



BACKGROUND // OCTOBER 2018

The need for soil protection legislation at EU level


Position paper of the
German Environment Agency

Imprint


Publisher:

German Environment Agency
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Editor:

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Design:

Atelier Hauer + Dörfler GmbH

Publications as a pdf:

www.umweltbundesamt.de/publikationen

Photo credits:

shutterstock.com, Fotolia: Petr Bonek and lucag_g

Position paper completed in: March 2018

ISSN 2363-829X

Dessau-Roßlau, October 2018

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1 Background

Due to the opposition of Austria, France, the Netherlands, the United Kingdom, Northern Ireland and Germany, the EU Commission withdrew the proposal of a Soil Framework Directive (SFD) in 2006. In the 7th Environmental Action Program, the EU commits itself to examine the suitability of measures for qualitative soil issues “within a legally binding framework”. According to SDG target 15.3 states have obliged themselves “to strive to achieve a land degradation neutral world” by 2030. The EU is also pledging to reduce land take: The EU roadmap for a resource-efficient Europe and the EU’s 7th Environmental Action Program call for ensuring “no net land take” by 2050.

The German Bundesrat stressed already in 2013 the need for soil protection legislation at EU level. The Bundesrat furthermore decided in 2011 that the objective of “no net land take” – mentioned also in the EU roadmap for a resource-efficient Europe – should be reached by 2025 already.

The final report of 2017 of the EU-funded “soil inventory” project (2017), a survey of soil protection regulations in EU directives and regulations as well as in national policies, points out the following fundamental shortcomings in EU soil protection law:

- ▶ Fragmentation
- ▶ Lack of coordination (lack of priority setting, insufficient monitoring, inadequate combination of instruments)
- ▶ Insufficient conceptualisation
- ▶ No binding targets



2 Rationale for the need for soil protection legislation at EU level

Soil is immobile, therefore a locally bound resource, the restoration of which, once destroyed, is not possible at all or only possible over a long period of time. At the same time, soil provides ecosystem services, which are of cross-border importance, as soils

- ▶ are basis for the production of food and feed and additionally of biomass for renewable energy sources
- ▶ sequester carbon
- ▶ serve as habitat for an almost immeasurable biodiversity
- ▶ have an important function in the biological cycle, for example by storing nutrients or filtering pollutants before they enter the groundwater and
- ▶ act as archive of biological or cultural monuments.

These ecosystem services are of eminent importance with regard to societal challenges, such as the prevention of hunger and poverty, food security, the fight against climate change and the avoidance of political or even military conflicts.

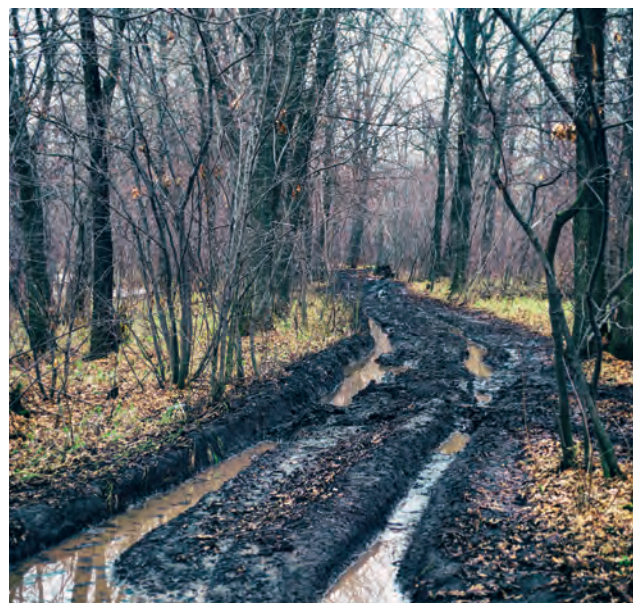
The availability of fertile soils can therefore be described as a prerequisite for sustainable development.

In addition, soils – as defined by the German Federal Soil Protection Act – function as

- ▶ a raw material deposit,
- ▶ areas for settlement and recreation,
- ▶ sites for agriculture and forestry,
- ▶ sites for other economic and public uses, for transport and for supply and disposal purposes.

