Study:

Down to Earth - The soil we live on -

On the state of soil in Europe's agriculture

In the study presented here, Dr Andrea Beste, founder of the Institute for Soil Conservation & Sustainable Agriculture (BBÖA, Germany) and co-author of the Soil Atlas published by Friends of the Earth Germany (BUND) and the Heinrich Böll Foundation (HBS), takes an in-depth look at the state of the soil beneath Europe's agricultural land.

Over the past 15 years, Andrea Beste has personally investigated the state of soil structure at more than 400 different locations in Europe, mostly in Germany. This work was either commissioned by food companies, universities and chambers of agriculture or carried out within the framework of soil protection training seminars for farmers.

In this study, the independent scientist and soil consultant presents current data and conclusions from a number of recent European research projects on the state of our soil. Her findings are alarming, with many soils clearly showing veritable 'burn-out' symptoms. What makes the situation particularly grave is that with climate change on the way Europe could really do with particularly fit and healthy soils to enable us to produce sufficient quantities of food, guarantee a plentiful supply of clean drinking water and prevent flood damage.

The author of the study also describes which therapy Europe's soils urgently need if they are to recover. The potential methods she proposes are nothing new. Some have been overrated for a long time or simply misjudged, whilst other, more effective methods are still being too sparsely applied. Also, far too little lobbying is done on behalf of Europe's soil, even though its health is fundamental to our own wellbeing.

Meanwhile, Germany has thwarted the EU Soil Protection Directive, and the so-called 'greening' of the EU's latest agricultural reform has proved unable to prevent humus-sapping crop rotation and monocultures. Furthermore, the EU has no truly effective training and advisory programmes whatsoever for agricultural soil protection management. Nor are there any in Germany's federal states.

So what about farmers? What role do they play in all this?

Based on her experience from more than 15 years' training and advisory work on soil protection, the author says:

"Given current agricultural policy, the fact that producer prices are geared towards the world market, and the need to boost yields, individual farmers have virtually no leeway to attribute greater importance to ecosystem or soil conservation criteria."
In view of the data presented in this study, Martin Häusling demands:

1. Europe needs a soil protection strategy. Germany must take its responsibility for protecting Europe's soil, stop blocking a European Soil Framework Directive and play a constructive, formative role.

2. We need a total reorientation of the Common Agricultural Policy (CAP). Payments must only be made to those farmers whose methods meet the strictest requirements of ecological compatibility and animal welfare. Organic farming must be held up as the model to follow.

3. The cross-compliance rules need to be extended. Anyone who desists from agricultural subsidies in future must comply with their provisions as legal minimum standards. To this end, binding good professional practices for soil management need to be clearly specified.

4. We need a support programme implemented throughout the EU that advises individual farmers on soil protection management.

5. More funding must be made available for research into mixed cropping, nurse crops and intercropping in organic and conventional agriculture.

6. The support of conservation tillage using total herbicides over agri-environmental programs must be excluded.

7. Europe's soil needs a humus creation programme (research, training and advice), to prepare it for the challenges posed by climate change.

8. Slurry and fermentation residues do not create humus in the soil like compost or solid manure do. The quality of organic fertilisers must be judged more finely in terms of its impact on the soil and be either suitably encouraged or restricted by law.

9. The authorisation of veterinary drugs must give greater consideration to their environmental impact. Livestock farming that pollutes waterways and soil with drug-contaminated organic fertilisers is no longer tenable.

10. Apart from the use of pure vegetable oil in farm vehicles, the encouragement of biomass production for energy purposes, damages the environment and competes directly with food cultivation, and must therefore be stopped.

The full Text of the study will be available in the beginning of December in English [here](#).