birds directive, Natura 2000)



# Cross Compliance and RDP Issues Special areas of conservation

- habitats SACs (Natura 2000)

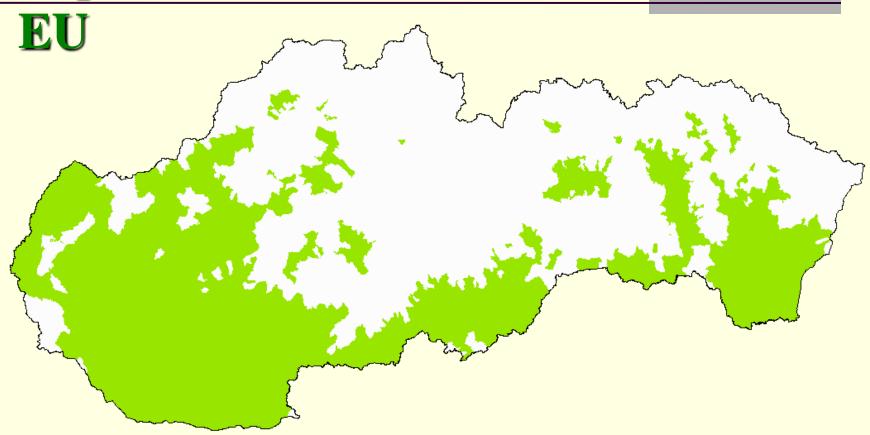


## Cross Compliance Issues Protective zones of water resources





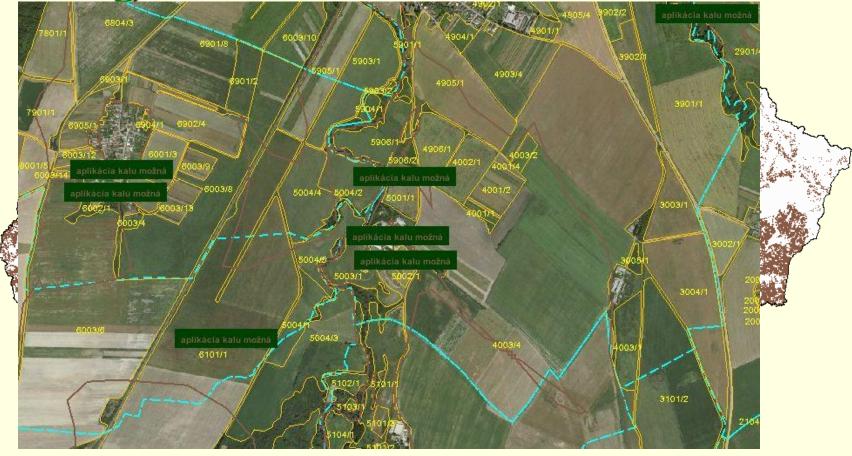
# areas of SR declared by implementation of "Nitrates directive"



- Directive 91/676/EC on the protection of waters against pollution caused by nitrates from agricultural sources
- Government regulation (26.6.2003) selection of vulnerable areas from the point of the water source protection

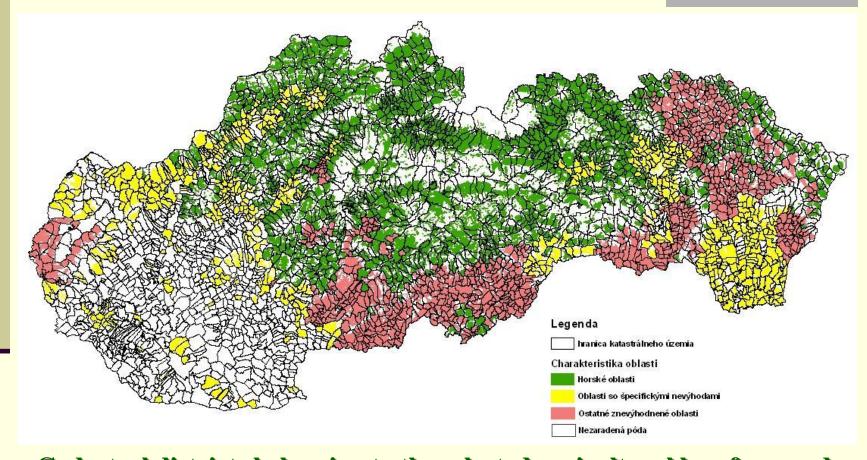
# Cross Compliance Issues Sludge savage directive – aplication of