Due to the various and different functions of soils conflicts of use and potentially also soil threats may occur. Eight types of threats are distinguished: loss of humus content, loss of biodiversity, contamination, compaction, land take and sealing, erosion, eutrophication, salinization.

In the UN Agenda for Sustainable Development of 2015, all states worldwide commit themselves to achieve a “land degradation neutral world” (= Land Degradation Neutrality, LDN) by 2030. The principle of neutrality asks for a balance between further degradation and restoration projects, i. e. calls for a zero balance. Future EU soil protection legislation should ensure that this LDN obligation is effectively implemented.





Benefits of potential EU soil protection legislation could materialize for:

- ▶ the EU as a whole,
- ▶ individual other EU states or a group of other EU states,
- ▶ Germany.

Through EU soil protection legislation, in particular the following benefits would accrue for the EU as a whole:

- ▶ The effective regulation of soil protection in all EU Member States could ensure that the trans-boundary ecosystem services of soils, for example with regard to combating climate change and guaranteeing food security, are maintained and, if necessary, expanded.
- ▶ A model for the effective implementation of the “land degradation neutrality” objective could be developed, which could also be used for international cooperation.
- ▶ EU legislation could lead to more attention being paid to maintaining good soils, improving degraded soils and thus also reducing pollution of other ecosystems or environmental media (surface waters, groundwater, air).

- ▶ EU soil protection legislation could at least partially establish harmonized standards.
- ▶ EU soil protection legislation could incentivize the attribution of more financial resources for soil protection.
- ▶ Common EU soil protection rules can create a level playing field for all European economies by fixing commonly agreed requirements.

The most important benefit for other EU states would be that EU soil protection legislation would set an incentive for new or improved soil protection rules at the national level. This would also strengthen the protection of human health as well as of the environment at the national level. This would especially benefit those Member States which do not yet have specific soil protection legislation.

As Germany has committed itself to an ambitious implementation of the SDGs, including the LDN objective, common soil protection rules at the EU level could be used as a vehicle for introducing progressive requirements for LDN implementation for the EU as a whole.

In a nutshell: The need to maintain and ensure soil ecosystem services throughout Europe is the strongest argument for soil protection rules at EU level.

3 Suitability of basic regulatory approaches

Basically, two regulatory approaches can be considered:

- ▶ a regulatory approach, based on the Water Framework Directive (WFD) and/or the Marine Strategy Framework Directive (MSFD), of holistic planning and management with the objective of achieving good soil status,
- ▶ a regulatory approach that limits itself to specific – most important – aspects and that only establishes a set of essentially required provisions.

A general EU-wide obligation for effective soil protection without determining specific legally binding instruments, the implementation of which is therefore entirely in the responsibility of the Member States, is not appropriate and should be rejected as a regulatory approach. As this approach would be purely programmatic, no harmonization could be achieved. It could well be argued that such an approach would be in contradiction to establishing fair competition. Moreover, it would not be possible for the European Court of Justice to monitor the implementation. Thus, an added value could hardly be expected.

The pros and cons of the two models mentioned above are described below.

3.1 Holistic planning

This regulatory approach would be guided by the WFD and/or the MSFD. It would oblige all Member States to achieve good soil status in Europe by a certain date. This aim would necessitate the following planning steps:

- ▶ Definition and determination of “good status” of soils
- ▶ Inclusion of all threats
- ▶ Determination of ecological requirements on differently used soils
- ▶ Deficit analysis for all soils throughout Europe (monitoring)

- ▶ Obligation not to deteriorate the current status of soils and to take compensatory measures in the event of unavoidable land degradation
- ▶ Obligation to plan necessary measures to achieve good soil status
- ▶ Duty to report on soil status, deficits and measures taken.

The core benefit of such a regulatory approach would be that it would be – by the inclusion of all soil threats – comprehensive and would thus avoid fragmentation. It would significantly contribute to ensuring cross-border ecosystem services and safeguarding local health and environmental protection. Through the planning obligation Member states would have to prioritize the measures that are essentially necessary. Moreover, more financial resources would probably be provided for soil protection in EU Member States.

