European Commission

RECARE Project

Finding and sharing solutions to protect our soils

Due to changing climate and growing human intervention, soils are currently under increasing threat from a wide range of processes, such as soil erosion, compaction, desertification, sealing, contamination
and others. They need to be adequately protected and conserved to ensure that their many functions and services, such as food production, buffering and filtering of water, and storage of nutrients and carbon, are not lost or diminished. The RECARE project has brought together a multidisciplinary team
of 27 different organisations to find ways of assessing the current threats to soils and finding innovative solutions to prevent further soil degradation across Europe.

Aims

The RECARE project aims to:

1. Fill in gaps in our understanding of the functioning of soil systems under the influence of climate and human activities

2. Develop a harmonised methodology to assess the state of soil degradation and conservation

3. Develop a universally applicable methodology to assess the impacts of soil degradation upon soil functions and ecosystem services

4. Select innovative measures in collaboration with stakeholders and evaluate the efficacy of these regarding soil functions and ecosystem services as well as costs and benefits

5. Upscale results from 17 case studies to European scale to evaluate the effectiveness of measures across Europe

6. Evaluate ways to facilitate adoption of these measures by stakeholders

Carry out an integrated assessment of existing soil related policies and strategies to identify their goals, impacts, synergies and potential inconsistencies, and to derive recommendations for improvement based on RECARE results.

A research initiative to develop effective soil degradation prevention and remediation solutions across Europe.

RECARE Case Studies

As soil degradation problems are caused by the interplay of biophysical, socio-economic and political factors, all of which vary across Europe, these problems are by definition site specific and occur at different scales.

Therefore, 17 case studies of soil threats are included in RECARE to study the various conditions that occur across Europe and to find appropriate responses using an innovative approach combining scientific and local knowledge.

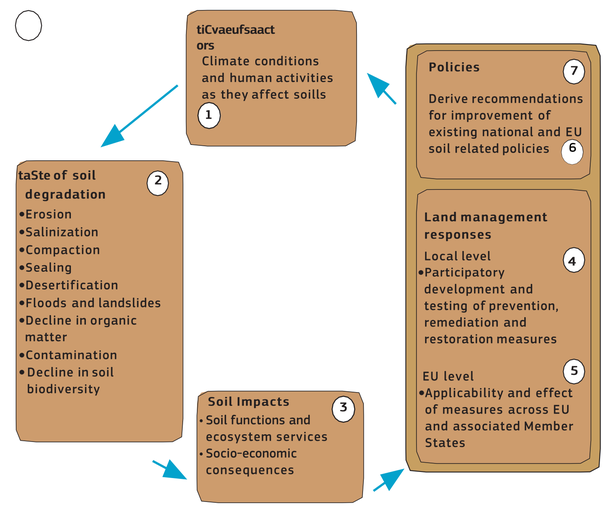
Contamination

Sealing

Compaction

Biodiversity

SOIL THREAT	CASE STUDY AREA
Soil erosion by water	Frienisberg, Switzerland; Caramulo, Portugal; Peristerona Watershed, Cyprus
Salinisation	Timbaki, Crete, Greece
Soil compaction	Aarslev, Denmark
Soil sealing	Wroclaw & Warsaw, Poland
Desertification	Canyoles River Basin, Spain; Gunnarsholt, Iceland
Floods and landslides	Vansjø-Hobøl Catchment, Norway; Myjava Catchment, Slovakia
Loss of organic matter - peat soils	Berkenwoude, The Netherlands; Örke, Sweden
Loss of organic matter - mineral soils	Olden Eibergen, The Netherlands; Veneto region, Italy
Soil contamination	Guadiamar, Spain; Copsa Mică, Romania
Loss of soil biodiversity	Isle of Purbeck, UnitedKingdom



Dissemination of Results

As good communication is essential to optimise the value of research, the project results will be continuously disseminated through a dedicated RECARE Information Hub www.recare-hub.eu

This centralised website will enable public access to all project outputs by interested stakeholders, including farmers, advisors, industry, policy-makers, researchers and the general public. You can also follow us on Twitter @RECARE_EU and Vimeo
http://vimeo.com/channels/RECARE

Start date: 1 November 2013, end date: 31 October 2018 (duration 60 months)

RECARE
Preventing and Remediating degradation of soils in Europe through Land Care

https://ec.europa.eu/jrc

Joint Research Centre

Contact Cristiano Ballabio
European Commission • Joint Research Centre
Institute for environment and Sustainability
Land Resources Management Unit – H05
Tel. +39-0332-783021
Email: cristiano.ballabio@jrc.ec.ec.europa.eu