Legal instruments of soil protection – chances and obstacles from an EU point of view

Dr. Irene L. Heuser Berlin, Germany Irene.Heuser@googlemail.com

Abstract

According to the current legal situation in the EU, protecting our soils against biological, chemical und physical damage does so far not take place in a systematic way. Therefore effective models for the further formation of an EU soil protection law may be developed. The combination of regulative and non-regulative instruments, particularly consisting of those of planning, of direct and indirect behaviour control, of company organisation and of private law, could lead to a more effective protection of the soils. A closer look at these possible EU instruments might be interesting for the development of legal regimes of soil protection at national and international level as well.

Introduction

In contrast to the effects of air and water pollution which usually show up after relatively short periods of time and more directly affect human beings, the entry of pollutants into the soils and their ecological consequences are, due to their storage and buffering capacity, perceived only with considerable temporal delay. Due to the previous use of the medium soil which predominantly happens to be in private property in Europe, it came to an endangerment of the various (in particular the natural) functions of the soils. At the moment more than 16 % of the land surface in the old EU-15 and even approximately 35 % in the states which joined the EU in 2004 are affected by soil degradations. Building up soil layers of 30 cm requires a period of 1000 to 10000 years.

Development of EU soil protection policy

Since the beginning of the 1970's the European environmental policy increasingly committed itself to cleaning air and water, whereas only in recent years the problem of the protection of soils has attained a bit more awareness. Although the European Union already set up important Community wide standards in many policy areas with direct or indirect effects on the soils, a special soil protection policy is still missing. Until now the development of EU soil protection law took place in three phases: before the adoption of the Single European Act in 1987, soil protection neither found consideration in the context of EC agricultural policy nor in the initial EC environmental policy. This changed in a second development phase with the inclusion of the environment chapter in the Single European Act and the beginning of a common policy on the environment and led to a consideration of particular aspects of soil protection in different intensities in the Community policies. The Sixth Environmental Action Programme (EAP) adopted on 22 July 2002 by the European Parliament and the Council marks the beginning of the so far important third development

phase. It established the objective to protect soils against erosion and pollution. In order to put the 6th EAP in concrete, the communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions with the title "Towards a thematic strategy for soil protection" of 16 April 2002, the first document exclusively dedicated to soil protection, was published. It analyses the threats for the soils and the existing political attempts of the European Union and the Member States and their effects on the soils and sets for the future EU soil protection policy. Despite its broad and rather describing content the communication forms the basis and the starting point for further actions on EC level.

The strategy itself will comprise a communication laying down the principles of Community soil protection policy, a legislative proposal for the protection of soil (in form of a "soil framework directive") and an analysis of the environmental, economic and social impacts of the proposals. An integrated and holistic approach should form its basis; it should be cost effective and contain both short-term goals and long-term visions. In June 2004 the proposal for a soil monitoring directive and the new strategy communication with concrete actions for the three priority aspects organic matter, soil erosion and soil contamination as well as for the further soil aspects of sealing, compaction, decrease of biodiversity, salinisation and floods and landslides were expected to be published; due to various internal and external reasons they were not presented until now (except for the Commission proposal of 18 January 2006 for a directive on flood risk management).

Legal instruments

Since the 5th EAP of 1993, widening the portfolio of legal instruments for achieving environmental objectives was a main pillar of EU policy. The soil protection strategy will require an approach based on the principles of precaution, prevention and anticipation and the "polluter pays principle". In the context of the soil protection communication of April 2002 the Commission stresses that it has "the difficult task" to develop "better instruments for soil protection". Due to the lack of political importance of this environmental medium and/or to the complexity of this matter the legal instruments of soil protection in the EU have not yet been examined systematically so far. In order to develop legal instruments of soil protection, regulation options might be shown by a problem-orientated comparative law study taking into consideration existing models, e.g. the proposed "Protocol for the conservation and sustainable use of soil" prepared by the specialist group of the IUCN Commission on Environmental Law and drafted as one of the outcomes of the SCAPE workshop in Iceland in September 2005. The way towards the development of instruments of soil protection must also be based on an evaluation of the efficiencies of existing EU legislation and on the competences and the principle of subsidiarity. The important practical issue is to identify when such instruments are likely to be more efficient/effective than other types of policy measures or, alternatively, when they can be an effective supplement.

