



# Land rehabilitation

A global approach for local solutions



WAGENINGEN  
UNIVERSITY & RESEARCH



Photo by Erik van den Elsen

*"Essentially, all life depends upon the soil. There can be no life without soil and no soil without life; they have evolved together."*

*Charles Kellogg, American naturalist, 1938*

Globally, sustainable use and management of our land is still the exception rather than the rule. Thus it is crucial that we exchange knowledge about sustainable land management as well as promote its implementation by practitioners in the field. This will contribute to protecting our environment and help to create a healthy and sustainable basis for current and future generations.

### The need for sustainable land management

All over the world, land users are required to maximise the economic and social benefits from land while fighting against land degradation. Globally, large areas of land are being affected by land degradation, resulting in a loss of functions the land can perform and affecting livelihoods of people. Sustainable land management is the key answer to these challenges.

### A Global Approach...

The DESIRE project ([www.desire-project.eu](http://www.desire-project.eu)) developed an approach that can be applied to achieve sustainable land management in degraded areas around the world. It involves working with stakeholders to select, test and upscale sustainable land management strategies.

### ...for local solutions

As land degradation is caused by an interplay of natural and socio-economic factors it manifests differently in different locations. This means that rehabilitation should use site-specific measures. The DESIRE approach can be applied around the world to find solutions for land degradation that are locally suitable.

Approaches inspired by the work in DESIRE are being applied to water shortage problems in African agriculture, to prevent irreversible degradation in the Mediterranean, to combat soil threats in Europe, China and Mexico, and to make crop production more sustainable while maintaining its profitability to farmers.

### Challenges

- Multiple causes of land degradation
- Multiple land degradation processes
- Site-specific problems
- Livelihoods affected

### Takeaways

- Local solutions to land degradation
- Stakeholders involved in all stages of rehabilitation
- Significant improvement of soil functions, livelihoods and sustainability if proper measures are implemented correctly

### Results

Approaches inspired by the DESIRE project have been used successfully in multiple projects:

- Crop yields and resilience to drought increased in the study areas of the WAHARA project ([www.wahara.eu](http://www.wahara.eu))
- Work on finding sustainable measures against soil degradation in Europe is ongoing in the CASCADE, RECARE and SoilCare projects

### Research Program

Sustainable Land Management

#### Contact

For more information, please contact:  
Wageningen Environmental Research

Rudi Hessel  
T +31 (0)317 486 530  
E [rudi.hessel@wur.nl](mailto:rudi.hessel@wur.nl)

Saskia Visser  
Programme Sustainable Land Use  
T +31 (0)317 484 583  
E [saskia.visser@wur.nl](mailto:saskia.visser@wur.nl)