sludge



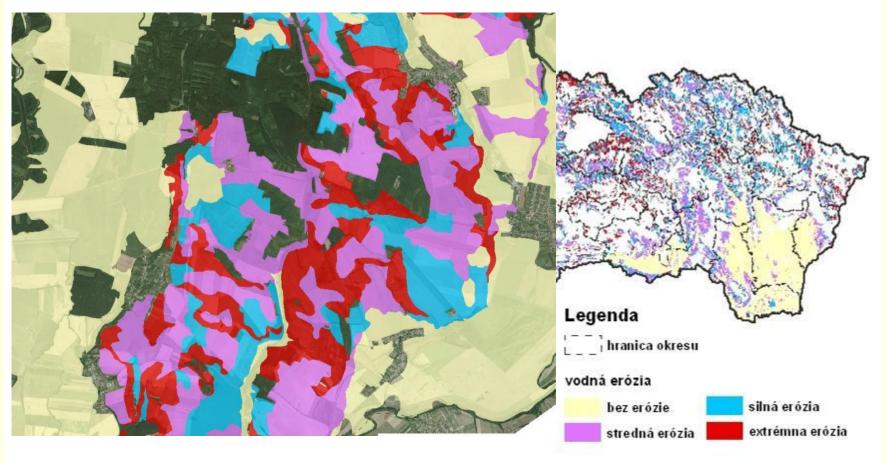
- Sludge directive – act legislative 188/2003 Z.z. about aplication of sewage sludge and limber sediments

## RDP - Agricultural less-favoured area (LFA) of Slovakia

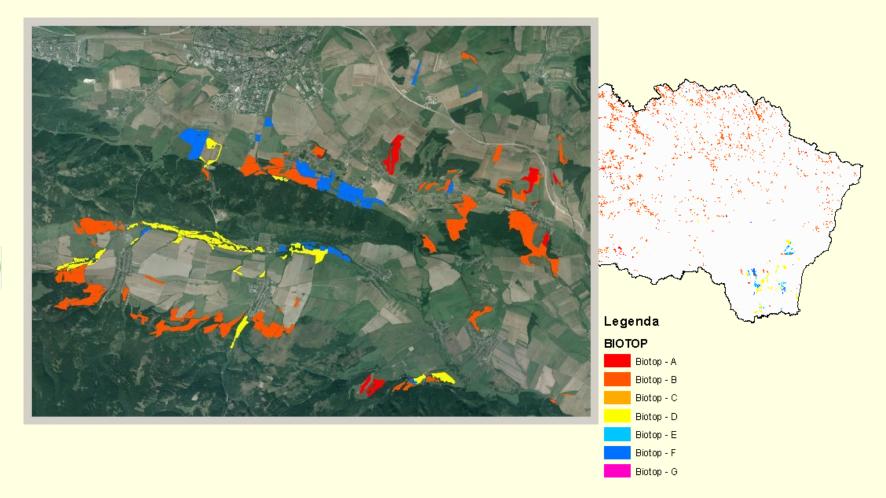


-Cadastral districts belonging to the selected agricultural less-favoured areas (LFA) were noted by regulation of Ministry of Agriculture MP SR number 928/1/1999-100

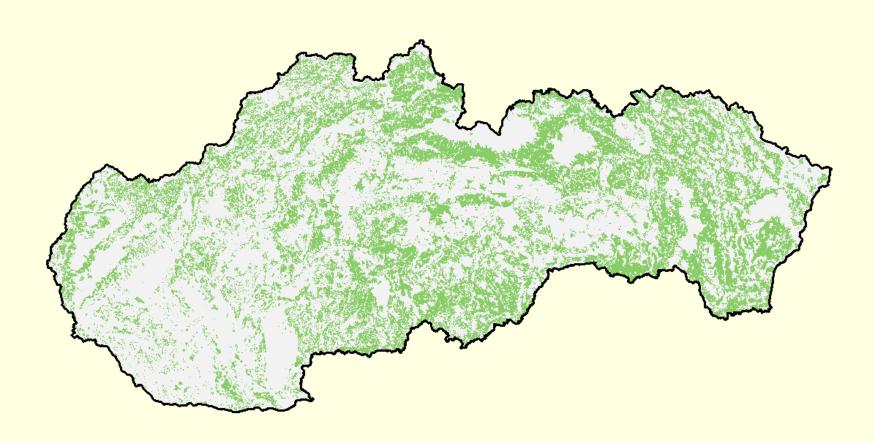
# RDP - Potential water erosion of agricultural soils —protection against erosion on agriculture land