Planning instruments

Although land use planning is mainly the responsibility of member states, a number of key initiatives at EU level provide scope for developing a more integrated approach. This is the case with the European Spatial Development Perspective, which is intended to promote cooperation between member states in pursuit of sustainable development through a more

balanced spatial use of EU territory. For soil protection objectives both the setting up of soil protection plans and the classification of soil protection areas appear to be useful instruments especially in precautionary handling of chemical and other endangerments of the soils. The instrument of soil protection planning was inserted on Community level only in individual member states so far; on international level it is occasionally used (in a general form or specifically tackling soil erosion or soil contamination). Apart from the registration of harmful impacts on the soil, these protection plans cause a concretising of protection objectives and could contribute to establish evaluation and action catalogues.

For precautionary reasons the preservation of rare soil types or those which are mostly untouched by man still has great importance. The area-related soil conservation by a classification of protection areas, in current EC law e.g. in the context of the habitats directive, aims at the preservation of the status quo and other effects of planning. The Council of Europe also makes important defaults about soil protection planning which might influence the EU strategy. By classifying soil protection areas endangered soils could be protected in particular against harmful impacts and these interests could be coordinated with town and country planning. Furthermore the routine setting up of a soil expert report (according to § 62 of the Hungarian soil protection act) could be helpful too. The collection of harmful soil impacts in a soil pollution register may form the basis for these planning instruments.

Instruments of direct behaviour control

Direct regulation instruments impose a certain behaviour on its addressees in a compelling way. Within this range notification obligations, prohibitions of extremely soil-endangering pollutants as well as the establishment of soil protection obligations and soil values serve to set up standards for the assessment of the limits of harmful impacts on the soils.

The EU IPPC directive on integrated pollution prevention and control doesn't establish any emission limits, but contains trans-medial requirements on the operation of certain industrial plants, in particular permission provisions for larger industrial plants on the basis of the application of the best available technique. Due to this directive the environmental permission system is already shaped by a uniform procedure with very general descriptions of the permission criteria for general or special aspects of mainly chemical soil protection (e.g. waste disposal, large combustion plants). Notification or indication obligations are used in European environmental law mostly in those situations, in which intervening is only possible in individual cases, since the respective activity is not dangerous in principle (e.g. in chemicals law). In the field of soil protection an EU wide introduction of a notification obligation could be prescribed for agricultural activities which generally don't lead to endangerments of the natural soil functions, especially for the opening of farms, in order to attain a certain control moment concerning the soil use on the one hand and not to stigmatize the farmers as "polluters per se" on the other hand.

The main focus with national legal instruments preferably lies on fundamental soil protection obligations which go beyond the existing IPPC obligation triad of precaution, protection and after-care and could be formed following the regulation in art. 6 ff. of the Dutch soil protection act (WBB) and the precaution obligation in the German act (BBodSchG). They could particularly be concretised by the definition of soil values in the form of trigger values, action values and precaution values. Moreover the existing "principles of good agricultural practice" could be extended with regard to the management obligations, in particular for physical soil protection. Permission conditions or impositions determine the absolute and relative restrictions of environmental impacts in the form of quantity limitations

and process and product regulations. In order to quickly stop the use of extremely soil-endangering pollutants the classical instrument of prohibitions in EC pesticides, biocides and fertilizer law as well as in chemicals law seem to be indispensable. The most extensive authorizations are regulated in art. 6 to 10 of the Dutch WBB, according to which concretely indicated actions which are likely to contaminate or impair the soil may be regulated by general administrative order; the person who performs these acts shall be obliged to take any measure that can be reasonably required of him in order to prevent the soil being so contaminated or impaired or to take remedial action and to limit and to eliminate as much as possible the impairment or the direct consequences thereof. With the new EU chemicals strategy "REACH" it can be expected that the examinations of the respective material properties are accomplished faster and that the special effects on soil organisms are more exactly examined in the authorization procedure than so far.