However, there are also disadvantages or potential shortcomings: The approach establishes a long-lasting preparatory planning phase which is time and resource intensive before any measures could be taken. Furthermore, it is questioned whether the good status of soils could principally be defined from a scientific point of view, as location and climate conditions as well as soil uses in Europe differ significantly.

It needs to be borne in mind that this regulatory approach would be very similar to the approach of the Soil Framework Directive, which finally failed for several reasons. To gain support for a similar concept would require a lot of good reasoning.

3.2 Sector-related and minimum requirement – approach

Under this approach, EU soil protection regulations would be limited to the three most important areas of soil degradation that is contamination (3.2.1), land take/soil use (3.2.2) as well as agriculture (3.2.3). In each field only the measures urgently needed should be put in place.

The individual proposals for the three areas are explained below.

3.2.1 Contamination

The EU Environmental Liability Directive regulates a remediation obligation for “land damage” that has occurred after 2007. However, land damage since 2007 only accounts for an insignificant proportion of land in need of remediation.

Therefore, a remediation obligation should also be included in EU soil protection legislation for soil contamination that occurred before 2007 (therefore not covered by the EU Environmental Liability Directive by now). The prevention of hazards to important assets (e. g. human health) could be achieved. Furthermore, the new provisions should require that the remediation of soils should contribute as much as possible to effective land recycling.

As an instrument to implement these new obligations a new EU legal act can be considered. By such an act, it could firstly be clarified that land damage can occur independently of specific risks to human health and secondly that landowners can be held liable, at least alternatively, if those which have caused the land damage cannot be called upon. Both aspects are currently not or not clearly regulated in the EU Environmental Liability Directive.

It is proposed that the new EU legislation should oblige the Member States to elaborate, at the national level, standardized values to determine when a soil contamination is caused from harmful substances (limit and/or threshold values for soil pollution). The national determined values should be based on a Europe-wide commonly agreed understanding on the general level of soil protection.

Since German soil protection law (which mainly deals with remediation of soil contamination) has proved effective, it must be ensured that the “new” EU regulations do not fall short of German standards or make their implementation more difficult.

3.2.2 Land take and soil use

First, the EU legislation should include the obligation for Member States to set binding national targets for the reduction of soil sealing and land take, e. g. based on the “artificial surfaces” of the CORINE Land Cover classification. From 2050 onwards, “no net land take”

is allowed (see above). The instrumental framework for achieving this is to be determined by land/soil protection law, construction law and (town-) planning law of the individual Member States (trade in land certificates is currently being discussed in Germany). Specific measures to achieve the objective of “no net land take” should be defined by the Member States and should be integrated into the national approaches for the implementation of LDN.

Secondly, changes in land use (e. g. infrastructure/settlement) should be subject to authorization throughout Europe under EU soil protection legislation. Within the framework of such authorization, the evaluation and consideration of (quantitative and qualitative) soil concerns should be obligatory. EU law should oblige to minimize adverse effects of land-use changes.

In addition to the obligation to obtain an authorization, an effective compensation obligation should be established within the framework of EU LDN oriented soil protection legislation in order to ensure that unavoidable soil degradation is compensated. The compensation obligation must be designed in such a way that the compensation is orientated on qualitative standards and corresponds to the degree of the degradation.

In order to be able to implement the compensation obligation, Member States must assess all areas at least in terms of natural soil functions and use functions. Member States must be committed to develop an appropriate and comprehensible assessment methodology.

These assessments shall also be used to identify, describe and evaluate “the direct and indirect significant effects of a project on the assets land and soil”, pursuant to the Environmental Impact Assessment Directive (Article 3 paragraph 1 lit. c EIA Directive) in a legally undisputable manner.

It is appropriate to combine the two instruments, i. e. the obligation to continuously reduce soil sealing and land take and the obligation to obtain an authorization and to compensate for land-use changes. The reasons are: the obligation to reduce soil sealing and

land take first results in a de facto restriction of land take – and is thus per se important and appropriate – and secondly, compensation is actually limited, thus every land-use change can be compensated.