# RDP – Natural and Seminatrual Grassland Biotopes



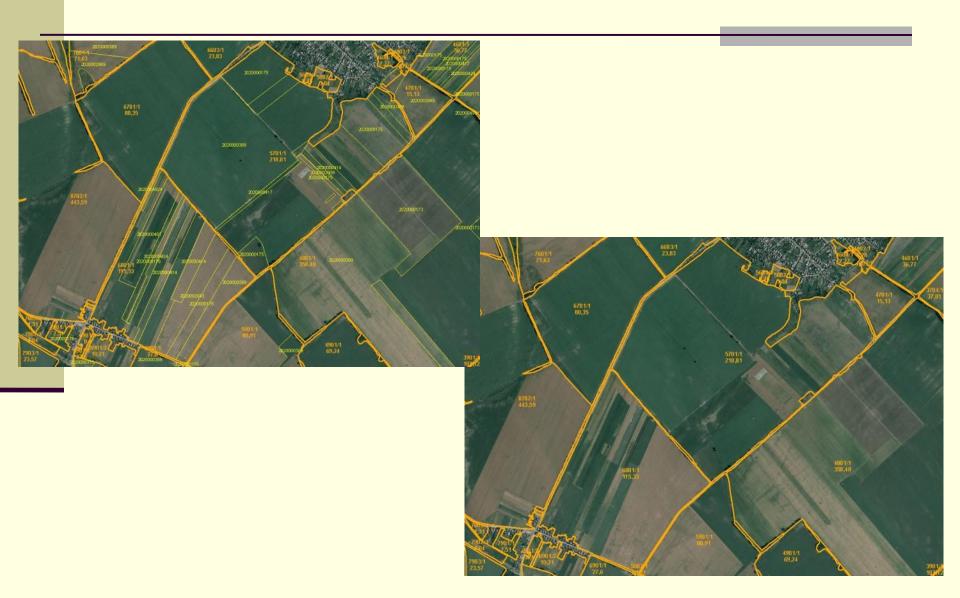
## RDP - Afforestration not allowed on the agricultural soils with high quality



## Soil Law 220/2004 about conservation and usage of agricultural land

- The unique definition and specification of abandoned land seems really very difficult by reason of several different approaches. (Agricultural, forestry, environmental point of view). It exist serious difference between agriculture land area registered in Land Parcel Identification System (agriculture land under good agriculture and environmental condition eligible for subsidies) and area of agriculture land registered by ÚGKK (juridical state).
- Soil Science and Conservation Research Institute developed digital EXPERT SYSTEM OF ABANDONED LAND IDENTIFICATION THROUGH USER AND OWNER RELATIONSHIP. This system was developing on the basis of Ministry of Agriculture request to identify abandoned land directly by digital geographical layers.

