

# From organic matter through soil structure to water management.



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Introduction  
**Slovak Association for Sustainable Agriculture**  
**„SASA“**

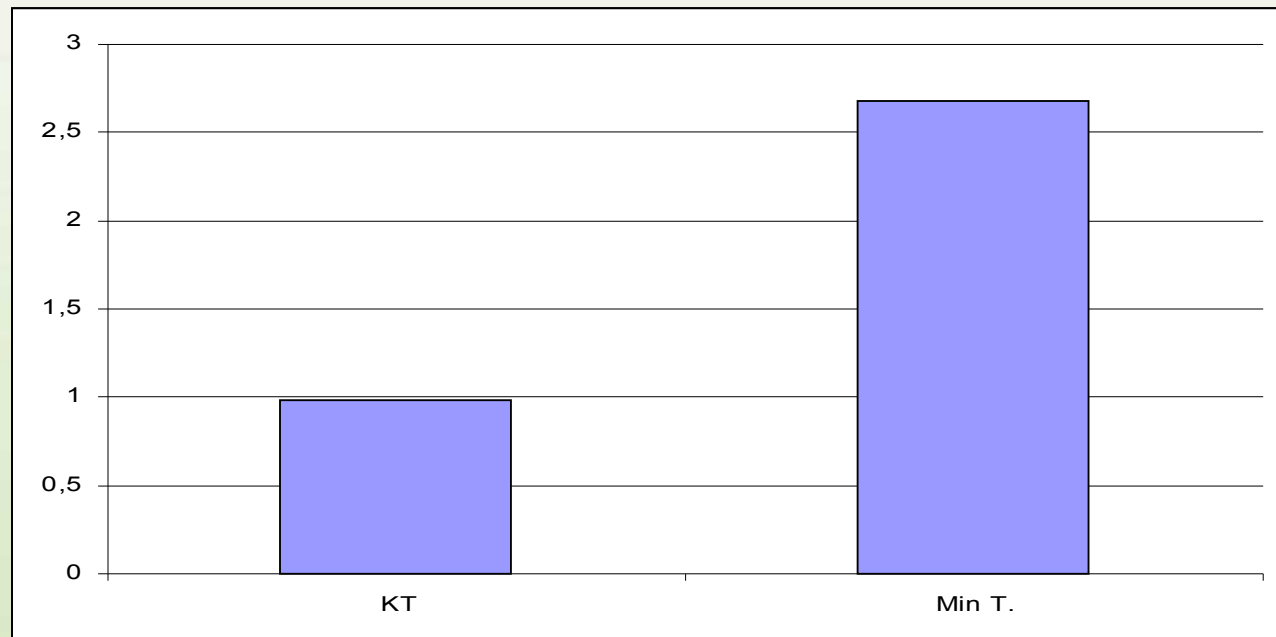
- Non - governmental organisation
- Established in 2003
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# Crucial activities:

- Ekomit 2004, 2008,
- Dutch projects      Organics  
                                 Transfer
- Project Non chemical regulation of weeds
- Project YSLIFE (Youth for sustainable life)
- Future: Ecomit 2012, projects in the area of (research) results and knowledge transfer into practice, new knowledge and information spreading and popularization, on farm farmers education, etc.

# The effect of different tillage systems on soil structure coefficient in organic farming system

(Source: VURV Piešťany, not published yet)



# Analýsette 2



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# The effect of different tillage systems on water infiltration in the soil profile (0-30 cm)



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- Conventional tillage



- Minimum tillage





# Comparison of soil aggregates water stability in different tillage systems in organic farming system

- Conventional tillage technology (ploughing)
- Minimum tillage technology





- Soil ability to resist the erosion meteorological conditions (e.g. wind, rain, flowing water) depends mainly on the soil structure and organic matter content, which influence its ability to suppress water and determine soil ability to create soil aggregates.
- Erosion causes top soil losses and therefore also reduces soil fertility and causes contamination of water ecosystem.

- Organic matter absorbs water – it is able to hold sixfold of its weight – it enables the life of vegetation in naturally dry and sandy soils.
- Soils containing organic matter have better soil structure, which improves water infiltration and decreases soil susceptibility to compaction, erosion, desertification and landslides.

# May 2010 Floods demonstration



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# Thank you for your attention



- I am looking forward to the next cooperation!
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