European Commission

Session 6

Soil quality restoration and land management

European Commission

Identified common challenges:

soil/land restoration: degradation (erosion, compaction, contamination, salinisation, acidificatione, alcaline soils), overfertilization

Soil fertility managment, N fixation, microbiological application in crop production and soil bioremedation

Ecological farming

Ecosystem services/biodiversity

Conservation agriculture

Land productivity, loss of fertile land

ICT, precision farming, robotics

Carbon sequestration in different pedo-climatic conditions

Climate change, soil- water balance, soil water capacity

Soil security

Issue of degradation

- **soil/land: desertification and degradation (erosion, compaction, contamination, salinisation, acidificatione, alcaline soils), overfertilization, organic matter decline and nutrient depletion/mining, loss of fertile land**

Issue of remediation

- **Soil fertility managment, N fixation, microbiological application in crop production and soil bioremedation, Ecological farming,Ecosystem services/biodiversity,Conservation agriculture, ICT, precision farming, robotics, Carbon sequestration (CC mitigation), preserving and improving land productivity**

Issue of policy

- **Soil security, science based policy making, better land managment, sustainability (SDGs), land degradation neutrality, extention services – dissemination, involvement of farmers, demonstration farms and best practices, stakeholder involvement/awareness raising**