Such a regulatory approach would essentially contribute to the implementation of the obligation to “Land Degradation Neutrality” according to SDG Target 15.3. At the same time, it would ensure that there would be “no net land take” throughout Europe by 2050, as required by the EU roadmap for a resource-efficient Europe and the EU’s 7th Environmental Action Program. The obligation to reduce negative effects and the obligation to compensate could continue to guarantee the cross-border ecosystem services of soil.

3.2.3 Agriculture

At present, most soil-related requirements for agriculture derive from the Common Agricultural Policy (CAP). CAP requirements are defined by either the standards to maintain all agricultural land in good agricultural and environmental condition (GAEC), or greening standards or priorities for rural development to be specified by the Member States. So far, these national regulations often fall short of an effective soil protection.

EU soil protection legislation should incorporate appropriate CAP regulations as minimum standards into regulatory law. The issues currently regulated in connection with the CAP, such as erosion, humus content and carbon sequestration, must be specified and supplemented. As the specific requirements have to be defined site-specifically, EU soil protection law must therefore hold the Member States liable to determine the specific requirements locally.

It is being discussed to reduce funding from the first pillar. It is proposed to primarily provide financial support only for “public services”. However, the reorientation of support structures that will then be necessary would have to take into account that the existing support funds represent a considerable proportion of farmers’ income.

The principle of subsidiarity cannot be used as an argument against corresponding regulatory requirements for soil protection, since numerous regulations on agriculture have already been adopted at EU level

(regulations on plant protection products, Water Framework Directive).

3.2.4 Pros and cons of the sector-related and minimum requirement – approach

One benefit of the sector-related and minimum requirement – approach could be that various levels of conflict at the same time could be avoided. If independent legal acts were adopted for the various areas, the dialogue would only have to be conducted with those concerned by each act. Furthermore, it would be easier to identify win-win options – for example regarding agriculture. Finally, it would be more likely to obtain political support for this approach, in particular because the Europe-wide requirements would be limited to the absolutely necessary minimum provisions and because it would be a new and different approach with regard to the opposed Soil Framework Directive.

A disadvantage of this regulatory approach is its limitation to certain topics, a fact that may be considered as fragmentation of soil protection. Forest management would not be addressed, and soil protection in urban areas would presumably be limited to contamination and land take. Additional challenges, such as soil protection during the construction phase, would continue to be subject to national legislation.

3.3 Summary and proposal how to proceed further

The decision in favor of one of the two regulatory approaches will depend above all on its political feasibility. At the moment, support for the holistic planning approach seems very unlikely.

We therefore propose that the German Environment Agency organizes a workshop and invites a selected group of experts from other EU Member States in order to deepen the discussion on the two regulatory approaches and, if necessary, to gain a better understanding of the sector-related minimum requirements.

4 Scientific investigations

Regardless of the chosen regulatory model, there is still a need for soil protection-related information and data. Therefore, the EU legislation should commit Member States to systematically collect data. The

EU legislation should ensure that the data collection is compatible and refers to the existing European systems.

5 Final remarks

New alliances are needed to enforce “improved” soil protection at EU level. In this context, reference is made, for example, to the Soil Paper of the German Bishops’ Conference of 2016 (<http://www.dbk-shop.de/de/der-bedrohte-boden.html>). The same applies to activities of civil society, such as *people4soil* (<https://docs.google.com/document/d/1ArZxqnOxuu51wA8NI-wBlnudc63eFOjhSXJEIjLZDyj0/edit>) or of associations and federations, such as the Federal Association of Soil (<http://www.bvboden.de/>) or the European Soil Alliance of Towns and Municipalities (*ELSA*).

Soil protection poses expectations to various interest groups (settlement management, agriculture, etc.) It is therefore necessary to attempt to develop rules from which both sides may benefit (e.g. avoiding the use of agricultural land to compensate for infrastructure measures, if necessary). In this respect, close cooperation with the interest groups – depending on the willingness of the respective groups – is also recommendable.





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