

## Summer School <<Food Production and Environmental Impact on Agricultural Land>>

**Date:** September 22-26, 2025

**Place:** Slovak University of Agriculture in Nitra, Faculty of European Studies and Regional Development, Tr. A. Hlinku 2, 949 76 Nitra, Slovakia

**TASK: CREATE A DECISION TREES**

**See: information about decision trees in LiLAC: Our Approach**

### Group number 1

#### ISSUES AND IMPACTS OF CLIMATE CHANGE ON SOILS

##### **CREATE ONE COMMON TREE**

1. Impacts of Climate Change

1a. Increased Temperature

→ Accelerated Humus Mineralization

→ Loss of Organic Matter

1b. Changes in Precipitation

→ Soil Drying

→ Flooding and Inundation

1c. Extreme Weather Events

→ Water and Wind Erosion

→ Loss of Soil Structure and Quality

## 2. Threats Resulting from Climate Change

2a. Degradation of Soil Fertility

2b. Desertification and Steppe Formation

2c. Loss of Water Retention Capacity (Weaker Water Retention)

2d. Pollution and Biological Degradation

## 3. Conservation and adaptation measures

3a. preserving organic matter (manure, compost, mulching)

3b. erosion control (cover crops, field margins, slope terracing)

3c. sustainable water management (retention, infiltration, drainage)

3d. soil biodiversity restoration and protection

3e. carbon sequestration in soils (increasing humus as a way to reduce CO<sub>2</sub> emissions)

## **Conclusions:**

## **Sources:**