

Editorial

EU Soil Protection – More than a Memorandum of Understanding?

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The Threats to Soil

Soil as a vital and largely non-renewable resource is getting increasingly under pressure. In order to perform its many functions, it is necessary to maintain soil condition. However, there is evidence that soil becomes increasingly threatened by a range of human activities which can degrade it. The final phase of the degradation process is **land desertification** where soil loses its capacity to carry out its function. Among the threats to soil are erosion, a decline in organic matter, local and diffuse contamination, sealing, compaction, decline in bio-diversity, and salinisation. These threats do not apply evenly across Europe, but obviously, degradation processes are getting worse.

A European Soil Protection

As some EU-member countries have already set directives on soil protection into force, it becomes essential for the European Commission (EC) to initiate and push a European-wide soil protection. This could be based on already existing activities such as the United Nations Convention to Combat Desertification in 1994 and the regulations of the member countries at the Rio summit in 1992. The participating states adopted a series of declarations of relevance to soil protection. In particular, the concept of **sustainable development** was agreed upon and legally binding conventions on **climate change** and **biological diversity** were adopted.

Thematic Strategy for Soil Protection

To implement a European soil protection, a Communication 'Towards a Thematic Strategy for Soil Protection' was prepared and published by the EC in 2002. It was the aim of the EC to strengthen and improve the political engagement on soil protection and to elucidate the feasibility of a systematic and sustainable soil protection.

The European Parliament adopted the Communication and, by July 2004, calls on the EC to present the 'Thematic strategy for soil protection' which should be based on the strengthening of current policies and, through an integrated approach, should define problems, qualitative and quantitative objectives, and the means by which they can be achieved, as well as timetable and general principles for evaluation and monitoring geared to the following issues:

- putting an end to the accumulation of substances in soil which pose an environmental and health hazard;
- reversing the alarming trend towards erosion, compaction and sealing, as well as the removal and contamination of soil;
- protecting soil in its role of storing CO₂, securing water resources, and preserving biodiversity;
- protecting soil for the sustainable production of food and renewable resources.

This is the first time the protection of soil has been addressed in its own right. In the past, soil has only been protected indirectly through water, waste, and land-use planning legislation. **The EC is now recognising that soil should be ranked with water and air in future environmental protection regimes.**

For the realisation of the soil protection strategy, five technical working groups were installed which are coordinated by an advisory forum. The topics are

- soil erosion
- decline in organic matter
- soil contamination
- soil monitoring
- research

As integral part of the development of the soil strategy, the EC co-operates closely with Member States, Candidate Countries, European institutions, networks of regional and local authorities, and a broad community of European-wide stakeholder organisations, civil societies, NGOs, research, industry, and global professional organisations.

Based on the Communication 'Towards a Thematic Strategy for Soil Protection', the comments received, and the results of the working groups, the EC will draw up further specific proposals on soil protection during the course of 2004, including legislation related to **mining waste, sewage sludge, and compost**; the EC will also seek to integrate soil protection concerns into the main EU policies. A progress report will be prepared starting in mid-2004.

Soil Monitoring Legislation

In addition, the EC will, in collaboration with Member States and relevant stakeholders, also prepare the ground for a proposal for soil monitoring legislation to be published in 2004. Furthermore, and also working with relevant partners, the EC will prepare a Communication dealing with **erosion, decline in soil organic matter, and soil contamination** including recommendations to overcome them.

This a very ambitious programme, and the results of the working groups elucidate that a lot of problems are arising. It becomes clear, which has already been stated by the EC, that information and data material on soil quality are not conclusive. Therefore, research still remains to be carried out.

Harmonised Assessment Schemes

Regarding **soil monitoring**, most European soil monitoring services were set up around fifty years ago. Soil maps including background values based on these data are extremely variable in Europe. Differences in nomenclature, techniques, scale and data transfer methods used in the Member States

makes it urgently necessary to harmonise sampling procedures and methods of data analysis. **Harmonised assessment schemes** are lacking which are appropriate to deal with various problems in soil protection which may differ considerably according to different stressors and conditions in the European regions. So, the specification of a community 'soil information and monitoring system' is urgently needed. Although it can be based on existing information systems, data bases and scientific know-how, it will take several years to reach harmonisation and even longer to fill data gaps.

Further Specific Proposals

The EC will draw up further specific proposals on soil protection including legislation related to mining waste, sewage, sludge and compost (see above); the EC will also seek to integrate soil protection concerns in the main EU policies.

The Development of an EU Soil Protection Policy

The elaboration and consensus finding processes on the level of soil protection (e.g. is a precautionary soil protection needed in all cases or is a prevention of threats sufficient?), as well as

the detailed lists of threshold values or tolerable concentrations of pollutants in the matrices, for example, are time consuming and sometime reflect the different understanding and handling of soil protection in the Member Countries.

However, the initiative by the EC elucidates the fact that soil protection be strengthened and is placed **alongside with water and air as an environmental compartment** to be protected for the future.

The development of an EU soil protection policy will require a **precautionary approach** based on preventing soil degradation in the future as well as on integrating soil protection aims into several policies in order to arrest current soil degradation processes and to deliver protection in the future. This approach will have a local and an EU dimension. For the longer term, it will be necessary to establish a legislative basis for soil monitoring to establish a knowledge-based approach aiming at delivering soil protection.

Although it will take time and a lot of research and administrative efforts, a harmonised and legally based soil protection in the EU is more than a memorandum of understanding.

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