Instruments of indirect behaviour control

Market-based instruments offer dynamic incentives not generally available through the use of standards or other direct regulation instruments. In the field of indirect behaviour control an EU-wide soil information and monitoring system which at the moment only exists for the protection of forest soils ("Forest Focus") could primarily be set up. Beside other informative instruments this has both for the precaution and for the after-care of soil protection great importance in EU law. Unfortunately the economic instruments are not yet used for this purpose. Market-based instruments include taxes, charges, incentive payments, refundable deposit schemes, permit trading systems etc..

Supplementing the existing state grants for information, training and consultation and the agri-environmental subsidies for aspects of soil protection would be welcomed – as long as they don't support environmentally unsound practices that respond to economic or social concerns. Environmental taxes generally work when the tax is sufficiently high to stimulate measures to abate levels of pollution or natural resource use. They will often be the most efficient way of applying the polluter pays principle, through the direct internalisation of the environmental costs. Despite some implementation problems a special tax on the use of mineral nitrogen fertilizer could therefore contribute to the reduction of the entries into the soils. Although it is still too early to evaluate the success of the new EU trading scheme for CO₂ emissions, it is clear from the present experiences that trading can be a powerful tool for delivering environmental objectives in a cost-effective way. One option discussed in the UK is the system of tradable landfill allowances issued to waste-disposal authorities. With the instrument of trading with land utilisation certificates in combination with a soil sealing tax further soil sealing might effectively be prevented and unsealing and – on a long-term basis – a trend reversal in land consumption might be achieved.

Instruments of company organisation and of private and criminal law

The use of environmental liability offers great potential and seems to become an important supplement to the set of economic instruments currently available – although at Community level an extension of the EC environmental liability directive including an extensive liability for soil damages appears to be politically impossible to implement at present. Some instruments of company organisation may contribute to the interests of soil protection: on a voluntary basis a "soil inspector" could give advice to farmers about the soil protective

use of their land and could control the complying with the substantive soil protection obligations. Concerning criminal instruments it was stated that minimum standards in EU criminal law would supplement the development of common soil-protecting administrative standards in the future and in particular could have deterring effects for soil protection.

Résumé and conclusion

It seems to be politically quite realistic to assume that not all proposed instruments of soil protection could be realized at the same time. Regulative and non-regulative means of soil protection might be combined as a "mix of instruments" particularly consisting of those of planning, of direct and indirect behaviour control, of company organisation and of private and criminal law. Used judiciously, the impact of these instruments should be complementary and mutually supporting. In the course of the present activities it seems possible that EU soil protection law emerges from its shadowy existence and develops to a "genuine" soil protection policy on European Union level. Considering the fact that the EU normally plays a major role at the negotiating table and in pushing the implementation of environmental agreements on global and regional issues these instruments might also provide guidance to governments on how to develop their environmental policy.

French abstract

Selon la situation légale courante dans l'UE, la protection de nos sols contre des dommages physiques, biologiques et chimiques n'a jusqu'ici pas lieu de manière systématique. Par conséquence des modèles efficaces pour la formation supplémentaire d'une loi de protection de sol d'UE peuvent être développés. La combinaison des instruments regulatifs et non-regulatifs, composé en particulier de ceux de la planification, de la commande de comportement directe et indirecte, de l'organisation de l'entreprise et de la loi privée, pourrait mener à une protection des sols plus efficace. Une observation plus précise de ces instruments possibles d'UE pourrait être intéressant aussi bien pour le développement des régimes légaux de la protection du sol au niveau national et international.

References

Commission of the European Communities, COM (2002) 179 final of 16/04/2002

European Environment Agency, Market-based instruments for environmental policy in Europe, EEA Technical report No. 8/2005, Copenhagen 2005

Hannam, Ian D., with Boer, Ben W., Legal and Institutional Frameworks for Sustainable Soils: A Preliminary Report, IUCN Environmental Policy and Law Paper No. 45, 2002

Heuser, Irene L., Europäisches Bodenschutzrecht – Entwicklungslinien und Maßstäbe der Gestaltung, Berlin 2005

Jans, Jan H., European Environmental Law, 2nd ed. Groningen/Amsterdam 2000

Krämer, Ludwig, Casebook on Environmental Law, Oxford, Portland 2002