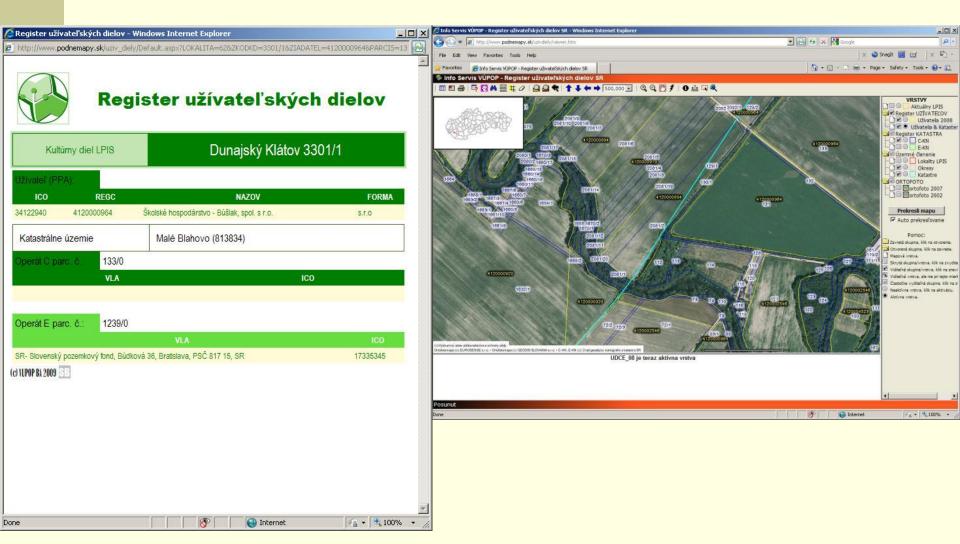
## Users of agriculture land



## Owners relationships



# Identification of users and owners relationship via web portal



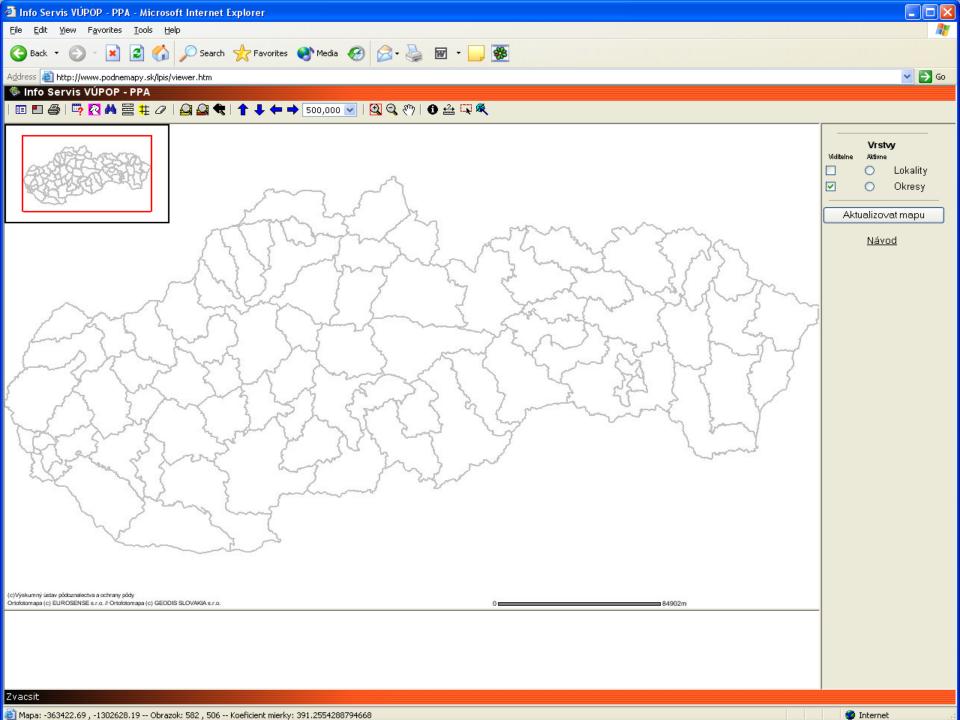
## Soil portal of SSCRI

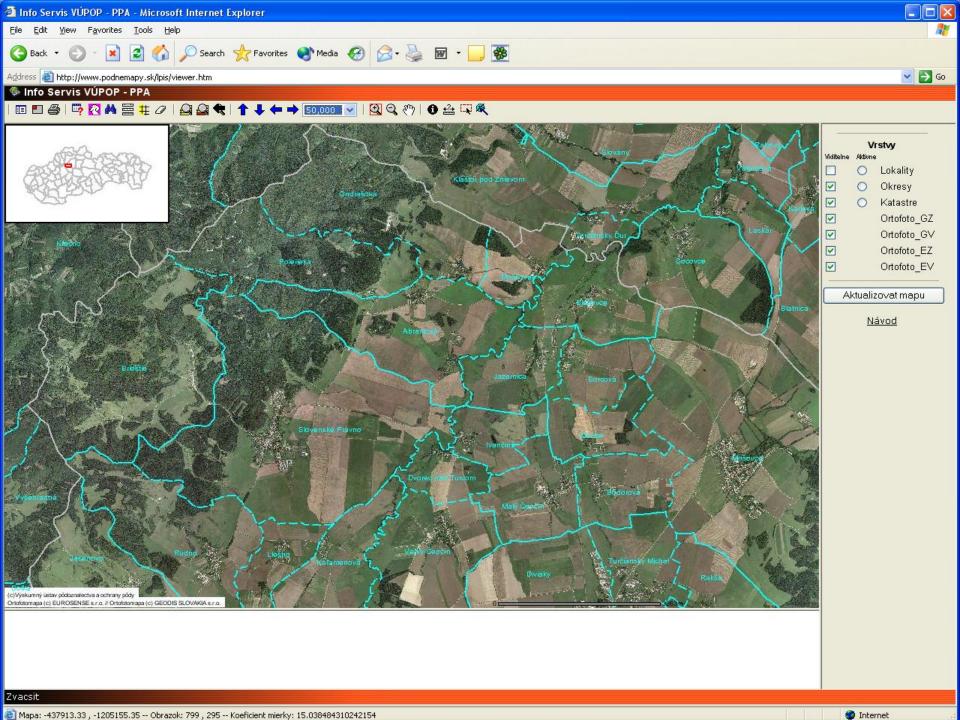
- Web on –line information and counselling
- > IACS/LPIS
- > Informational GIS about soil (LEU, CSS, Monitoring of soil...)
- > X- compliance- SMRequirements, GAECs
- > Aplications (yield estimation, fertilising N, P,K Ca, organic fertilising, erosion, compaction, energetic crops,....)
- Veterinary GIS (V-GIS)



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## Soil



# is most valuable natural resource for man